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COLONISATION, SCIENCE, AND CONSERVATION:

THE DEVELOPMENT OF COLONIAL ATTITUDES TOWARD THE NATIVE LIFE OF NEW ZEALAND WITH PARTICULAR REFERENCE TO THE CAREER OF THE COLONIAL SCIENTIST WALTER LAWRY BULLER (1838-1906).

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Abstract

New Zealand, by the end of the nineteenth century, was well described as a "Britain of the south": not only were people of British descent dominant but in much of the country the native life had been replaced by European sheep and grass, weeds and sparrows. In this study the attitudes of the British colonists toward the native life of New Zealand are examined through the life and works of the colonial scientist Walter L. Buller (1838-1906).

It is argued that British colonisation of New Zealand proceeded under a set of assumptions and attitudes which together led to the expectation among the colonists that the native flora and fauna, as well as the native people, must inevitably be displaced by the European introductions and immigrants. Ideas concerning the native people on the one hand and native plants and animals on the other were closely connected; in scientific discourse the displacement of the native Maori race was expressed in biological metaphors and "explained" by analogy with the displacement of the native vegetation and the native birds -and conversely the displacement of the native plants and birds was "explained" by analogy with that of the Maori race.

In the colonists' ideology this displacement was seen as not merely assured, but pre-ordained -part of the working out of the law of nature. Analysis of the writings of colonial scientists reveals several forms of the "law" of displacement; most of which, despite the use of such catch-phrases as "the struggle for survival", owe little to Darwinian ideas.

By the end of the nineteenth century, while displacement of the natives had largely been achieved, at the same time the

contrasting and in many ways contradictory view became accepted that native species should be retained and preserved. It is argued that although many of the ideas of preservation or conservation were drawn or modified from American or British precedents, they gained particular acceptance in New Zealand by association with a developing national sentiment. As British colonists became New Zealanders they invested the native New Zealand scenery, flora and fauna with newly patriotic significance, as part of the "heritage" of the New Zealander. Images of native birds, drawn largely from the illustrations of Buller's scientific treatises, became used for trademarks and other symbols, and some species -especially the Kiwi Apteryx australis -were elevated as emblems of New Zealand identity.

As well as analysing colonial attitudes toward native things in New Zealand, especially as articulated by Walter Buller, the study aims to broaden the contextual framework in which these attitudes are understood, by exploring them within the contexts of colonisation, of colonial science, and of the development of a New Zealand identity among the colonists.

Preface

The conventions of scholarship generally demand that research is presented as if it had been done in logical order to answer prior questions. It must be stated from the outset that the present study has evolved in a much less tidy fashion. It grew out of research for a biography of Walter Buller (1838-1906), the New Zealand-born son of a Wesleyan missionary, who made his fortune in New Zealand as a lawyer specialising in the alienation of Maori land, and his name in London as the scientific authority on the New Zealand native birds. His books on the latter have had wide influence: ask any New Zealander, even today, to visualise the native birds which are special to the country, and the images which come to mind -familiar from innumerable books, postcards, calendars, even stamps and coins -will probably be drawn from "Buller's Birds".

And here I must drop the mask of scholarly detachment even further to declare my own personal interest and point of view: that of a New Zealander, a product of the colonial society of Buller and his kin, with an emotional attachment to New Zealand -the people, the land, and the plants and animals native to it. Buller's Birds, as portrayed in rather garish colour on my earliest school stationery, kindled in me, as in generations of New Zealand schoolchildren, a

fascination with Kiwi, Takahe, Huia and the others -native birds that seemed far more exotic than the sparrows and starlings seen outside every day. The Huia in particular had a special romance as a species said to be extinct, but which, like the Moa, might still be imagined living on in some hidden valley deep in the bush.

Given this background, I was interested to investigate Buller's life, and why in the 1890s, toward the end of a scientific career spent in taking specimens and writing the histories of native birds under the expectation that they were declining toward imminent extinction, he turned and took, in A.G. Bagnall's phrase, a "righteous stand" for their protection and conservation.

As is so often the case, closer examination of the available evidence revealed a much more complex situation than had generally been portrayed. It emerged that even after the government -with Buller's encouragement -had gazetted the Huia and other birds as protected species and Little Barrier Island as a sanctuary for them, Buller continued surreptitiously to obtain further specimens for export to England, including some Huia meant for release on the new sanctuary. In writing a biography of Buller I struggled to place these actions in context. The present study has arisen out of a further attempt, free of the restraints of the biographical form, to deal with the questions raised by the

contradictions of Buller's actions and, more generally, to examine colonial attitudes toward native things.

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As well as the usual archival material, I have drawn information from the materials on which much of Buller's

success was based -museum bird skins. I thank the curators of the Carnegie Museum of Natural History, Pittsburgh, the American Museum of Natural History, the British Museum (Natural History), the Merseyside County Museums, the Cambridge University Museum of Zoology and the Oxford University Museum for patiently answering my inquiries, and Sandy Bartle of the National Museum of New Zealand and Geoff Tunnicliffe of Canterbury Museum for allowing me to examine the Buller specimens in their care.

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CHAPTER 1.

INTRODUCTION: COLONISTS, NATIVES AND THE COLONIAL SCIENTIST

"Home", to the colonists in New Zealand in the nineteenth century, meant Britain or, more specifically, England. This orientation, and this parlance, persisted well into the twentieth century among colonial generations born in New Zealand and regarding themselves as New Zealanders.[1] Thus Sir Walter L. Buller (1838-1906), the first colonial-born New Zealander to gain a British knighthood, reached the peak of his success by "returning" to a place at "Home" as an English gentleman. Buller made his fortune in New Zealand in the Native Land Court, facilitating the alienation of Maori land to British colonists; but he made his name, both in New Zealand and in Europe, as a colonial scientist. In successive editions of his A History of the Birds of New Zealand he recorded for European science the native species which were apparently doomed to inevitable extinction. In his careers both in law and in science he fulfilled the role of the colonist exploiting the opportunities of the new country. Then, toward the end of his life, he took what A.G. Bagnall has termed a "righteous stand", advocating new ideas of conservation of the disappearing native species and patriotic pride in the special features of New Zealand.[2] While still oriented towards "Home", seeking recognition and approval there and supplying the demands of metropolitan science for


NEW ZEALAND
- showing places mentioned in the text
Mangungu
Waitangi
Tangiteroria
Whangarei
Little Barrier I.
Auckland
Te Aroha
Pirongia
WAIKATO
Rotorua
HAWKES BAY
Mt Tongariro
Parihaka
TARANAKI
Napier
Wanganui
Stephens I.
Papaitonga
Otaki
Wellington
Nelson
D'Urville Island
Cheviot
WESTLAND
CANTERBURY
Kaiapoi
Christchurch
Milford Sound
Timaru
Fiordland
OTAGO
Blue Spur and Gabriels Gully goldfield
Resolution I.
Dunedin
SOUTHLAND
Stewart I.
50 0 50 100 miles
50 0 50 100 150 200 km

specimens of the rare New Zealand species, he also articulated the developing sense of colonial identity -of patriotism for the new homeland of New Zealand, and pride in its native forms.

This study is based on an analysis of Buller's scientific career and his attitudes toward the native plants, animals, and people (which, for want of a more fitting term will be collectively referred to as "native things") -and how these attitudes shifted as new ideas emerged of preservation and pride in those things native to New Zealand. In the course of the prior biographical study out of which this one has grown, it became apparent that many of the contradictions of Buller's attitudes and activities concerning native things had their roots in his own ambiguous position as an "Anglo-New Zealander": an English colonist, but also a native-born New Zealander. As a colonist he exploited in various ways both the native New Zealand people -the Maori -and the native New Zealand fauna in his drive for recognition and acceptance in social and scientific circles at "Home" in England. His late support for conservation of native species, judged against this record of colonisation and exploitation, has been regarded as something singular: a "righteous stand"; "apparent hypocrisy".[3] But, as will be seen, Buller's stand is much less of an anomaly when seen in the context of the developing sense of local pride and

national feeling as colonists began to consider themselves New Zealanders.

Accordingly, as well as analysing the attitudes and ideas which Buller embodied and articulated, the aim of this study, at a more general level, is to broaden the contextual framework in which colonial attitudes toward native things in New Zealand are understood: in an attempt at what G.W. Stocking terms "multiple contextualisation",[4] to explore the changing colonial attitudes toward native things within the intersecting contexts of colonisation, of colonial science, and of the development of a New Zealand identity among the colonists.

The particular case of Buller and his ideas and actions will thus be examined in the contexts of the continuing process of European colonisation of New Zealand and the concomitant displacement of natives by European immigrants; the changing popular and scientific ideas in the European colony of New Zealand regarding the relative place and worth of natives and Europeans, and the struggle between the two; and the shifting balance between colonial deference and attachment to England on the one hand, and the developing New Zealand national feeling on the other as the colonists began to identify not only with the old country but also with the new.

Following the introductory exposition of some of these issues and contexts, chapters 2, 3 and 4 will analyse some ideas basic to colonial attitudes toward native things: firstly the colonists' expectation of the inevitable displacement of natives by European species; secondly, their ideas concerning "acclimatisation" of introduced species; and thirdly colonial ideas on Darwinism and the "struggle for survival" between native and European. It will be argued that the colonisation of New Zealand proceeded on the premise and the expectation that native things would be displaced and replaced by "superior" European colonists and introductions. Colonial scientists (or, as they might equally be classified, philosophically-minded colonists) observed the native people, plants and animals from this perspective and within a scientific framework set in the metropolitan centres of Europe (and especially London): in general they submitted their observations and their specimens to the metropolitan collectors, classifiers and theorists to systematise and speculate upon, and they looked to London for scientific legitimation and reward. Colonial "acclimatisers" -often the same people as the colonial scientists -imported plants and animals to fill the silent wastes with the familiar creatures of "Home" and to "furnish" the land with game, again under the assumption that the European introductions were superior to their native equivalents. Darwinian ideas gave added scientific support to this assumption and to the idea of the

inevitable displacement of the natives in the struggle for survival.

Chapter 5 will describe the emergence of the ideas which from a present perspective might be described as "conservationist", by which -despite all the colonial assumptions of native inferiority -native species began to be accorded greater worth and their preservation and retention became seen as desirable. It will be argued that these ideas of preservation or conservation of native species gained acceptance as colonists began to develop a national sentiment and to identify more with their new country and with its native life. Out of a combination of New Zealand ideas of protective state intervention, New World ideas of "National Parks", and British ideas of preservation, policies were developed for the establishment of reserves or sanctuaries where the progress of European colonisation might be stayed and examples of the native flora and fauna thus protected and preserved. The native people, however, were not perceived by the colonists in quite the same light; efforts to conserve native birds were sometimes made at their expense. Chapter 6 will describe how the native birds in particular were invested by the colonists with special value (a process in which Buller's illustrated books -"Buller's Birds" -played a large part), with some species, notably the Kiwi <u>Apteryx australis</u>, gaining emblematic significance.

Buller's writings and activities provide a useful focus for examining these developments in ideas and attitudes on native things in New Zealand. Indeed, although in this study Buller and his ideas are given prominence, the significance asserted for him is rather more modest. His influence was in articulating current attitudes rather than formulating new ideas; he was a skilled advocate for the views and policies of others rather than a proponent of particular views of his own. Again, while his books became New Zealand classics and shaped the colonists' view of their new land and its "beautiful" birds, their influence was largely from the images created by his London artist J.G. Keulemans.

Buller and his attitudes are not presented as typical in any general sense of his time and background. On the issue of the growth of a New Zealand identity among the colonists, although in some of his later writings Buller discussed approvingly the rise of "national feeling", he still continued to play down his own New Zealand origin and to cultivate the image of an English gentleman. And while his published writings do illustrate many of the attitudes of his period, the contradictions of his private actions show that they can not be taken simply at face value. In these very contradictions, however, he highlights the incongruities of various roles of the colonist in New Zealand in relation to the native life of the land: between the colonial scientist sending back specimens to enlarge the boundaries of European

science; the settler working to establish a "Britain of the South" by supplanting and displacing native things; the New Zealander seeking a native identity there; and the conservationist urging the retention and preservation of the native life of the land.

The remainder of this introductory chapter will set the scene for the subsequent analysis of colonial ideas and attitudes with brief discussions of colonisation and the perspective of the colonist; colonial science in New Zealand and its relationship with European science; and summaries of Buller's life and careers in law and science, and the patterns of colonial science and colonial identity which they reveal.

1.1 Colonisation

New Zealand, as the very name indicates, is, in A.W. Crosby's term, a "Neo-Europe" or, more specifically, a "Neo-Britain":[5] in a country at the antipodes of Britain -at the opposite end of the earth -the process of British colonisation has been so successful that not only are people of British ancestry and culture predominant, along with their government, their science and other institutional forms, but even plants and animals from Britain predominate as well. In this regard the consequences of British colonisation are so pervasive in New Zealand that to many New Zealanders they

have become the normal and natural state of affairs. Similarly, in much that has been written on New Zealand and New Zealand history the British colonisation of the country is taken as given -a standpoint from which all else is seen. Historians, geographers and anthropologists, for instance, have frequently written as if the history of the country began either with British annexation[6] or with its "discovery" by Cook in 1769, and consign the rest to "prehistory".[7] This distinction hardly bears examination, even within its own terms.[8] If it is argued that "prehistory" signifies nothing more than an absence of contemporary written records,[9] then the prehistory of New Zealand would end in 1642 with the journals (meagre though they may be) of the Dutch explorer Tasman rather than those of the British explorer Cook.

With Maori people of very different views on history and colonisation making themselves heard[10] the view of New Zealand as seen from a British colonial perspective is being challenged, but it is still pervasive. In this study the British colonial perspective itself -or aspects of it -will be examined: in particular the colonists' attitudes toward the native life of the land they colonised, and some of the shifts in these attitudes.

These attitudes had their foundations in British attitudes toward the colonies. By the mid nineteenth century the ideas

and theories of colonisation gaining most attention in Britain were probably those of "systematic colonisation". The details of the system promoted by E.G. Wakefield and others need not be traversed here; indeed it can be argued that the particular principles Wakefield promoted were of less importance than his "incessant and effective propagation of the cause of colonization as such".[11] However, several of the common themes of the rhetoric of colonisation at this time should be noted. Firstly, colonisation was portrayed in a newly exalted light. There was much grand talk -and not only among the Wakefield camp -of the "finger of Providence" pointing to the "destiny of the English nation to people the boundless regions of America and Australia".[12] The New Zealand Company in turn quoted speeches containing such sentiments in handbooks for intending colonists.[13]

In the same way Lord Durham asserted in 1839 that the colonies (of North America) were "the rightful patrimony of the English people, ample appanage which God and Nature have set aside in the New World for those whose lot has assigned them but insufficient portions in the Old".[14] In the United States, Americans were using much the same rhetoric in arguing that it was their "manifest destiny to overspread and to possess the whole of the continent which Providence has given us"[15] -in particular the territory of Oregon, then jointly occupied with Britain. The British and American viewpoints had much in common;[16] in the words of Robert

Torrens (British economist and promoter of the New Zealand Company of 1825), it was "the mission of the Anglo-Saxon race to multiply and replenish the earth".[17]

In line with the Biblical imperative, the Anglo-Saxon colonisers regarded their mission as to not only "replenish", but to "subdue" the lands lying in wait for them.[18] Charles Buller, (no relation, apparently, to Walter Buller) in a celebrated speech of 1843 on "systematic colonisation", portrayed the colonies as having "vast tracts of the most fertile land wanting only capital and labour to cover them with abundant harvests; and, from want of that capital and labour, wasting their productive energies in nourishing weeds, or, at best, in giving shelter and sustenance to beasts".[19]

Allied with the general theme of the "manifest destiny" of the English to colonise and people the boundless regions of the New World, was a more specific idea stressed particularly by the Wakefield camp. In a development of the old idea of colonies as an outlet for "surplus" population[20] it was urged that, rather than merely "shovelling out paupers", colonisation could relieve pressures among other classes as well, and that a colony should be "a miniature representation of England" -with all its social structure and institutions.[21] Thus the Directors of the New Zealand Company described their aim as "not confined to mere

emigration.... [but] to transplant English society with its various gradations in due proportions, carry out our laws, customs, associations, habits, manners, feelings -everything of England, in short, but the soil".[22]

The importance for the development of the British colony of New Zealand of Wakefield's ideas of "systematic colonisation" or of the efforts of the New Zealand Company might be debated, but their aim of "transplanting English society -everything of England...but the soil" was very largely achieved. Colonisation was so successful that later generations of New Zealanders have largely taken the transplant for granted. The ecological dimensions to the "European takeover" in New Zealand and the other "Neo-Europes" have been discussed by A.W. Crosby:[23] the European diseases to which native people had no immunity; the European crops, domestic animals -and the weeds and pests which had co-evolved with them -which together flourished in environments disrupted or "Europeanised" by burning, ploughing, and grazing. The present study is concerned less with the objective factors, ecological or otherwise, which aided the colonists' success, than with their subjective attitudes and perceptions during the process: not so much how or why the colonists succeeded in creating a colony of Britain at its antipodes, but their outlook in doing so -in particular, how they regarded the native people, plants and animals they displaced in the process.

1.2 Colonial Science

Along with all the rest of their "cultural baggage", the colonists brought European science. The first colonial scientific society in New Zealand was quite literally imported: during their passage out from England in 1841 a group of New Zealand Company colonists formed a "Literary and Scientific Institution" for a then entirely notional settlement of "Nelson".[24] The Institution appears to have been modelled on the Literary and Philosophical societies which were a feature of many provincial English cities at the time, although when it became established in the new settlement of Nelson it did little more than provide a library and a reading room where colonists could read the English journals. The later Philosophical Societies established in Wellington, Christchurch, Auckland and other towns had more pretensions as learned scientific academies: they held formal meetings at which members read papers describing the natural productions and native life of the colony according to the categories of European science.[25] In most cases, however, colonial scientists did not assign "scientific" names to their "new" species -those unknown to European science -but forwarded them to the experts of the British Museum or other metropolitan scientific institutions.[26]

To give one instance, colonial scientists eagerly sought specimens of the unusual bird well known to the Maori under the name Kiwi. A pair sent "home" to England by W.B.D. Mantell in 1849 enabled the London taxidermist A.D. Bartlett to name the new species from the North Island of New Zealand according to the Linnean conventions of European science: Apteryx mantelli.[27]

Science in the colony thus faced two ways. It was both an instrument of colonisation by which the colonists appropriated and assimilated native things into the European realm, and an arm of imperial domination under which colonists generally accepted a subordinate, peripheral role. These colonial aspects of science were not peculiar to New Zealand; they can be seen as part of the general pattern of "colonial science" which has been the subject of much debate by historians of science in the United States, Canada, Ireland, Australia and elsewhere.[28]

This debate, however, has had little influence in New Zealand, where the history of science is a relatively undeveloped field of study.[29] Science is barely mentioned at all in the standard New Zealand histories[30] and most general accounts of the history of science in New Zealand have been written by scientists rather than historians, and tend to concentrate on charting scientific discoveries and institutional progress.[31]

In 1976 the historian Michael Hoare proposed a periodisation of the development of New Zealand science,[32] which has, in general, been accepted by subsequent New Zealand writers on the subject.[33] Under Hoare's scheme, from 1769 to 1810 New Zealand was a "frontier zone" for European science; and in 1810-1840 a field for "French enterprise and Australian scientific outreach". His third and fourth periods are those of most relevance here: 1840-1865, when European settlers "forged a scientific tradition in the colony"; and 1865-1905, when government scientific institutions became established in New Zealand under the "hegemony" of James Hector.

Much of the debate in Australia and elsewhere on the pattern of "colonial science" is also relevant to the New Zealand situation. In 1967 the American historian George Basalla incorporated the idea of colonial science in a general model for the diffusion of Western science into "non-scientific" societies or countries.[34] Elsewhere Basalla's model has stimulated much constructive criticism[35] but it has so far had only minor influence on New Zealand history of science. Hoare, for instance, referred in passing to Basalla's paper[36] but did not explicitly relate his own scheme of chronological periods, based on "themes" in the development of New Zealand science, to the three overlapping phases of Basalla's general model.

In Basalla's first phase, European visitors to the non-scientific society make surveys and collect specimens, and take their results back to Europe. Scientific activity in New Zealand in Hoare's first two periods falls largely within this phase. "Colonial science", Basalla's second phase, arises with the establishment of a local scientific community which is still based upon the institutions and traditions of the European nation. In Basalla's description, the colonial scientist "may be a native or a transplanted European colonist or settler, but in any case the sources of his education, and his institutional attachments, are beyond the boundaries of the land in which he carries out his scientific work.... [and he] seeks the membership and honors of European scientific societies and publishes his results in European scientific journals." The colonial scientist "works under handicaps at home and relies upon a scientific tradition located abroad".[27]

Hoare's third and fourth eras in New Zealand science from 1840-1865 and 1865-1905, when local scientific traditions "crystallised" and scientific institutions became established, cover the period of interest in this study. They also fall largely within Basalla's "colonial science" phase, although it could be argued that some developments from the 1880s (for instance the establishment in 1888 of the intercolonial Australasian Association for the Advancement of Science[28]) represent early moves toward the breaking of

colonial ties and the establishment of an "independent scientific tradition" -which constitutes Basalla's third phase. In this final phase local scientists obtain their scientific training, employment, intellectual stimulation, recognition and the prospect of honours for superior work, all within their own country. The shift from colonial to independent science, as Basalla describes it, is a complex one involving many factors, of which the rise of a local national feeling is but one.

While it has been accepted that the "phases" Basalla describes do have descriptive value, his three-phase sequence has been generally rejected as an inadequate model for the spread and growth of Western science.[39] At the same time the pattern of "colonial science" has been considered further, particularly in the light of the sociological concepts of centre and periphery, or metropolis and provinces. R.M. MacLeod, for instance, has employed these concepts in his analysis of British imperial science and its relationship with science in Australia in particular.[40]

MacLeod describes colonial science in Australia as developing within a "mythology of devolved responsibility". Thus colonial science was accorded -and accepted -a position of intellectual deference to the metropolis, and a peripheral scientific function of gathering information and concentrating on "practical" knowledge. The role of

metropolitan power-broker filled earlier by Sir Joseph Banks was carried on in the colonial phase by men such as Roderick Murchison in geology, William and Joseph Hooker in botany and Richard Owen in zoology.[41] Colonial scientists "could maintain a place in 'metropolitan' circles by accepting the role alloted by those circles".[42] Although colonial discoveries might provide important material and even play a central role in metropolitan debates, colonial deference and dependence was maintained.

MacLeod argues, on the basis of the Australian case, that by the early 1880s the language of colonialism in science began to be replaced by that of federation, of encouraging a "greater Britain" in scientific as in cultural and political affairs. Viewed from London this was a policy of containment in the face of increasing competition from German and American science and technology, while maintaining the metropolitan primacy. Viewed from the periphery, federation of local, colonial scientific societies (for instance in the Australasian Association already mentioned) "strengthened their intellectual position and their loyalty to British science at the same stroke".[43]

The concept of colonial science elaborated by Basalla and MacLeod, with the "twin principles of intellectual deference and practical service [operating] to sustain dependence upon the metropolis",[44] provides a useful basis for considering

the progress and the ideas of New Zealand scientists such as Buller. One does not have to look far for evidence of scientific deference to the metropolis. It continues in the 1980s: for instance, to New Zealand scientists the honour of greatest prestige (Nobel prizes aside) remains the title FRS (Fellow of the Royal Society -of London) compared to which FRSNZ (Fellow of the Royal Society of New Zealand) is accorded a much lesser status. In the period of main interest in this study -roughly spanning Buller's scientific career from the time he joined the Linnean Society of London in 1857 to his death in 1906, or Hoare's third and fourth periods from the "forging" of a scientific tradition in the colony from about 1840 to the end of Hector's "hegemony" over colonial scientific institutions in 1905 -colonial science in New Zealand largely fits the pattern described by Basalla and MacLeod. To return to the point made earlier in this section, science in New Zealand was indeed "colonial": not only was it derived from and dependent upon metropolitan science, but it was an instrument of the European colonisation of New Zealand.

However, although the concept of colonial science has been a most fruitful one in the analysis of scientific development in colonies such as Australia, and will be applied also in this study, it has its limitations. As the summary of Buller's career in the next section will demonstrate, the relationship between colonial scientists and metropolitan

science could be rather more complex and varied than the generalisations of metropolitan dominance and colonial deference might suggest.

1.3 Walter Buller: from Colonial Scientist to English Gentleman

A brief account of Buller's life and his careers in law facilitating the transfer of land from Maori to colonist, and in science bringing the native birds before the English scientific world, will give some background for the analysis of his ideas and attitudes. Little has been published on Buller apart from entries in biographical dictionaries and encyclopedias, most notably A.G. Bagnall's model summary in An Encyclopaedia of New Zealand.[45] The following account stresses the issues of interest in this study: the relationship between colonist and native, between colonial scientist and imperial science, and the development of the colonist toward becoming a New Zealander. For a more information on these and other issues in Buller's life and various careers reference should be made to the fuller biography written as a preliminary to this study.[46]

One of the key facts of Buller's life -and one which he often obscured -was that he was a native of New Zealand: he was born on 9 October 1838 at the "Newark" Wesleyan mission

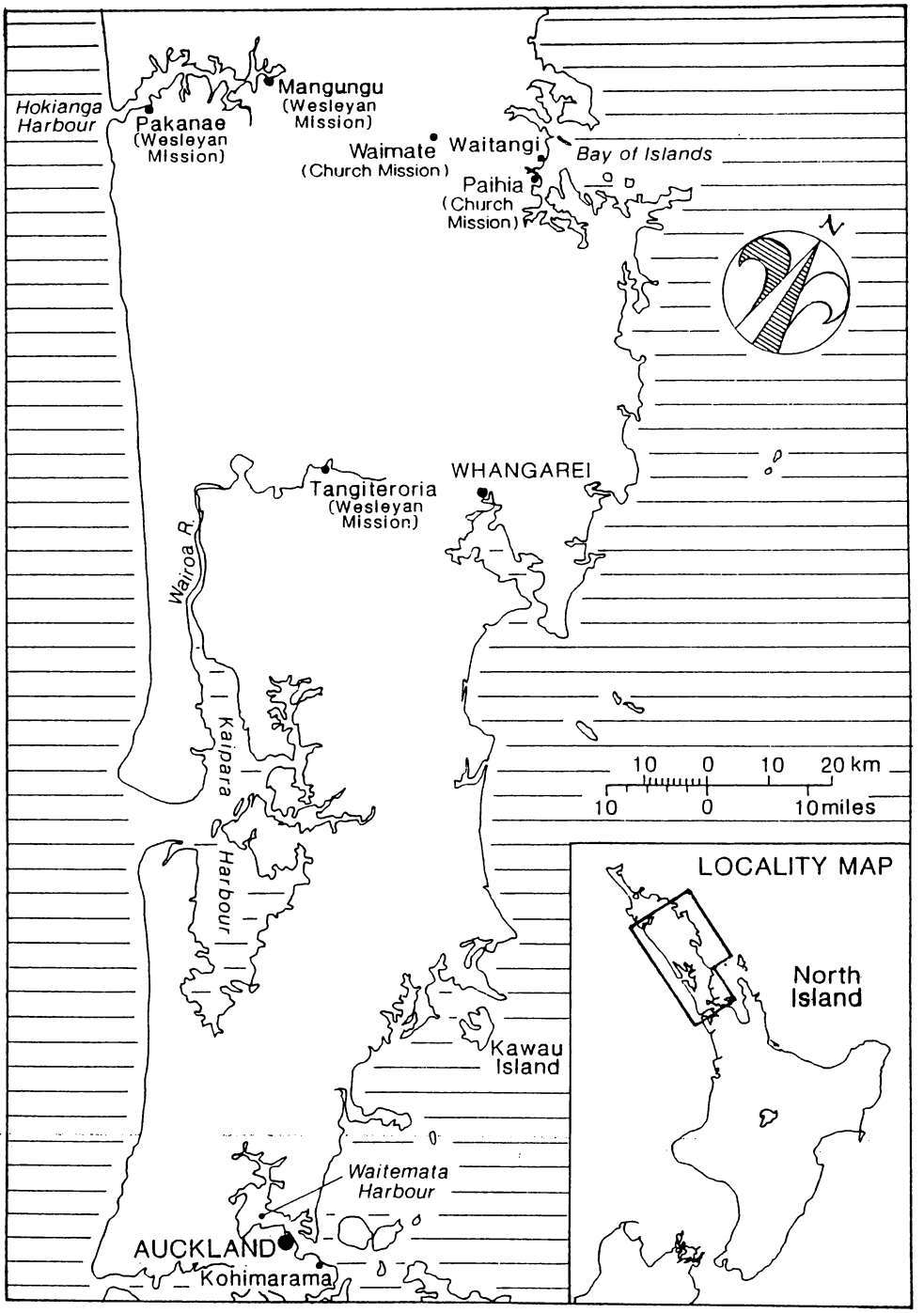


Fig. 2. Map of Northland district, New Zealand, showing sites of the Wesleyan and Church Mission Stations.

station at Pakanae, Hokianga. His parents had emigrated from Helston, Cornwall, in 1835, initially to Sydney, and then in 1836 to the Wesleyan mission at Mangungu on the Hokianga harbour. After a few months as tutor to the mission children, James Buller was accepted as a missionary and served briefly at Pakanae (where Walter, the second of their ten children, was born), and then for fifteen years at Tangiteroria in the Kaipara district.

The Tangiteroria mission station, where Walter Buller spent most of his childhood, was a tiny English enclave in the territory of the Kuihi people, a hapu of Ngapuhi.[47] Tirarau, the principal man of the area (a "chief", in the colonists' terminology), lived at his pa only half a mile away -indeed that had been the deciding factor in siting the mission, both for the missionaries (who wanted to convert the Maori) and probably also for Tirarau (who through "his" missionary gained prestige and access to European goods). Buller played in the bush surrounding the mission and sometimes accompanied his father on missionary circuits of Maori settlements. He evidently learned to speak Maori as a child.

English, however, was his first language. Like his father, he became an eloquent speaker and writer. He began his formal education in his father's study. James Buller stressed the importance of education and self-improvement -as did the

Wesleyans generally. The missionaries also worried about their children "imbibing bush manners and native habits"[48] and thus in 1850 they established their own Wesleyan College and Seminary[49] in Auckland as "a little South Sea Kingswood School"[50] modelled on the Wesleyan school of that name in England. It thus followed the nonconformist pattern and placed more stress on utilitarian subjects and less on the classics than prevailed in English public school education at the time. On the other hand, any native New Zealand influence on the school was minimal. The brick school building stood in enclosed grounds on Auckland's upper Queen Street, with hardly a tree or a fern, native or otherwise, in the neighbourhood. There were no Maori at the college -the Wesleyans' Natives Institution was several miles away at Three Kings.

Buller spent four years at the Wesleyan College. He then worked briefly as a clerk at the Union Bank in Auckland but in 1855, when the rest of the Buller family moved to Wellington, he went too. After some months "rest" there he made use of his familiarity with Maori people and the Maori language and obtained a well paid (£150 a year) position as an Interpreter in the Resident Magistrate's office. His obvious ability and energetic self-promotion brought him to the attention of Donald McLean, the Native Secretary and Chief Land Purchase Commissioner, who gave him more challenging assignments in the Native Department: reporting

on the state of the Maori population of Canterbury (1859); Secretary to the Kohimarama Conference between the Governor (Thomas Gore Browne) and Maori leaders (1860); editor of the official Maori-language newspaper Te Karere Maori/The Maori Messenger (1860-1861); completing the partition of the Kaiapoi reserve in Canterbury among the individual Ngai Tahu owners (1861). In 1862, when the network of magistrates in Maori districts was expanded under the "New Institutions" proposed by Sir George Grey, Browne's successor, Buller was appointed Resident Magistrate in Manawatu.[51]

Although Grey promoted his "New Institutions" as a form of guided Maori self-government, the scheme did not develop much beyond the network of Resident Magistrates, who in practice acted primarily as government agents in Maori districts, reporting on the disposition of the local people and exercising as much judicial authority as they could be induced to accept. As M.P.K. Sorrenson observes, the Resident Magistrate system in the self-governing colony of New Zealand was a form of "home-grown colonialism" operating rather like the British colonial administration in Crown colonies elsewhere in the empire.[52] The colonists, having gained a measure of independence from the direct rule of their British homeland, remained colonists; they continued the process of colonisation and colonial rule over the native people.

Buller, perhaps because of his youth (at twenty-three he was one of the youngest appointed), and certainly from his impetuous nature and personal ambition, was not a success as a Resident Magistrate. He was not able to gain either the necessary measure of trust and respect among the Maori or the confidence of his official superiors. Several times his judgement was publically questioned. Furthermore, where other Resident Magistrates managed to avoid overt involvement with the other arm of government Native policy -land purchasing -and thus preserve some degree of judicial authority, Buller compromised his position and influence among the Maori by becoming involved in land purchase negotiations on behalf of Dr I.E. Featherston, the Superintendent of the Wellington Provincial Council.[53]

Land and the ownership of land were crucial for colonist and Maori alike. The colonists tended to regard any Maori land not under cultivation as waste land waiting for their use. The Maori were thus under continual pressure from government land purchase officers to agree to the sale of land; indeed willingness to sell was often regarded as the criterion of allegiance to the government.[54] At the same time traditional disputes between Maori tribes over land still continued. Colonial land purchasing and Maori settling of old scores could thus become enmeshed into complex wrangles, especially in those areas which were both disputed between Maori tribes and coveted by the colonists. The fertile

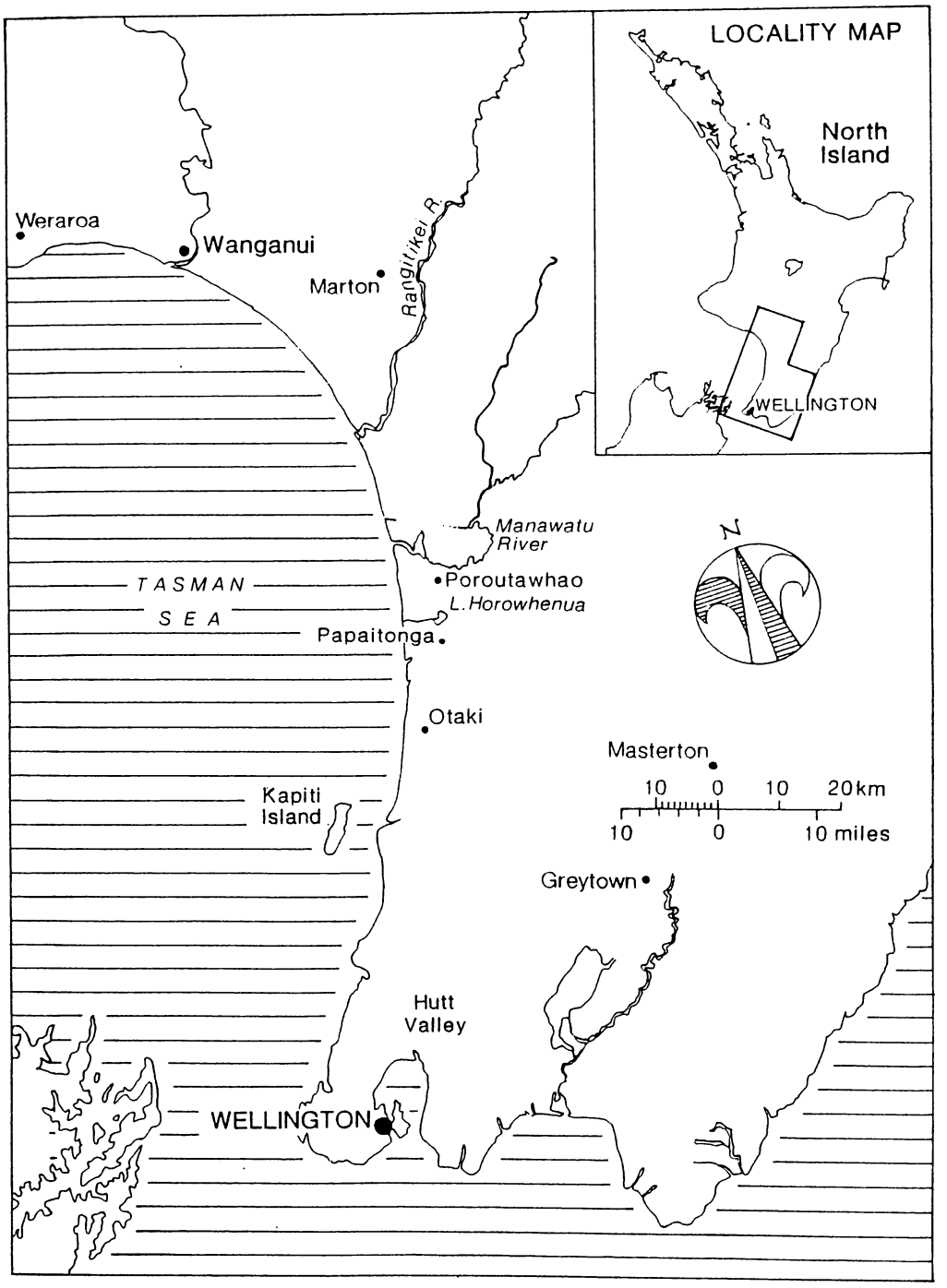


Fig. 3. Map of Wellington district, New Zealand.

coastal strip of Rangitikei and Manawatu where Buller was posted was such an area.

In 1863-1864 Featherston was not only Wellington Provincial Superintendent but also General Government Agent in Wellington,[55] and had the support of William Fox, Minister in charge of the Native Department -Buller's superior. In 1864 Featherston, with Buller's assistance, took advantage of a longstanding dispute between the three iwi or tribes of Buller's area (Ngati Raukawa, Ngati Apa and Rangitane) to push them into selling the land in dispute -250,000 acres between the Rangitikei and Manawatu rivers -as "the only means of finally settling our difficulty".[56]

When the Fox-Whitaker ministry fell in November 1864 the new Native Minister, W.B.D. Mantell (a temperamental man noted both for his cynical wit and his quixotic principles) first ordered Buller as Resident Magistrate for the Manawatu district to desist from land purchase negotiations, and then transferred him to Wanganui. However, Featherston had Mantell's orders overruled and Buller was sent back to complete the purchase of the Rangitikei-Manawatu block. The purchase was eventually completed, over Ngati Raukawa protests. Buller was then made Resident Magistrate for the colonists of Wanganui, with only secondary responsibility for the Maori of that area.

Buller's career in the Native Department brought him to a position of some local standing but little real importance; his real success at this time and later was in the scientific field. From his schooldays, he had shown a strong interest in natural history, especially ornithology -the study of which then consisted of collecting and describing specimens. He advanced by his own initiative and by contacts with men such as Dr Andrew Sinclair in Auckland, Dr T.S. Ralph and W.B.D. Mantell in Wellington and, later, with Sir George Grey and James Hector.[57] Suggestions in some biographical notes that he was the "pupil" or "disciple" of William Swainson FRS, (who when Buller arrived in Wellington in 1855 was living nearby in the Hutt Valley) appear to be quite without foundation.[58] In New Zealand science history Swainson is a figure whose shadow is greater than his substance: he had achieved some celebrity in London as a scientific illustrator, writer and theorist but abandoned his career and in 1840 emigrated to New Zealand, where he testily refused to join the fledgling local scientific society. Although he was in the 1850s the most eminent man of science resident in New Zealand, his scientific influence or achievement there was minimal.[59] He died in December 1855, a few months after Buller settled in Wellington. Buller may subsequently have encouraged the suggestion that he had been Swainson's "pupil" in order to give himself a scientific pedigree and enhance his credibility in London.

From the outset of his scientific career Buller was never confined to the role of a mere provider of specimens for imperial science. In his very first scientific paper, which he submitted to the Linnean Society of London in 1859, he described and named a new species in the proper scientific form.[60] By contrast, other New Zealand zoologists then and long afterward submitted their specimens to the metropolitan authorities of the British Museum for naming. Even so, Buller was clearly driven by a desire for metropolitan recognition and approval and his scientific efforts were shaped to this end.

In particular he made great efforts to gain the marks of scientific acceptance and success: academic titles and fellowships in the London learned societies. Like many gentleman scientists of the nineteenth century, he collected a long string of letters to his name.[61] Some colonial scientists -especially Ferdinand Mueller of Melbourne -became notorious in London for their craving for titles and honours.[62] In New Zealand, Buller was continually in competition with Julius Haast in particular for further titles to add to his name. His craving was not quite as strong as Mueller's but was certainly noticed. His obituary in Ibis, the journal of the British Ornithologists' Union, recalled that "not quite content with his English honours, Sir Walter had an innocent pleasure in obtaining distinctions from foreign countries".[63]

While it is clear that Buller, like many colonial scientists, actively sought titles and fellowships in metropolitan societies, the other side of the equation that is sometimes made -that the patrons of imperial science arranged these titles and fellowships as a reward for colonial scientific services[64] -cannot always be assumed. Buller obtained his first title, that of FLS (Fellow of the Linnean Society of London) before he had written a single scientific paper, by the simple expedient of writing and applying directly for it. He evidently learned of the society, and the requirements for entry, from Dr T.S. Ralph of Wellington.[65] With his letter to the Society Buller remitted the required fees of £6 for admission plus ~~required fees~~ £30 for life membership (mandatory for overseas Fellows) -which amounted to a quarter of his annual income, but the title must have seemed worth the cost. The Society was ready to oblige the unknown candidate from the colonies; J.D. Hooker and three other members signed his proposal and after a formal ballot at the meeting of the Society in January 1858 Buller was elected a Fellow and admitted into the Society.[66] No one thought to ask his age, although, as he must have known, the by-laws of the Society required that those nominated be at least twenty-one. Walter L. Buller FLS was then nineteen.

Fellowships in the London learned societies may sometimes have been arranged for colonial scientists as part of an imperial reward system but, as Buller's case illustrates,

were also obtained by direct application. It is also clear that in most cases Fellowships were by no means honorific titles bestowed for scientific distinction or worth. The latter impression, though often given, was merely a polite fiction, maintained by gentlemanly reticence or naive ignorance on the part of the recipient, and unwittingly perpetuated by some subsequent historians.[67] The FLS in particular was (and largely still is) simply a mark of membership of the Society.[68] There was no requirement, as Buller's election makes clear, that a Fellow was possessed of any scientific learning or reputation, or had made any contribution to knowledge. Few applicants were ever rejected; the election procedure was little more than a formality.[69] Most of the learned societies, except (after 1847) the Royal Society of London, bestowed their Fellowships in much the same way.

Buller's first significant scientific paper was written originally as an essay for the New Zealand Exhibition held in Dunedin in 1865. Buller was awarded a silver medal -as were all those who had submitted essays and everyone else with any official connection with the exhibition. Although the Exhibition Commissioners had intended to publish the essays, after several years delay they abandoned the idea; some, however, including Buller's, were later incorporated in the first volume of the Transactions and Proceedings of the New Zealand Institute, published in 1869.

Among the essayists Buller was the youngest (at twenty-six), the only one born in New Zealand, and had perhaps the least standing socially or scientifically.[70] He fully exploited the possibilities for self-promotion. Not only did his essay establish him in New Zealand as the authority on native birds, but even before the Transactions volume was published he sent reprints of his essay to key men in the English scientific establishment to make his name more widely known there as well. The essay was also widely distributed with the Transactions -not only did all 258 members of the various philosophical societies and 25 public libraries and other institutions in New Zealand receive a copy, but presentation copies were also sent, as a showcase for New Zealand science, to 50 important scientific men and institutions in England and elsewhere.[71]

The essay itself was a competent summary of the state of European knowledge of New Zealand ornithology, reviewing all the known species. Among these Buller included eight new species which, rather than submitting to the metropolitan experts, he had again described and named himself. By the publication of his essay these were placed before all scientists for their scrutiny and verdict. But even apart from his new species Buller argued that the birds of New Zealand were "of considerable interest to the general zoologist". From the perspective of European science they

were new and exotic. Furthermore many of the species were rapidly disappearing and "will ere long exist only in our Museums". This added to their interest; they would soon join the Moa, whose bones had, as Buller quoted, "excited the delight of the natural philosopher and the astonishment of the multitude".[72]

The metropolitan experts were indeed interested. Dr P.L. Sclater, secretary of the Zoological Society of London, in acknowledging the essay expressed the hope that Buller, as an ornithologist "on the spot", would "let us have a complete volume on the birds of New Zealand before long." He also agreed to recommend Buller as a corresponding member of the Zoological Society (giving him the title CMZS).[73] More importantly, Sclater wrote a short review of Buller's essay for Ibis, the journal of the British Ornithologist's Union, and Alfred Newton (then editor of Ibis) in turn included it in the Zoological Society's newly established annual Record of Zoological Literature.[74] These brought the essay, and Buller, to the attention of the European scientific world.

The first critical analysis of Buller's work came from Otto Finsch, museum curator for the natural history society of Bremen, who although only twenty-seven (a year younger than Buller) was already a European authority on parrots and on the birds of the Pacific Islands.[75] Finsch obtained a copy of Buller's essay from Newton, translated it into German, and

reprinted it along with his own detailed critique in the German Journal für Ornithologie.[76] Finsch cast doubt on the validity of some of Buller's new species and also noted that Buller had compiled much of the essay not from his own observations but from the writings of G.R. Gray of the British Museum.[77] The colonial scientist was criticised on the one hand for being too independent and on the other for being too derivative.

Buller responded to Finsch's critique with a rejoinder in the Transactions and Proceedings of the New Zealand Institute.[78] He also sent to Ibis a paper describing further new species. Finsch in turn rejected most of these as synonyms of species already described by European scientists.[79] Buller proved to be an expert controversialist and in his rejoinders to Finsch's successive critiques publicised himself further while generally conceding Finsch's points about his new species.

On the other hand, Finsch's message was clear: that Buller was overreaching himself and blundering in matters of taxonomy which required the expert judgement which could only be acquired from experience among the libraries and museum collections of Europe. Colonial scientists were expected to confine themselves to the collection of the material, and leave its classification and analysis to the metropolitan savants. Most New Zealand scientists tended to agree. As F.W.

Hutton commented when Buller's species continued to be rejected, "it only shows that new species must be referred to Europe before it is safe to name them".[80] Science was based in Europe even if the species under study were antipodean.

Buller, however, was not discouraged. He even exploited the contact with Finsch by asking him to arrange a degree from one of the German Universities. Buller made no secret of his aim of advancing both his careers concurrently: not only was he seeking scientific recognition, but by gaining a degree he hoped to be admitted as a barrister in New Zealand without having to serve time as an articled clerk. Finsch complained to his compatriot Haast in New Zealand about Buller's "vanity" and "real English insolence". Haast took a rather more indulgent view of Buller's vanity and ambition -which were no more than Haast's own -but he took mischievous delight in passing Finsch's comments on to Buller, who did not press the matter further.[81]

By 1871 Buller had assembled the materials for a comprehensive treatise on the ornithology of New Zealand and negotiated leave on half pay from his position as magistrate plus a government grant in aid of publishing it in London. To bring his income there up to £600 -the level he had enjoyed in New Zealand -he was also appointed secretary to Featherston, who had just been made Agent-General.[82] In

New Zealand there were accusations of patronage, especially when it became known that Buller was also reading law at Inner Temple[83] -the traditional entry to the legal profession, and a more prestigious one than the colonial back-door route he had tried earlier.

Buller was very successful in his time in London. Just after he arrived news came that Finsch, despite his protestations, had arranged for the Royal Wurtemburg University of Tubingen to award Buller the degree of Doctor of Natural Sciences, on the basis of his 1865 Exhibition essay as translated by Finsch. All Buller had to do to receive the doctoral diploma was to send the fee of 200 thaler -about £30.[84] Buller also managed to complete his terms at Inner Temple (though he had to extend his leave and was eventually forced to resign his New Zealand magistrate's position) and was duly called to the Bar.[85] And above all, his scientific magnum opus, A History of the Birds of New Zealand, published in parts in 1872-1873 and magnificently illustrated by the Dutch artist J.G. Keulemans, won Buller wide acclaim -even, to the chagrin of more established colonial rivals for honours, the CMG.[86]

Buller's colonial background does not appear to have disadvantaged him in London. He was accepted into Inner Temple as soon as he arrived. He was elected a Member of the British Ornithologists' Union in May 1872, while publication

of his book was still in progress. The B.O.U., unlike the Linnean Society, was socially rather exclusive; a man without means or social standing was not easily elected. Buller in London had an income from the New Zealand government of £600, which placed him well up in the middle class, and he gave the appearance of not having to work for his living -the mark of a gentleman. Although he was nominally private secretary to the New Zealand Agent-General, Featherston did not demand much of his time.

In January 1873, before he had even completed publication of his book, he was nominated for Fellowship of the Royal Society of London. To become a Fellow of the Royal Society was not just a formality as it was in the case of the Linnean Society, nor could it be bought by wealth or social rank. New rules for entry instituted in 1847 had restricted the number of new Fellows elected each year to fifteen; the resulting competition for entry meant that only those of scientific eminence and achievement were elected. In New Zealand, only Hector and Haast had the coveted FRS to their names. Buller was nominated by some notable Fellows, including J.E. Gray and Albert Gunther of the British Museum, Alfred Newton, John Gould, and even Charles Darwin[87] -all subscribers to his book. At the election in June he was not successful, but this was not too discouraging for few candidates were elected immediately.

He was put up again in subsequent years after he had returned to New Zealand in 1874. As he told Gunther, who was sponsoring him, "I shall of course strengthen your hands...by doing as much sound and useful work as I can".[88] Indeed, at this time he filled more pages in the Transactions and Proceedings of the New Zealand Institute than anyone else. His papers were presented before the Wellington Philosophical Society, but they were aimed more directly than ever at London. His efforts were eventually rewarded: in 1879 he was elected to the Royal Society. Even the Wellington Evening Post, which usually belittled Buller's efforts at gaining honours and titles, praised him for winning "the highest compliment and distinction which the scientific world of Great Britain has in its power to bestow.... being, we believe, the first man born and educated in the colonies who has won this high distinction".[89]

After winning election as a Fellow of the Royal Society, Buller relaxed his scientific efforts. In the seven years from 1873 (when he was first nominated for the Royal Society) to 1879 (when he was finally elected) he presented 47 papers before the Wellington Philosophical Society; in the seven years following he presented just 4.

The latter years were occupied mainly with his law practice. On his return from London as a member of the English bar, he

had quickly established himself in a very lucrative practice specialising in Native Land Court work. His unusual combination of professional legal skill and a command of the Maori language gave him an edge over most of the land court agents and "conductors" in the business. With all his contacts among the colonial establishment on the one hand and among Maori leaders on the other he was well placed to work the whole intricate system of Native Land law to the advantage of his clients.

The Native Land Court had been established under the Native Lands Acts of 1862 and 1865 which had also revoked the Crown pre-emptive right of purchase; trade in Maori land was open to anyone, once title to the land had been granted by the Court. Indeed this, to the colonial legislators, the Land Court judges and the colonists generally, was the real object of the Native Land Court: the awarding of titles to Native land, not for the benefit of the Maori owners, but "to enable alienation for settlement".[90] The way the Court operated in awarding titles to Native land was determined in practice as much by the Chief Judge, F.D. Fenton, as by the legislation. Fenton was an autocratic judge who would have none of the Maori runanga style of adjudication by discussion and eventual consensus; he insisted on the formalities of an English courtroom, with a judge who listened to the cases presented by the contending parties and then handed down his decision -hence the need for a conductor or lawyer familiar

with the procedures.

Buller was a most able advocate and generally managed to persuade the Court to award title to his clients. But they paid dearly for it: usually a retainer of a hundred pounds or so, and ten guineas a day plus expenses for the time he worked on the case.[91] When cases regularly ran for weeks in court his Maori clients were frequently forced to sell off part of their land to pay the costs of gaining title to it. They could not, on the other hand, afford to stay away from the court for if they did the land would probably be awarded to someone else.

Buller was not the only lawyer whose fees ate up the land of his Maori clients, but he made a greater fortune at it than most. Most of his fees actually came from colonists. Although he would act in court ostensibly for Maori clients, in many cases he held retainers also from colonists waiting to buy or lease the land they wanted once those Maori clients obtained legal title to it.[92] As well as assisting the progress of colonisation in this way, Buller's business was highly lucrative: in 1882 he estimated his receipts at £6,000 to £8,000 a year,[93] which may be compared with the £535 (including various fees and allowances) he received in his best year as magistrate, or the prevailing wages for most categories of workers of £50-£120.[94]

In 1886, after only eleven years in practice, Buller was able to retire[95] with a very respectable fortune. He then returned to London as one of the New Zealand commissioners for the Colonial and Indian Exhibition held at South Kensington. Following his efforts there, and his contribution of £5,000 toward the Prince of Wales's faltering project to turn the Exhibition into a permanent "Imperial Institute", Buller was made a Knight of the Order of St Michael and St George[96] -the order set aside for colonial honours. After the Exhibition he remained in London and published an enlarged edition of his A History of the Birds of New Zealand. This became a New Zealand classic, especially for its chromolithographic plates (again by J.G. Keulemans), which became the definitive images of New Zealand birds.

After he gained his knighthood Buller began to be approached by promoters seeking the backing of his name and title for companies raising capital in London for speculative mining ventures in New Zealand. Several of these companies quickly ran into difficulties when their prospectus statements on yields and profits turned out to be misleadingly optimistic. In the case of the Blue Spur and Gabriel's Gully Consolidated Gold Company, Buller, as chairman of directors of the company, was sued for fraudulent misrepresentation and was forced to return to New Zealand to try to rescue the operation -which he eventually did.[97]

While back in the colony Buller also became involved in two public issues, relating to native birds and Native Land. In 1891-1892 he assisted the Governor, Lord Onslow, in a successful campaign for the setting aside of island reserves for the preservation of native birds. To take such a stand was a new departure for Buller; he had previously argued that all the natives -plants, birds and people -would inevitably be displaced by the more vigorous European immigrants and that nothing could stem the process. The shift in attitude, toward the idea that native things were of value and should be protected, is central to this study and will be considered in detail in later chapters.

Also in 1892 Buller established a country estate at Lake Papaitonga, Horowhenua, on land leased and purchased from Keepa Te Rangihiwinui, or "Major Kemp" as he was known to the colonists.[98] During his career in the Native Land Court Buller had generally avoided dealing in land himself, but here he allowed sentiment about a particular piece of New Zealand scenery -"unspoiled" by the progress of colonisation -to overrule commercial prudence or any qualms about exploiting his position of trust with Maori clients. In the process he became drawn into a long-running dispute over the Muaupoko tribal estate at Horowhenua -indeed it had been Keepa's need for money to continue his fight in this dispute which gave Buller his foothold on the land. In 1895 the case came to wider attention when the Minister of Lands, John

McKenzie (who had also become entangled in the dispute after the government purchased part of the Horowhenua Block as a State Farm), publicly accused Buller of defrauding the Muaupoko people. McKenzie carried his feud against Buller through a succession of Commissions of Inquiry and actions in the Native Appellate Court and the Supreme Court, but in the legal arena he was no match for Buller; much evidence of shady dealings emerged but none of the charges against Buller were sustained.[99]

In the process, however, Muaupoko and Keepa paid dearly. Although ostensibly the issue was to save them from being defrauded of their land, McKenzie did not hesitate to charge Muaupoko with the costs of the Commission of Inquiry, and expropiated a section of their land in settlement. And Buller, while defending his own interests, acted at each hearing as Keepa's counsel and charged him accordingly through a mortgage over the Papaitonga property he already leased. When Buller visited Keepa on his deathbed in 1898 he had him sign a new will making express provision for paying his accumulated debt under the mortgage: £6,810.[100] This could only be settled in land; hence after Keepa's death Buller gained the freehold of the Papaitonga estate.

He left immediately for England, where, although expressing nostalgia for New Zealand in a Supplement to the "Birds of New Zealand", he was, finally, quite the English gentleman.

He died on 19 July 1906 at his daughter's country home in Hampshire, and was buried in the village there.

1.4 Buller, Colonial Science and Colonial Identity

Before going on to consider the matrix of colonial ideas concerning native things, some conclusions can be drawn on Buller's position and role as a colonist and a colonial scientist. Although Buller, as a colonial scientist, looked up to London, his position was not simply one of subordination to metropolitan authority. It is clear that Buller in particular took advantage of the European interest in observations and specimens from the antipodes in order to boost his own scientific and social advancement. His success in science, as in law and in business, was based on exploiting the opportunities of his colonial position. Buller cannot be regarded as typical in this regard; indeed it is also clear that although a pattern of "colonial science" in the sense of Basalla or MacLeod -of intellectual deference to metropolitan science and the acceptance of a peripheral, practical role -can be identified in New Zealand as elsewhere, colonial scientists varied considerably in their attitudes and the roles they adopted.[101]

When the issue of the relation between colonial and metropolitan scientists was raised at a meeting of the

Wellington Philosophical Society in December 1876 one member complained that colonial efforts were looked down on. Buller immediately spoke up for his "scientific friends at Home, who, so far as his experience went, were always ready to lend a helping hand to remote workers...and never failed to accord them the fullest recognition." W.B.D. Mantell disagreed; in his experience "scientific men at Home, while very willing to relieve the colonial gatherers of their treasures, were very apt to appropriate their labors in the most unblushing manner and without any recognition." Buller conceded that this might occasionally occur, but he insisted that from men such as Charles Darwin, Joseph Hooker, Alfred Newton and Albert Gunther in particular, "workers out here could always count on sympathy, aid and support" and a "strong personal interest...in our proceedings at the antipodes".[102]

Clearly, some scientists "out here" on the periphery chafed at their subordinate position and at being unable to share the honours for their discoveries.[103] Buller, however, rather than grumping in a colonial corner, established his own niche in London and even when back in New Zealand traded favours to cultivate his "scientific friends at Home". He was never a mere provider of specimens for metropolitan science. In his very first scientific paper, which he submitted to the Linnean Society of London in 1859, he described and named a new species in the prescribed scientific form. By contrast, other New Zealand zoologists for long afterward continued to

submit their specimens to the metropolitan authorities of the British Museum for naming. But at the same time Buller was clearly driven by a desire for metropolitan recognition and approval and his scientific efforts were shaped to this end.

By his confident efforts -over-confident in the eyes of some European scientists -in naming new species himself rather than submitting them to the experts in London, Buller refused to accept one form of deference to metropolitan authority which most other colonial scientists agreed with.[104] By assuming the power to attach names to species, Buller also gained the opportunity to operate one of the reward systems of science -"immortalising" colleagues or patrons by naming species after them.[105] Buller made most use of this to honour his colonial friends (Julius Haast, James Hector, F.W. Hutton, William Colenso), patrons (Dr I.E. Featherston, Sir George Grey) and collectors (H.H. Travers, A.W. Bethune, J. Brough). He also honoured a few English friends: P.L. Sclater, the secretary of the Zoological Society, and G.D. Rowley of Brighton, who paid large amounts for specimens of New Zealand birds. In 1876, when Buller was hoping to be elected to the Royal Society of London, he described a "supposed new species" of Tuatara and named it in honour of his sponsor in the Society, "the foremost among living herpetologists, Dr Albert Gunther, F.R.S."[106]

In the second edition of his A History of the Birds of New Zealand, Buller named four new species -all of them after friends.[107] As well, he indulged in another variation in scientific vanity: arranging for others to name species after him. The process of naming of new species of animals was by this time codified in generally-agreed rules of zoological nomenclature[108] It was, however, an unwritten rule of gentlemanly modesty in science that one did not name a species after oneself. Thus when Buller included in his new edition a new shearwater Puffinus bulleri and a new kiwi Apteryx bulleri (with a coloured plate of each), he quoted them as having been recently described by the English scientists Osbert Salvin and R.B. Sharpe respectively.

It is clear that, in the case of Apteryx bulleri at least, Buller himself took a large part in organising the naming process. Although R.B. Sharpe was Assistant Keeper in charge of the bird collections of the British Museum, his brief paper naming A. bulleri was presented not to a London learned society, but to the Wellington Philosophical Society, "communicated by Sir Walter Buller".[109] The paper described how, after examining Buller's collection of kiwi skins and discussing the relevant literature with him, Sharpe had become convinced that the old name Apteryx mantelli Bartlett, 1850 did not apply to the North Island Brown Kiwi, which thus lacked a valid scientific name. Accordingly, Sharpe explained, he named it Apteryx bulleri "after the

learned author of the 'Birds of New Zealand,'...on the completion of which I should think any one would find it difficult to write anything more about the birds of New Zealand".[110]

Sharpe's paper was formally "read" before the Wellington Philosophical Society in June 1888 by a local member.[111] Buller did not wait for its actual publication; he incorporated the new name Apteryx bulleri (and reprinted Sharpe's paper) in Part XIII of his new edition, which was published in December 1888.[112] The volume of the Transactions and Proceedings of the New Zealand Institute containing Sharpe's paper was not published until May 1889. In his book Buller quoted Sharpe's paper as being in a separately published Proceedings of the Wellington Philosophical Society, for which he quoted a date of "1888", but this reference appears to be spurious.[113] Buller's description, even though it quoted Sharpe's, was thus published first; technically, therefore, under the accepted principle of priority by date of actual publication, Buller must be regarded as having named Apteryx bulleri himself.

Altogether, there is a strong odour of scientific chicanery about the case. It is hard to avoid the conclusion that Buller was exploiting his friendship with Sharpe on the one hand and the position of the Wellington Philosophical Society

at the colonial periphery on the other, in order to quietly introduce a dubious species which in London would probably have been immediately rejected. Colonial obscurity had its uses.

The naming of Apteryx bulleri drew no immediate reaction in London, but in Wellington the incoming president of the Philosophical Society, the lawyer A. deB. Brandon, devoted most of his inaugural address to a systematic, forensic analysis of the issue. He concluded that the change of name was "wholly unwarranted" and also suggested, indirectly but unmistakeably, that the change had been engineered less for scientific reasons than to "add one more to the list of species in which [Buller's] name will be handed down to posterity".[114]

Only Buller and a few New Zealand scientific followers ever used the name Apteryx bulleri. British scientists generally ignored the name change and continued to use A. mantelli.[115] That position was made explicit in 1893 when Walter Rothschild reviewed kiwi taxonomy in a paper which he read at a meeting of the British Ornithologists' Club. Rothschild rejected A. bulleri, commenting that "Sir Walter Buller unfortunately misled Dr Sharpe into renaming the North-Island bird".[116] In the gentlemanly Club atmosphere little more was said; Buller appears to have been better accepted and his foibles more readily tolerated in London

than in Wellington. Sharpe, who was present when Rothschild read his paper -and also edited it for publication -remained silent. Even Rothschild softened his blow by immediately naming another species of kiwi in Buller's honour. As the specific name bulleri was preoccupied (in the nomenclatural sense -it had already been used for a species in the genus Apteryx), Rothschild used another of Buller's names and called the Stewart Island Kiwi A. lawryi.[117]

Buller, however, still did not give up his kiwi. Stubbornness and vanity outweighed scientific argument; although no one else in England and few in New Zealand went along with him, he persisted in calling it Apteryx bulleri for the rest of his life.[118]

Apart from demonstrating his egotism, Buller's manipulation of the procedures of European science illustrates how even a colonial could work those procedures for his own ends. Buller found in London that metropolitan science was not an impenetrable monolith; scientists there came in many kinds and classes. And certainly Buller's wealth placed him in a different class than those who worked in science as a profession. In New Zealand, James Hector received a salary of £800 per annum as head of all government scientific departments and Julius Haast £500 as director of the Canterbury Museum -and they were well off compared with many scientific men in Britain and Europe. R.B. Sharpe was paid

less than £200 as Assistant in the Zoology Department of the British Museum, and Otto Finsch the equivalent of £100 at the museum of the Bremen natural history society. Such men were professionals, but Buller, even when in London in 1871 on a government allowance of £600 per annum, was a gentleman scientist. By the time he returned to London in 1886 the distinction was even greater.

The prosperous colonist going "home" with inflated social pretensions was something of a stock figure in the late nineteenth century; thus in 1886 New Zealand newspaper gossip columns repeated the disdainful judgement said to have been heard in a London club -of colonials "anxious for a nod from any titled person...and consumed at the same time with a most ridiculous sense of their own importance".[119] Even allowing for the exaggeration of sarcasm one can recognize in this view men like Buller, with their combination of brashness and insecurity, self-importance and a craving for recognition. Buller in particular appears to have been driven by the need to wipe out any imputation of inferiority arising from his New Zealand birth, and to reconstruct himself more in the mould of an English gentleman.

He certainly tried to discard and disguise any traces of his humble birth and nonconformist upbringing, and to recast them into a more established mould. It is noticeable, for instance, that when he began to be listed in biographical

dictionaries, his entries generally omitted to mention that his father had been a Wesleyan missionary, or that "Newark", his birthplace, had been a Wesleyan mission station on the Hokianga harbour. The process can be seen even in his scientific writing. In the second edition of his A History of the Birds of New Zealand, -published three years after his father's death -he wrote in nostalgic terms of "my juvenile excursions through the bush near the parental home -the dear old Church Mission station of forty years ago".[120] By the quiet allusion to the Church Missionary Society, Buller was here subtly transposing his childhood mission home up in tone from nonconformist Wesleyan to established Church of England.[121] He was so successful at camouflaging his birthplace, or relocating it to the Bay of Islands -Church Missionary Society territory -that even as careful a chronicler as A.G. Bagnall has been misled.[122] Similarly, in his contemporary biographical listings his school was first transformed from the Wesleyan College and Seminary to a more acceptable "Auckland College",[123] and then dropped altogether.[124]

Even more significant than Buller's connection with the Wesleyan mission was the fact that he had been born in New Zealand at all. By the end of his life he was more at home in England than in New Zealand, his sons had been up to University at Cambridge, and his daughter had married into a junior branch of a noble English family.[125] How successful

he was in disguising his New Zealand birth -or indeed how hard he tried -is not entirely clear. His writing also shows an identification with New Zealand -with "our native birds", and with the "beautiful sylvan scenery" of the New Zealand bush[126] -even before such sentiments came more generally into vogue in the colony.

In 1890, after publishing the new edition of his A History of the Birds of New Zealand, Buller made a collection of reviews, laudatory notices and testimonial letters from important men, and had the whole lot printed in a slim volume for presentation to his friends.[127] The image presented is that of a successful colonist returned "home" rather than that of a colonial son. Under his name on the title-page he added a Buller family motto he had by then adopted for his letterhead: "Aquila non captat muscas": the eagle does not catch flies. He quoted one reviewer's judgement that it was "extraordinary...that a man who had lived the best part of his life at the Antipodes...should be able to produce a high-class book, strictly scientific and quite abreast of the time", and Sir Richard Owen's crowning accolade that "one feels proud that its Author is a Countryman".[128]

Given Buller's wealth and consequent social status on the one hand, and his craving for legitimisation and recognition on the other, his relationships with British and European scientists were more complex and varied than is suggested by

the Basalla model of colonial science marked by deference to metropolitan authority. Buller did not defer at all to the recognized scientific authority of Otto Finsch of Bremen when Finsch rejected his new species, and did not hesitate to criticise the work of some English scientists -even, in his later years, such important ones as Sir John Lubbock and A.R. Wallace.[129] In London Buller obtained the assistance of R.B. Sharpe of the British Museum in editing the text of successive editions of his A History of the Birds of New Zealand, and evidently paid Sharpe for the work; he certainly treated Sharpe in much the same way as he did his artist Keulemans -as a tradesman.[130] On the other hand Buller did defer to and court the attention of the more scientifically and socially eminent, especially those who appeared to be in a position to help his advancement -such as the old "czar of imperial science", Sir Richard Owen, and also Sir Joseph Hooker of Kew and Alfred Newton of Cambridge.

In his rise from humble beginnings in the colony of New Zealand to a position of wealth, social standing and scientific repute back "home" in England, Buller lived out the colonist's dream of making good. By taking advantage of the opportunities of his colonial position, he went further than he could ever have expected had his family not emigrated from their home town in Cornwall. In New Zealand he was able to made his fortune by exploiting his knowledge of English law and Maori language and custom in the Native Land Court; and to make a name for himself

by bringing the native New Zealand birds before the English scientific world.

One of the ironies of Buller's scientific career -based as it was on exploiting the rarity of the native birds and the prospect of their imminent extinction -is that despite his own lack of interest in conserving or protecting native species, the very success of his great books and the strong images they provided of the native birds helped to foster the growth of such ideas in New Zealand. His books helped create the public perception of the native birds as both unique to New Zealand and of special, international interest. The birds became valued accordingly: previously as curiosities or commodities to be traded for profit, but by the end of the century increasingly as objects of national pride, worth the attempt to save from extinction. And while Buller himself made determined efforts to disguise his New Zealand birth and background and make an Englishman of himself, his (or strictly Keulemans's) birds -Kiwi, Huia and Tui in particular -began to be used as emblems or symbols of a New Zealand national identity.

The next three chapters of this study will examine, through Buller's writings in particular, some of the framework of ideas within which the colonists regarded the native things of New Zealand (plants, birds and people) and their relative place or worth as against those of the corresponding British or European colonisers. Colonial attitudes toward the native flora and

fauna can not be separated from attitudes toward the native people; indeed contemporary writers frequently argued by analogy from one to the other. Buller, although a native-born New Zealander himself, was no exception. Thus although this study is mainly focussed on attitudes toward native species, considerable attention will also be paid to the corresponding attitudes toward the native people. Chapter 2 will examine the colonists' general presumption that European species and European people were superior and would inevitably displace the natives from New Zealand; Chapter 3 the colonists' desire to "acclimatise" European species, which they expected would flourish in the same way as they themselves expected to flourish in the colony; and Chapter 4 the relationship between colonial and Darwinian ideas on the struggle for survival between European and native species and people. The following chapters (5 and 6) will then describe the emergence of the seemingly conflicting attitudes concerning native species -that they should be preserved from exploitation and extinction as the "heritage" of New Zealanders and a source and symbol of national pride. All these attitudes -embracing both European superiority, and pride in native New Zealand things -are exemplified in Buller's writings. The concluding chapter (7) will examine more closely some of the conflicts and contradictions in these colonial attitudes.

CHAPTER 2

DISPLACEMENT OF THE NATIVES

2.1: Introduction

The European colonisation of New Zealand was based on the displacement of native things. In this Chapter it will be argued that the colonists who landed in New Zealand in large numbers from 1840 believed that this displacement was not only necessary but inevitable in the progress of colonisation. They worked under the presumption that the native vegetation would be swept aside to make way for English grass and sheep; that the native people would not and could not stand in their way. They took it for granted that the native plants, animals, and people were bound to die out in the face of the more vigorous immigrants. These ideas pervaded both popular and scientific views toward all native things. As will be seen, not only colonists but also visiting scientists -most notably Charles Darwin, J.D. Hooker and Ferdinand Hochstetter -all saw confirmation of this "displacement" on every hand in New Zealand. Colonial scientists later quoted the views of these metropolitan experts in support of their own.

Before examining the notion of displacement as held by the colonists in New Zealand in the nineteenth century, some comments should first be made on its roots in European ideas.

Two in particular are relevant here. The first can be traced from an idea with a very long history (reaching back to Plato) and many ramifications: that of the scala naturae -that all creatures in nature formed a continuous scale, from the highest to the lowest, on a "great chain of being".[1] Much of this concept was repudiated by European philosophers and scientists of the late eighteenth and early nineteenth centuries such as J.F. Blumenbach and Georges Cuvier, but its influence persisted; as Nancy Stepan argues, it re-emerged in mid-century in the idea that races of mankind formed a natural scale or hierarchy from the European at the top to the Negro at the bottom, somewhere near the apes.[2] The idea of a hierarchy of races was not new[3] but in the nineteenth century the superiority of the "Anglo-Saxon" race became a major preoccupation in British scientific and popular thought.[4] In the 1850s Robert Knox, one of the most outspoken exponents of these ideas, argued that "race is everything..." and that the northern European "Saxon" or "Scandinavian" race was destined to dominate all others.[5]

The other idea was more recent, and contradicted one of the tenets associated with the great chain of being -that there could be no gaps in the chain. Under this view of nature, no species could be lost from the earth -nor, conversely, could any new ones be produced. "Such is the oeconomy of nature, that no instance can be produced of her having permitted any one race of her animals to become extinct; of her having

formed any link in her great work so weak as to be broken".[6] This expression of eighteenth century orthodoxy was written by Thomas Jefferson in 1785 during a controversy with the Comte de Buffon over some enormous bones found in Ohio. Buffon's contrary view, that the bones belonged to animals now extinct, prevailed. Further developed by Georges Cuvier, the radical idea that species could be totally exterminated became accepted -but not, until much later, the corollary that new species might evolve to fill the gap.[7]

By the 1830s Charles Lyell described extinction as "part of the regular and constant order of nature". To illustrate the process and the struggle between species that it implied he compared it with the process of colonisation and displacement:

> A faint image of the certain doom of a species less fitted to struggle with some new condition in a region which it previously inhabited, and where it has to contend with a more vigorous species, is presented by the extirpation of savage tribes of men by the advancing colony of some civilized nation.[8]

Lyell gave the examples of "the speedy extermination of the Indians of North America and savages of New Holland" and, as if to quieten any humanitarian qualms, also turned his analogy around to argue from the human realm to the processes of nature:

> Yet, if we wield the sword of extermination as we advance, we have no reason to repine at the havoc committed....

> Every species which has spread itself from a small point over a wide area, must, in like manner, have marked its progress by the diminution, or the entire extirpation, of some other, and must maintain its ground by a successful struggle against the encroachments of other plants and animals.[9]

Lyell's argument here contains much of the idea of displacement. It also demonstrates the close connection between its application to species of plants and animals on the one hand and to human races on the other. In the same way, when J.D. Hooker summarised his views on the displacement of native plants in Australia and New Zealand by vigorous European species, he took his metaphor from Robert Knox's ideas on human races: "the Scandinavian", Hooker wrote (referring to the plants) "asserts his prerogative of ubiquity from Britain to beyond its antipodes".[10] As with human races, so with plant species: the European colonists were displacing the natives.

Before discussing the development of the idea of displacement as applied to New Zealand, some of the attitudes of the colonists there toward native things, and the native people in particular, will be briefly surveyed. The latter attitudes have been examined for instance by John Miller and by Angela Ballara;[11] here a range of views on the place of Maori people in relation to the colonists will be described to give background for more detailed analysis of the rhetoric and ideas of displacement as expressed in the scientific writing of Buller and others.

2.2 The Background: Attitudes of the Colonists Toward the Maori People

Underlying the attitudes of British colonists toward native people in general was a combination of the two ideas introduced above: that of European and especially "Anglo-Saxon" racial superiority; and that of the inevitable extinction of the inferior, less vigorous, uncivilised natives. Concerning the Maori race in particular, predictions were made even before organised colonisation began that it would "melt away" and die out. One of the more influential of these predictions was that of James Busby, the British Resident in New Zealand, who reported in 1837 that the high mortality among the Maori promised "at no very distant period, to leave the country destitute of a single aboriginal inhabitant".[12]

Predictions such as Busby's became widely known in Britain, and can only have strengthened the popular belief there that the Maori, like other native peoples of the Pacific and elsewhere, were headed for extinction. In the 1830's the extinction of native races under the impact of European colonisation was an issue of scientific interest and humanitarian concern in Britain. The Aborigines Protection Society, founded in 1837, attracted members interested in

both aspects.[13] In 1839 the British Association for the Advancement of Science heard a paper by James Prichard "On the extinction of human races"; and at the same time humanitarian concern at the fate of the Maori people, expressed by the Missionary Societies in particular, was influential in the forming of Imperial policy on New Zealand.[14] When the Colonial Office, under pressure also from the promoters of colonisation, reluctantly accepted the "unwelcome necessity" of intervening in New Zealand, the predicted "calamities" hanging over the Maori race formed an element in the calculations of all the parties.[15] William Hobson, the British emissary who in February 1840 negotiated with Maori "chiefs" to sign what became known as the "Treaty of Waitangi" ceding sovereignty of New Zealand to the British Crown, believed privately that the Maori race was diminishing so fast that it would not be long before New Zealand "will be wholly occupied by white people".[16]

Not surprisingly, among the colonists who began arriving in New Zealand in large numbers from 1840, the assumption of Maori inferiority and the expectation of Maori extinction were so general that most attitudes were merely variants on these themes, coloured by humanitarian concern on the one hand, and self-interest on the other. At the latter end of the spectrum, E.J. Wakefield and other New Zealand Company propagandists for colonisation raged against "protection of the aborigines" and "all the 'Treaty of Waitangi'

nonsense...hindering the settlement of the islands", and wrote expectantly of war between the races "which could only end in the more or less speedy extermination of the natives, crushed like a wasp in the iron gauntlet of armed civilization".[17]

Wakefield mentioned "extermination" with a jingoistic show of reluctance; humanitarian sentiment prevented the idea ever becoming respectable, but it was expressed often enough, especially later, during the wars of the 1860s.[18] Moreover, such talk did not go unnoticed by the Maori. When, in 1863, a group travelled to England and met Queen Victoria, disquiet at the idea formed the burden of their addresses. As Paratene Te Manu of Ngapuhi expressed it (as translated by their Pakeha escort William Jenkins):

> There are many who say "Let the Maories be destroyed & let their lands be possessed by the white man." .... It is because we have heard these things that we wish to see the face of Our Mother the Queen and to hear from her own lips what the intentions of the English people are towards us the people of New Zealand.[19]

When the Maori addresses to the Queen were reported in New Zealand one newspaper noted with surprise that they "all speak in apprehension of extermination of the tribes by the Europeans", and considered that the "true colonist" had done nothing to warrant such an apprehension.[20]

In Britain, by the mid 1860s the philanthropy and

humanitarianism of the Missionary Societies and the Aborigines Protection Society had lost much of their former support and influence, especially after the shocks of the Indian "mutiny", the Jamaica "revolt" and the war in New Zealand.[21] In 1862, when the British parliament debated the costs of the latter, one member urged that it was time all "sanctimonious hypocrisy" was abandoned. "All they did by their pretended humanity was to extend the time in which he [the Maori] lingered in his misery.... They had planted England in New Zealand: the Englishman would destroy the Maori, and the sooner the Maori was destroyed the better".[22] As the native populations in many colonies continued to decline while the colonists increased, in London James Hunt's Popular Magazine of Anthropology concluded that "to colonize and to extirpate are synonymous terms"[23] and the idea that "the black man always speedily disappears before the white" became a popular adage, often repeated by colonists in New Zealand.[24]

Toward the humanitarian end of the colonial spectrum in New Zealand were some of the missionaries. James Buller (Walter Buller's father), for instance, speaking of the colonists' common belief that the Maori people were dying out, suggested that "the wish is father to the thought".[25] In an 1857 address on "New Zealand, the future England of the Southern Hemisphere" he expressed his loftier view: that the Maori

race would become extinct "but not in the sense of dying out, but by reason of amalgamation with our race, for which it is the office of a Christian education and progressive civilisation to prepare them".[26]

The settler politician Dr I.E. Featherston was more pragmatic. He was a driving force in the Wellington Constitutional Association, which in 1851 passed a resolution arguing that there was no need to allow the Maori any political power in the colony since "there is no prospect of their becoming as a body sufficiently enlightened for the exercise of political privileges before the period of their extinction shall arrive".[28] However, within this perspective of settler progress and Maori displacement, Featherston was also a humanitarian. In 1855, as Superintendent of Wellington in the new Provincial Government, he argued that:

> Although I myself have long since come to the conclusion that no human means can possibly prevent the extinction at no distant date of the Native Race...still humanity and sound policy equally plead in favour of our doing our utmost to retard that event, and especially to prevent them falling victims to those epidemic diseases which colonisation appears to have introduced.[29]

As a physician, Featherston was well aware of the terrible mortality from measles and other epidemic diseases which was decimating the Maori population at this time.[30] He asked his Provincial Council to vote a small grant for medical aid.

In 1863 Featherston, still Superintendent of Wellington Province and a Member of the House of Representatives in the General Assembly as well, assured a Maori gathering that "it is not true, it is utterly false that [the Governor] has any intention to wage a war of extermination, or to seize and confiscate Native lands".[21] Featherston's assurances on the latter point were not well founded. And while he rejected extermination of the Maori he still expected their extinction. Before an election meeting of colonists in 1866 he justified his "waiting" Native policy and commented that "as it was utterly impossible to preserve the race, to prevent its speedy extinction; our chief duty was to make the dying couch of the race as easy -as comfortable as possible".[22] Featherston's deathbed image became a common one in later discussions of the decrease of the Maori race; its use will be explored further in a later section.

The various attitudes on the fate of the Maori -from E.J. Wakefield's casual dismissiveness, to Featherston's condolence and James Buller's pious hope of amalgamation into the English race -all rested upon the fundamental assumption of European racial and cultural superiority, and the expectation of native extinction. The same set of attitudes are reflected in the development of Walter Buller's more "scientific" ideas explaining the displacement of native species, which are discussed in the following section.

2.3: Scientific views on displacement: Walter Buller

Walter Buller's early views on the native people (expressed for instance in the Maori-language newspaper he published in 1857-1858)[33] were to the humanitarian end of the colonial spectrum, reflecting the views of his father. But Featherston was also a strong influence upon Buller and an important patron for him in his career in the government service. When employed by the central government as a Resident Magistrate among the Maori of the Manawatu district on the Wellington west coast (in 1862-1865) Buller went so far in assisting Featherston's purchases of Maori land for Wellington Province that he seriously compromised his position as a magistrate.[34]

But although he worked mainly for the progress of colonisation and his own self-interest, Buller retained a regard for Maori people and enjoyed their company. He evidently agreed that they were doomed; but he did not descend, even in his private letters, to the casual denigration usual among many of his contemporaries, including the scientists. James Hector, for instance, after first visiting the North Island, complained that this "splendid country" -so suitable for colonisation -was "cursed by these rascally Maoris. However they are fast becoming extinct".[35] Buller's brother-in-law William Mair, also a

magistrate, wrote scornfully of "the niggers".[36] Buller did not use that term, even indirectly; in his scientific writing, when referring to Carex secta, the mop-headed swamp plant which other scientists called "Maori-head" or "Nigger-head", Buller carefully wrote "Negro-head".[37]

In 1860 Buller was appointed editor of the government Maori newspaper Maori Messenger/Te Karere Maori and wrote commentaries on events of the time. He was then just twenty-one, but while the opinions he gave must be assumed to represent official views, their expression was certainly his own. Thus when discussing the war in Taranaki he commented (in parallel English and Maori texts) that it was disastrous for Pakeha and Maori alike, but the Pakeha would soon recover.

> Not so with the Maori. His race, already fast declining, will surely, if exposed to the ravages of war, ere long cease to exist, and the land on which the warrior has spilt his blood will pass into the hands of strangers!
>
> Some have said that this is what the Pakehas desire -that with this intent they came hither -and as the Norway rat...overran the country and exterminated the indigenous one, so in like manner will the white man himself in course of time overspread the country and extirpate the Maori. Friends, it is not so.
>
> ...we say that the white man came not to destroy the Maori, but to raise him out of the darkness of barbarism and to impart to him all the blessings of civilisation.[38]

The evangelical tone and biblical cadence of the final pronouncement perhaps echo his father's sermons. But the ambiguity in his denial that the colonists would, like the introduced rat, overspread the country and extirpate the natives, is characteristically his: did he mean to assure his Maori readers that the their race would not be displaced and die out like the indigenous rat, or merely that this was not what the colonists desired or intended?

Subsequently, in his scientific papers, Buller had more to say on the displacement of the Maori. His clearest and most comprehensive statement was in his presidential address to the Wellington Philosophical Society in 1884. This address, "On the Decrease of the Maori Race", was widely reported at the time[39] and has often been quoted since. In it Buller showed none of his earlier ambiguity, but was forthright in his assertions that the Maori were being displaced and "dying out very rapidly". He rejected one of the goals of the humanitarians (which his father, for one, hoped for even still[40]): "Amalgamation of races had been talked of, but this would not save the Maoris".[41] On the other hand Buller explicitly acknowledged the influence on his thinking of the views of Dr I.E. Featherston:

> He [Buller] had often reflected on an observation of the late Dr Featherston, on their first meeting, just twenty-eight years ago: "The Maoris (he said) are dying out, and nothing can save them. Our plain duty as good compassionate colonists, is to <u>smooth down their dying pillow.</u> Then history will have nothing to reproach us with."[42]

Buller based his explanation of the displacement of the Maori people on two main arguments. The first was that this displacement was a universal law of nature:

> What had happened in other parts of the world must inevitably happen, and indeed is happening, here. The aboriginal race must in time give place to a more highly organised, or, at any rate, a more civilized one. This seems to be one of the inscrutable laws of Nature.

Buller's second argument rested on the same analogy he had rejected in his Maori Messenger editorial. Now he ascribed it to the Maori people themselves, recounting how he

> had often heard the Maori themselves speculate on their speedy extinction, saying in a melancholy way, that as the Norwegian had destroyed the native rat, and as the indigenous birds and shrubs were being supplanted by the introduced ones, so surely would the Maori disappear before the pakeha.

"And this was no mere fancy", Buller added, and went on to give anecdotal evidence of Maori depopulation to assert scientific authority for the idea.

In other papers Buller employed the same argument by analogy, but turned it around to explain the displacement and extinction of native plants and animals by comparison with that of the Maori race. The most exhaustive version of this argument by analogy is in his discussion of the "displacement of the natural Avifauna" in the second (1888) edition of his A History of the Birds of New Zealand:

> As the Maori is being rapidly supplanted by his Anglo-Saxon neighbour, as the rat has exterminated the kiore maori, as the native fern and other herbaceous vegetation disappears in all directions before the spreading grass and clover of the colonist, so in like manner the native birds, or at any rate many of the well-known species, are giving place to the ever-increasing numbers of Sparrows, Linnets, Greenfinches, Yellowhammers, Starlings, and other introduced birds that are now to be met with in every part of the country.[43]

All these instances were seen as manifestations of a common phenomenon of displacement, or what Buller described as the "almost universal natural law -that indigenous forms of animal and vegetable life sooner or later succumb to, and are displaced by, more vigorous types from without".[44] As with the native people, so with the native vegetation and the native birds; all, it was thought, were being displaced in the inexorable progress of European colonisation.

The notions quoted here from Buller's papers were common to much of the discourse on displacement: the images of the introduced rat exterminating the native one, and of smoothing down the pillow of the dying native race; displacement as a law of nature; and concern for the reproach of posterity. The last concern also became an element in later ideas of protecting or preserving native things, which are considered in Chapter 5. In the remainder of this chapter other elements of the discourse on displacement will be examined more closely: some general features of the language and imagery used to express the idea; the particular images of the rats

and of the dying pillow; and the various ideas subsumed within the general concept of a "law" of displacement.

2.4: The Language of Displacement

Scientific writing, despite the European convention of objectivity in science, is never entirely neutral. Buller's papers and books in particular convey much more than just the observations and descriptions of the native species which are their ostensible subject: the language, allusions and anecdotes he employs define the audience he means to address, reconstruct the described scenes and objects in terms to suit that audience, and create a particular image of himself in relation to them. To this last end, some of his linguistic devices -especially in the more spacious prose of his quarto books -were evidently used quite deliberately.[45] But even apart from such conscious construction, the language of Buller's scientific writings reveals much on the social context of his ideas. Some of the underlying influences are personal ones, particular to Buller, but many of the attitudes and images conveyed are of wider interest here in relation to contemporary colonial perspectives on native things.

It is noticeable, for instance, that in his discussions of displacement of native species, although describing it as a natural process or a law of nature, and even when referring only to native plants and animals rather than people, Buller (like many of his contemporaries) used images of social conflict and conquest. He used the metaphor of "oppression" for Darwin's "struggle for existence"; as well as the passive "extinction" of the natives he used the active "exterminate" or the even more strenuous "extirpate"; species were "displaced", "supplanted", or they "gave place" to the immigrants, who "overran" the country.[46]

But in Buller's case at least, there is sometimes a certain ambiguity in his rhetoric. His language in describing the process of displacement is not that of a neutral, detached observer; but it is not clear whether he identifies with the fitter, more progressive immigrants, or the oppressed, displaced natives. This is shown in his discussion of displacement in the first edition of his A History of the Birds of New Zealand:

> In a newly colonized country, where the old fauna and flora are being invaded by a host of foreign immigrants, various natural agencies are brought into play to check the progress of the indigenous species, and to supplant them by new and more enduring forms.[47]

Buller's perspective of the country being "invaded by a host of foreign immigrants" is more that of the native than the colonist. His ambivalence on the displacement of the native

birds (for it is less noticeable in his discussions of the displacement of the Maori people) could be ascribed to a measure of sympathy for the displaced indigenes; or to the beginnings of a feeling of national pride and identification with indigenous things. The development of such ideas will be explored in detail in later chapters. But before discussing further some of the linguistic evidence for the colonists' perspectives on New Zealand and native things, it should be noted that in Buller's case there is a further, more personal factor. In all the argument about inferior natives and vigorous, progressive British colonists, his own position as a native-born New Zealander was rather uncertain. Most of his social and scientific peers in New Zealand were British born and bred, and no matter how successful Buller became he was continually reminded that he was not quite one of them. For instance, in 1875 when A history of the Birds of New Zealand, his magnum opus, was being acclaimed in London and he had just received the British honour of CMG, in Wellington the congratulations of the local philosophical society were qualified with a condescending remark on his origins. Buller had "achieved a position of great distinction", said the Scottish-born vice-president, Charles C. Graham -"Although born and bred in the Colony".[40]

Buller, for his own part, avoided explicitly identifying himself as a native New Zealander; in the language he used he dressed himself in English terms and maintained a clear

distinction from the natives, the Maori. In his 1884 address on "The Decrease of the Maori Race", he quoted Featherston on "Our plain duty as...colonists" and referred to Maori people as "them" -making it clear that he did not recognize any Maori within his audience. There were indeed no Maori members of the Wellington Philosophical Society at that time; indeed there appear to have been none in any of the philosophical societies until 1907, when Maui Pomare joined the Wellington Society and Te Rangihiroa (Peter Buck) joined the Auckland Institute.[49] But the form of rhetorical displacement or exclusion that Buller employed -defining Maori as "other" -was general usage not only in his time but for long afterward.[50]

In the 1890s when New Zealand-born colonists first established "New Zealand Natives Associations", not only were no Maori among the members but there were even suggestions that they were not eligible.[51] That the term "New Zealand Native" might be understood in the sense of excluding Maori is another indication of the way colonisation displaced the indigenous. The process can be seen also in the semantic shifts in terms of identity such as "Maori", "native" and "New Zealander". In the Maori language, in general usage maori had evidently been an adjective meaning "usual", "ordinary", "normal". By extension it came to mean "native", as opposed to pakeha, "foreign" or "European". In the linguistic adaptations to the new situation brought about by

European colonisation, Maori became the term by which Maori people identified themselves.[52] The terms used by the colonists to refer to Maori people also shifted. European visitors and colonists had initially used the term New Zealander, then, from about mid-century, generally native, but gradually adopted Maori both as a noun for the people and an adjective for "native" things generally. Buller used Maori in this last sense, even (from about 1870) in his scientific writing.[53]

Moreover, in the process of colonisation and displacement, Maori came to be used by the colonists as an adjective of disparagement. When Buller stood for parliament in 1881 (at the time of the Parihaka affair, when anti-Maori feeling among the colonists was stronger than usual) his opponents spread the word that he was a "Maori man" -a Maori sympathiser. Buller went to great lengths in his election speech to try to defuse this and to redefine the label nearer to what was known at the time as a "Maori doctor", or a colonist with, as he claimed for himself, "a very extensive knowledge of Native matters".[54] The use of Maori with connotations of disparagement persists in the twentieth century: Maori PT for lying down, doing nothing; Maori time for not running to schedule, Maori bug for Platyzosteria novaeseelandiae, a malodorous native cockroach.[55]

The philologist Sidney Baker, in comparing Australian and New Zealand terms of national identity, has suggested that since in Australia the aboriginal people "were slaughtered with much greater abandon" there was little confusion when colonists there called themselves "Australian" or "native" compared to the situation in New Zealand, where the colonists could not call themselves "New Zealander" or "native" without "being mistaken for Maoris". Therefore, Baker considers, "it was obvious that they should feel something less of the proprietorship that Australians had in their own country".[56] Be that as it may, it is clear that the New Zealand colonists, or their sons and daughters, were slow in regarding themselves as New Zealanders. The short-lived New Zealand Natives Associations of the 1890s borrowed their title from an Australian precursor established twenty years earlier,[57] but the label "native" for native-born colonists did not persist in New Zealand. However, as the colonists began to see themselves less as transplanted Britons or Englishmen in exile, and more as New Zealanders, some native things and terms of nativeness did begin to be rehabilitated. Some aspects of this process will be discussed in later chapters.

The examples given above illustrate only some of the ways colonisation and the concomitant displacement of native things were reflected in language. In the following sections two images will be examined which were elaborated explicitly

in connection with the idea of displacement: the image of smoothing the dying pillow, and that of the introduced rat exterminating the native one.

2.5. Images of Displacement: "Smooth Down Their Dying Pillow"

The best-known and most-quoted expression of the image of the Maori race on its deathbed is that in Buller's 1884 address on "The Decrease of the Maori Race". Buller had stated his conviction that it was one of the "laws of Nature" that the "aboriginal race must in time give place to a more highly organised...more civilised one". He then recalled a line from Dr I.E. Featherston:

> The Maoris (he said) are dying out, and nothing can save them. Our plain duty as good compassionate colonists, is to smooth down their dying pillow. Then history will have nothing to reproach us with.[58]

The line "smooth down their dying pillow" is described by Harry Orsman and Jan Moore in their compendium of New Zealand quotations as "a main English text in the mid to late nineteenth century for sermonising about the decline of the Maori race".[59] This is perhaps overstated; certainly the deathbed image was used in various forms in the nineteenth century but not as much as in the twentieth, when, in the version Buller attributed to Featherston, it has become a

main text for sermonising on mid nineteenth century colonial attitudes toward the Maori. Furthermore, to describe its application in the nineteenth century as "sermonising about the decline of the Maori race" obscures not only the variety of contexts in which it was used, but also the fact that, given the then almost universal belief that the Maori race was headed for imminent extinction, those who argued for "smoothing down their dying pillow" were actually toward the humanitarian end of the colonial spectrum. In some recent popular histories the line is used out of context to paint a much grimmer picture.[60]

In order to show the changing uses and contexts of the deathbed image, some embellishments which have built up around the remark attributed to Featherston should first be cleared away. Orsman and Moore, and others quoting the remark, date it to 1856 and state that it is from an address to the Wellington Philosophical Society. The latter detail appears to have no more basis than misplaced association with Buller's February 1884 address to the Society; the date of 1856 also rests on Buller's reference in that address to "just twenty-eight years ago".[61]

Moreover, perusal of Featherston's reported speeches reveals nothing like Buller's version until the February 1866 comment which has already been quoted, that "as it was utterly impossible to preserve the race, to prevent its speedy

extinction; our chief duty was to make the dying couch of the race as easy -as comfortable as possible".[62] There were certainly earlier, more general expressions of professional sympathy at the demise of the Maori race. In 1853, for instance, Captain T.B. Collinson of the regiment of Royal Engineers then stationed in New Zealand wrote that "All that can be done is to let them die out as quietly as possible".[63] Even earlier, in 1840, Vernon Smith, British Parliamentary Undersecretary of State for the Colonies, argued that "If the difference of races is such that everyone can foresee the extinction of the inferior by the abler...then all that humanity can dictate is that the end of these unfortunate Beings should be accompanied by as little terror or cruelty as is possible".[64] And although Featherston may not have employed the deathbed image until 1866 he had frequently expressed his view of the impending extinction of the Maori race. His argument for the Wellington Constitutional Association in 1851 that there was therefore no need to accord the Maori any political rights, and his humanitarian call in December 1855 for medical aid to retard their demise, have already been mentioned in Chapter 2.2. Indeed it is possible that this latter speech was recalled by Buller twenty-eight years later, mixed in memory with the "dying couch" comment of 1866.

When Featherston made his famous speech to Parliament in August 1860 condemning the Government's military campaign to

enforce the Waitara purchase as an "unjust and unholy war",[65] C.W. Richmond retaliated by misquoting Featherston's 1855 speech back at him, charging that his "temporizing" policy relied on the "hope" of speedy extinction. Richmond, defending the war policy, thus attacked Featherston on humanitarian grounds: "The extinction of the Maori race, I say, is the sole reliance of the temporizers, and it is one on which I should refuse to found a system, since it is our bounden duty by all means to counteract the decline of the Native people".[66] There was a fine line between predicting or expecting extinction, and hoping for it; the former was unexceptional and acceptable but, in public speeches at least, the latter was condemned as "wicked".[67]

By 1866 when Featherston gave his "dying couch" speech to an election meeting in the Wellington Oddfellows Hall, colonial forces were carrying on the war against Maori "rebels". Featherston's ideas again drew fire. The Wellington Independent thought they were too soft -too humanitarian:

> It is all very well to say...that our whole policy in dealing with the Natives is summed up in the one word "wait". It would be an excellent plan to "wait" and, "to sooth the dying couch" of a gradually expiring race if the invalids would only consent to take the worthy Doctor's prescription quietly. We...think it premature to talk about "soothing the dying couch" of a race which will take a good deal of beating yet.[68]

From the other side Featherston was accused of hypocrisy.

T.C. Williams (son of the missionary Henry Williams) denounced Featherston -"a gentleman who wept over the Waitara, and who considered it his 'chief duty' to make the Maori's dying couch as easy and as comfortable as possible'" -for the methods of manipulation and coercion he and Buller had used in purchasing the large Rangitikei-Manawatu block over the protests of a section of the Maori owners.[69]

The deathbed image was used again when the decline of the Maori race became a major topic of philosophical or "scientific" discussion in the 1880s. By then the Maori population had fallen below 50,000, while the colonist population passed 500,000.[70] However, it was also a time of renewed bellicosity by the colonists toward the Maori, as Te Whiti and his people at Parihaka (in Taranaki) passively but determinedly asserted their claim to land confiscated after earlier hostilities. But the humanitarian impulse had not lost all force. The Colonial Treasurer and member of parliament for the area including Parihaka, Harry Atkinson, felt constrained to deny the accuracy of a newspaper report that he had told colonists in his electorate that he "hoped, if war did come, [over Parihaka] the Maoris would be exterminated".[71] Another colonial politician, Robert Stout,[72] mindful also of the reproach of posterity, used the deathbed image to suggest a more humane solution:

> The [Maori] race is dying, and if we were at all affected with the love of humanity we should strive to preserve it,

> or to make its dying moments as happy as possible. To this end, I think, we ought to have given Te Whiti and his people a Crown grant of the Parihaka block, and allowed them to live there unmolested.... We are powerful, they are weak, and that is the only explanation that the future historian will give of our conduct.[73]

The Rev. J. Wohlers, in an address to the Southland Institute in September 1881, was more other-worldly, but his imagery and his assumption of imminent Maori extinction were similar to those of Featherston and Stout. Wohlers spoke of the "dying out" of the Maori and the "coming in of a superior race to take their place and to make a better use of it", but he rejected the idea that the one was the result of the other. He considered that the destiny of races was ruled by God and that "when the Maori race was going to die he caused a race, best fitted for his purpose of mercy, to come and smooth the bed of the dying Maoris with Christian consolation and bodily comfort".[74]

Thus when Buller spoke on "The Decrease of the Maori Race" in 1884, both the subject and the deathbed image were familiar to his audience. He took a scientific approach, stressing what he called the "ethnological or ethnographical point of view".[75] He argued much as he did concerning the disappearing native birds -that it was important "to collect and preserve, while yet there was opportunity, a faithful history of so interesting a people". And after arguing by analogy and by reference to the "universal laws of nature" that the Maori would surely disappear, he reflected on

Featherston's outlook that "Our plain duty as good compassionate colonists is to smooth down their dying pillow. Then history will have nothing to reproach us with".[76]

Buller probably borrowed his memorably elegaic expression from a ballad recited by every well-brought-up Victorian child: the Rev. Charles Wolfe's "The burial of Sir John Moore", which includes the line "We thought, as we hollowed his narrow bed/ And smoothed down his lonely pillow...".[77] The New Zealand Times apparently recognized the poetic quotation in Buller's address, for the line was printed in italics. From all Buller's output of books, papers and addresses it has become the most frequently quoted line -although, following his own attribution, it has invariably been ascribed to Featherston.

The views Buller articulated in his address were widely shared. One of the few to publicly oppose them was a Maori, James Carroll, who in 1891 rejected the idea that the Maori race was dying as a "mistaken theory" and bluntly dismissed Buller's notion of smoothing down the dying pillow as "sentimental nonsense". Carroll wrote these comments in the context of arguing that the colonial government's Native institutions and land laws were themselves major obstacles impeding the progress of the Maori people, who desired to become "useful settlers" like their European neighbours.[78]

But Carroll's complaints went largely unheard and unheeded by the colonists.[79] Even when, in spite of the predictions by Buller and many others, the Maori population decline had turned to a steady increase, the idea of the dying race continued to prevail. The image of the dying race was hard to break; not only was it seductively romantic, but it had the scientific respectability of a law of nature as well. And as long as the Maori people continued to be seen in this light, as invalids -picturesque perhaps, even noble, but still dying -then it seemed only right that they should be left to quietly fade away while the new men, the colonists, took up their inheritance in the land.

The deathbed image, in Buller's memorable version, has continued to be quoted in New Zealand in the twentieth century, but, as noted earlier, for a different purpose: to illustrate nineteenth century colonial attitudes. The eventual rejection of ideas of displacement and inevitable extinction and the deconstruction of the images associated with those ideas will be examined in the concluding chapter of this study. In the next, we return to examine another, more feral image of displacement.

2.6: Images of Displacement: Native and European Rats

The image of the dying pillow was used by those seeking to convey humane or sentimental compassion at the ineluctable displacement and demise of the native race. The rat image stood for the same displacement, but without the sentimental tone. The case of the "extermination" of the Kiore' or "native" rat by European species became the archetypical example of the scientific, ecological phenomenon of displacement of New Zealand native species by European immigrants. It also became a standard analogy for the European colonisation of New Zealand with its expected outcome of dominance by the colonists and extinction of the native people. In this section the notion of the extermination of the native rat will be examined in order to show the process by which it became a paradigm for the displacement of the natives, in both the general scientific sense and the popular racial sense -and eventually began to be questioned and rejected by some colonists in New Zealand.

As with many of the issues explored in this study, the displacement of the native rat has implications and connections in many fields of study. It has received relatively little attention from historians,[80] but the scientific interest evident in the nineteenth century still continues and thus much of the historical account given here

is drawn from recent scientific papers.[81]

The scientists also provide the necessary zoological nomenclature. By the mid nineteenth century there were three species of rat and one mouse established in New Zealand. The "native rat" or Kiore, which was by then rare (in the North Island at least), was described under a number of scientific names but eventually identified with the Polynesian rat Rattus exulans (Peale). The adjectives "native" or "indigenous" are applied to it in much the same way as to the Maori people; most early and all recent writers have accepted the Maori account that the Kiore came to the country with them. The European species present were (and are) the ship or black rat Rattus rattus (L.),[82] the Norway or brown rat Rattus norvegicus (Erxleben), and the house mouse Mus musculus L. In nineteenth century accounts all four are classified in the genus Mus; and indeed the Kiore R. exulans, which is a rather small rat (especially compared to R. norvegicus), was sometimes referred to as the "native mouse".

The progression of European reports on these species in New Zealand is of interest not only in ecological terms, as a record of the changing distributions and numbers of the rats; but also in terms of the shifting relationship between European and Maori as shown by the changes in the tone of the remarks attributed by the former to the latter. Some caution

is necessary here; it is difficult to determine how far the reported remarks (which are in almost every case given only in English) reflect Maori ideas as against European interpretation, supposition or invention.

In earlier accounts there is no hint of the displacement of the Kiore, or of Maori anxiety about displacement. In fact Richard Cruise, who visited northern regions of New Zealand in 1820, reported that the "native" rats "are so much smaller than the European rat, that a chief expressed a wish for an importation of some from England to improve the breed, and thereby give him a more bountiful meal". William Yate, who was in New Zealand (mainly in the Bay of Islands) from 1828 to 1834, mentioned the "aboriginal" rat and added only that "The natives tell us that rats were introduced in the first ship, by Tasman." Joel Polack, who was also in the north in 1831-1837, made a similar comment.[83]

By the 1830s, however, some Maori disquiet began to be reported by European observers. In May 1832 the missionary Henry Williams recorded in his diary that some Maori at Kawakawa were building an elevated whata or store for food "to preserve it from the English rats which are now beginning to infest all parts of the land.... The natives have expressed considerable alarm and have brought this forward as another evidence of the anger of Atua [their gods] for not observing more rigidly their religious ceremonies".[84]

Within a few years after this the displacement of the "native" Kiore by the immigrant "English" rat, and the analogy with the predicted displacement of the Maori people, became expressed commonly enough to be recorded by visitors. The earliest record in fact has European settlers using the analogy to taunt Maori with extermination. In 1834 Edward Markham noted when visiting the Hokianga region that "The Sawyers tell the Natives when in Anger, They will exterminate the 'Tangata Mouries' as the 'Rah Parkieah' [=Pakeha or English Rat] has the 'Rah Mourie'".[85]

Charles Darwin, during ten days in the Bay of Islands region in December 1835, spent time with relatively genteel missionaries rather than rough sawyers. He recorded the striking absence in New Zealand of any indigenous mammal, "with the exception of a small rat" -the Kiore. "It is moreover said that the common Norway rat has entirely annihilated (in the short space of two years) the New Zealand species".[86] These comments (slightly reworded) were published in Darwin's Journal of Researches,[87] which became probably his most widely read book.[88]

Ernest Dieffenbach, who travelled through much of the North Island and part of the South Island in 1839-1841 as naturalist for the New Zealand Company, recorded his observations in his book Travels in New Zealand. Unlike the

other European observers mentioned, Dieffenbach was not English, but German, and he also gained an understanding of the Maori language.[89] Dieffenbach made a similar comment to Darwin's about the "extermination" of the Kiore. He went on to also mention the analogy with the displacement of the Maori people -but rather than a European taunt he quoted it as a Maori lament: "It is a favourite theme with them to speculate on their own extermination by the Europeans, in the same manner as the English rat has exterminated their indigenous rat".[90]

Maori displacement by European colonisation was thus expressed in a memorable image. Just how generally it was used by Maori is not clear,[91] but Dieffenbach's Travels in New Zealand began the process of popularising it among both colonists and scientists. Similar statements to Dieffenbach's subsequently appeared in other early natural history writings, for instance by Julius Haast, who was in turn quoted by English scientists such as J.D. Hooker.[92] How far their comments are derived from Dieffenbach is not clear, but it is noticeable that Haast follows Dieffenbach in misidentifying the "native rat" as "Mus rattus".

Dieffenbach's book was widely read in New Zealand; Buller, for instance, included it (along with Darwin's Journal of Researches) among the few named references in his 1865 essay "On the Ornithology of New Zealand".[93] Buller's interest

in the "native rat" was evidently kindled by Dieffenbach's account, for in an 1870 paper describing a supposed specimen (and describing it under the new name of Mus novaezelandiae), Buller quoted a letter he had obtained fifteen years earlier from the Rev T. Chapman of Maketu -the same informant named by Dieffenbach.[94] At that time (November 1855) Buller was seventeen and unemployed in Wellington, devoting himself, according to his biographical note, "principally to literary and scientific pursuits".[95] In his 1870 paper Buller quoted Dieffenbach's remark on the extermination of the native by the European rat and also gave another version of his own, with the usual figurative addition:

> the Maoris are accustomed to speculate, by comparison, on their own ultimate extinction in like manner before the stronger Anglo-Saxon race, which is fast gaining the ascendancy. "As the pakeha rat has eaten up the Maori rat, so will the pakeha kill the Maori," has already passed into a proverb.[96]

In his later writings on displacement Buller widened the rat analogy to many other forms of native life. But the rats eventually disappeared from the displacement proverbs he attributed to the Maori. In his 1884 address on "The Decrease of the Maori Race", Buller quoted the rat version, which, he stated, he "had often heard Maoris themselves saying in a melancholy way".[97] In 1888 he gave a different proverb, to the same effect: "Well may the Maori say, as he laments over the decadence of his own race -'Even as the Pitoitoi [the New

Zealand Robin Petroica australis] has vanished from the woods, so will the Maori pass away from the land and be forgotten!'"[98] In 1898 Buller quoted yet another Maori proverb, attributed to "old Ihaka, of Ngatiwehiwehi" (a hapu of Ngati Raukawa, at Manakau, Manawatu) to the effect that many species of native birds were "all gone -as completely as the moa! Soon also will [the Maori] race vanish from the land, and the white man, with his sheep and his cattle and his birds, will occupy the country!".[99] This last, or at least the reference to the people "gone like the moa", is a recognised whakatauki or proverb, quoted in both nineteenth century and modern collections[100] although it is generally meant in a more restricted sense than Buller presented it, to refer at most to a hapu or tribe rather than the entire Maori race. Some extrapolation or exaggeration in Buller's versions may also may be suspected in his progressively heavier emphasis on the "melancholy" of the Maori lamenting the "decadence" of the race.

There are, it should be noted, many tribal sayings in which the people of a particular area express grief at their displacement -but in a much more specific sense, by the loss, or, in the allusive legal term, alienation of their land. A hapu of Ngati Raukawa of Horowhenua, for instance, wrote eloquently to the Native Minister, Donald McLean, in 1873:

> Aue...ka whakaritea nei ki te Kuaka e paringia to ratou tahuna e te Taipari -"Alas!...[we] have become like a godwit whose sandbanks have been engulfed by the rising tide"[101]

But whether the rat proverb was truly a Maori whakatauki or merely interpreted as such by some Pakeha, it became widely known among the colonists. Few of them could tell the difference between a native and a European rat (even Buller did not recognise that his specimen of "native" rat, obtained in 1870 by a reward of £5, was actually Rattus rattus -a European Ship Rat[102]), and few colonists learned enough of the Maori language to understand any of its proverbial sayings; but many would have heard the idea of the displacement of the native by the European rat -and the associated proverb -even before arriving in New Zealand, for both were quoted in handbooks for intending colonists. S.W. Silver & Co.'s Handbook for Australia and New Zealand, for instance, in a line which may well have been supplied by Buller, reassured prospective colonists that there was no cause for anxiety about the natives:

> Every year the difficulty diminishes, for the whites increase as the Maories die off. As the English clover destroys the native grass, and the English rat is annihilating the native rat, so, believe the natives, must the Maori be swept off the fern-home of his fathers by the ever rolling wave of British colonisation.[103]

Whatever the authenticity of the rat proverb, the other image in this mixture of metaphors -of an onrushing tide or wave of colonisation -was certainly shared by both colonisers and

colonised.[104]

The extinction of the Kiore as an instance of the displacement of native New Zealand species, and the associated proverb linking it with the extinction of the native people also had the imprimatur of the European scientific authorities. The displacement and the proverb were quoted by Ferdinand von Hochstetter, J.D. Hooker, Charles Darwin and Alfred Wallace, and repeated by other lesser figures.[105] Despite this eminent support, some doubts about the validity of the notion were expressed in New Zealand scientific circles. In 1869 W.T.L. Travers described the continual quoting of the displacement of the native rat as a "fashion" and suggested that there was no evidence to support it. He was cautious also about the authenticity of the proverb which, as he put it, "the natives have been credited with".[106] On the matter of the displacement of the rat Travers took a position corresponding to that taken by many on the question of the decrease of the Maori race, and expressed himself satisfied that the native rat had been declining before the arrival of the European species. This argument will be discussed further in the next section, but Travers's position is also noteworthy for his scepticism about an idea accepted by British and European scientific authorities. By the end of the century others in the New Zealand philosophical societies were expressing similar doubts. The conventional account of displacement of the native rat was questioned by Taylor White, and the associated proverb by H.

Guthrie-Smith, who considered that the "white man's self esteem has been flattered unduly" by it.[107]

In the 1970s, New Zealand scientists (in particular I.A.E. Atkinson) have taken further the ideas first raised by Taylor White and suggested that there was considerable confusion among many nineteenth century observers about the species of rat, and that the ecological balance between the species was and is much more complex than simple displacement or extermination of the native by the European rats. Atkinson argues that the native rat, the Kiore, was only partly displaced by the Norway rat and was still present in the North Island until the later spread of Ship Rats about 1860-1870, and was common in the South Island up to 1888, when Ship Rats began spreading there too. Certainly, Kiore, like the Maori people, are not extinct in New Zealand; Kiore still survive on many islands, including Kapiti where Norway Rats are common and Stewart Island which has both Norway and Ship Rats but no mice.[108] Colonists and scientists in the nineteenth century to some extent saw what they expected to see; the metaphorical image obscured the real situation.

One further point should be made on the displacement of the native rat. When European observers such as Darwin and Dieffenbach reported the New Zealand case it was not to them a novel or unfamiliar phenomenon. During the eighteenth century the large Norway rat had all but displaced the Ship

Rat throughout Europe and in the nineteenth century was doing the same in India, the United States and elsewhere. "How frequently we hear of one species of rat taking the place of another under the most different climates!", Darwin observed in his chapter on the "Struggle for Existence" in The Origin of Species.[109] In England, the invading Rattus norvegicus with their many offspring and their large appetites had been identified with the newly arrived German Protestant dynasty and labelled the "Hanoverian" rat, as opposed to the "old English" Rattus rattus.[110] In New Zealand Rattus norvegicus became the vigorous "European" or "English" rat colonising the new country and displacing the "native" or "Maori" rat -quite a different analogy, but just as topical in its time. It had a biological basis, but its main import was ideological.

2.7: Laws of Nature: Variations on the "Universal Law of Displacement"

As already shown from Buller's writings, the displacement of the natives by European immigrants was seen as a general phenomenon, embracing the decrease of the Maori race on the one hand and the disappearance of the native plants and birds on the other. And further than this, it was frequently suggested that such displacement was destined to occur as part of the working out of the law of nature. Buller, for

instance, referred to the "almost universal natural law -that indigenous forms of animal and vegetable life sooner or later succumb to and are displaced by, more vigorous types from without".[111] In this section, after a brief discussion of ideas of laws of nature in general, the variations of laws used to explain displacement in New Zealand will be examined in more detail.

In the nineteenth century the word "law" was used much more readily than it is in the twentieth to refer to perceived regularities in the natural order. It is difficult to separate how much of the change is due to changes in philosophical outlook and how much from linguistic shifts. In late twentieth century popular usage the concept might be expressed by such phrases as "human nature", or "physical necessity" but, apart from a few cases such as "Newton's law of gravity", the use of "law" in this sense has now generally become restricted to technical discourse in philosophy and science.[112] In popular usage in the mid nineteenth century natural law was often invoked in a general and indefinite way to "explain" events. But in scientific writing and even in some popular writing of the time more definite conceptions of natural law can be distinguished, in particular those corresponding to the different schools in British philosophy represented by William Whewell and J.S. Mill.

Whewell's most widely-read work was probably his Bridgewater Treatise -one of the series published in the 1830s under the provisions of the will of the Earl of Bridgewater to demonstrate "the Power, Wisdom, and Goodness of God, as manifested in the Creation". Whewell began with the idea of universal laws, on which he rested his argument for the design of God in nature: "the mere existence of a law connecting and governing any class of phenomena, implies a presiding intelligence which has preconceived and established the law".[113] J.S. Mill's empiricist philosophy had no place for Whewell's metaphysical argument or for laws as divine agencies. But at the same time Mill pushed the idea of law even further: "it is a law that every event depends on some law".[114] Mill's System of Logic (1843 and later editions) was particularly influential in popularising the idea that all natural events, including human actions, were subject to invariable laws.

In the 1860s and 1870s these ideas took on new significance in the debate on Darwinism. There was much questioning of the philosophical underpinnings of Darwin's scientific method and especially his rejection of supernatural causes; his opponents, concerned about the religious implications of Darwin's ideas, argued for supernatural causes or the will of God. The view that natural laws were the direct expression of God's will was given currency at this time especially by the Duke of Argyll's Reign of Law (1867) and by W.B.

Carpenter's presidential address to the British Association for the Advancement of Science in 1872.[115] Darwin, on the other hand, like Mill wrote of "laws" in the sense of empirically observed rules or natural regularities.[116]

Under any of the nineteenth century conceptions, there certainly seemed to be justification for regarding the displacement of native races in particular as a "law of nature". Instances were seen in many New World countries: native races were decreasing in North America, the Hawaiian Islands, Australia, New Zealand. The extinction or extermination of the Tasmanians was a particularly notable case, discussed in the learned societies of Europe and of the colonies.[117] It was but a small step to argue from the observed pattern or regularity to the idea that it occurred by some natural necessity, under a law of nature. Viewed in this light, the displacement of the natives was a natural, inevitable process.

In New Zealand some early scientific observers took a position similar to Whewell's and expressed the idea of displacement of native species in terms of "the design of Providence". Ernest Dieffenbach, for instance, commented in relation to the "Apterix australis" (the Kiwi) that "In some cases the extermination of a species of animals seems to be connected with a plan of nature, which man can neither frustrate nor comprehend".[118]

Dieffenbach was rather more equivocal about the displacement of the Maori people by "the spreading of colonization". Dieffenbach of course was German and his philosophical position here reflects that of Johann Herder rather than the British racial theorists. As Gerda Bell comments in her biography of Dieffenbach, although he was employed by the New Zealand Company he was "strictly speaking, anti-colonial in his philosophy. He believed, as Herder did, that supremacy of one country over another was ethically wrong".[119]

Dieffenbach's views were thus rather heterodox in the colonial setting. He argued in his book Travels in New Zealand that the decrease of "unoffending tribes of coloured men" under the impact of "'firewater'...the musket, and disease" by no means demonstrated the inferiority of the natives -"the lion that tears the deer into pieces is not therefore made of nobler material". But at the same time he suggested that it might be "one of Nature's eternal laws that some races of men, like the different kinds of organic beings, plants, and animals, stand in opposition to each other; that is to say, where one race begins to spread and increase, the other, which is perhaps less vigorous and less durable, dies off".[120] This last idea, of displacement by competitive struggle, which Dieffenbach applied to animal and plant species as well as human races, prefigures the Darwinian "struggle for existence".

Later in the nineteenth century, some of the more philosophical colonists began to explain the decrease of the Maori race by a rather different law of nature -one precluding the implication in the law of competitive struggle that they, or the process of colonisation, were responsible for the Maori decline. Thus in 1859, after conducting a census of the Maori population, F.D. Fenton wrote a report on the reasons for its decrease. Fenton made much play of natural law, but his concept was rather more empirical than Whewell's or Dieffenbach's. Fenton ruled out any idea that providential design was clearing the way for the colonists. He rejected any suggestion that the decrease of the Maori population was by some "special providential interference" or "Divine decree" suspending the usual laws of nature governing human reproduction and increase. He also rejected the popular adage that "the colored race must fade away before the white race", arguing that this generalisation had "never been satisfactorily established as a law of nature". Instead, Fenton argued that the Maori race had been in "decay" in the 1830s -"antecedent to the colonization of the country". Fenton considered that the immediate cause of this "decay" was "breeding in and in", and suggested the operation of a more general law of nature:

> There may be a law of nature, mysterious and inscrutable, under which no species can perpetuate itself beyond a certain period. We know that races of plants and of animals have died out.... If families die out in accordance with this mysterious dispensation why should not also nations?[121]

In simple terms, Fenton added (quoting from Charles Heaphy), the race appeared to be "run out".[122] This idea, of racial "decadence", explained the decrease of the Maori as a phenomenon occurring prior to and independently of colonisation; the colonists in New Zealand were thus not so much displacing the Maori as replacing them. The same idea was sometimes invoked to explain the disappearance of native animals, as in W.T.L. Travers's remarks on the Kiore, which he considered had been "replaced, if not destroyed, by the European rat",[123] or in the opinion of a later New Zealand scientist, J.G. Myers, who asserted in 1922 that the native birds "had begun to decline in pre-European days".[124]

The idea of racial "decay" as applied by F.D. Fenton to the Maori people should be distinguished from that of racial "degeneration" -the idea that over time some races had fallen or degenerated to a state of savage barbarism.[125] Although the two were sometimes applied synonymously, "decay" referred more particularly to progressive decline in population, and "degeneration" to a perceived decline in the moral condition or level of civilisation of the race. The idea of degeneration was associated with the theory of monogenesis as advanced in the eighteenth century by J.F. Blumenbach and others. Blumenbach argued that all races of mankind were of one species, but that those races living in adverse environments had degenerated to barbarism while those in the temperate regions of Europe in particular had maintained or

advanced their level of civilisation.[126] In the early nineteenth century the idea that "savage" races had fallen to their "degraded" condition was also part of the evangelical creed of the missionary societies; the missionaries in New Zealand saw the Maori in this light and sought to raise and redeem them.[127] But a "degenerate" race or class was not necessarily a "decadent" one; later in the nineteenth century concern was expressed in Britain, America, and also in New Zealand, about "degeneration" of the "racial stock" if the defectives and the dissolute at the bottom of the social scale continued to outbreed the brightest and best at the top. Thus in New Zealand Duncan McGregor[128] argued against state assistance or protection for the former: "to concede the right of the degenerate to procreate without restraint is merely subsidising the survival of the unfit".[129] This Darwinistic idea was combined with a belief in the virtue of "self-reliance"; those unwilling to help themselves were "undeserving" of state support. On the other hand, in relation to the Maori people, protective measures were criticised as sapping self-reliance and leading to racial decay: "you must make the Natives self-reliant, or you doom them inevitably to gradual extinction".[130]

Fenton in 1859 wrote of the "decrepitude" and "decay" of the Maori race rather than of its degeneration. There are few traces of the latter idea in his report, unless it can be identified with his general attitude of racial superiority

-as in his remark that "the Maories are utterly unable, without direction, to found and continue any system [of government]...calculated to make them good citizens, and useful colonists".[131] As the suggestion that Maori people might become "useful colonists" indicates, the colonists by this time regarded themselves as the natural and proper New Zealanders;[132] the Maori had already been displaced, or replaced, in thought and word if not entirely in deed.

Later in the same year as Fenton's report, Darwin's The Origin of Species was published. Its thesis of evolution by "preservation of favoured races in the struggle for life" led to new formulations of natural laws, and "the struggle for existence" and "survival of the fittest" became popular catch-phrases. However, as will be argued in more detail in a later chapter, although these phrases appear in New Zealand writings on displacement, in many cases they were merely grafted on older ideas. Fenton's view, that the Maori race had been in "decay" before European colonisation began, or that its time -under some "inscrutable" law of nature -had "run out", continued to be elaborated by colonial commentators. Two expositions of it will be examined here: Dr A.K. Newman's 1882 "study of the causes leading to the extinction of the Maori" and Buller's 1884 address on "The decrease of the Maori race". Both were widely read; they were presented before the Wellington Philosophical Society and published in the Transactions and Proceedings of the New

Zealand Institute which was distributed to each of the 1300 members of the philosophical societies and institutes -effectively the entire colonial intelligentsia.

Newman's paper, which has been described as "one of the best examples of Victorian writings on the Maori population",[123] combines a general discussion of the ideas of racial decay and extinction with a detailed medical analysis of particular mortality factors. Some of Newman's ideas on mortality factors combined the germ theory of disease which had recently gained acceptance in medicine, along with older ideas of displacement of the less vigorous natives:

> It has occurred to me...that the phthisis [pulmonary consumption, tuberculosis] which is so invariably and so speedily fatal to the Maoris, may owe some of its severity to the importation of phthisis germs of a stronger and more virulent nature, such germs finding a most nutrient soil in the bodies of the weakly constituted Maoris.[124]

In his general discussion of racial decay, Newman, although not explicitly invoking laws of nature, took a similar view to Fenton's and compared the "rapidly progressing" Anglo-Saxon with the "run out" or "effete" Maori. His conclusion has often been quoted:

> I hope I have made it clear that the Maoris were a disappearing race before we came here.... Taking all things into consideration, the disappearance of the race is scarcely subject for much regret. They are dying out in a quick, easy way, and are being supplanted by a superior race.[125]

Newman's paper attracted some sharp comment from James Hector, who as President of the Wellington Philosophical Society chaired the meeting. Hector disagreed that the decrease of the Maori could be attributed to "an inherent tendency to decay". "We [colonists] were really to blame", he charged. "We have destroyed their social organisation, and not replaced it with ours." In a line which recalls the humanitarian sentiment expressed earlier by Dieffenbach, he argued that "it is no use trying to excuse ourselves by any other natural law but that of might".[136] Hector, however, had other motives than humanitarian conviction in opposing Newman. A few months earlier, Newman had initiated the first moves toward reform of the New Zealand Institute, challenging Hector's hegemony over New Zealand science.[137] When Buller, who was close to Hector and certainly no advocate for reform, gave his views on "The Decrease of the Maori Race" two years later, Hector accepted them without demur.

Buller's 1884 address has already been discussed in several connections. Although it was presented as an extempore presidential address it was widely reported and reprinted.[138] In it he urged the importance of collecting as much information as possible on "so interesting a people", since the "race was dying out very rapidly, and... in all probability, five and twenty years hence there would only be a remnant left". After the ubiquitous reference to the extermination of the native rat he discussed the displacement

of the native race, which he had no doubt was inevitable:

> What had happened in other parts of the world must inevitably happen, and indeed is happening, here. The aboriginal race must in time give place to a more highly organised, or, at any rate, a more civilized one. This seems to be one of the inscrutable laws of Nature.[139]

Although Buller did not make it explicit that the "law" of displacement of which he spoke was one incorporating Fenton's and Newman's concept of innate decadence acting prior to and independently of colonisation, his use of Fenton's term "inscrutable", and evidence from his subsequent writings on the issue, suggest that he had such a law in mind. Buller's concept of an "inscrutable law" of displacement will be discussed further in Chapter 4.3.

Buller described the decline of the Maori race as a "melancholy tale", but his attitude was generally one of detachment. As with the disappearing native birds, so with the dying native race; they were losers in the struggle for survival, and progress would leave them behind. Their passing was not a matter for regret, but a natural phenomenon which the scientist should record. "And if true to our watchword of progress -social, intellectual, and physical", Buller stated, he "could scarcely believe that even the most earnest Philo-Maori would deplore the change".[140]

His address was received by the Philosophical Society with "general applause".[141] Helped perhaps by Buller's

conceptual vagueness, both Newman and Hector stated that they agreed "entirely" with his views. However, three parliamentarians at the meeting (T. Fraser, R. Hart and G.M. Waterhouse) suggested that Buller's pessimism was premature and that census statistics did not bear out his view. The previous (1881) census had indeed shown a very slight incease in the Maori population figures but Buller -supported by Hector -rejected these as "mere approximations" and "quite delusive",[142] and asserted that the Maori race was in fact rapidly decreasing. If displacement and extinction were ruled by a law of nature, then anything appearing to indicate the contrary must necessarily be false.

Fifty years earlier the evangelical philanthropists of the Missionary Societies and the Aborigines Protection Society had been important enough to influence British policy toward the Maori race. But in Britain, philanthropy and humanitarianism had lost ground to the unsentimental doctrines of laissez-faire and "Social Darwinism". By the 1880s in New Zealand also -Hector's outburst notwithstanding -less humanitarian concern was being expressed; in Buller's address it was reduced to a mere vestige of condolence.

The influence of Darwinism on colonial ideas of displacement will be explored in Chapter 4, but here it should be noted that neither Buller's nor Newman's address showed much evidence of any Darwinian influence, except perhaps in the

latter's expression of another popular view:

> The struggle for existence is among them [the Maori] far less severe than it is among ourselves, yet our race, by natural means, apart from immigration, is increasing as rapidly as the other is decreasing.[143]

The idea that Europeans were the product of more rigorous competition -"a harder school" -became another commonly-used explanation for the displacement of the natives. It is essentially the old assumption of European superiority and native inferiority reformulated in terms of competitive struggle and the "survival of the fittest". As with other variants of the law of displacement, it was applied both to human races and to species of plants and animals. It remained popular and, perhaps from its Darwinian flavour, scientifically respectable, well into the twentieth century. One of its clearest expositions, by E.F. Hawthorne, is in an explanation of the "law" of displacement of native species in New Zealand published in 1918 in the New Zealand Journal of Science and Technology -a journal which aimed to present science in a "popular" way:

> It is a fact well known to naturalists that animals and plants of the Southern Hemisphere are almost invariably beaten in the struggle for existence when brought into competition with the living productions of the Northern Hemisphere. The latter have been evolved in a harder school than the former, and the southern forms have but a poor chance of survival against their hardier and more vigorous rivals from the north. We in New Zealand have already seen this law in operation: witness the fate of so many of our beautiful native birds....[144]

Alongside all the more "scientific" variants of the law of displacement discussed in this chapter -involving providential design, innate native decadence, or competitive struggle and the "harder European school" -there were many straightforward assertions that, for instance, "the black man always speedily disappears before the white". The certainty that the disappearance or displacement "always" followed -that it occurred by some natural necessity -is the essential idea of a law of nature. All the variants discussed above were in the nature of explanations given this basic assumption. They were not entirely distinct alternatives; Newman, for instance, combined several of them in his explanation. But when the evidence did not appear to follow the law, it was the evidence that was thought to be faulty. Displacement of the natives was seen as being ordained by nature and endorsed by science; under this view it could neither be denied nor averted.

CHAPTER 3

ACCLIMATISATION

3.1: Introduction: Acclimatisation and Associated Ideas

The corollary to the idea of displacement of native species was that of acclimatisation -that new, improved forms should be brought in and acclimatised to the country, to replace inferior local species, or provide new and useful ones. Thus when Buller noted in his 1865 exhibition essay that the formerly common native quail Coturnix novaezealandiae was rapidly disappearing, he added that "Its place, however, is adequately supplied by the introduced members of this family". As he explained, "Acclimatization Societies are now in operation in several of the Provinces, and the introduction of useful birds is every day gaining a larger share of public attention".[1]

Like most of the ideas examined in this study, acclimatisation was a topic of both popular and scientific interest in New Zealand, and was discussed in the newspapers as well as the Philosophical Societies. Scientific men were prominent among the founders of the various Acclimatisation Societies: James Hector in the Otago Society; Julius Haast, W.T.L. Travers and T.H. Potts in Canterbury; Buller in Wanganui, T.B. Gillies in Auckland. The Acclimatisation and Philosophical Societies had many members in common -in the

case of the Westland Naturalists' and Acclimatization Society the two were combined in a single body.

The New Zealand colonists brought in plants and animals from other lands as part of the general process of colonisation, but by 1865, when Buller wrote his exhibition essay, acclimatisation of species new to the colony had become a fad among them. The acclimatisation societies which sprang up in the 1860s have been a feature of New Zealand ever since. The development of these societies will be discussed later in this chapter; but first, some of the background to ideas of acclimatisation will be discussed.

Here a note of explanation should be provided for New Zealand readers. The term "acclimatisation" is commonly used in New Zealand in reference to the acclimatisation societies and their activities. However, in the twentieth century the societies have all but lost their original function of introducing new species and "acclimatising" them in the literal sense -habituating them to the new climate and surroundings so that they might become established and "naturalised" -and have effectively become restricted to the management of mainly introduced fish and game species. The term acclimatisation, as used in New Zealand, has accordingly become loosely associated with the latter activity. In the following discussion, unless the context indicates otherwise, the more literal meaning of introduction and habituation of

species to a new climate or new region is intended.

Just as on the issue of displacement, ideas on acclimatisation of plants and animals were closely related with those on human acclimatisation -whether, or how well, European colonists could become acclimatised and thrive in their new climate and country. Walter Buller's father, the missionary James Buller, argued that for Englishmen emigration to New Zealand offered "relief from excessive competition, and the painful struggles for life which prevail in [the] old country".[2] This was the positive side of the argument for colonisation, taking for granted that the colonists would acclimatise. On the other hand, in the geographical and other learned societies of Europe it was often argued that Europeans could not become acclimatised to tropical climates, and sometimes that acclimatisation was impossible even in more temperate countries and that the colonists even in these countries therefore degenerated below the standards of their parent stock.[3] Underlying these arguments were the controversies on the races of mankind and their origin: whether, as James Prichard argued in the 1840s, all races had a common ancestry and had gradually differentiated (or degenerated) under the influence of the climates of the countries into which they had migrated (in other words by a process of acclimatisation); or, as Robert Knox argued in the 1850s, the races were immutably distinct and could not be changed by environmental effects. In Knox's

view human acclimatisation was impossible; he consequently argued that although the "Saxon" or "Scandinavian" race (which stood at the head of his racial hierarchy) would dominate the world, it could never establish healthy colonies outside Europe without continual replenishment from the homeland.[4] The Prichardian environmentalist view, on the other hand, while allowing that colonists could acclimatise, implied that they might degenerate in the process.

The linking of colonisation and racial degeneration had a longer history. In the 18th century, European writers quoted ideas of Buffon to argue that in America not only were the natives an inferior breed, but the European colonists degenerated there also. The American colonists rejected the idea. Thomas Jefferson vigorously opposed Buffon's proposition that the natural productions of the New World, and America in particular, were inferior to those of the Old -and, as mentioned in Chapter 2.1, quoted in evidence the mammoth bones found in Ohio.[5] Benjamin Franklin, in a famous encounter in Paris with one of the main proponents of the idea of degeneration of European colonists in America, Abbé G.T.F. Raynal, refuted the idea simply by asking the diminutive Abbé to stand alongside any American in the room "to see on which side nature has degenerated".[6] But the notion was a persistent one in European thought. Evidence to the contrary was explained away. In the nineteenth century, when Australians grew taller than their English cousins that

too was regarded as a degeneration and they were branded as "Sydney cornstalks" -inferior hothouse weeds that would quickly fade and die.[7]

Similar views concerning inferiority and degeneration among the native-born were expressed by some colonists in New Zealand. For instance, in 1876 Dr A.K. Newman presented a paper to the Wellington Philosophical Society on "The Physiological Changes obtaining in the English Race when transplanted to New Zealand". Newman had just returned to New Zealand after reading medicine at London and Aberdeen. Although he had been born in India and had begun his education in New Zealand, Newman was quite explicit about colonial inferiority: "the New Zealand and colonial youth and young man is physically and mentally weaker than persons of similar age at home".[8] In Newman's view, not only were the New Zealanders -the Maori -inferior to the English, but the sons of the colonists were as well.

Newman's awkward terminology of "New Zealand and colonial" reflected the problem of identity faced by colonial sons such as Walter Buller. Their immigrant parents clung to their English identity; at first they used the adjectives "New Zealand" or "native" to mean Maori, and to distinguish their own children born in New Zealand fell back on dual expressions such as "Anglo-Maori" or "Anglo-New Zealand". But as Newman found, by the 1870s attitudes had begun to shift.

Colonial pride had developed to the extent that his paper sparked off an unusually spirited debate, which continued into the succeeding meeting. The terms had also begun to change from those Newman had used: speakers referred to "New Zealanders" in general and distinguished between "white" or "European" on the one hand and "Maori" or "Native" on the other. Some argued that New Zealand actually had a better climate and healthier, more vigorous sons and daughters than those of England.[9]

Buller did not participate in the debate, although he was certainly the most prominent native-born member of the Society -and its President at this time. Whether by coincidence or out of a personal sensitivity about the issue, these particular meetings were the only ones that year he did not attend and chair. His brother-in-law Gilbert Mair, also born in New Zealand, did attend and spoke out for native-born New Zealanders, claiming them to be at least the equal of English-born persons.[10] Mair made an impressive case for the vigour of the native son. He was lean, tough, and tireless; no new chum from "home" could keep up with him.[11]

Despite the lack of support among New Zealand colonists for Newman's pessimistic view on human acclimatisation, it was clearly a sensitive issue. Anxiety on the matter of human acclimatisation and possible degeneration may be one

explanation for the frequent assertions by New Zealand colonists and promoters of colonisation that in climate New Zealand was the "Britain of the South": if the climate was as "temperate" as that of Britain then colonists need neither acclimatise (in the literal sense) nor degenerate. Many scientific observations and comparisons of climatic factors were made to support this view. Ernest Dieffenbach, for instance, must have pleased his employer, the New Zealand Company, when he concluded that "as regards climate no country is better suited for a colony of the Anglo-Saxon race than New Zealand", and hence that "children of Europeans, born in this country, show no deterioration from the beauty of the original stock, as they do in New South Wales and Van Dieman's Land".[12]

The stress on maintaining the Anglo-Saxon stock again recalls the New Zealand Company aim to "transplant English society... -everything of England, in short, but the soil".[13] Acclimatisation as carried out by the Acclimatisation Societies certainly followed this general aim. Transplanted English thrushes, oaks, trout and deer transformed New Zealand into something more like a Britain of the south. In this regard, J.O.C. Phillips argues that the new colonists were driven by "fear and loathing" of the wild, desolate nature of the land and thus moved to alleviate the "pain of exile, and the terror of the bush...by converting the land into an English garden".[14] Phillips was evidently speaking

provocatively and his generalisations are, by their nature, too simplified. There is much romantic enjoyment expressed in nineteenth century writings about the New Zealand bush, but "fear and loathing" is certainly there as well. James Buller, for instance, when writing in his Forty Years in New Zealand of his posting to the isolated Tangiteroria mission in the Kaipara region, described the scene with a Gothic shudder: "As far as the eye could range, there was but a vast sweep of silent and sombre woodland.... It brought to my mind the solitude of Martin Luther when he was confined to the castle, amid the primeval forests of old Germany".[15] His son, Walter Buller, born in New Zealand, wrote of the bush in English terms but with quite lyrical romanticism of its "peculiar charm" and "sylvan beauty", with its "rank profusion" and "shady depths".[16] But the "fear and loathing" sometimes emerge even in the writings of the "native-born (that is, New Zealand-born) European",[17] as in M.H. Holcroft's apprehensiveness about the "sinister quality" of the forest and the "eerie cry" of the Morepork owl.[18]

However, sentiments such as these are not prominent in the writings of proponents of acclimatisation of new species in New Zealand. Nor did Walter Buller's more positive feelings about the bush and birds of his native country prevent him from joining enthusiastically in the task of acclimatisation. Despite Phillips's claim, the colonists' impulse to

acclimatise new species in New Zealand appears to have been driven more by a positive urge toward progress and civilisation than a negative one of fear of an alien nature.

3.2: The New Zealand Acclimatisation Societies and their origins

All human colonists in New Zealand, from the Polynesian voyagers on, brought plants and animals with them -such "biological baggage" is one of the concomitants of colonisation. Some of these plants and animals were carried inadvertently (as parasites, weeds and other fellow-travellers) but most were carefully transported and deliberately introduced. James Cook liberated "useful" animals (geese, sheep, goats, pigs, and fowls) and planted gardens of European vegetables; and subsequent European visitors and colonists continued the process. Some went to considerable trouble and expense, especially in efforts to introduce game birds and animals. But not until the early 1860s were these efforts coordinated and institutionalised in a new fad for organised "acclimatisation" and for acclimatisation societies to carry it out. Where did this fad come from?

The New Zealand acclimatisation societies and their activities have been described many times,[19] but these

accounts are written almost entirely from a local perspective. Consequently the acclimatisation societies have generally been portrayed as an internal New Zealand development, arising out of a combination of settler nostalgia for the familiar plants and animals of "home", desire for access to sports which there had been the preserve of the upper classes, and increased leisure as the rigours of the pioneering phase of colonisation passed.[20] All these motivations were certainly present, but there were other, external developments and ideas which directly influenced the establishment of the societies here. As will be seen, the establishment of the New Zealand acclimatisation societies was just one manifestation of a widespread phenomenon; the ideas of organised acclimatisation, along with the associated terminology and institutional structures, were all disseminated in a particularly rapid process of diffusion across Europe to Britain and out to the colonies.

The first acclimatisation society was established in Paris in 1854 by Isidore Geoffroy Saint-Hilaire.[21] Its aim was primarily agricultural: to introduce (into Europe) and domesticate new plants and animals from elsewhere in the world. Isidore Geoffroy St Hilaire's ideas on acclimatisation appear to have been based on the biological philosophy of his more famous father, Etienne, who had extended Lamarck's idea of the inheritance of characteristics acquired by use or disuse, and argued that heritable change or adaptation in

plants and animals was directly induced by the environment in which they were placed. According to this view, which has been labelled "Geoffroyism", a hotter or colder climate would evoke the appropriate adaptations in organisms transplanted there.[22] Acclimatisation was thus seen as a creative, progressive process, not a degenerative one.

The Société Zoologique et Botanique d'Acclimatation attracted many titled and even royal members and in its second year added the epithet Impériale to its title. It was influential and widely copied in Europe: acclimatisation societies were established in Prussia (1856), Russia (1857), and Britain (1860).[23] Along with the idea of organised, scientific acclimatisation, the Société Impériale Zoologique et Botanique d'Acclimatation popularised the word as well. In English, after some experimenting with acclimatation and acclimation, acclimatisation became the standard term.[24] Even then the spelling reflected the French influence -all the adjurations of the etymologists that it should be acclimatization have still not been entirely successful.[25] But the new word spread quickly; where previously one might have spoken of the introduction, establishment, habituation or naturalisation of plants, animals -or people -in a new country, acclimatisation soon became the usual word.

The British society (initially called the Society for the Acclimatisation of Animals, Birds, Fishes, Insects and Vegetables within the United Kingdom) was established in London in June 1860. It was not particularly successful; its schemes to domesticate yak, capybara and kangaroo to add to the English diet were criticised and ridiculed, and it maintained a separate existence for only five years.[26] But from its inception it aroused the interest of visiting colonials in London who had already made efforts to introduce new plants and animals into their respective colonies. The most enthusiastic and influential of these was Edward Wilson of Melbourne; through his agency, the London society had an immediate and lasting influence in the colonies of Australia and New Zealand.[27]

Edward Wilson (1813-1878), owner and recently-retired editor of the Melbourne Argus, had long been an enthusiast for the introduction of English song-birds and other species into the colony of Victoria.[28] On his return from London he promoted the establishment of the Acclimatisation Society of Victoria (February 1861) which in turn led to the founding of Societies in Queensland (1862) and other Australian colonies.[29] Australian accounts claim also that Wilson's "deputy", Dr Thomas Black, "while in New Zealand [in December 1861 and January 1862] stimulated sufficient interest in acclimatisation to later form societies in Auckland, Dunedin and Lyttleton".[30] Although such claims can be largely

discounted as Australian exaggeration (Black's name does not appear in the histories of the Auckland, Otago or Canterbury Acclimatisation Societies), there is evidence to confirm that the influence and example of Wilson and his Victorian society were very important in the establishment of the New Zealand societies.

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Acclimatisation Societies were formed in New Zealand in Nelson (1863), Otago and Canterbury (1864), Auckland (1866), Southland (1867), Westland, Wanganui, and Hawkes Bay (1868), Wellington (1871), and subsequently in all larger centres. The myriad personal connections and influences involved in this sudden proliferation could be traced from their archives, but there is another line of evidence which clearly shows the derivation of the New Zealand acclimatisation societies from the Australian model and thence from the London one.

All the societies drew up rules incorporating a statement of their aims or objects, setting out what was considered to be the proper activities and scope of acclimatisation. But the

most striking feature of these statements of objects is their similarity. They are clearly all copied, directly or indirectly, from a common original source. By following the methods of textual criticism and comparing the variants used by each society, a "genealogy" can be deduced indicating the lines of influence between the societies.

The statement of aims is seen in its earliest form in the Prospectus of the London Society:

> 1. The introduction, acclimatisation, and domestication of all innoxious animals, birds, fishes, insects, and vegetables, whether useful or ornamental.
>
> 2. The perfection, propagation, and hybridisation of races newly introduced or already domesticated.
>
> 3. The spread of indigenous animals, &c., from parts of the United Kingdom where they are already known, to other localities where they are not known.
>
> 4. The procuration, whether by purchase, gift, or exchange, of animals, &c., from British Colonies and foreign countries.
>
> 5. The transmission of animals, &c., from England to her Colonies and foreign parts, in exchange for others sent thence to the Society.
>
> 6. The holding of periodical meetings, and the publication of reports and transactions for the purpose of spreading knowledge of acclimatisation, and inquiry into the causes of success or failure.[31]

The Victorian society repeated these clauses verbatim (apart from changing "United Kingdom" and "England" to "the colony" where required) and added two more clauses:

> the interchange of reports, &c., with kindred associations in other parts of the world, with the view, by correspondence, and mutual good offices, of giving the widest possible scope to the project of acclimatisation;

> the conferring rewards, honorary or intrinsically valuable, upon seafaring men, passengers from distant countries and others who may render valuable services to the cause of acclimatisation.[32]

The New Zealand Societies all copied the Victorian version -errors included ("the conferring rewards"); indeed the slight variations in wording indicate that the three earliest societies at least (Nelson, Otago and Canterbury) drew independently on the Victorian version rather than from each other.[33]

As the borrowed statements of aims demonstrate, the concepts and institutional forms of the movement for acclimatisation in New Zealand were not indigenous to the colony; like so much else in colonial society they came from the imperial centre, although they were transmitted indirectly, and transmuted to some extent in the process. But the colonial acclimatisers did have a different perspective to that of their imperial counterparts. Accordingly, despite the similarity of the formal statements of aims and objects they adopted, in practice their objectives were rather different. In the following sections some of the ideas and developments of the acclimatisation movement in New Zealand will be examined, particularly in relation to the attitudes they reveal on the place and worth accorded to European and native species.

3.3: Colonial Nostalgia for the Familiar Things of "Home"

Although the concept of organised "acclimatisation" was derived from metropolitan ideas it gained much more popular support in the colonies than in the the European centres. In London (or Paris), naturalisation or acclimatisation of plants and animals was an imperial enterprise, aiming to exploit the resources of the empire and of foreign lands. From the perspective of the colonists in New Zealand acclimatisation was a natural part of the process of colonisation in which they were engaged -of transplanting and establishing a piece of England in the "new" land.

This latter view of the colony as an outpost of "England" is seen also in the legal language of "naturalisation" in its other human sense, of admitting "alien" persons into full citizenship of the country: the Naturalization Act passed by the colonial government in 1860 allowed colonists who were not of British birth or nationality to be "naturalised" in New Zealand -to be accorded the same status "as if they had been respectively born within the realm of England".[24]

The acclimatisation societies of Australia and New Zealand had much more in common with each other than they did with the London society -even apart from their similar colonial

perspective. In London, the activities of the acclimatisation society -which were concentrated mainly on domesticating new species to add to the British diet -were generally regarded as eccentric. Furthermore, as suggested in an earlier section, in London acclimatisation was a topic of scientific controversy -a controversy which was only partly echoed in the colonies. Altogether, although the London society attracted the patronage of a number of the nobility and some scientific men (most notably Sir Roderick Murchison, Professor Richard Owen, and Dr Albert Gunther) it gained little official backing. The British government declined to give it any financial support.[35]

In New Zealand and Australia, however, acclimatisation had widespread support. There was much optimism about the benefits to the colonies of introducing new and exotic plants and animals; but there was an even stronger urge to bring in the familiar animals and plants of "home". This nostalgic sentiment (which of course did not apply in the London society) was very powerful in the colonies. As James Drummond put it, "The Old Country was their Holy Land, and anything that reminded them of it and its associations was given a hearty welcome".[36] The colonists made great efforts to introduce favourite English song birds such as the thrush, robin, skylark and nightingale, and fish and game such as trout, salmon, pheasant, and deer.[37]

The colonial acclimatisers generally did not speak explicitly

in terms of displacing inferior native species; instead they felt that they had almost empty countries requiring to be stocked or "furnished" with "all that could contribute to our enjoyment". David Monro of Nelson, for instance, spoke of "filling our dreary wastes and hills with animal life, and.... [making] our hedges alive with that delightful music of the 'Old Country'". He was sure that colonists would "rejoice" with him at the introduction of the red deer -"one of the noblest and finest animals of their Native Country". Similarly, Julius Haast wanted to stock the New Zealand alps with chamois from Europe to provide "the exciting pleasure and manly exercise of the chase".[38]

Even Buller, although born in New Zealand, could still adopt the sentiment of the settler pining for the familiar things of home. For instance, in a discussion of the decline of the Piopio (Turnagra capensis) he noted philosophically that "with the disappearance of this native Thrush, the English songster is fast becoming established in the country...supplying to the loyal colonist yet another link of attachment to 'dear old England'".[39] The ambivalence of Buller's position as an Anglo-New Zealander, a native-born colonist, has already been discussed. But there were further ambiguities in the "patriotic" view of acclimatisation. Buller's father wrote in 1880 (after returning "home" to England) of how in New Zealand "Imported animals of every kind do remarkably well.... and every living thing prospers."

The colonists were healthy and their crops abundant -more so, it was often claimed, than in any other country.[40] But for all his colonial pride, James Buller still maintained the superiority of the land of his birth. In New Zealand, he wrote, "the fragrance of the lily and the rose is not equal to that exhaled from lilies and roses in England".[41]

The "patriotic" rationale for acclimatisation expressed by Walter Buller was later elaborated even further by another native-born New Zealand scientist, J. Allan Thomson,[42] writing in 1918:

> The question of acclimatisation has not only utilitarian and aesthetic aspects, but has an intimate bearing on national sentiment. The similarity of farm stock and of trees and birds in New Zealand to those of the English countryside enables the New-Zealander to enter more sympathetically into the moods and thoughts of the great masters of English literature. National sentiment has diverged less from that of the Home-land in New Zealand than in Australia and Canada, and the similarity of surrounding and atmosphere must be an important factor in this respect.[43]

Even while a New Zealand national consciousness was developing, this sentimental identification by the native-born New Zealander with idealised images of England remained strong. The best-known literary expression of such feelings is Alan Mulgan's book Home; a New Zealander's Adventure, first published in 1927.[44] The reverse process, of identification with New Zealand native things as part of the rising national consciousness from the 1890s, will be examined later in the chapter on conservation. But it

is clear from Mulgan's and Thomson's attachment to the "Home-land" that, although from 1907 New Zealand was styled a British "dominion" rather than a "colony", the colonial orientation remained. Similarly the New Zealand acclimatisation societies clung conservatively to their original appellation long after their activities in "acclimatisation" or ecological colonisation had ceased. In 1989 they retain the name still -apparently the last in the old empire to do so.[45]

At the same time, as shown by Thomson's comment about the "similarity of farm stock and of trees and birds in New Zealand to those of the English countryside", and confirmed by any casual observer today, the original aims of "acclimatisation" have been more fully achieved in New Zealand than in Australia: English grasses, weeds, birds, and farm animals now dominate the New Zealand scene. The present New Zealand fauna and flora has a much higher proportion of introduced species (technically "exotic" but, in many cases, so familiar in New Zealand that the term seems inappropriate) than Australia or probably than any of the other "Neo-Europes".[46] In this respect, English colonists can still feel quite at home.

3.4: Acclimatisation in New Zealand: Political Success and Ecological Disaster

By comparison with the Acclimatisation Society in London, the colonial societies were, right from their inception, much more successful in attracting members and official support. At the end of its first year the London society listed only 49 members -a number easily exceeded by many of the New Zealand societies at the same stage.[47] And from the beginning the colonial societies had support at the highest levels. In New Zealand Sir George Grey and his successor as governor, Sir George Bowen, were both enthusiastic patrons, and many leading public men were members. Premiers F.A. Weld, E.W. Stafford and G.M. Waterhouse, for instance, were all founding figures of their local acclimatisation societies.[48]

With popular, scientific and political support the acclimatisation societies became firmly established in both Australia and New Zealand. They eventually outlasted their European models. In fact in the acclimatisation movement the imperial centre soon became peripheral; as the London society faded and disappeared[49] the Australasian societies strengthened their co-operative efforts, gained governmental backing, and arranged for practical men in England to do their field-work for them. The former secretary of the defunct London society, Frank Buckland, sent some

consignments of fish ova, but another ex-member, the colonial-born James Youl, was more successful and later received the CMG (the colonial honour) for his part in the acclimatisation of trout in the antipodes.[50]

Some of the introductions made by the acclimatisation societies soon turned out to be economically and ecologically disastrous. As Buller commented in 1888, when ruefully admitting his part in the introduction of sparrows in the 1860s, "the zeal for the introduction of novelties has not always been tempered by the judgement which comes of experience".[51] The ecological consequences of "acclimatisation" in New Zealand have been surveyed by many authors, most recently by King (1984) and Westerskov (1987).[52] Contemporary reaction by Buller and others to the "rabbit problem" in particular gives a further illustration of colonial attitudes on acclimatisation and the place of native species.

Rabbits were introduced by individual European visitors and settlers before 1840 and later by many of the acclimatisation societies, although when rabbit populations exploded in the 1870s and 1880s and the animal became a serious pest the societies tried to disown them.[53] A further controversy developed over proposals for dealing with the problem by acclimatising "the natural enemy": predatory animals such as stoats, ferrets and weasels.

Scientific opposition to the idea of introducing these animals (known collectively as mustelids) appears to have first been expressed, not in New Zealand, but from England, by Alfred Newton of Cambridge. In July 1876 Newton read in the English journal Land and Water a note by Frank Buckland to the effect that rabbits were becoming such a pest on the large New Zealand sheep runs that some run-holders were offering £5 a pair for weasels from England to control the pest.[54] Buckland was proposing to send "polecats" -wild ferrets. Newton was no friend of Buckland ("the greatest fool that was ever called a naturalist"[55]) or of the acclimatisers and their activities, and he did his best to stop them. He wrote immediately to Land and Water and also to those scientists in New Zealand who he thought might have some influence there: James Hector, F.W. Hutton and Buller. He urged them to prevent this "disastrous importation", if need be by Act of Parliament. "It is ridiculous to suppose that weasels, polecats or ferrets will confine their destructive powers to rabbits", he wrote; "& there will be an end not only of your brevipennate [shortwinged, i.e. flightless] birds, but of many of the other native species".[56]

Buller does not appear to have taken any immediate action on Newton's warning. Hutton, in Dunedin, responded by writing to his local newspaper.[57] Hector's letter was passed on in his absence to W.B.D. Mantell,[58] who seems to have been the one to act; a bill to prohibit the importation of polecats, stoats

and weasels was introduced in parliament only a few weeks later.

In the House of Representatives the Protection of Animals Amendment Bill (later renamed the Noxious Animals Prohibition Bill) was moved by Sir George Grey, then a leading opposition figure in parliament. On this occasion, however, Grey and most government members were in agreement: if such destructive animals were introduced they "would materially interfere with the agriculture of the country, because they would kill the birds which destroyed the grain-eating insects".[59] Although it was pointed out that the Select Committee to inquire into the Rabbit Nuisance had just suggested the introduction of the very same animals, most members were in favour of the Bill which would prohibit them. Farming interests were well represented in the House, but mainly by agriculturalists, or smaller farmers, who regarded rabbits as a manageable pest or even as a source of income. The Bill passed in the house with a large majority and was sent up to the Legislative Council.

In the Legislative Council it was sponsored by Mantell. By contrast with the House of Representatives, the Council had a much greater representation of pastoralists, who regarded stoats and weasels not as noxious vermin, but as the "natural enemy" of the rabbits which were ruining their sheep runs and threatening the economy of the country. They rejected Newton's concern about the fate of native birds as "frivolous".[60] The

Bill did not proceed.

Two months later Buller wrote a paper on the issue for the Wellington Philosophical Society. His argument against the introduction of mustelids was based on extensive quotations from Newton's letter. He concluded that as Parliament had rejected the Bill prohibiting the importation of mustelids "nothing now remains for us but to sound the note of warning before it is too late, and, by directing public opinion to the subject, to mitigate the danger". He agreed that sheep "are of more practical account to the colony than kiwis and wekas, and that, from the sheep-farmer's point of view, anything almost is preferable to the 'rabbit nuisance.'" But while accepting the pastoralists' view that polecats would be effective in ridding the country of rabbits, he asked whether "in the attempt to put down one evil, you are not permitting a larger one to grow up in its place.... The issue is an important one to every lover of natural history, and the members of our Society ought not to be content to let it rest where it is".[61]

Perhaps Newton's warnings from "home" had some effect, for the importations of weasels proposed in 1876 did not proceed immediately. But as anxious run-holders saw their pastures overrun with rabbits, the demand grew for something to be done. Various control measures were tried -guns, dogs, poison, even some domesticated ferrets were used -but the rabbits kept on increasing. Run-holders petitioned the government to act,

urging that "the natural enemy alone remains...the only means to avert the calamitous result of a wholesale abandonment of runs".[62] Government intervention was called for on the basis that neither the rabbits nor any "natural enemy" were confined by farm boundaries; runholders charged that as fast as they cleared the pest from their properties it re-invaded from the back country Crown land. The government responded with a series of Rabbit Nuisance Acts levying rates for the destruction of rabbits and establishing a system of rabbit inspectors. Finally, in 1882, the government bent to the runholders' demand. The ferret was gazetted as a protected rather than a prohibited species, and an extensive programme was begun to import and liberate ferrets, stoats and weasels.

In a recent discussion of the introduction of mustelids and the contemporary arguments for and against, Buller is portrayed as one of the major opponents of the idea, "tireless in his opposition".[63] Certainly Buller made such claims for himself. "As shipment after shipment of this vermin from over the water arrived in New Zealand, I raised my voice in protest against so insane a policy", he told the Wellington Philosophical Society in 1894.[64] But he exaggerated. In fact, after his initial echoing of Newton's warning in 1876 he barely mentioned the issue in his published papers at all, indeed not until he became involved in a new development in bird protection fifteen years later.[65]

Even his 1876 paper at the Wellington Philosophical Society had less impact than it has been given in retrospect; in the rush at the end-of-year meeting -which Buller chaired -he let it be taken as read, and the issue was not discussed at all. An abbreviated report only was printed in the Proceedings section of the Transactions and Proceedings of the New Zealand Institute. This, however, was probably sufficient for what appears to have been his prime purpose at the time -to place it on record for his wider audience in London at a time when he was hoping to be elected to the Royal Society there.

Nor did the scientific arguments of Buller or even of Newton have much influence. Both in the acclimatisation societies and in parliament the views of "practical colonists" were more valued than those of scientific gentlemen.[66] There was in fact very little discussion in New Zealand of ideas or theories of acclimatisation. In the philosophical societies as elsewhere most of the discussion on the issue was on practical problems of introducing particular species; the prospect and the desirability of acclimatisation were largely taken for granted. It was "only natural", argued Alexander Bathgate when addressing the Otago Institute in 1897, that the colonists in New Zealand -a country with "such a limited indigenous fauna" -should "establish acclimatisation societies, and endeavour to introduce the familiar forms of wild life from their native lands".[67]

Bathgate did go so far as to suggest that some scientific study should be made of species already introduced in New Zealand, by "recording what changes in habit, if any, were induced by their new environment".[68] This view of acclimatisation, based on Geoffroy St Hilaire's concept of direct environmental induction of adaptive change, had been implicit in much of the acclimatisation societies' enterprises in New Zealand. By the 1890s the very success of some of those enterprises raised questions: why did some species such as the rabbit acclimatise too well and become pests, others such as trout grow to unprecedented sizes, and others show alterations in behaviour or even in colour?[69] Those colonial scientists who did venture to address these questions generally expressed their ideas in terms of a rather different European theoretical framework than Bathgate's Geoffroyism. For example, G.M. Thomson, a Dunedin science teacher, argued in 1891 that acclimatised European species succeeded because the struggle for survival was less rigorous in New Zealand:

> Nearly all our introduced animals have been brought from lands where the struggle for existence is very keen and where natural enemies abound. In their new home they have been set free from these old trammels, and their enemies have been left behind.[70]

This is the same Darwinistic argument as in Hawthorne's (1918) explanation for the displacement of native by Northern Hemisphere species, which "have evolved in a harder school".[71] The expectation of inevitable displacement of

the weaker native by the more vigorous European colonist, and the urge for "acclimatisation" to fill perceived deficiencies in the colonial environment by bringing in desirable, mainly European species, were, as suggested in the introduction to this chapter, two sides of the same basic colonial viewpoint. Both displacement and acclimatisation rested on the presumption of European or English superiority.

CHAPTER 4
DARWINISM AND COLONIAL IDEAS ON THE STRUGGLE FOR SURVIVAL

4.1: Displacement and Darwin

The colonists' perceptions of the superiority of acclimatised European species over indigenous ones, or of the inevitable displacement of the natives by European immigrants, were often expressed in terms of "laws of nature", or such catch-phrases as "the struggle for existence" or "survival of the fittest" -which are generally identified with Darwinism. A number of passages already quoted, such as those on displacement by E.F. Hawthorne (1918) and on the success of acclimatisation by G.M. Thomson (1891), might certainly be read in this way. But how much did New Zealand ideas of native inferiority and displacement really owe to Darwinian concepts? And, putting the question the other way about, how much did Darwin's ideas on these issues owe to New Zealand observations and opinions? To answer these questions we must examine the various ideas more closely.

Part of the force of the idea of displacement as expressed by Buller and others in New Zealand was its seeming comprehensiveness: that none of the indigenes -rats, birds, plants, or people -were as vigorous, progressive, advanced or competitive as the corresponding European immigrants and that

all would inevitably be displaced by them. Thus, as shown in Chapter 2, it was observed that the "native" rat was annihilated by the spreading "English" one; native birds disappeared while introduced birds such as sparrows multiplied so rapidly as to become pests; the native bush receded while European plants grew, sometimes with extraordinary vigour; and the Maori race decreased while the European immigrants flourished. All these observed changes were seen as manifestations of the one basic phenomenon of native inferiority and displacement. The apparent parallelism between the various manifestations gave strength to the argument, and obscured the cases where European immigrants did not flourish -or natives did.

Competition or struggle was inherent to the idea of displacement -and was also a key element of the ideas of Darwinism. The phrase "struggle for existence" was popularised by Darwin's The Origin of Species (1859), and "survival of the fittest" was coined by Herbert Spencer in his Principles of Biology (1865);[1] but the idea of struggle for survival (in the human realm at least) was much older, with perhaps its most famous expressions those by Hobbes in the seventeenth century, Adam Smith and especially Thomas Malthus in the eighteenth.[2] The biological concept of competition between species as a factor in their spread or extinction had been developed in the nineteenth century by Charles Lyell and Alphonse de Candolle.[3] Darwin

incorporated their ideas to argue in The Origin of Species that species had evolved from pre-existing species rather than being separately created, and that one of the main mechanisms (but not the only one) by which this occurred was natural selection -"the Preservation of Favoured Races in the Struggle for Life", as he put it in his subtitle. The observation that the New Zealand natives were being displaced pre-dated Darwin's formulation of his ideas. Was he influenced by the New Zealand case?

Darwin visited New Zealand briefly in December 1835 during the voyage of the Beagle. He appears to have been rather depressed and homesick at the time and the impressions of New Zealand and New Zealanders he gained during ten days at Paihia and Waimate were predominantly negative, as shown by his parting diary comment:

> I believe we were all glad to leave New Zealand; it is not a pleasant place; amongst the natives there is absent that charming simplicity which is found on Tahiti, and of the English the greater part are the very refuse of society. Neither is the country very attractive.[4]

It has been suggested by Michael Roche that the major impact of the New Zealand visit on Darwin's subsequent thinking was his observations of the apparently rapid and successful establishment of introduced European species there, displacing the native fauna and flora.[5] Darwin certainly mentioned the displacement of the native rat and the spread of European weeds in his account of his visit, but only in

passing. Examination of the development of his ideas in his various journals and drafts prior to The Origin of Species does not, in fact, bear out Roche's contention; Darwin's writings suggest that not only was he more impressed by the anomalous absence of land mammals in New Zealand, but that his ideas on displacement of the New Zealand natives were drawn not so much from his own observations as from those of others such as Ernest Dieffenbach and especially J.D. Hooker.[6] Hooker visited New Zealand (again at the Bay of Islands) in 1841 on the expedition of the Erebus and Terror and subsequently wrote of the aggressive colonising power of northern European or "Scandinavian" plants as shown by their spread into New Zealand and other southern temperate countries.[7]

However, whether from his own observations or Hooker's, Darwin certainly included the displacement of New Zealand native species among the evidence exemplifying his concept of natural selection in The Origin of Species:

> Natural selection tends only to make each organic being as perfect as, or slightly more perfect than, the other inhabitants of the same country with which it has to struggle for existence. And we see that this is the degree of perfection attained under nature. The endemic productions of New Zealand, for instance, are perfect one compared with another; but they are now rapidly yielding before the advancing legions of plants and animals introduced from Europe....
>
> From the extraordinary manner in which European productions have recently spread over New Zealand...we may believe, if all the animals and plants of Great Britain

> were set free in New Zealand, that in the course of time a multitude of British forms would become thoroughly naturalised there, and would exterminate many of the natives. On the other hand, from what we see now occurring in New Zealand, and from hardly a single inhabitant of the southern hemisphere having become wild in any part of Europe, we may doubt, if all the productions of New Zealand were set free in Great Britain, whether any considerable number would be enabled to seize on places now occupied by our native plants and animals. Under this point of view, the productions of Great Britain may be said to be higher than those of New Zealand.*

This authoritative expression of European superiority and native New Zealand inferiority may have reinforced the New Zealand colonists' views on displacement of native species. But were Darwin's ideas any more soundly based than the colonists' own? He was certainly an acute observer but his brief time in New Zealand, the very restricted area he saw, and his mood of homesickness and depression while there, severely limit the value of his own observations. In the case of the displacement of the native rat his observations appear to have been derived from missionaries he spoke to. J.D. Hooker, whose observations Darwin also quoted, spent rather longer in New Zealand, but apart from visits to several of the subantarctic islands he too went no further than the Bay of Islands, where he botanised with William Colenso and Andrew Sinclair. However, although Darwin clearly accepted that the New Zealand native species were being displaced by European immigrants, and used the idea in his own argument for <u>The Origin of Species</u>, it appears that he was not entirely satisfied with the evidence for the idea. In January 1863 he wrote to Julius Haast suggesting that New Zealand

observers might take records of the progress of displacement, "the rate and manner of spreading of European weeds and insects, and especially to observe what native plants most fail; this latter point has never been attended to. Do the introduced Hive bees replace any other insect? &c. All such points are, in my opinion, great desiderata in science".[9] The general pattern of displacement might have seemed obvious, but detailed evidence of particular instances was still lacking.

4.2: Darwinism and Colonial Science

The ideas Darwin expressed in The Origin of Species concerning the displacement of native New Zealand species -that European species were "higher", the product of more intense competition and natural selection than those of New Zealand, and therefore displaced and exterminated the latter when brought into competition with them -were not new, but Darwin placed them in the context of a coherent theory of progressive evolution and gave them scientific legitimacy. Other authorities too continued to quote the case of displacement in New Zealand. J.D. Hooker in particular referred to this displacement in several of his papers, and in his 1867 Handbook of the New Zealand Flora -commissioned by the New Zealand Government, and the standard flora until 1906 -wrote that "many [introduced] plants...are actually

driving the native plants out of the country". This "actual displacement", he commented, "may well arouse the curiosity of the most listless colonist".[10] Later A.R. Wallace quoted the instance of the exterminated New Zealand rat and also "a native fly [which] is being supplanted by the European house-fly".[11]

This metropolitan support for the idea of displacement of the New Zealand natives did not go unnoticed by the colonists. One of the clearest instances of this influence is in the lectures given by W.T.L. Travers in Wellington in 1869 on "the changes effected by civilized man in the physical features and organic life of new countries"[12] -in essence, the idea of displacement. Travers was somewhat doubtful about some details -for instance, whether the European rat had literally exterminated the native one or had simply filled the space left by the prior decline of the latter -but his exposition of the broad idea was almost liturgical in its appeal to the authority of Darwinian doctrine:

> Many, if not all of you, have heard of the Darwinian theory as applied to the origin of species. This theory teaches us that a struggle for existence is constantly going on between all the varied organisms, both animal and vegetable, which occupy any particular Zoological or Botanical province.... In a country like New Zealand, placed at such a distance from other countries as to preclude the risk of invasion, except through the agency of man, it must be manifest that this struggle would be carried on under peculiarities little likely to be observed in other places, and the results already caused by the introduction of new and rival organisms satisfies me that the indigenous flora and fauna even on their own

> ground, are unable to cope with the intruders.... The "Kiore" has been replaced, if not destroyed by the European rat; the European honey bee now swarms in our forests, taking the food of the meliphagous birds, which are already diminishing palpably in numbers.... I believe if every human being were at once removed from the Islands...the introduced would succeed in displacing the indigenous fauna and flora.[13]

Travers spoke of displacement as the corollary of the colonists' credo of progress: "in all that is taking place around us, we see the energies of our race forming a new and vigorous state. The face of the country, the life native to its soil, and the aboriginal race which claimed it, are all being modified, effaced, and displaced".[14]

As in Travers's omnibus statement, the idea of displacement was generally applied to the native race along with the native flora and fauna. Darwin, however, omitted this aspect in The Origin of Species. Indeed, in that book Darwin avoided applying his theory of evolution by natural selection to the human species. But despite his diplomatic silence the popular response to The Origin of Species focussed almost entirely on the issue of human evolution. The idea that mankind might have evolved or descended from an ape-like ancestor came to stand for the whole Darwinian theory; and "the ape theory" was often ridiculed and rejected as irreligious. In the New Zealand context, John Stenhouse has described how extreme opponents of Darwinism such as J.G.S. Grant of Dunedin condemned it outright as "the wretched gorilla damnification of humanity", which "gives the lie

direct to the Bible, and cuts the throat of Christianity".[15] But Grant had few followers in New Zealand, Stenhouse argues; scientists in New Zealand "were and remained religious believers" while leading churchmen (often also members of the philosophical societies) "eagerly sought rapprochment between their Christian faith and evolution. The relations between the two groups were marked by deliberate irenicism".

Certainly, despite the use of Darwinistic[16] catch-phrases by Buller and others in the Philosophical Societies, remarkably little controversy or even discussion on Darwin's theory is apparent in the published Transactions and Proceedings of the New Zealand Institute. Travers's lecture is in fact one of the few explicitly Darwinian expositions to be published in the Transactions and Proceedings until the 1890s at least. But the "irenicism" in the New Zealand philosophical societies on the issue of Darwinism, and the absence of discussion of the issue in their published proceedings, must be seen in a wider context. There is, in fact, relatively little controversy expressed in the Transactions and Proceedings on any philosophical or theoretical issue. The philosophical societies generally followed the tradition of the London learned society and maintained the lofty air of earnest seekers after truth. Colonial scientists generally accepted that their proper role was to present observations, to describe and classify; few

attempted to synthesise or explain, and they were uncomfortable with provocative speculation, or metaphysical argument.

In the particular case of Darwinism there may well have been even greater reluctance to engage in controversy. Stenhouse suggests that instead efforts were made to "defuse a potentially explosive [scientific] issue by insisting on its compatibility with moral and religious orthodoxy".[17] Certainly the New Zealand philosophical societies, like those of Canada and Australia, again followed the example of the major English learned societies and maintained a studious reticence on Darwinism, evolution or the origin of species.[18] The issues were occasionally raised in the New Zealand societies, especially in presidential addresses, but through the 1870s and 1880s there seems to have been a tacit understanding that only conciliatory views would be printed in the Transactions and Proceedings of the New Zealand Institute, and then usually only in summary in the "Proceedings" section. Papers taking an explicit position on the subject -either for or against -were not printed among the scholarly "Transactions". For instance Dr A.C. Barker's paper "Continued Creation versus Darwinian Evolution", presented to the Philosophical Institute of Canterbury in 1871, was mentioned only in the "Proceedings" and only by title.[19] Travers's lecture was no exception in this regard: it was not a scholarly paper, but one of a series of

popular lectures given in conjunction with the conversatione held during the first year of the New Zealand Institute in support of its general aim of "the promotion of Science Literature and Art in this country".[20] These lectures were printed in the "Proceedings" section.

Most of the practising scientists among the members of the philosophical societies -those who regularly presented papers -held more-or-less Darwinian views; indeed it has been suggested by Garry Tee that New Zealand "was probably the only country in which every significant scientist of the second half of the 19th century was a public supporter of Darwin and his work on evolution".[21] This is too sweeping a generalisation: W.M. Maskell, for instance, a significant scientist with an international reputation as an entomologist, gave public addresses denouncing Darwinism.[22] But certainly in New Zealand scientific circles there was less opposition, or at least less influential opposition, than in Australia, where few supporters were in evidence and scientific leaders such as W.S. Macleay, Sir Henry Barkly and F. von Mueller firmly opposed the "transmutation theory so dangerous to our Christian faith".[23] It has been argued that in Australia the scientific infrastructure -the Royal Societies and museums, the government scientific positions and university chairs in science -had been established and men appointed to them under the patronage of pre-Darwinian metropolitan

science, and that the older views therefore became entrenched.[24] This "Hartzian" argument on the establishment of a particular scientific outlook in a colony according to the views brought by the founding colonial scientists[25] could equally be applied to New Zealand, where colonial scientific institutions were not established until the 1860s, at a time when Darwinian views were gaining ground in metropolitan science. The older patrons or "Czars" of colonial science such as Richard Owen or Roderick Murchison were still powerful, but the Darwinian J.D. Hooker had more effective influence in New Zealand. It is interesting to note that James Hector, who, as Hoare puts it, gained "hegemony" over colonial scientific institutions in New Zealand, gained his first appointment in New Zealand in 1862 on the recommendation of Murchison, but also came with an interest in Darwinism and letters of introduction from Hooker.[26]

Although Hector and other leading figures in colonial science in New Zealand such as F.W. Hutton and Julius von Haast held evolutionary views, they, like W.M. Maskell and other opponents of evolution, held their peace in the Philosophical Societies and the Transactions, and used other platforms and other journals to publish their arguments on the issue. Not until Buller's "Illustrations of Darwinism" in 1894 was any paper explicitly addressing evolution or Darwinism published in the Transactions.

4.3: The Development of Buller's Ideas on Darwinism

Buller, like most of his fellows in the philosophical societies, generally avoided speculation on theoretical issues. However, there is enough in his writings to trace his developing position on Darwinism and the influences of Darwin and other metropolitan authorities, in particular Richard Owen and A.R. Wallace.

Buller's first major scientific paper, his 1865 essay On the Ornithology of New Zealand, gives only faint hints of his position on Darwinism at that time. In several of his statements the concept of evolutionary lines of descent might be discerned. For instance, Buller described (as "a hitherto unnoticed fact") the "remarkable and very manifest representation" of many North Island species by closely allied species in the South Island and compared it to the pattern of "closely related" finches noticed by Darwin in various of the Galapagos Islands.[27] Buller gave a reference here to Darwin's Journal of Researches, though none to The Origin of Species. Or consider Buller's account of the Kakapo Strigops habroptilus:

> there can be little doubt that as colonization spreads into the Kakapo country, this species like many others will rapidly disappear. Birds possessing so feeble a development of wing as to be unable to fly, cannot, in the struggle for existence, long withstand the oppression of men and their domestic attendants, dogs and cats. The introduced rat (which has multiplied to a prodigious extent and has almost exterminated the indigenous one,) contributes also to the extinction of these races[28]

Buller here combines the idea of inevitable displacement and extinction of native species (with the ubiquitous reference to the rats), the metaphor of oppression by the immigrants, and the Darwinistic phrase "the struggle for existence". Some negative evidences should also be mentioned: he does not make any reference to a Creator, or Creation (even in a figurative sense), or to design in nature. But taken altogether the most that can be said is that Buller's 1865 Essay is implicitly Darwinian. It takes no overt position on the issue.

Such reticence regarding Darwinism was, as already mentioned, typical of New Zealand colonial science as represented by the papers published in the Transactions and Proceedings of the New Zealand Institute. It is seen again in Buller's paper "On the Structure and Habits of the Huia (Heteralocha Gouldi)",[29] presented to the Wellington Philosophical Society in November 1870. Buller quoted the statement of a "well-known naturalist" (P.L. Sclater, Secretary of the Zoological Society of London) concerning the most unusual difference in this species between the form of the beak of male and female birds: "It is difficult to guess at the reason of it or to explain it on Darwinian or any other principles".[30] Buller proceeded to give his observations of the way the birds extracted their insect food from rotting wood -the different beaks enabled the sexes to use different methods of attack and thus they "assisted each other". He

suggested rather vaguely that this complementary behaviour "appeared to explain the use, in the economy of nature, of the differently formed bills in the two sexes",[31] but did not explicitly commit himself on the London naturalist's question of whether the morphological and behavioural adaptation of the Huia could be explained on Darwinian principles of natural selection, or as an example of providential design in nature.

Buller published his 1873 A History of the Birds of New Zealand in London, and aimed it more directly at a metropolitan readership than he had with his papers in the Transactions and Proceedings of the New Zealand Institute. Though he still largely refrained from speculating on theoretical or philosophical issues, he did express his views rather more explicitly than before. For instance, he suggested a Darwinian explanation for the moss-green plumage of the Kakapo Strigops habroptilus, which blended so well with its surroundings: "Conformably...with the doctrine of natural selection, we have here another striking instance of the law of assimilative colouring".[32] But he continued to be cautious in his espousal of Darwinism. When discussing the Wry-Billed Plover Anarynchus frontalis he quoted a long passage by T.H. Potts suggesting that its strangely curved beak was "a beautiful provision of nature",[33] adapting it to its special mode of feeding. The phrase implies a view of nature closer to the natural theology of Paley than the

natural selection of Darwin. Buller let it stand, but in regard to the similar asymmetry in the bird's colour pattern he suggested that the "law of natural selection has operated".[34] Moreover, he drew back from any substantial discussion of these ideas:

> I do not propose to enter here into a discussion of the theory which a consideration of these facts seems necessarily to involve; but I see myself no difficulty whatever in reconciling this view of the evolution of species by means of natural selection with a belief in the unity of design in Creation, and with the acceptance of the great truths of revelation.[35]

The word "design" signified the view of nature epitomised by William Paley's argument of the watch and the watchmaker: that the evidence in nature of well-adapted (well-designed) organs and organisms implied the operation of a divinely creative designer.[36] Thus Buller was taking a position like that of many scientists of the time: retaining the older ideas of design in nature -that there was plan, purpose and a Creator behind it all -while also accepting Darwin's thesis that the origin of species had been by evolution from pre-existing species rather than by separate creation. The mode of that evolution was more problematical. Darwin proposed that species changed and evolved by natural selection, analagous to the stock-breeder's selection: those individuals who happened to have characteristics which made them fitter or better adapted were more likely than the rest to survive to produce offspring -with the same characteristics. This idea, of chance rather than design, of

competition and waste rather than economy in nature, was deeply subversive of the old view of the natural world ruled by the laws of a benevolent God. Darwin had tried to obscure this and soften the revolutionary impact of his ideas; and certainly Buller was not alone in accepting the evolutionary part of his theory while misunderstanding or gliding over the theological implications of natural selection.[37]

Also like many others, Buller stressed the idea of inheritance of acquired characters (those developed by use or disuse) -an idea associated with Lamarck, which Darwin had incorporated in The Origin of species. Buller employed this idea to explain the flightlessness of the Kakapo -a bird which was active only at night and, in primeval New Zealand at least, faced no mammalian predators. Flight had thus been "superfluous" for the Kakapo, Buller argued, and therefore "it may be reasonably inferred that disuse, under the usual operation of the laws of nature, has occasioned [its] disability of wing".[38] The idea of evolution by inheritance of acquired characters appealed to those who could not accept the blind chance behind natural selection; it embraced the idea of ordered progress, and a predetermining will.

However, Buller's position in A History of the Birds of New Zealand was, in the view of contemporary English reviewers, "friendly to Darwin's celebrated hypothesis".[39] Darwin

himself took a subscription to the book, wrote Buller a "very complimentary letter", and later added his signature to Buller's nomination for Fellowship of the Royal Society of London.[40] Furthermore, Darwin made reference in his next book (the second edition of The Descent of Man and Selection in Relation to Sex) to several observations concerning New Zealand birds which "we hear from Dr Buller", -especially concerning the differences in beak form of the sexes of the Huia and their complementary feeding methods.[41] But Buller, who would normally draw attention to any such reference to himself, never mentioned Darwin's quotation. Was it reluctance to associate himself too closely with Darwin's name and irreligious ideas on the descent of man that overcame Buller's usual vanity? For when the less controversial Sir John Lubbock subsequently quoted the Huia anecdote in his popular The Beauties of Nature to make a homily from nature on "the wife as helpmate to the husband", Buller took care to mention the fact before the Wellington Philosophical Society -and even to pedantically correct the "pretty sentiment" of Lubbock's version.[42]

By the time Buller wrote the second (1888) edition of his A History of the Birds of New Zealand Darwin was dead -and had been accepted back into the fold of the English church and given a burial in Westminster Abbey. By this time, too, Buller was undisputed authority in his field of New Zealand ornithology, had been elected to the Royal Society of London,

and had won his British knighthood; from this securer position Buller pronounced more strongly on his various ideas. Thus in his rewritten account of the Wry-Billed Plover Anarhynchus frontalis, after concluding categorically that the bird's assymetrical beak "can be rationally accounted for only on Darwinian principles", he also elaborated on his previous statement of faith: that he saw no difficulty in reconciling Darwinian evolution by natural selection with "design in Creation" and "acceptance of the great truths of revelation".[43]

But despite professing acceptance of Darwinism, in his second edition Buller actually paid homage as much to the anti-Darwinist Sir Richard Owen as to Darwin. The reasons for this appear to combine some elements personal to Buller and others more general among colonial scientists. In earlier years Owen had been the "Czar of English natural history in the colonies"[44] -a key figure in imperial science both as seen from London and from the colonies. Owen had built his career largely on materials provided from the colonies; as will be seen, evidence from the colonies also contributed to his scientific defeat. In the metropolitan debate on The Origin of Species Owen had been a bitter and devious antagonist.[45] Initially, he had argued that rather than Darwin's evolution by natural selection the evidence suggested instead the "continuous operation of the ordained becoming of living things". Then in 1862 he rejected both

Darwinian natural selection and Lamarckian inheritance of acquired characteristics and proposed his own theory of "derivation" of an orderly succession of species to a "pre-ordained design". Instead of the blind chance behind natural selection and the struggle for existence, Owen retained a place for the hand of God in the design of creation. But he continued to shift his ground. In 1866, when a reviewer of his latest book noted a passing reference to "the 'battle' for life" and asked whether Owen was here expressing the Darwinian theory, Owen pointed to a similar line in one of his early papers on Dinornis, the New Zealand Moa, to claim priority over Darwin for what he called "the theory of the extinction and conservation of species" -natural selection by another name.[46]

In part because of all this backing and trimming Owen lost credibility and prestige in metropolitan scientific circles. However, he still commanded respect among colonial scientists. When the New Zealand Institute decided in 1870 to award honorary membership to a few select scientists, he was among the first chosen.[47] Similarly, when G.M. Thomson's independent New Zealand Journal of Science ran a series of biographies of scientists in 1884-1885, again Owen was one of those chosen.[48]

Buller showed his respectful deference to Owen in many ways. Not only did he share the colonial perspective of Owen as

still an important figure in imperial science, but Buller, as a man of uncertain Anglo-New Zealand identity, was also exceedingly susceptible to personal attention and flattery from such figures -which makes his silence on Darwin's notice of him all the more striking. Owen, moreover, now had the further importance in Buller's eyes of a title (KCB, 1884) and of being a favourite of the royal family.

When he rewrote the "Introduction" for his new edition of A History of the Birds of New Zealand Buller added a section on the extinct birds of Zealand. This was Owen's preserve: his classic papers had dominated the field since 1839, when he had first deduced that a fragment of bone brought from New Zealand came from a giant struthious (ostrich-like) bird, which he later named Dinornis. By 1887 Owen had retired to a grace-and-favour house in Richmond Park, rejected by the new generation of English scientists. But in his introductory essay on the extinct birds Buller still paid tribute to the "venerable Professor", and proudly quoted some words of praise Owen had written about him.[49] Buller also took the proof sheets of his essay to the venerable professor for his approval. Owen was transported back to happier days. "Seldom have I enjoyed a morning more, in the quiet period of my existence", he told Buller gratefully. Buller duly quoted this in a footnote he added to the introduction.[50] After the book was published Owen wrote again to compliment him: "'The Birds of New Zealand' is a type of Ornithological

Excellence"; and, most gratifying of all, "One feels proud that its Author is a countryman".[51]

Buller showed his continued, indeed his renewed deference to Owen in two further matters. Firstly, where the extinct birds were concerned, Buller referred to Owen rather than Darwin for his evolutionary views. In reviewing the evidence on Dinornis Buller concluded that the bird had possessed only the merest rudiments of wings. "It seems to be placed beyond doubt", he wrote, that this was the result of "long-continued disuse...through many successive generations"; and he quoted Owen in support of this "Lamarckian law".[52]

The second display of deference to Owen was by an act of omission. Only a few years earlier, in 1885, Owen had been humiliated in the Zoological Society of London by a belligerent young opponent, E. Ray Lankester. The scientific question at issue was a New Zealand one. Forty years earlier, in one of his classic anatomical papers on the Kiwi Apteryx australis, Owen had claimed that the heart of this flightless New Zealand bird was not like that of other birds, but approached the mammalian type of structure, being similar to that of the Australian platypus Ornithorhynchus anatinus. Lankester published a series of papers to prove that Owen had muddled his specimens from the colonies: the platypus-like Kiwi heart he had described was in fact that of a platypus.[53] Buller refrained from any mention at all of

Owen's blunder. Although the Kiwi was, as Buller put it in his new edition, "the most distinctive feature in the avifauna of New Zealand", and merited a long and detailed account in which he quoted at length from many papers including the one of Owen's in question, he did not allude to the revised conclusion on the structure of its heart.[54] Buller was not alone in this -all New Zealand scientists appear to have kept a tactful silence on the matter.[55]

Buller's next and most explicit expression of his views on Darwinism was published in the Transactions and Proceedings of the New Zealand Institute in 1894. Stenhouse quotes this paper in support of his thesis that on issues of evolution and Darwinism a spirit of "irenicism" and rapprochement prevailed between scientific and religious camps in New Zealand,[56] but he fails to note the departure which Buller's paper represented. It was in fact the first paper explicitly on Darwinism to be published fully and openly among the "Transactions" rather than being relegated to a brief abstract among the "Proceedings" or not mentioned at all. The reports of the meetings of the Wellington Philosophical Society printed in the "Proceedings" indicate that Darwinism had become something of an issue in the Society: in 1890 one President had made comments in his annual address in favour of Darwinism and then in 1893 another, Major-General H. Schaw, argued against. "I have, as it were, thrown down the gauntlet", said Schaw. "Evolution at

present may be said to be in the air, like Home Rule and the great Labour-and-capital question, and people hold very different views on such subjects".[57] When another member, Coleman Phillips, then presented a rambling but unmistakeably anti-Darwinian paper, and this was subsequently printed among the "Transactions",[58] Buller took up the challenge. "Had [I] sat silently by...[I] would have felt self-convicted of moral cowardice", he told the Society.[59] He presented his paper, "Illustrations of Darwinism; or, The Avifauna of New Zealand considered in relation to the Fundamental Law of Descent with Modification", as a delayed Presidential Address in June 1894, and persuaded Hector to publish it among the "Transactions" in the Transactions and Proceedings of the New Zealand Institute. Irenicism, or keeping the peace in the philosophical society was overruled.

In "Illustrations of Darwinism" Buller initially staked out an explicitly Darwinian position:

> Mr Darwin has shown that all organic beings, without exception, tend to increase at a very high ratio, and that the inevitable result is an ever-recurrent struggle for existence, in the natural course of which the strongest ultimately prevail and the weakest fail[60]

In his previous scientific writings Buller had followed the usual colonial pattern of observation, compilation and classification, with a minimum of synthesis or theoretical speculation; he was more naturalist than scientist. But in

"Illustrations of Darwinism" he set out to analyse and explain his observations of New Zealand birds to show "their direct bearing on the theory of evolution, or, putting it the other way about, to endeavour to find in the Darwinian doctrine of natural development their true and rational explanation".[61]

He gave a long series of examples which he explained by reference to Darwin's "Fundamental Law of Descent with Modification". For instance, he referred to special structural adaptations such as the complementary beak forms of the male and female Huia "specially adapted to their habits of life and general economy", and asked "on what principle apart from the Darwinian theory can we explain this"?

Similarly, he restated the observation he had made in his 1865 Essay, of the phenomenon of "representation" of closely similar species of birds geographically separated in the North and South Islands of New Zealand. In the 1888 edition of A History of the Birds of New Zealand he had discussed ideas of speciation of New Zealand birds, in particular the ideas of F.W. Hutton and of A.R. Wallace that the land had been sundered by geological events and that the species thus marooned on each island had evolved separately, and hence diverged from their common ancestral form. In "Illustrations of Darwinism" Buller adopted these ideas to give a Darwinian

explanation for "representation".

But it is also apparent that Buller's professed acceptance of Darwinism was hedged in several ways. He repeated the position he had taken in the 1873 and 1888 editions of his A History of the Birds of New Zealand, that Darwinism could be reconciled with religious doctrine, and now justified this position by an argument limiting the scope of action of Darwinism as applied to the human species. In this he appealed to the authority, not of Owen (who had died in December 1892 and now all but disappeared from Buller's writings), but of A.R. Wallace, "the great apostle", Buller wrote, "of the creed of natural selection, -to whom, indeed, we all metaphorically doff our hats in respectful admiration".[62] Buller quoted an argument of Wallace's that the Darwinian theory explained the physical evolution of man but not the "intellectual and moral" development for which "we can only find an adequate cause in the unseen universe of Spirit".[63] Buller could thus assert that scientific acceptance of Darwinism by no means implied that one was also materialist or agnostic.

In "Illustrations of Darwinism" Buller also expounded, in passing, his concept of the displacement of native species -in terms which indicate that he conceived of the idea in non-Darwinian terms:

> We all know that the existing avifauna is being stamped out and destroyed by a variety of artificial causes, not the least among them being the naturalization of foreign birds by way of acclimatization, on the one hand, and the introduction of bloodthirsty animals like stoats, weasels, and ferrets, on the other. But long before the effect of our drastic colonization made themselves felt, many of the ground species were dying out, in obedience, no doubt, to that inscrutable law of nature whereby races of animals and plants, apparently of their own accord, die out and give place to other forms of life.[64]

The reference to an "inscrutable law of nature" recalls Buller's use of the same phrase in relation to the decrease of the Maori race. Just as A.K. Newman asserted that the Maori race was "run out...effete", Buller here appears to be arguing that the native birds were dying out, not so much from any consequence of European colonisation, or Darwinian "struggle for existence", as from their own prior and innate decadence. European species were replacing rather than displacing them.

His notion of an "inscrutable" law of nature evidently goes beyond the idea of an unknown cause -one not yet given a scientific explanation -to an unknowable cause -one outside the realm of the kind of scientific explanation represented by Darwin's natural selection. Certainly Buller did not include displacement among his "Illustrations of Darwinism".

4.4: Darwinism and Colonial Ideas of Displacement Reconsidered

The conclusion that Buller did not include displacement among his illustrations of Darwinism leads us to reconsider the question raised at the beginning of this discussion of Darwinism and colonial ideas: how much did New Zealand ideas of native inferiority and displacement really owe to Darwinian concepts? Little indeed, it could be argued. But the ideas involved can not always be easily classified between non-Darwinian replacement of decadent races and Darwinian displacement of less-favoured races in the competitive struggle for existence -natural selection. Some (Travers, for instance, in his argument concerning the displacement of the "native" rat) managed to loosely combine the two.

Darwin himself, in his early writings combined "mysterious", if not "inscrutable", agencies along with elements of his later concept of natural selection. In his "Journal" of the voyage of the Beagle he generalised on the decline of native races generally:

> Beside...several evident causes of destruction, there appears to be some more mysterious agency generally at work. Wherever the European has trod, death seems to pursue the aboriginal.... The varieties of man seem to act on each other in the same way as different species of animals -the stronger always extirpating the weaker. It was melancholy in New Zealand to hear the fine energetic natives saying, that they knew the land was doomed to pass from their children.[65]

It should be noted that if Darwin heard this "melancholy" line in New Zealand, it would have been only as an English interpretation -he understood no Maori.

Darwin, even in later life, shared the attitude of his time of the superiority of the Anglo-Saxon race over others "lower in the scale" and the consequent importance in the progress of mankind of such struggles for existence as were going on in the colonies: "No words can exaggerate the importance, in my opinion, of our colonisation for the future history of the world".[66]

M.P.K. Sorrenson has pointed out that when Darwin eventually explicitly extended his idea of evolution by competitive struggle to human races, in his The Descent of Man; and Selection in Relation to Sex (1871), an important part of his evidence was drawn from the case of the decrease and displacement of the Maori race.[67] Darwin in fact made few references to New Zealand in the first edition (1871) of The Descent of Man. The following discussion is based on the second edition of 1874. In his comments on "the extinction of races" Darwin asserted generally, following the conventional wisdom of the time, that "When civilised nations come into contact with barbarians the struggle is short, except where a deadly climate gives its aid to the native race".[68] The native race of New Zealand had no such aid; the "decrease of the Maories of New Zealand....since 1830 is admitted by every

one, including the natives themselves".[69] For his detailed evidence on the Maori situation he relied almost entirely on F.D. Fenton's Observations on the Aboriginal Inhabitants of New Zealand (1859)[70] Furthermore, Darwin was particularly impressed by the New Zealand rat analogy and quoted it when pointing out the "parallelism" of the decrease and extinction of races of man and of species of animals.[71] Thus Darwin incorporated the notion of displacement, and the observations from the colonies in support of it, into his own ideas on human evolution and progress.

Given the theological implications of the idea that the human species was like any other and had evolved rather than been specially created, it is not surprising that it was a controversial subject, treated with, as Travers put it, an "uneasy tenderness" in the learned societies of London as well as those of the colonies. But at the same time the other aspect of Darwin's thesis, that such evolution progressed by competitive struggle, was used to give scientific legitimacy to the idea that in human affairs economic, social, and military struggle and conquest were part of the law of nature: a natural, inevitable part of progress. It was said, only partly in jest, that Darwin had "proved 'might is right'".[72] Far from being troubled by theological objections, exponents of ideas of "Social Darwinism" sometimes brought in God on their side. John D. Rockefeller, for instance, was not being irreligious when he told a

Sunday-school meeting that success in business was "merely a survival of the fittest.... This is not an evil tendency.... It is merely the working out of a law of nature and a law of God."[73]

But beyond this justification by association it is difficult to discern any more than the vaguest influence of Darwin's ideas in much of what is often called "Social Darwinism". Furthermore, the term "Social Darwinism" is not clearly defined and of little descriptive value -it can reasonably be equated with ideologies of laissez-faire, or eugenics, or simply with the idea of social evolution or progress by competitive struggle.[74] In many cases the new catch-phrases such as "the struggle for existence" or "survival of the fittest" merely gave support and justification to existing attitudes of social or racial superiority.

New Zealand colonial attitudes on displacement of the natives have sometimes been identified with "Social Darwinism", but the labels confuse more than they explain. For instance K.R. Howe, in his Race Relations Australia and New Zealand, quotes a member of the New Zealand "colonial literati" in 1863 questioning the "supposed obligation...to save and elevate the Maori race" on the basis that "if we find that by the operation of natural laws the decline and extinction of the inferior race is being effected, we are not to assist the

process but admire the result".[75] Howe describes this as a "neo-Darwinian" argument, presumably from the appeal to "the operation of natural laws". However, as shown in the discussion in Chapter 2.7 on the "natural laws" applied to the displacement of the natives and the decrease of the Maori race in particular, there were many variants of such laws, only some of which were based on ideas of competitive struggle. Mere reference to "the operation of natural laws" does not necessarily imply Darwinism, or Social Darwinism. It should also be noted that Howe's use of "Neo-Darwinism"[76] is idiosyncratic; the term is generally applied not in any sense of Social Darwinism but, following G.J. Romanes (1895), to describe Darwin's theory of biological evolution by natural selection as modified by August Weissman's genetic theory of inheritance -i.e. rejecting any Lamarkian inheritance of acquired characters.[77]

As we saw in Chapter 2, New Zealand ideas of European superiority and the displacement of the natives pre-dated Darwin's The Origin of Species (1859) -or, for that matter, Herbert Spencer's first expression of the ideas later identified with "Social Darwinism", in Social Statics (1851). Consider again Ernest Dieffenbach's comment on the decline of the Maori race:

> It may be that it is one of Nature's eternal laws that some races of men, like the different kinds of organic beings, plants, and animals, stand in opposition to each other; that is to say, where one race begins to spread and

> increase, the other, which is perhaps less vigorous and less durable, dies off.[78]

This could well be labelled Social Darwinism (or Howe's neo-Darwinism) or Spencerism, except that it was published in 1843. Dieffenbach did not, however, take quite such an implacable view as Herbert Spencer later took of the displacement of the "less vigorous" and the socially unfit generally: that the "whole effort of nature is to get rid of such, to clear the world of them, and make room for better".[79] Instead, he suggested that:

> if it be the design of Providence that the [native] race should disappear, ...[we should] alleviate that change in the inhabitants of countries of which we have taken possession, and at least to have the satisfaction of knowing that we have done everything in our power to prevent injustice or to lessen the extent of it.[80]

Buller expressed all this more pithily forty years later when he said that "The Maoris...are dying out, and nothing can save them. Our plain duty as good, compassionate colonists is to smooth down their dying pillow. Then history will have nothing to reproach us with." Buller, as already shown, viewed the process of displacement and extinction as being under the operation of "one of the inscrutable laws of Nature".[81] All this is much closer to Dieffenbach's pre-Darwinian "Nature's eternal laws.... the design of Providence" than to Darwinian natural selection. It is clearly perilous to identify sentiments such as Buller's as being derived from or influenced by the ideas of Darwin or

even Spencer.

Much of what is labelled "Social Darwinism" owed little to Spencer and less to Darwin, apart perhaps the measure of scientific justification provided by phrases such as "the struggle for existence". This is not to say that Darwin's or Spencer's ideas as applied to human affairs had no influence in New Zealand; Spencer in particular was quoted in support of the view that charity was a "curse" which discouraged self-reliance and helped to propagate degenerates.[82] But to label generalised later nineteenth century ideas of displacement of native species or the decrease of the Maori race as "Darwinian"[83] or as "Social Darwinism"[84] explains little and conceals much. As the analysis of Buller's views in particular has shown, ideas of displacement of weaker native races or species by superior, more vigorous European colonisers were not necessarily derived from Darwin or based on his ideas.

Some later New Zealand writers did use explicitly Darwinian arguments to give a "scientific" explanation for conventional ideas of displacement. G.M. Thomson in 1891 and E.F. Hawthorne in 1918, as quoted earlier in Chapters 3.4 and 2.7 respectively, argued that immigrant European species, having "evolved in a harder school", were fitter than the natives and thus prevailed in the struggle for existence. However, by the time they wrote the terms of the debate on the place of

the natives had shifted; instead of justifying the displacement of the natives, Thomson and Hawthorne deplored its results and sought to shield native species against its further operation. This shift in perspective is the subject of the next chapter.

CHAPTER 5

THE EMERGENCE OF CONSERVATION

5.1: Introduction

Given the prevailing colonial assumptions discussed in the previous chapters -that anything native was inherently inferior to the equivalent European form and in the progress of colonisation would inevitably be displaced and die out -the acceptance of any suggestion that native species were of worth to the country and should be preserved and retained as part of the national heritage obviously involved a significant shift in perspective. However, by the 1890s such ideas had enough support and were being expressed with enough force to persuade the New Zealand government to set aside sanctuaries or reserves for the conservation of the native flora and fauna -areas where colonisation would be suspended. This chapter examines the development of these ideas and policies in New Zealand, particularly in the period 1860-1905. As in the remainder of the study, Buller's ideas and activities serve to exemplify many of the developments discussed; analysis of his writings, both public and private, reveals many of the complexities and contradictions of colonial attitudes on the place and worth of native forms in New Zealand.

5.2 Conservation: an Etymological Excursus

Only from about the 1870s (or in Buller's case from the 1890s) was the idea expressed in New Zealand popular or scientific writing that the native flora and fauna could and should be protected and preserved. The word now associated with this idea -conservation -has a complex etymology or semantic history of its own which must be considered along with the history of the idea. In the literature on conservation history (which is mostly concerned with American conservation history) few writers distinguish between the connotations of the word as used in the nineteenth century and as understood in the late twentieth century. Some have avoided this problem altogether by asserting, in an excess of American insularity, that the word was "coined" in 1908 by the American forester Gifford Pinchot.[1]

From a late twentieth century perspective the word "conservation" has several distinct meanings, of management for future consumption on the one hand, or preservation for future enjoyment or on account of intrinsic worth on the other; furthermore, in its current popular usage it is so value-laden that a simple dictionary definition is not enough. In this study, rather than trying to set a particular definition on "conservation", it is hoped to draw out the particular meanings given to it at different times as part of the analysis of the ideas involved.

The earlier history or etymology of conservation can be explored largely through the Oxford English Dictionary.[2] In summary, as used in English the words conserve and preserve and some of their cognate pairs (conservation/preservation, conservative/preservative) have strongly overlapping meanings. Both are derived from Old French, originally from the Latin (con- or prae- + servare, to keep, protect or preserve). According to the OED, since the early eighteenth century preserve has been more commonly used than conserve. Judging by usage in, for instance, the King James Bible, this predominance began even earlier. However, the use (from 1830) of Conservative as a political label has since stimulated the use and coloured the sense of other cognates of conserve.

Preserve, preservation and their cognate terms have generally retained the more general senses of keeping from harm, injury or destruction, but there are some more particular usages which are relevant here. For instance, in the nineteenth century preserve was used in a gamekeeping sense, for an area of land set apart for the rearing, encouragement or protection of game for later private use. This usage survives in a figurative sense ("the university is becoming the preserve of the wealthy"). Some words derived from conserve have no parallel in the preserve series (conservancy) or only a rare and obsolete one

(conservator/preservator).

Conservator was first used in the general sense of a preserver, guardian, keeper or custodian, and by the fifteenth century was used more particularly in many official titles of such functionaries. Its specific application to an official supervisor of forests, which gained currency from its use in the mid-nineteenth century by the British administration in India, will be further discussed below.

Conservation was used in English from the fourteenth century in the general sense of preservation from destruction, decay or waste; and from the late fifteenth century in the more particular sense of official charge and care of rivers, forests or other estates. In the latter sense of official charge, conservation was an alternate for the older term conservacy, which itself by the eighteenth century had become conservancy. The use of conservation in the restricted sense of preservation of the environment or of natural resources was not usual until well into the twentieth century. Care must therefore be taken not to read this last meaning into earlier writings where it is not meant.

In the following sections of this chapter, some of the developments in New Zealand leading toward the idea of conservation in the sense of preservation of nature or the

environment will be examined.

5.3: The Beginnings of Colonial Policies of Nature Conservation in New Zealand

Although a "conservationist's sensitivity" about the expected impact of European introductions in New Zealand has been read even into comments by voyagers with Cook in 1773,[3] a more useful point of departure for the present discussion is the early colonial legislative efforts to conserve wild animals and control their exploitation. From a twentieth century perspective, conservation of native species involves policies of protection of the species themselves from hunting or other exploitation, and protection of their habitat, especially by the creation of reserves or sanctuaries. In retrospect both strands of policy can be traced in the early legislation -directed, however, not at native species, but at protecting or conserving introduced species for acclimatisation or game-hunting purposes.

The Public Domains Act 1860, for instance, contained some elements of both the protection and the reserve concepts: it prohibited the shooting or trapping of any bird or animal or the removal of the eggs of any bird on a scheduled public domain. This Act was used to assist "acclimatisation" efforts even before the movement under that name reached New Zealand: in 1861 its powers were invoked "to protect Certain Birds

recently imported into this Colony for the Public Benefit".[4] Only three public domains were initially scheduled, including the government house grounds in Auckland and Wellington. Later, however, public domains became a familiar feature of New Zealand towns, taking some of the functions of the English commons or village greens. Some of the colonists' sentiment for the latter can be seen in the proposal made in 1873 in the Philosophical Institute of Canterbury by F.E. Wright, "On the Desirability of Dedicating to the People of New Zealand Small Areas of Ground, assimilating to the Village Greens of England". Wright argued that "the agricultural labourer's pleasantest recollections were of the hours of his youth spent on the village green of his natal place; and that, when emigrating, such reminiscences went far to enhance his love for the land of his birth".[5] He thought such greens, which "should be kept in a state of nature", would have a "beneficial influence" on colonial children, but did not coment on whether they too would thereby develop a love for the land of their birth. According to the biographical note on Wright in the Cyclopedia of New Zealand (probably written by Wright himself), the newspapers "took the matter up, and it resulted in the formation of recreation reserves in various parts of the Colony".[6]

The notions of "public domains" or even of "village greens" kept in a state of nature contain many of the elements of the

later, wider concept of "national parks" -land reserved under common or Crown ownership in a state of nature for public recreation and as preserves for wild birds or animals. The United States' Yosemite state park (established 1864) and especially Yellowstone National Park (1872) created a precedent for the parks and reserves subsequently established for such purposes in many countries, including New Zealand.

The other strand of policy -of legislative protection of wild animals -is rather stronger than that of setting aside reserves and sanctuaries. But again the early legislation, such as the Protection of Certain Animals Act 1861 and the Birds Protection Act 1862, was primarily for the regulation of game-hunting and the acclimatisation of introduced species. Native species were fair game for anyone; the birds specified for protection under these Acts were all European species. The Wild Birds Protection Act of 1864 did extend some protection to wild (native) duck and pigeon by defining them also as game, and thus protected except in season, i.e. April to July.

In 1867 parliament considered a new Protection of Animals Bill which, among other things, would have extended permanent protection to a wider range of native birds. The motivation was concern at the plagues of insects attacking gardens and crops; it was hoped that under protection, native birds might increase in numbers and assist the introduced birds in

keeping the pests in check. Buller, by then an accepted expert on New Zealand birds, was asked to draw up a list of insectivorous native species which might be scheduled for protection. But in parliament there was considerable opposition to this legislation. How, members asked, was anyone who shot a bird to know whether it was one of those on the protected list? Was every settler who kept a Tui in a cage or every Maori who snared a pigeon to be made a criminal? If so, it was suggested, within three months the whole population of New Zealand would be in gaol.[7] Buller's list was dropped and the protective clause watered down to a general one giving the Governor power to proclaim any indigenous bird a protected species. Constitutionally, such powers were exercised on the advice of the government; in this case the power was never used and the clause was dropped completely when the Act was later amended.[8] Even the law protecting native game out of season was widely disregarded and many pigeon Hemiphaga novaeseelandiae and other larger species continued to be taken for the pot.[9]

All these legislative developments of the 1860s grew out of the colonists' views of native inferiority and inevitable displacement, and the need to furnish the land with acclimatised European species. Only in retrospect can they be seen as precursors of later conservation policies. However, during the same period some proposals were made specifically for the conservation and protection of native species,

especially by T.H. Potts of Canterbury. These proposals and the ideas on which they were based are discussed in the next section.

5.4 T.H. Potts and his Proposals for Conservation of Forests and Preservation of Birds

In the 1860s some New Zealand colonists began to express ideas challenging the usual colonial presumptions of native inferiority and displacement, and to make proposals for the conservation or preservation of the native flora and fauna. The major colonial proponent of these early conservation ideas and proposals was a Canterbury settler, Thomas Henry Potts (1824-1888). Potts was unusual among English colonists in New Zealand in that he emigrated as a wealthy man, having inherited the small-arms company and the fortunes of his father and uncle. He was a lively, unpretentious man of wide interests. His library included a collection of seventeenth century prayerbooks; his collection of British birds' eggs even included several eggs of the extinct Great Auk; he became well-known in Canterbury as a horticulturalist; and he was an enthusiastic sportsman, especially with the gun.[10] He enjoyed his sport among the birds of New Zealand and he cultivated the native trees and ferns in his garden. But he also observed the native life and the changes occurring as a result of colonisation, and wrote about them with insight and

with engaging directness: his writings can be seen as a New Zealand equivalent of Gilbert White's English classic, The Natural history of Selborne.[11]

Buller was a more facile writer than Potts but Buller's papers, by comparison, often have the mustier air of the study; his scientific work was based more on the examination of cabinet specimens and the collation of observations made mainly by others. Up until the publication of Buller's A History of the Birds of New Zealand (1873) he and Potts were on good terms, although they were in a sense rivals. Privately, however, Potts was amused by Buller's cheek and competitive determination to get what he wanted; while Buller was rather disparaging about Potts ("our field ornithologist"), his new species that did not pass scientific scrutiny and his literary style that lacked the proper scientific gravity.[12] Buller, nonetheless, was not above using extensive quotations from Potts's observations in his own book.

Potts's writings promoted in New Zealand the idea of enjoyment of wild nature and life "Out in the Open". Just as in the case in much early conservationist sentiment in America, his advocacy of these ideas was clearly associated with his sporting interests and his sense of a sporting code of behaviour.[13] Thus his vivid description of nesting colonies of the Spotted Shag Stictocarbo punctatus on

cliffs near Christchurch included an appeal for restraint:

> One word to the visitor; take not a gun with you, or at any rate do not use it wantonly; enjoy the scene spread out before you, and be thankful that you have health and the opportunity to do so, but refrain from expressing your feelings of pleasure by slaughtering these harmless sea-fowl.... For the infliction of wanton torture and death, cui bono [to whom is it a benefit]?[14]

In line with these ideas, Potts was one of the first New Zealand colonists to call for the protection of native birds not only for reasons of utility but also for their own sake, out of humane sentiment. In a paper he presented at the Wellington Philosophical Society in 1869 he referred particularly to the flightless Kakapo Strigops habroptilus and Kiwi Apteryx australis:

> a regular trade is carried on in specimens of these birds.... Could not our paternal Government interfere in behalf of these interesting aborigines, for we believe there are those who would shoot the Cherubim for specimens without the slightest remorse.[15]

Potts was in Wellington as a member of parliament at the time, which may explain the undertones of political rhetoric in his analogy between the proposed protection for native birds and the more familiar, though contentious idea of "paternal Government interference" for the protection of the rights of the native people -the "aborigines", as they were often called in the more formal language of parliament.

Potts served for twelve years on the Canterbury Provincial

Council, but he was less at home in parliament in Wellington; he apparently only agreed to serve a term when W.S. Moorhouse was elected to two constituencies and had to decline one. And as the cynical tone of Potts's reference to "paternal Government interference" suggests, he in fact had little enthusiasm for protection by legislation; he had sat in silence through the long debates on Native legislation, and he was sceptical about the value of the continually-amended Animals Protection Acts.

But in his 1869 paper to the Wellington Philosophical Society he did make a more specific suggestion that the "re-establishment" of species which colonisation had displaced from much of the country would be a "worthy, if not a noble, object of ambition for our Acclimatization Societies to achieve".[16] He justified this particular suggestion, not by protectionist sentiment but in the utilitarian terms which had been the basis of acclimatisation as practiced in the European societies: "many of [the rare species] are excellent as articles of food".[17]

There was little reaction to Potts's proposals at the time. They do not appear to have been considered by the acclimatisation societies and no discussion is recorded in the published "Proceedings" of the philosophical societies. Given the generally accepted ideas of inevitable displacement of the inferior native species, and the fact that many

leading members of the philosophical societies were among those Potts criticised for "shooting the Cherubim for specimens", the lack of response is not surprising.

At the same time Potts was involved in another issue relating to native trees: the "forest question", or whether there was a need for state control of forests in New Zealand -conservation in the sense of management of the resource to meet future needs. Such a proposal had been raised in the relatively treeless Otago province as early as 1862, but Potts first brought it to wider attention in 1868 when he moved in parliament that steps should be taken "to ascertain the present condition of the forests of the Colony, with a view to their better conservation".[18] Reports were tabled, but the idea of conservation was not taken seriously.

The subsequent history of the forest question has been well described by Graeme Wynn and by Michael Roche.[19] In the 1870s forest conservation caught the imagination of the Premier, Julius Vogel, who introduced the New Zealand Forests Bill, 1874. In the political situation of the time this Bill aroused great controversy, although the issues had little to do with forest conservation. Under the constitutional arrangements which still pertained in the colony the land Vogel proposed for his forestry scheme was the domain of the provincial governments, not the central government. However, the power of the central government was growing and that of

the provincial governments declining. The opposition to the New Zealand Forests Bill from the Provincialist faction unwilling to give up control of land for state forests spurred Vogel to act to abolish the provincial governments altogether.[20] The issue of forest conservation thus became so enmeshed in the wider political struggle that although the idea was not generally accepted, the word conservation gained currency in New Zealand long before it came into popular use in, for instance, Britain or the United States.[21]

The ideas expressed by Vogel and the supporters of forest conservation in New Zealand were derived from developments elsewhere in the British Empire and in America, where there was a new interest in forestry, arising from concern about possible shortages of timber if the current rate of exploitation of forests continued. Concepts of forest management aimed at maintaining a continuing crop were mainly drawn, directly or indirectly, from France and Germany; these concepts were new to the English-speaking world and new word usages developed accordingly. In England in particular the forests, especially the Crown Forests, were not managed in the European sense, but cropped and used for a variety of purposes under laws and traditions reflecting the medieval law of vert and venison relating to the privileges of use of the products of the forest.[22] The first British forestry programme in the European sense of state management was that in the teak forests of Burma and southern India in the 1850s.

The high demand for teak for shipbuilding created the problem (the perceived threat of shortage) and the British imperial administration in India made possible a solution which would not have been contemplated in Britain itself: intervention by official government regulation and management of the forests to ensure a continuing supply. The skills of forest management were not available in Britain; the experts who established these forestry programmes in India were brought in from Germany.[23] They were titled conservators of forests (in line with their official status) and their style of forest management (as opposed to unregulated exploitation) became known as conservancy, or conservation. From India, ideas of managed forestry, and these associated terms, spread to many other British colonies. For instance, Indian Forest Service conservators (many originally from Germany) went on to report on or establish organised forestry in New Zealand, Victoria, South Africa, and later in Kenya, the Malay States, Trinidad and other colonies.[24]

Thus when speakers in the debates of the 1870s on forestry in New Zealand referred to "conservation" of forests, they generally meant management as practiced in India. The aim was not to preserve native forests but to manage and replant them, for, as Vogel explained, "in no case is natural bush, untended and unconserved, as valuable, commercially, as planted forest".[25] Vogel and his supporters argued that such "conservation" was necessary in New Zealand, just as in

India, to avoid a coming timber "famine". But opponents considered that such a system of state control was not only unnecessary but undesirable; it was suggested on the one hand that the indigenous forest -the bush -was "inexhaustible", and on the other that it was an obstacle to progress and thus should be cleared away as quickly as possible. To its proponents conservation had connotations of management and careful use, and to its opponents, the "locking up" under government control of a previously freely-available resource.[26]

Furthermore, the idea of conservation of forests in New Zealand also ran against the conventional wisdom of inevitable displacement of all the natives -trees, birds, and people -by European immigrants. The popular view of this law of nature was expounded most bluntly in the forest debate by a native-born member of parliament, John Sheehan:

> any attempt to preserve native timber in New Zealand will result in failure. It is impossible it should be otherwise. I cannot explain the reason: but the same mysterious law which appears to operate when the white and brown races come into contact -and by which the brown race sooner or later, passes from the face of the earth -applies to native timber. Whenever grass, clover, and European plants and animals find their way into the bush, the forest begins to decay away[27]

The colonial scientific view was very similar. Most members of the philosophical societies firmly believed in the conventional idea of displacement which, after all, had the backing of such scientific authorities as Hooker, Darwin and

Wallace.

How then did Potts justify his ideas of conservation of native forests, and of protection for native birds? Like many colonial observers, Potts noted that the native forests were rapidly retreating, and also that the birds were rapidly disappearing. In his earlier writings he accepted that one of the factors involved in these changes was "the feeble hold on life which appears to be shared by every living thing that is indigenous".[28] But in an address he gave to the Philosophical Institute of Canterbury in 1872, he rejected the "sentiment so often uttered, that the disappearance of the native fauna is the natural sequence of Anglo-Saxon colonisation". That idea, he argued, was simply an excuse for indifference and inaction -the lazy sentiment of those too busy to think. It was "not rendered truer, though it may gain greater credence, by much vain repetition".[29] Instead, he argued that the forests could and should be conserved and the birds protected. As for the native people -his observations on them were sympathetic and positive, with no hint of the "dying pillow".[30]

Potts argued that native species were disappearing not by any mysterious, inexorable law of nature, but as a consequence of human action. In taking this view, he and his supporters in forest conservation (W.T.L. Travers and Charles O'Neill in particular) were greatly influenced by the ideas of the

American writer George Perkins Marsh, as expressed in his Man and Nature; or, Physical Geography as Modified by Human Action, first published in 1864. Marsh, who had been American ambassador in Turkey and Italy, argued from his observations in the Mediterranean that human actions did not necessarily improve nature, and that restraint and control were needed to avoid waste, destruction, eventual scarcity and impoverishment. He stressed the importance of maintenance and management of forests -for which he used the term silviculture rather than conservation. But especially he warned of the dangers of disturbing the balance of nature: "we can never know how wide a circle of disturbance we produce in the harmonies of nature when we throw the smallest pebble into the ocean of organic life".[31] In a new edition of Man and Nature published in 1874, Marsh pointed to New Zealand as offering one of the clearest cases for the study of the impact of human action, since the country was so recently colonised and had both "greater facilities and stronger motives" than elsewhere for the scientific investigation of such questions.[32]

Potts and Charles O'Neill referred to Marsh's ideas in the debates in parliament on forest conservation in 1868 and 1873, and W.T.L. Travers drew heavily from Man and nature in his series of popular lectures "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilised Races", which he gave in Wellington in 1869 and

1870 under the auspices of the New Zealand Institute. James Hector supported the idea of forest conservation, and published Travers's lectures in the Transactions and Proceedings of the New Zealand Institute. But most colonists in or out of the philosophical societies, were not converted from the doctrines of progress and displacement and the expected consequence of the disappearance of native species. Certainly, it was difficult to argue against the evidence on every side that the introduced English and European species were indeed displacing the corresponding natives. Travers noted the evidence of displacement, but insisted that man had been the "chief instrument" in greatly accelerating the process.[33] To most colonists, however, it seemed obvious that the native species must be constitutionally weaker in the struggle than the immigrants, which had been bred to the rigours of European life. Were not the native trees slower in growth, the native birds less vigorous? Had not Darwin shown that on this basis "the productions of Great Britain stand much higher in the scale than those of New Zealand"?[34] Even Buller, though born in New Zealand, still identified with this view of colonial inferiority.

There was, in fact, little discussion of these issues in the Philosophical Societies. Most members were more interested in description and classification than in generalised concepts or hypothetical speculation. They considered their main scientific role to be the collection of facts; as W.B.D.

Mantell reminded the Wellington Philosophical Society in a presidential address in 1870, "an ounce of fact is worth a pound of theory".[35] Nor did the Wellington philosophers discuss the forest question, at least not while it was a controversial political issue. The issue was not mentioned in their deliberations until March 1877, when Vogel's newly-appointed Conservator of State Forests, Captain I. Campbell Walker, addressed the New Zealand Institute in Wellington on "the climatic and financial aspect of forest conservancy as applicable to New Zealand". Even then the assembled scientific gentlemen received his address in silence, leaving the embarrassed chairman (the Governor, Lord Normanby) to hurriedly propose a vote of thanks.[36]

The subsequent history of forestry in New Zealand lies outside the scope of this study. It should be noted, however, that despite the passing of the innovative New Zealand Forests Act in 1874, forest conservation gained only temporary acceptance. After Vogel left parliament in 1876 the Conservator's appointment was allowed to lapse. No further funds were voted for forestry until after Vogel returned as Premier in 1884.[37]

Potts's proposals for bird preservation were initially heeded even less than his ideas on forest conservation. Proponents of the latter could make a case on commercial grounds: timber was a valuable commodity and once it was accepted that the

supply was not inexhaustible it made sense to conserve it. But there was little profit in preservation of native birds. In his 1872 Christchurch address, which he published and reprinted widely,[38] Potts based his case for "the preservation of our native fauna" partly on utilitarian arguments -appealing again to the acclimatisation societies for the "re-establishment" of the "most valuable" species both for controlling insect pests and as food -but also on the grounds of scientific importance:

> Let it not be forgotten that...our fauna....[is] of very great interest to naturalists and physiologists, the wide world over. We shall justly incur the opprobrium of barbarism if we neglect to use strenuous exertions to avert the fate which seems impending over them. No excuse that we could offer for indifference will palliate our destructiveness in the eyes of the scientific world.[39]

Potts's reference to "our fauna" contains the germ of another idea which became progressively more important: colonists like Potts were beginning to identify with their new country and consequently with those things especially characteristic of New Zealand. The gradual development of an attachment to native species in general as part of a growing national sentiment, and the raising of some species to the status of emblems, will be further discussed in later chapters. By the 1870s, when Potts wrote the passage quoted, there had been some discussion among the colonists of the idea of New Zealand as an independent nation, but this was in a rather negative sense, in the context of the withdrawal of Imperial

backing (in troops and financial guarantees) for the continued prosecution of the war against "rebel" Maori in New Zealand, and the consequent "self-reliant" colonial policy.[40] Colonists felt themselves being cut adrift rather than wanting to cut themselves off from the motherland, although in 1870 John Ballance, then editor of the Wanganui Evening Herald, supported self-reliance and asserted that a "strong feeling of patriotism is growing up in the colony".[41]

Potts did not rest his case for "the preservation of our native fauna" on considerations of patriotism or national sentiment, but such arguments were made from this time. In a parliamentary debate in September 1872 on the Animals Protection Amendment Bill, William Rolleston urged that "some clause [be] introduced into the Bill which would have the effect of preventing the loss of birds which were characteristic of the country".[42] He referred in particular to two species which were already becoming identified with New Zealand: the Tui Prosthemadera novaeseelandiae and the Kiwi Apteryx australis.

Ideas of bird preservation were also being being expressed at this time in Britain, where there was controversy over such issues as the use of "plumes" (feathers), birds' wings, or whole birds for millinery, and the shooting of seabirds at nesting colonies such as those at Flamborough Head. Eggs and birds had long been taken from such colonies by local people,

but with the improvements in railways sportsmen travelled to them for mass shooting parties or "battues". Opponents of this wholesale slaughter wrote to the newspapers condemning "bird murder", and scientists such as Alfred Newton urged new game laws to protect the birds during the breeding season. Newton was a Cambridge don with a distaste for sentimentality, but he was roused to something near it over this issue. "Can men blaze away hour after hour at these wretched inoffensive birds and call it 'Sport' without being morally the worse for it?" he asked in an address to the British Association for the Advancement of Science in 1868. He also condemned shooting for the "plume trade": "Fair and innocent as the snowy plumes may appear in a lady's hat...she bears the murderer's brand on her forehead".[43]

As a result of this agitation, the British Parliament passed a Sea Birds' Protection Act in 1869. In 1872 a more comprehensive Wild Birds Protection Bill was introduced in the Commons, and Alfred Newton and other scientists gave evidence to a select committee on the issue. They and most of the other witnesses, even those in the trade of bird-catching, were in favour of protection in some form. The motive was generally to maintain bird numbers, combat insect pests, or increase the supply of game. Some species -predators and other "vermin" -were held to be injurious and therefore deserving of destruction rather than preservation, for, as one witness told the committee, "Man's task is to

interfere with the natural condition of things, so as to turn everything to his advantage".[44] But others disagreed. John Colam, the Secretary of the Royal Society for the Prevention of Cruelty to Animals,[45] claimed that right-thinking people were turning against that attitude: "there seems to be among the more cultivated classes a very general feeling that all birds should be protected, including birds of prey, in order that nature might keep up its own balance".[46] Although Colam presented this as a protectionist view there are echoes also of the laissez-faire or "Social Darwinist" ideas of "survival of the fittest" which were increasingly popular among the "cultivated classes" at the time. Alfred Newton, in his evidence to the select committee, also favoured a laissez-faire policy, with a minimum of intervention in human activities as well: no protection except where there was persecution. He argued strongly, however, that the slaughter of birds at their nesting colonies was not only cruel and unsporting persecution but could, as in the well-known case of the Great Auk Alca impennis, even lead to the extinction of a species. He favoured a "close time" over the breeding season when shooting would be prohibited.[47]

Potts was encouraged by these British developments to write to the London scientific journal Nature in 1872 with an appeal to "Help us to save our Birds". "For the preservation of our birds we require some assistance from abroad", he

explained; the colonists in New Zealand were so preoccupied with "gain", the pursuit of wealth and success, that they would pay little attention to the idea unless they heard it from "home".[48] Potts could afford to be righteous about the colonists' preoccupation -he already had his fortune when he emigrated to New Zealand. However, he was right: his proposals made little impact within New Zealand. Although Potts made efforts to publicise his ideas,[49] not until the issue of preservation of New Zealand birds was raised from England in 1876 (when Newton wrote warning of the consequences of acclimatising mustelids) was it seriously discussed in New Zealand either in parliament or in the philosophical societies.

As described in Chapter 3.4, colonial parliamentarians eventually rejected Newton's concern about the fate of native birds as "frivolous". Are there, one asked, "any birds worth preserving in this country?" Another was more sympathetic, explaining that he personally was "very fond of birds; but if it came to a question whether he would have birds or sheep, he would certainly vote in favour of the sheep".[50] Certainly self-interest, as represented by the economic value of sheep, outweighed any amount of sentimental or scientific interest in birds. And, as has already been argued in Chapter 3.4, Buller too, while ostensibly supporting Newton's expression of concern for the preservation of native New Zealand birds, was probably also motivated by self-interest:

he wanted Newton and his English friends to support his candidacy for Fellowship of the Royal Society. Thus although Newton's appeal from "home" received more attention than Potts's in the colony, neither had much immediate effect.

5.5: Proposals for Island Reserves

Potts's 1872 appeal in Nature to "save our Birds" included a brief reference to a new idea for a way this might be achieved. It would be useful, Potts suggested, to set aside islands, "placed under tapu from molestation by dog and gun", where the birds might "find a refuge". As possible candidates for such refuges, he mentioned D'Urville Island (in the Marlborough Sounds) and Resolution Island (in Fiordland).[51] This appears to be the first published reference to the idea of island reserves for the preservation of New Zealand flora and fauna.[52]

It is interesting to note Potts's borrowing of the Maori word "tapu" in his proposal for saving the birds. The words "conservation" and "preservation" both had some inappropriate connotations; "conservation" suggested state management of forests to maintain the timber supply, while "preservation" of birds carried associations of gamekeeping to ensure good shooting for sportsmen. Potts might have talked of "protection", as in the British (and New Zealand) Birds'

Protection Act, but for some reason he seems to have avoided the word; instead he used the Maori concept of tapu -placed under supernatural or religious sanction, sacrosanct -which was indeed still applied in Maori society for conservation purposes to rahui or ban the taking of resources such as fruit or birds from a designated area.[53] In 1875, for instance, a colonial observer reported that part of the ranges of the Wairarapa region "had been tapu by the natives, for the last seven years, so as to protect the Huia [Heteralocha acutirostris] from being killed off".[54] Potts's use of the concept was unusual; in general the colonists regarded tapu as a heathen and obsolete superstition with no relevance to them. On the other hand, it was recognised among the Maori that the old sanctions no longer sufficed to conserve resources of the forest such as the Huia (whose feathers were worn as a mark of nobility) or the lesser birds used for food. In 1886 when Hori Ropiha of Ngati Kahungungu and his deputation met the Native Minister, John Ballance, the New Zealand Herald reported with some surprise that "one of their chief complaints referred to the rapid extinction of the native forests, and as a consequence the disappearance of native birds".[55]

In 1878 Potts elaborated on his earlier proposal, in an appeal for the establishment of "national domains, parks, or reserves".[56] Under his concept these would encompass a range of public purposes: "sanitaria" at the sites of hot

springs (as suggested by William Fox in 1874 after the precedent of Yellowstone Park in the United States),[57] and reserves for both "forest conservancy", and "the preservation of the indigenous fauna of New Zealand". For the last he reiterated the idea of islands such as D'Urville or Resolution being "set aside and held under tapu" as refuges. "It will not redound to our credit", Potts argued, "if we suffer the indigenous fauna to be exterminated without some further efforts for its preservation".[58]

Potts made these proposals in the New Zealand Country Journal, not in the conservative Philosophical Societies. The latter, from the reports of their proceedings, evidently did not discuss the idea of island reserves at all until some years later. In 1884 and 1885, after large-scale introductions of mustelids began, Hugh B. Martin, a young New Zealand-born Nelson farmer, read papers to his local philosophical society arguing (too late) against introducing these "beasts of prey" and listing the bird species which he considered should be "preserved in island reserves". Martin felt constrained to justify the idea in scientific and utilitarian terms, "to show that this is not a question of sentiment only". He thus argued that indigenous birds should be preserved in order to permit study of the birds in the living state; to enable museums to be supplied with specimens; and to preserve potential game birds or those "capable of domestication".[59]

Martin's disclaimer -that "this is not a question of sentiment only" -suggests that although in 1885 sentimental or emotive appeals for preservation were not considered sufficient, especially in a scientific forum, such appeals were no longer entirely novel. It should also be noted that Martin, like most subsequent proponents of island reserves in New Zealand, referred specifically to the effects of the introduced mustelids on native birds. In 1876 Alfred Newton had argued that the native New Zealand birds -especially the flightless species -were of great scientific interest and importance, and that mustelids would have dire effects on them. Neither of these arguments had had much influence among the colonists at that time, but subsequently they were widely repeated. The increasing colonial sensitivity about the fate of native species will be touched on again in other contexts; in the 1880s and 1890s not only were reports of declining bird numbers made more often and taken more seriously, but these reports began to be linked specifically with the effects of the mustelids. The evils predicted to follow from their introduction were seen to be coming to pass. Whether there was in fact a direct causal relationship is arguable; twentieth century scientists suggest that there is no conclusive evidence that the introduction of mustelids led to any greater decline in bird populations beyond that already occurring from other predators, especially ship rats (Rattus rattus).[60] But from the time of their government -sponsored introduction in the 1880s the ferrets, stoats and

weasels attracted much of the blame. This became expressed in ever more emotive terms, even in the philosophical societies (in 1907 the president of the Otago society, Dr R.V. Fulton, spoke of the "red-eyed monster" attacking "our beautiful feathered friends"[61]), and was an important element in the growth of support for the idea of island reserves or sanctuaries.

In October 1886, eighteen months after Martin gave his paper on "The Protection of Native Birds", the idea of island reserves was raised again, at a meeting of the Auckland Institute. After the formal reading of a paper by the professional collector Andreas Reischek on the birds of Little Barrier Island, A.P.W. Thomas, Professor of Natural Science at the recently established Auckland University College, spoke "feelingly" on the "rapid extermination" of native birds on the mainland, compared with the still-thriving numbers on the island. Thomas, English-born and Oxford-educated, took the Darwinian view that the indigenous species were not as fit as the European immigrants which were displacing them: "the birds of New Zealand seemed to have less power of resisting their various enemies than those which had had to go through keener competition in the struggle for life".[62]

In the discussion after Reischek's paper, F.D. Fenton suggested from the floor that Little Barrier Island should be

purchased by the government as an endowment for the Institute and to preserve the birds living there. Fenton had recently retired as Chief Judge of the Native Land Court and was familiar with the island from hearings in the Court about it. Ownership of the island had been disputed between Ngati Wai (a hapu of Ngapuhi) and Ngati Whatua. After ten years of hearings and rehearings the Court had just two days earlier (16 October 1886) finally settled it on Ngati Wai. Fenton considered that the island could be purchased from them for £3,500. The Institute members supported his idea and moved to make a formal case to the government that Little Barrier Island should be purchased and made a "Forest Reserve as a place of shelter for the indigenous birds of New Zealand". T.F. Cheeseman, the Institute secretary, wrote accordingly to the Premier, Sir Robert Stout.[63]

The Institute's proposal was supported by Reischek (who also offered himself as curator for the reserve),[64] and by Professor T.J. Parker, Thomas's counterpart at the University of Otago. The attitude of James Hector, still the government's main scientific adviser, is not clear. A year earlier when Parker and Thomas had proposed the protection of the Tuatara Sphenodon punctatum Hector suggested that they were being hypocritical, having just taken a large number of specimens for themselves. He does not appear to have actively supported their island reserve scheme at this time.[65]

However, the Auckland Institute proposal did receive serious consideration by the government. Stout circulated Cheeseman's letter among his ministers. J.A. Tole (the only Aucklander among them) minuted that Little Barrier Island "should be procured by Govt." Stout concurred ("something should be done in this direction") and raised the matter formally in cabinet, which referred it to the Native Minister, John Ballance, to deal with. Ballance minuted that another Native Land Court rehearing on ownership had been applied for, but when that was settled negotiations for purchase "can be commenced".[66]

Several overseas precedents for the government taking such action were quoted by the supporters of the idea. Cheeseman's letter mentioned that the Canadian Government had "set apart certain islands in the Great Lakes as reserves for the preservation of the indigenous birds and animals".[67] Another, unspecified American precedent was mentioned by Thomas[68] -perhaps Yellowstone National Park, established by Act of the United States Congress in 1872 to be "set apart as a public park or pleasuring ground" in which "all the timber, mineral deposits, natural curiosities or wonders" were to be preserved "in their natural condition".

The influence of the American precedent in New Zealand has already been mentioned: William Fox argued from it in 1874 that similar action should be taken to preserve all the

central North Island hot springs -an idea T.H. Potts included in his 1878 proposal for "national domains, parks or reserves". In 1883 an English visitor, J.H. Kerry-Nicholls, reiterated the idea in his widely-read account of travels in the "King Country": he described the Tokaanu-Tongariro area as "a model Switzerland under a semi-tropical sky...designed, as it were, by the artistic hand of nature for a national recreation-ground". He suggested that if it were "proclaimed as a public domain New Zealand would possess the finest park in the world".[69] The extension of the concept of the "public domain" to that of a "national park" developed rapidly in New Zealand at this time: in 1886, at the same time as the Stout-Vogel cabinet was considering the idea of making Little Barrier Island a reserve, Horonuku Te Heuheu and the Tuwharetoa were negotiating with the Native Minister, John Ballance, to make the mountains of Tongariro tapu to the Crown as a national park. The deed of gift was signed in September 1887, but the empowering Act, providing for the administration of the park along the lines established for public domains, was not passed until 1894.[70] All these ideas -of national parks for tapu places or public pleasuring grounds, or of island reserves for the preservation of native flora and fauna -were developments of the New World settler societies, already moving well beyond English precedents such as the common lands on the one hand or private game preserves on the other.

5.6: Buller's Responses to the Early Conservation Proposals

As shown in the chapter on the idea of displacement, Buller took the common view that displacement and extinction of the native species was inevitable, under the operation of an "inscrutable law of nature". Given this perspective it is not surprising that his responses to conservation ideas in general, and the proposal for reserves for the preservation of indigenous flora and fauna in particular, were initially negative and later contradictory.

In his scientific writings Buller held that displacement of native species in New Zealand was an inevitable, natural process; that there was a "general law" acting to "check the progress of the indigenous species, and to supplant them by new and more enduring forms".[71] Up until the 1890s he only occasionally expressed any hope that there might be exceptions to this law. For instance in the first (1873) edition of his A History of the Birds of New Zealand he wrote with unusual sentiment about one particular favourite:

> Long may the Pied Fantail thrive and prosper, in the face of cats, owls, naturalists, and the whole race of depredators; for without it our woods would lack one of their prettiest attractions, and our fauna its gentlest representative.[72]

At the same time Buller continued his own depredations as a naturalist collector of bird-skins. He also regarded with

equanimity the growing "plume trade" -the use of feathers, birds' wings, or whole skins for women's hats, muffs or boas. In 1873 he wrote from London to his brother-in-law Robert Mair in Whangarei to pass on a dealer's order for rough skins of the native New Zealand Pigeon Hemiphaga novaeseelandiae in lots of a thousand to satisfy the "great rage at present for feathers for ladies' costumes". Buller was sure Mair would be pleasantly surprised at the price offered (£10 per hundred) because, as he had explained in his book, in New Zealand the native pigeon "is less esteemed for its beauty than for its value as an article of food".[73] Buller evidently saw no irony in encouraging the large scale destruction of the birds on which his own scientific and social success was based. It was in fact their imminent disappearance -the romance of the dying race -that gave them, and his book, their particular attraction.

Also while he was in London publishing his book, the select committee hearings on the (British) Wild Birds Protection Bill were held and Newton and other friends came up to give evidence. Buller especially admired Newton and greatly valued his opinion, but does not appear to have supported him on this issue, or to have taken any interest in the issue of bird protection at that time.

However, as described earlier in Chapter 3.4, when Newton wrote to him in New Zealand a few years later, in 1876,

concerning the protection of native birds -asking him to try to prevent the introduction of mustelids into New Zealand -Buller gave a paper on the issue in the Wellington Philosophical Society. But there is no evidence that he took any other action on the matter and it appears likely that his paper was motivated largely by his desire to make a good impression in English scientific circles at a time when he was a candidate for Fellowship of the Royal Society of London.

When Potts made his proposals in 1878 that islands should be "set aside and held under tapu" for the "preservation of the indigenous fauna of New Zealand", Buller made no comment at all in his published papers.[74] By this time the two men had fallen out; Potts considered that Buller had made undue use of his field observations in his 1873 A History of the Birds of New Zealand.[75] But even before that, when they were on cordial terms, Buller had not responded to Potts's earlier proposals for protection of native birds nor to his criticisms of collectors "who would shoot the Cherubim for specimens".

Not until the second edition of his A History of the Birds of New Zealand, which he published in London by parts in 1887-1888, did Buller react to the various ideas and proposals for the protection of native species. In his book he reiterated his view of inevitable displacement of native

species, but, by contrast with his insistence in his 1884 presidential address on "The Decrease of the Maori Race", that "not even the most earnest Philo-Maori would deplore" their displacement,[76] in the case of the birds he now admitted to some regret. "For my own part, I deplore very much this displacement of the natural Avifauna", he wrote, "because many interesting types will disappear for ever".[77]

However, it is clear from his text that this note of regret reflected the sentiments of certain English scientists rather than those being expressed in New Zealand by Potts or the other proponents of protection for native birds. In particular, Buller referred several times in his text to Alfred Newton's address to the British Association for the Advancement of Science at its meeting in Manchester in September 1887. Newton had spoken on the advances in science brought about by Darwin and ended by referring to the work remaining to be done, especially the duty to make a "properly organised biological investigation of all the portions of the empire". There was still much for colonial science to do, Newton told the assembled scientists, and the task was an urgent one:

> I am told by Sir Walter Buller that in New Zealand one may now live for weeks and months without seeing a single sample of its indigenous birds, all of which, in the more settled districts, have been supplanted by the aliens that have been imported.... for the sake of posterity, as well

> as to escape its reproach, we ought to learn all we can about them before they go hence and are no more seen.[78]

Buller, evidently flattered by the mention, reprinted this extract of Newton's address in the preface to the new edition of his A History of the Birds of New Zealand, and again in his subsequent publication of a self-laudatory collection of Reviews and Other Notices of Sir Walter Buller's "Birds of New Zealand".[79] But although he was no longer content to watch over the dying forms without expressing some regret at the loss to science, he had little sympathy with the hopeful schemes for saving them which were then being mooted in New Zealand by Hugh Martin in Nelson, and by F.D Fenton and the Auckland Institute. From London, Buller discounted their suggestions. "Efforts are being made to save some of [the native birds] by means of island reserves", he commented in his text, "but I fear the task is a hopeless one".[80] There may have been a personal factor in his rejection of the island reserve idea at this time: he was not likely to take seriously any scheme associated with Fenton, who had recently impugned his honour as a gentleman during a controversy over a Native Land Court case in which they had both been involved.[81] However, aside from personal animosities, the idea ran against Buller's belief in the "almost universal natural law" of displacement. It followed that any plan for averting extinction ran against nature and was thus doomed to failure. This presumption was so strong that at this time Buller did not consider the possibility of such a plan even

when circumstances might have seemed to favour it.

For instance, in his new edition of A History of the Birds of New Zealand Buller described how the North Island Robin Petroica australis longipes was, "alas!...instead of being, as formerly, one of the commonest of our native birds, is now one of the rarest.... in common with many other native forms, its doom is sealed". The species was, as he mentioned in passing, still "comparatively plentiful" on some offshore islands, including Little Barrier -the island proposed as a reserve. But rather than commenting on the prospects of the reserve scheme he maintained his tone of melancholy in a recollection of his own "juvenile excursions" after robins' nests forty years earlier, and reflected that "ere long the bird itself will be but a memory of by-gone years".[92]

Thus Buller, like most of his colonial contemporaries, gave very little attention to the early conservation proposals of Potts or Martin, or even that of the Auckland Institute. The heightened elegaic regret which Buller expressed in the 1888 edition of his A History of the Birds of New Zealand appears to be a reflection of English rather than colonial opinion. Certainly the underlying presumption of inevitable displacement and extinction of native species remained.

5.7: Buller, Walter Rothschild and Lord Onslow

Buller's involvement in the subsequent development of conservation ideas in general, and the proposal for reserves for the preservation of indigenous flora and fauna in particular, is complex and contradictory. As with much of his scientific career, his actions and writings on these matters must be considered not only in the context of contemporary scientific and popular opinion but also in the context of Buller's personal aspirations and social connections. Thus two apparently inconsistent positions he took reflect those of two English aristocrats whose acquaintance he cultivated: the Earl of Onslow, governor of New Zealand from 1888 to 1892; and Walter Rothschild, elder son of the famous banker Baron Rothschild of Tring.

Buller was first introduced to Walter Rothschild by Alfred Newton about 1888, when Buller had just completed the second edition of his A History of the Birds of New Zealand and was seeking a buyer for his collection of bird skins. When Buller first began corresponding with him Rothschild was twenty and a student under Newton at Cambridge. He was a shy, unconsciously eccentric, golden-haired boy with a passion for birds and butterflies; he was already an avid collector with a rapidly growing museum of his own. His menagerie of live animals included a small flock of Kiwi, which accompanied him even up to Cambridge.[83]

Buller offered Rothschild his entire collection of nearly five hundred skins, including the "types" of his new species (the actual specimens upon which his descriptions of the species had been based, and suggested that Rothschild consult Newton about its value. The figure mentioned was apparently £1,000 -nearly as much as Rothschild's total annual allowance, although he regularly managed to spend far over that amount on his museum.[84] Rothschild was fascinated by birds of the South Sea Islands and could not resist the offer, but when the collection arrived missing several of the rarest specimens on Buller's list, he refused to pay until they were supplied.[85] The documentation of the specimens also left much to be desired: Buller habitually left his bird skins unlabelled -even his type specimens -and just tagged them with a code number referring to a list of species. The dispute over payment was eventually settled and Rothschild sent Buller a typically open-ended order for the birds he still required, of all stages and varieties and "in any number".[86] Buller took him at his word and for the next ten years sent him shipment after shipment of expensive specimens of native New Zealand birds.

Once Buller's New Zealand bird collection had been incorporated into Rothschild's museum at Tring, Buller took a vicarious pleasure in building it up on Rothschild's account to make it the finest in the world. Although he had responded with affronted indignation to suggestions from lesser men

such as Otto Finsch or F.W. Hutton that he might act as an agent and procure specimens for them,[87] Buller responded to Rothschild's orders as deferentially as any tradesman, and as brazenly ran up his lordship's bill. The margin he added to the amounts he paid to his own suppliers does not seem to have been great, but he made up for it in volume. For instance, in 1895 he sent over three hundred specimens plus twenty-eight live birds, for which he charged Rothschild a total of £542/9/8.[88] Rothschild was of course reputed to have unlimited wealth, but Buller scarcely needed the money. Perhaps he assumed that Rothschild scarcely missed it.

Buller's relationship with Lord Onslow was on a rather different plane. In December 1891, toward the end of his term as Governor of New Zealand, Onslow sent a memorandum to the colonial government arguing for the conservation of native New Zealand birds and advocating the establishment of island reserves for the purpose. These ideas were beginning to gain some support in New Zealand; partly, it is suggested, from a new pride in those things indigenous to New Zealand which came with the growing sense of New Zealand identity among the colonists. This proposition will be discussed further in later sections. Certainly, with the Onslow Memorandum the conservation ideas became established and incorporated into official policy.

The Onslow Memorandum is important from this aspect alone, as a key document in the official acceptance of conservation ideas, and its arguments will thus be examined below in detail. But in the context of the present study the Memorandum has further significance, for there is clear evidence that it was in fact drafted for Onslow by Buller. Given the opinions that Buller had expressed up to this time, that native species were "doomed" to inevitable displacement and extinction, and that schemes for averting this fate were "hopeless", it is of great interest to examine both the process by which he became involved in arguing in favour of conservation, and the way he constructed his case.

The conservation issue has been largely overlooked in discussions of Onslow's governorship,[89] which was dominated by constitutional matters relating to ministerial advice and appointments to the upper house of parliament, the Legislative Council. After the election of December 1890, Onslow, acting on advice from the incumbent Premier (Sir Harry Atkinson), approved a number of new appointments to the Legislative Council. Thus although Atkinson's ministry fell at the first vote when parliament met in January 1891, the Legislative Council was effectively stacked against the incoming Liberals.[90] Onslow's relations with the new Liberal government were as a result somewhat strained, but on the conservation issue he and the Premier, John Ballance, found some common ground.

Several apparently unrelated developments combined to draw Onslow -and Buller -into the conservation issue. One of these was the choice of a name for Onslow's son, born in Wellington just before the 1890 election. It was thought to be the first time a vice-regal child had been born in the colony and local newspapers expressed the hope that a distinctively New Zealand name might be bestowed on him to mark the occasion, especially as it was also a jubilee year marking New Zealand's fifty years as a British colony.[91] In the search for a name distinctive to the country, thoughts eventually turned to a Maori name. Some of the Maori members of parliament were apparently involved, but it was Buller who suggested to Onslow the name eventually chosen: Huia, after the rare native bird, Heteralocha acutirostris, which was the Maori emblem of nobility.[92]

The child was in fact christened Victor Alexander Herbert Huia, but the first three names (two bestowed by the Queen as godmother, and a family name) were hardly noticed; in New Zealand he immediately became Huia Onslow, and so he was known all his life. The newspapers reported every detail of the christening, down to the "truly national finish to the ceremony...when the Hon. C.J. Johnston affixed a beautiful Huia feather in the baby's headdress, thus, according to Maori custom, creating him a chief of the land of his birth".[93]

The naming of Huia Onslow had sequels which will be described below. But the other relevant development involving Onslow and conservation should first be introduced: the meeting of the Australasian Association for the Advancement of Science (AAAS), held in Christchurch in January 1891, a week before the christening.

The origins of AAAS and its establishment in 1888 have been discussed by Hoare.[94] Its main organiser was Archibald Liversidge, Professor of Chemistry and Mineralogy at Sydney. AAAS was modelled on an imperial pattern: the British Association for the Advancement of Science (BAAS). Thus, like the BAAS, it operated in parallel to the more established scientific institutions and aimed to be less exclusive -for instance, unlike the philosophical societies in New Zealand, it explicitly invited woman members. Its meetings rotated among the centres of the Australian colonies and New Zealand, with new office holders elected for each occasion. For the Christchurch meeting (the first held in New Zealand) Sir James Hector was president and F.W. Hutton was secretary of the organising committee. Buller was named as a vice-president of the Biology Section.[95]

However, Buller showed no interest in this intercolonial scientific enterprise and did not even attend the Christchurch meeting. Onslow, on the other hand did attend -even though it coincided with his difficult constitutional

deliberations over the appointments Atkinson sought to make to the Legislative Council.[96]

Whether the establishment of AAAS can be categorised as colonial science as defined by Basalla, and discussed in Chapter 1.2 above, or as a development toward an independent Australasian or national scientific tradition, is debatable. The concept and structure of AAAS was derived directly from the BAAS, which was looked up to as a parent body. On the other hand, AAAS was quickly exploited by local scientists as a forum for airing local scientific issues, without reference to any metropolitan precedent and without looking for metropolitan approval.

One such issue which was raised at AAAS from the beginning was the need for protection of the native flora and fauna of the colonies. At the first meeting in Sydney in 1888 Australian members raised the issue and a committee was formed to report on it. At the Christchurch meeting the issue was pressed further by New Zealand members. A.P.W. Thomas (Professor of Natural Science at Auckland) gave a paper arguing that "in the interests of science, it is most desirable...to establish one or more reserves, where the native flora and fauna of New Zealand may be preserved from destruction".[97] He combined the earlier suggestions made by T.H. Potts and the Auckland Institute respectively, that Resolution Island in Fiordland and Little Barrier Island near

Auckland were the most suitable sites for reserves. Thomas was supported particularly by G.M. Thomson, then science master at Otago Boys' High School. Given Thomson's subsequent record in the politics of science[98] it seems likely that it was he who saw the potential influence that AAAS might have as a transcolonial or transnational organisation and the possibility of using that influence to press the New Zealand government into action on the issue. In any event Thomas and Thomson put their proposals into the form of resolutions for AAAS to send to the Minister of Lands and had them endorsed by the meeting.[99]

Liversidge, the permanent secretary of the Association, duly conveyed the resolutions to the minister after returning to Sydney. John McKenzie, the new Minister of Lands in the Liberal government, responded particularly swiftly -AAAS evidently did have some weight. Resolution Island was unoccupied Crown land of no apparent use for settlement or development and within a month McKenzie had approved the gazetting of the island as a sanctuary. A temporary notice was published immediately and Onslow signed the proclamation for permanent reservation in August 1891.[100] However, no other action was taken; the Minister informed Liversidge that the island had been made a reserve, but the New Zealand members of the Association heard nothing of it. Several years later G.M. Thomson was still grumbling that there had been no action on the reserve proposal, and blaming Sir James Hector,

whom he saw as blocking all ideas for reform in New Zealand science, for blocking the reserve idea also.[101]

Although the establishment of the new reserve went almost entirely unnoticed, Onslow in particular had begun to take an interest in the preservation of New Zealand birds and the idea of island reserves for that purpose. After Buller's involvement in the choice of the name "Huia" for his son, Onslow contined to make use of Buller's expertise and contacts to promote the preservation ideas. These developments will be described below. But several questions arise from Buller's role in the matter. Why did Onslow turn to him? Apart from the contact already established over the naming of Huia Onslow, it may have been that Buller was closer to Onslow, both socially and geographically, than proponents of the preservation ideas such as G.M. Thompson of Dunedin or A.P.W. Thomas of Auckland. Buller, however, was not known as a proponent of preservation; was Onslow influenced in favour of these ideas by Buller -or conversely, was Buller influenced in this direction by Onslow? There is little direct evidence bearing on this point. When Onslow wrote (during the Christchurch AAAS meeting) to thank Buller for the suggestion of the name "Huia", he went on to ask him to "add to the favours you have already conferred by preparing a short memo on the subject which will explain to the New Zealand public the motives which have actuated me in the choice".[102] This appears to be the genesis of the

subsequent Onslow memorandum. It should be noted here that even though Onslow was inviting Buller to articulate his motivating ideas for him, it was Onslow rather than Buller who initiated the exercise. Buller had previously ignored or rejected any suggestion that it might be possible to preserve native birds from extinction, even on island reserves. It would thus seem more likely that he was influenced by Onslow's support for the idea of preservation, rather than the other way around. Coming from the young English nobleman the idea may well have commanded new respect.

Certainly Buller's public stance began to shift at this time. He began referring in his Philosophical Society addresses to the "insane policy" of previous governments (he was now a Liberal supporter) in introducing stoats and weasels, which threatened the extinction of the native birds. He began speaking of what should be done to save the birds. In this, he was joining the trend rather than setting it: similar sentiments were being fairly widely expressed in the philosophical societies by this time. In August 1891, while visiting Dunedin, Buller attended a meeting of the Otago Institute at which local member James Richardson gave an address "On the Extinction of Native Birds on the West Coast". Richardson quoted Potts's suggestion that islands should "be set aside and held under tapu as to dog and gun".[109] In the discussion following Richardson's paper Buller spoke up strongly in favour of the island reserve

idea. "Experience has shown that expiring species always [last] longest on islands, and we ought to draw a lesson from experience and place the birds on islands", he asserted. The establishment of "preserves" in "insulated areas" was the only remedy. Buller did not refer to Potts for these ideas; instead, like a politician visiting the provinces, he hinted at important deliberations in higher circles:

> Lord Onslow [is] thoroughly alive to the importance of the matter, and if the [Philosophical] Societies co-operated...they might confidently appeal to his Excellency, and something might be done. Unless something was done to arrest the loss of these species before this generation had passed away not one of the native birds would be left, and it would be a reproach to [us] that it should be so.[104]

About this time Onslow asked Buller to arrange a meeting with the Ngati Huia people, in order to present the infant Huia to them.[105] Ngati Huia (a hapu of Ngati Raukawa) had apparently been consulted earlier about the use of the name of their eponymous ancestor, although Buller took most of the credit for the suggestion.[106] Buller again acted as intermediary and on 19 September 1891 the governor's party (consisting of the Onslow and Buller families) were welcomed onto the Ngati Huia marae at Otaki. Buller translated for Onslow as their kaumatua spoke in welcome:

> Other governors have said kind things and done kind things, but it has been reserved for you, O Governor, to pay this great compliment to the Maori people -that of giving to your son a Maori name....It has long been said, let the Paheka and the Maori be one people....We invoke the spirits of our ancestors to witness this day that in

> your son Huia the friendship of the two races becomes cemented....
>
> There yonder is the snow-clad Ruahine range, the home of our favourite bird! We ask you, O Governor, to restrain the Pakehas from shooting it, that when your boy grows up he may see the beautiful bird which bears his name.[107]

Onslow's speech in reply recalled a line from an old Maori song, based on the word huia in its figurative sense, signifying something precious: E hoa ma, puritia mai taku huia, which Buller rendered in English for him as "O my friends, take care of my treasure".[108] Onslow assured the gathering that he would heed that injunction.

Whether he was influenced by the ideas expressed at the AAAS meeting, or by the Ngati Huia plea to save the Huia from extinction, Onslow certainly promoted the idea of preservation. It was implicit in the publicity surrounding his son's naming. Buller wrote up an account of the Otaki meeting for the New Zealand Mail. The report was then sent to newspapers in England, where the story made good copy as a tale of Empire: the fair child of a noble English house taking his place at the head of a dusky tribe, amid curious native customs. The fate of the Huia added piquancy to the story, although to English eyes the bird had none of the romantic lustre in which it was seen in New Zealand -the Daily Telegraph described it (presumably on the basis of remembered museum specimens) as "a sombre and rather lugubrious-looking bird....altogether unsuitable as an ornament for a lady's bonnet". However, the paper concluded,

"if some measures are not promptly taken for the protection of the huia...[it] will probably join the moa".[109]

At the next meeting of the Wellington Philosophical Society in October 1891, Buller took the opportunity to refer to "Lord Onslow's proposal" for establishing reserves at Little Barrier and Resolution Islands and "stocking them...with all the desirable species and placing them under the strictest protection". It was, Buller said, the "only chance now of saving the various species".[110]

This proposal may be compared with those of Potts in 1872 and 1878 that islands might be "set aside and held under tapu", where the birds might "find a refuge".[111] The climate of opinion concerning such ideas may well have changed by 1891 but it is hard to avoid the conclusion that the association with Onslow gave them greater acceptance, especially with colonial Anglophiles such as Buller.

At the time Buller began promoting "Lord Onslow's proposal"[112] the government had in fact already reserved Resolution Island following the AAAS resolution. It had also opened negotiations to purchase Little Barrier Island from the Maori owners, as decided by Ballance when Native Minister in 1887 in response to the Auckland Institute proposal of the previous year. However, in 1891 not only were some of the Ngati Wai owners reluctant to sell, but the current Native

Minister, A.J. Cadman, was also reluctant to spend his departmental allocation on an unproductive reserve rather than on land for colonisation and settlement. In October 1891, after secretly instructing the purchasing officer not to take any more signatures to the deed of sale, Cadman let the time limit on the government offer lapse and announced that the purchase of Little Barrier Island would not proceed.[113]

Onslow had by this time submitted his resignation as Governor[114] and was planning to return to England. But he did not let the reserve proposal die. He had earlier, when thanking Buller for the suggestion of the name Huia, asked him to "add to the favours you have already conferred by preparing a short memo on the subject which will explain to the New Zealand public the motives which have actuated me in the choice".[115] This idea was now expanded into a more substantial memorandum for sending to the government, presenting the case for the preservation of native New Zealand birds on island reserves, and for the legal protection of the Huia Heteralocha acutirostris in particular. Although Buller has not previously been linked with the memorandum Onslow subsequently sent to the Government, it is quite evident that Buller wrote it: not only is its phraseology characteristically his (and the first bird mentioned is his Apteryx bulleri[116]), but the draft retained by Onslow and now among his papers in the Surrey

Record Office is in Buller's hand and labelled (by Onslow) "Memorandum by Sir Walter Buller on the Vanishing Types of New Zealand Birds".[117] Except for a few minor changes the wording of this draft is identical with that of the published memorandum.[118]

In the next section the Onslow memorandum will be examined in detail. Not only is it an important statement of ideas on the place of native species in New Zealand, but, given that Buller drafted it, the memorandum is also of interest from the point of view of how he made the case for preservation and how his arguments relate to those he expressed elsewhere of inevitable displacement and extinction of native species.

5.8: The Onslow Memorandum

The Onslow memorandum is perhaps the clearest contemporary statement arguing the case for government protection of New Zealand birds. Compared to Potts's more impassioned pleas, Buller in the memorandum presented a smoothly argued professional advocate's case which, at least on the surface, is logical and convincing. Indeed, many of its ideas and recommendations were to become accepted as official policy.

In the Onslow memorandum Buller built his case for preservation not on Potts's or other colonial viewpoints, nor

on the Ngati Huia plea, but primarily on the dicta of metropolitan zoological authorities such as Alfred Newton (Professor of Zoology at Cambridge), W.H. Flower (Director of the British Museum) and P.L. Sclater (Secretary of the Zoological Society of London) who had "over and over again urged the importance of some steps being taken for the conservation of New Zealand birds".[119]

The English scientists had not in fact referred to "conservation" but in New Zealand the word had been familiar since the debate on forestry in the 1870s as a term implying state management and control; Buller evidently meant it with similar connotations of government protective action or intervention. He thus wrote elsewhere of "island-conservation" -"conservation" referred more to the policy or action of government intervention, for instance by making an island a reserve, rather than to the intended aim of preserving the flora or fauna of the island from loss or extinction.

As well as referring to the English authorities in general terms, in the memorandum Buller quoted again from Newton's 1887 address to the British Association for the Advancement of Science: "these indigenous species of New Zealand are...peculiar to the country.... for the sake of posterity, as well as to escape its reproach, we ought to learn all we can about them before they go hence and are no more

seen".[120]

Buller's argument in the memorandum then proceeded via his customary postulate that there was a "general law of nature under which races of animals and plants yield to foreign invasion and rapidly disappear, the aboriginal races of man being no exception to this rule." The native birds, under this general law of nature, were succumbing to the attack of such invaders as the Norway rat, and being displaced by those birds "introduced (whether wisely or not it is not necessary now to discuss) by our various acclimatisation societies". But here the argument departed from Buller's customary line. Rather than regarding this general law of nature as being inexorable and unavoidable in its operation, in the memorandum he argued that there was another law which modified the operation of the first: "it is an observed law of nature that expiring races survive and linger longest in insular areas".[121] Buller had previously recorded observations of rare species lingering on isolated islands[122] but here he gave this "law" much greater force.

Thus, combining the two "laws" of displacement of native species and of their lingering longest on isolated islands, he argued that "if an attempt is to be made to preserve [the disappearing] indigenous species, it must be made by setting apart suitable islands for the purpose, and placing them under very strict protective regulations". Judging by his

comments elsewhere Buller still had his own doubts about whether such an attempt could actually succeed, but in the memorandum he did not let them show. After arriving at the point in his argument where expiring races might be helped to "linger longest" on islands, he moved on quickly to suggest that on such islands they "would have every chance of being preserved and perpetuated."

But even if he had mental reservations about the chances of success, he argued that both scientific interest and latent public sentiment required that efforts should be made to preserve New Zealand species and that "a heavy responsibility rests on those who, while there is yet time and opportunity, may neglect to take the necessary steps". As an example of the kind of public sentiment he had in mind he quoted "the universal regret with which the Americans regard the almost complete extirpation of the herds of bison, of which...only a small remnant survives under Government protection within certain 'reservations'".

"Assuming it to be granted that it is the duty of the Government to take the necessary measures..." -a relatively easy assumption for a New Zealander accustomed to the idea of government intervention, although not at all obvious from Onslow's English perspective -assuming this, then, the memorandum went on, the most suitable islands to be set aside for the purpose were Little Barrier Island in the north and

Resolution Island in the south. As soon as the islands were reserved, birds such Kiwi Apteryx australis and Kakapo Strigops habroptilus should be obtained from the mainland "at once...before it is too late", and (borrowing the language of acclimatisation) "turned loose" on the islands.

Buller mentioned the the 1886 proposal for the reservation of Little Barrier Islands by the Auckland Institute, but not the earlier proposals by T.H. Potts, nor the resolutions passed by the AAAS in 1890. He may not even have known of the latter; he was certainly not aware that Resolution Island had in fact already been gazetted a reserve. This was one of the few points on which Onslow altered his draft.

Buller's argument in the memorandum now turned to the other strand of conservation policy, that of legislative protection for particular species. At the same time as establishing reserves, he suggested, the government should consider adding further native birds to the list of protected species under the game regulations of the Animals Protection Act. Setting aside his customary pessimism that all the native birds were doomed to displacement and extinction, he noted that the Tui Prosthemadera novaeseelandiae had become more numerous since it had been protected. "Would it not be well to extend the same protection to its small congener the makomako [Bellbird Anthornis melanura]?"[129]

Finally, there was the special case of the Huia Heteralocha acutirostris. After describing it in the same phrases he had reused ever since his exhibition essay of 1865, Buller referred in Onslow's name to Ngati Huia's appeal for its protection, and the adoption of the name for the Governor's own son. "I should therefore accept it as a compliment to my family if Ministers would exercise the power they possess, and throw over this bird the shield of Government protection".

Onslow made only a few minor alterations to Buller's draft before despatching the memorandum to the Government at the end of December 1891. The Premier, John Ballance, was sympathetic to the ideas expressed, and his official scientific adviser, Sir James Hector, gave a cautiously positive report, commenting that the memorandum "clearly expresses the views which have been discussed by various scientific authorities".[124] A few days later Onslow informed Buller "confidentially...Govt answer that they agree with every word".[125]

At the time (January 1892), Onslow was preparing to leave New Zealand, but the issue of appointments to the Legislative Council arose again. The Liberals' legislation had been greatly obstructed by the Council and Ballance sought to make new appointments to offset the conservative majority appointed by Atkinson the previous year. Buller had an

interest in this issue too: he was on good terms with Ballance (whom he had known since the 1860s, when he had been magistrate and Ballance a newspaper editor in Wanganui), and after offering to contribute £3,000 toward the Liberals' purchase of a newspaper he understood that his name was to be among those submitted to Onslow for appointment to the Legislative Council.[126] However, Onslow was unwilling to accept the number of appointments Ballance wanted to make, and decided to defer the matter for his successor.

But despite this difference with Onslow, the government decided to grant him the parting gift he had sought. When the Colonial Secretary, P.A. Buckley, went to Auckland for Onslow's farewell in February 1892, he took with him a draft proclamation declaring "the bird known as the Huia" protected under the Animals Protection Act, 1880. Onslow signed it the day before he sailed. As a final touch, to mark his son's part in the process, he took the paper to the fifteen-month-old child and held his hand to the pen. Buckley solemnly witnessed "Huia Onslow his mark".[127] At the farewell banquet the next day, Onslow gracefully acknowledged the government's wisdom in acceding to the request of the Maori people to protect the Huia.[128]

The legal mechanism used to give protection to the Huia was part of the law relating to native and acclimatised game. The Huia was in effect declared to be game which was not to be

shot or taken except within seasons gazetted by the governor. It was not the first indigenous bird to be so protected (the Tui Prosthemadera novaeseelandiae had been protected under earlier legislation in 1873; White Heron Egretta alba and Crested Grebe Podiceps cristatus were gazetted in 1885, Kaka Nestor meridionalis and Morepork Owl Ninox novaeseelandiae in 1888), but it was of great symbolic importance: it was valued not for any reason of usefulness but for its rarity, its scientific interest and its connotations of nobility.

The vice-regal imprimatur gave strength to the conservation ideas of the Onslow memorandum, but much of its force is in Buller's drafting. Its persuasiveness reflects his skill as an advocate, exploiting his scientific knowledge but submerging his own views to make the strongest possible case.

The ideas of the Onslow memorandum -that native species, in particular the birds peculiar to New Zealand, should be protected and preserved -had been expressed before, and, as the government action in 1891 in reserving Resolution island shows, the ideas already had a degree of acceptance. But clearly the memorandum was effective in advancing the ideas. In the following years it became the blueprint for government policy on the issue. All its specific recommendations were acted upon: the Huia was given legal protection immediately and the Bellbird in 1896; Little Barrier Island was acquired

in 1894 and proclaimed a reserve for "the preservation of the native fauna" to add to the Resolution Island reserve already gazetted; steps were taken to "stock" both reserves with flightless birds such as the kiwi and kakapo in particular. Even in general terms its ideas were followed: of the fifteen species of native birds and one native reptile mentioned in the memorandum as decreasing, ten of the birds and the reptile (the Tuatara Sphenodon punctatum) were given legal protection by 1896.[129]

But older ideas of inferiority and inevitable displacement of native forms continued to be held even as the newer ideas became accepted as the official view. The tension between the two will be explored in later sections. First, however, another piece of advocacy by Buller will be examined which articulates colonial attitudes of this period toward the native people. The juxtaposition will help to again point up the connections between ideas on displacement of the native fauna and the native people, and the way that even moves to conserve the native fauna on island reserves were carried out within a continuing process of displacement of Maori people.

5.9: "Looking after native races": Buller's British Empire Review paper

Through the 1890s and into the twentieth century older ideas of a natural law of displacement of the weaker native species continued to be held by the colonists even as the ideas of the Onslow memorandum -that native species should be protected and preserved -became accepted in popular opinion and official policy. And alongside the idea that the Maori race would inevitably lose the struggle for survival and be displaced by the more vigorous Anglo-Saxon colonists, it was also increasingly asserted that the Maori people had been well treated by successive New Zealand governments and that in this regard New Zealand stood as an example to the whole world. Such a self-congratulatory colonists' view was not entirely new -as early as 1844 the Auckland Southern Cross editorialised that "we are...honestly convinced that an aboriginal people never yet came into contact with Europeans half so well disposed toward them as the settlers of this Colony generally".[130] But, as Alan Ward observes, by 1900 this represented the "official" view.[131] And again Buller, with his usual facility for articulating popular attitudes, gave one of the clearest contemporary expositions of this official view of New Zealand race relations -and is thus quoted by Ward for this purpose. However, as with the Onslow memorandum, his paper, published in the British Empire Review in 1901, must be read as a piece of advocacy rather

than as necessarily an expression of Buller's personal views. The paper is an important expression of ideas, but its polemical purpose must be borne in mind as well.

The British Empire Review was the journal of the British Empire League, one of the many imperial patriotic organisations that flourished and proliferated in the late Victorian and Edwardian periods.[132] Buller became active in several of these organisations after returning to London in 1899. He had joined the Royal Colonial Institute from New Zealand in 1881, probably influenced by the enthusiastic imperialist S.W. Silver, a wealthy London merchant, with whom he then had business dealings. Silver later fell from favour but by then Buller had cultivated many other contacts in imperial circles: men of "quality" such as Sir Robert Herbert and Lord Knutsford from the Colonial Office, Sir Frederick Abel of the Imperial Institute, Sir John Lubbock the scientist and banker, and of course Lord Onslow, who in 1900 became parliamentary Undersecretary for the Colonies. Buller particularly admired Herbert, an aristocratic, urbane English gentleman, who had been Permanent Under-Secretary of State for the Colonies from 1871-1892, and still retained the role of chancellor of the colonial Order of St. Michael and St. George which had gone with that position.[133] For some years Buller had arranged for gifts of frozen New Zealand lamb to be delivered to Herbert and a few other English friends at Christmas.[134] Soon after returning to London in

1899 Buller joined the British Empire League, which Herbert, Lubbock and others had founded in 1895.

The League embraced a range of views and interests within its general aims of encouraging the bonds of empire. Buller's imperialism, like that of most New Zealand colonists who gave any thought to the issue, meant a stronger voice for New Zealand in the British empire while remaining under the protective wing of the mother country, and the extension of the empire among the islands of the Pacific -to be governed by New Zealand, as the "Britain of the South". The rhetoric was loyal and patriotic, for the "United Empire" as the motto of the Royal Colonial Institute expressed it, but underlying this, where New Zealand was concerned, was national feeling and national interest.[135] Thus when a controversy arose over political developments in the Pacific, Buller used the British Empire League to argue a New Zealand case.

The issue arose during a campaign by Seddon for New Zealand control of various British possessions in the Pacific. In 1899 it became clear that the Australian colonies would proceed with their plan to federate into a single, more powerful Commonwealth; in the same year Britain renounced claims to Samoa in favour of Germany and the United States. Seddon stepped up efforts to persuade the Colonial Office to annex to New Zealand a list of other Pacific possessions, especially the Crown Colony of Fiji.[136] He openly

encouraged agitation by settlers in Fiji against the rule of their British Governor and in favour of federation with New Zealand. The Governor of Fiji, Sir George O'Brien, fought back by charging that if New Zealand gained control of Fiji, then, as had happened in New Zealand, the native people would soon be dispossessed of their lands.

In London during 1900-1901 O'Brien's supporters argued his case at a meeting of the Royal Colonial Institute,[137] and Buller championed New Zealand's cause in the British Empire League's Review.[138] With a lawyer's eye for the point of weakness in his opponents' case, Buller noted their admission that under Crown Colony administration the native Fijians had "progressed little...and bid fair to disappear at no very distant date".[139] He thus built his case for New Zealand rule on a humanitarian argument that it would be beneficial to the Fijians as it had been for the Maori in New Zealand.

In his paper, blandly entitled "The Development of the South Pacific" in accordance with the announced policy of the British Empire Review of being "non-partisan", Buller stated New Zealand's case for "island-annexation" and rejected Sir George O'Brien's imputation that Fijians would suffer by it. Just the contrary, Buller argued: "What better fortune could come to the Fijians than to be placed under the paternal rule of New Zealand...[whose governments] have shown themselves capable of looking after native races"?[140] And

he proceeded to expound the view which was to become an article of faith for white New Zealanders: "The manner in which the Maori race has been treated by successive New Zealand Governments, and brought in the end into political amalgamation with the British Colonists, should be an object lesson to the whole world."

He went on to sketch a glowing picture of the progress of the Maori race under colonial government. Again using the advocate's technique, the outline of his argument incorporated the accepted elements of the ideas of native inferiority and displacement, but retouched and reconstructed to lead to the desired conclusion. The Maori people, he explained, being high-spirited and chivalrous, "could not be expected to submit to the new order of things without a struggle". However, as Buller now told it, this was not a struggle for existence. Instead, when "the great contest was over, and the white man's 'mana' established, the Maori tribes accepted their defeat like men" and the two races now worked together "like elder and younger brothers".

Thus in this picture for a wider public Buller modified the view he had presented in his 1884 address on "The Decrease of the Maori Race" and erased all trace of the "dying pillow", even though that pessimistic line was still being expressed in New Zealand. He admitted that the Maori race had been "in rapid decline", although, now explicitly using part of F.D.

Fenton's or A.K. Newman's idea of a decaying or effete race, he argued that this decline had begun "long before the advent of the whites" but had been arrested and that the race "is now probably slightly on the increase." He linked this regeneration with the benefits of British colonisation and described how the Maori people were now "emulating the European settlers in all Colonial avocations" and had been brought into "political amalgamation" with the colonists. Buller mentioned that the Maori people enjoyed all the rights of British citizens and had the franchise, "men and women alike" -he did not need to make the point that women's suffrage had not been granted in Britain itself. The Maori, he concluded, "ought to be and they are, without doubt, a happy, contented, and prosperous people".

Buller went on to reject Sir George O'Brien's allegation that the Maori had been dispossessed of their land as "a gross libel on the Government and people of New Zealand". Far from being landless the Maori people still held "no less than 5,000,000 acres of the cream of it". Giving as an instance the reserves set aside for the Ngai Tahu from the purchase of much of the South Island, he argued that the Maori were "the possessors of an inheritance of enormous value, the result of an unearned increment brought about by European colonisation". Buller's gloss here amounts to misrepresentation; the Ngai Tahu in particular had for fifty years been seeking redress for various grievances concerning

the South Island purchases, including the failure of the government to grant reserves which had been promised.[141] However, it allowed him to conclude that there "is nothing about which successive Governments in New Zealand have been more jealous than in conserving the rights of the Maoris".

Several of the allusions in this argument should also be noted. Firstly, it is clear that by 1900 when Buller wrote his paper, "conserving" had become something of a vogue word, used to denote any form of protective government intervention or control, whether it be on behalf of Maori rights, forests, native birds, or anything else. But this was a particularly New Zealand idiom. When, in December 1900, Seddon stated the New Zealand case for control of Fiji, he related how the Maori race had been treated humanely "and the State had conserved their lands", just as when New Zealand had annexed the Cook Islands, the "right of the natives to own land....was accepted, and had been conserved." Seddon used the word to imply paternal state guardianship but most of the English papers printing the report (including The Times) were unfamiliar with it and amended his "conserved" to "preserved" in the first instance and "observed" in the second.[142] Buller of course quoted Seddon's speech without alteration; the word and the idea of conservation were quite familiar to him. In New Zealand, conservation had, as he put it elsewhere, "taken hold of the popular fancy".[143]

Another significant allusion in Buller's British Empire Review argument is that to the "unearned increment" in the value of Maori land holdings brought about by European colonisation. Here Buller makes a virtue of something the New Zealand Liberal reformers generally regarded as a social evil: the idea, drawn from the political philosophy of J.S. Mill and Henry George, that increases in land value arising from the general progress of the community rather than the honest toil of the individual -the "unearned increment" -ought not be left to enrich the idle landowner. This reformist philosophy will be touched on again later in this Chapter in relation to the development of ideas of conservation.

Compared to the Onslow memorandum, Buller's paper in the British Empire Review appears to have had little direct influence in forming opinion in New Zealand or gaining acceptance for the "official" view which it articulated so clearly.[144] Nor does it appear to have had much effect in London, although Seddon no doubt appreciated Buller's support for his cause. When Seddon raised the issue of Fiji again at the Colonial Conference of 1902 he took Buller's line and argued that the fact that the native Fijians were "dying off" demonstrated that there was something wrong with the administration of that colony. But Joseph Chamberlain, the British Colonial Secretary turned this argument against him by saying, in effect, that people who lived in glass houses

should not throw stones: that until quite recently the same might have been said of New Zealand.[145]

Furthermore, the view expressed by Buller in the British Empire Review that the Maori people were "probably slightly on the increase"[146] was evidently more an argument of convenience than conviction on his part; as in the Onslow Memorandum he shaped his case to suit the occasion. When, a few months after he wrote, the 1901 census results did in fact show an increase in the Maori population figures, most commentators in New Zealand explained away the increase and continued to talk pessimistically of decline and doom.[147] Buller himself, in his later writings, did the same. In a passage written in London about 1904 for his final Supplement to the "Birds of New Zealand", he wrote plaintively of the displacement of native birds by "the sparrow and his foreign friends" and commented that he "could quite appreciate the Maori's pathetic reference to it when he remarked, 'So is the Pakeha replacing the Maori on the lands of our ancestors!'"[148] Similarly he quoted a lament of Ihaka of Ngati-Wehiwehi to the effect that the Maori race would soon vanish like the Moa "and the white man, with his sheep and his cattle and his birds, will occupy the country".[149] This, Buller concluded condescendingly, "was Ihaka's simple way of formulating the doctrine of the survival of the fittest". Official optimism and self-congratulation notwithstanding, the old colonial

presuppositions of native inferiority, inevitable displacement and extinction still persisted.

5.10: Conserving Native Species and Native Rights: the Establishment of the Little Barrier Island Reserve

The tensions between the established view of native inferiority and inevitable displacement, and the ideas either of conserving native species or of conserving the rights of the native people, are manifest in events leading up to the establishment of the Little Barrier Island reserve in 1895. The establishment of the reserve and the changing attitudes toward native New Zealand things which this embodied, will be examined in the following sections from three different perspectives. First, the establishment of the Little Barrier Island reserve will be described in terms of the application in practice of the two areas of official policy already described: conserving the native fauna on the one hand and the rights of the native people on the other. Buller's involvement will be touched on in this section but examined more closely in the second, in the context of the tension between the new ideas of conserving native species in their natural surroundings, and the established practice in colonial science of collecting specimens for the museums and private collections of the imperial centre. In the third of these sections, the discovery and immediate extinction of a

"new" native species, the Stephens Island Wren Traversia lyalli, which occurred in 1894-95 just as the Little Barrier Island reserve was being established, will be examined in the context of the rising national sentiment in New Zealand which took pride in native species and demanded that they be retained and preserved.

The standard account of the establishment of the Little Barrier Island reserve by W.M. Hamilton,[150] though based on archival material, takes, in general, a narrowly official perspective, overlooking both the wider issues and much important human detail. Here we will survey events leading up to the establishment of the reserve first in terms of Government policy development.

The Onslow memorandum, received by the government at the end of 1891, recommended legal protection for the Huia and other native birds, the acquisition of Little Barrier Island and the transfer of such flightless birds as Kiwi and Kakapo to it and to Resolution Island, which had already been gazetted a reserve. The government acted on most of these recommendations. The Huia was gazetted as a protected species immediately; the other recommendations required expenditure and were acted on more slowly. In the next session (1892) parliament voted £325 for a curator for a curator for the Resolution Island reserve,[151] to be "Curator of Birds" by analogy with the Conservators of Forests.

But although these moves were being made toward the establishment of the Resolution Island reserve, plans for a reserve at Little Barrier Island were in abeyance. No further approaches to the Ngati Wai owners had been made since the Native Minister, A.J. Cadman, had deliberately let negotiations lapse in October 1891. At that time about twenty-five Ngati Wai were living on the island. There were several elderly kaumatua (including Paratene te Manu, who had met Queen Victoria in 1863 and spoken of his fears that the colonists wished to exterminate the Maori and possess their land[152]), but the effective leader was an astute younger man, Tenetahi. After the collapse of negotiations with Cadman, Ngati Wai turned elsewhere and in March 1892 Tenetahi signed an agreement selling rights to all the valuable Kauri timber on the island to an Auckland businessman. By July it was reported that gangs were working to fell the trees as quickly as possible.

This news brought a strong response from the advocates of the reserve scheme. As Buller had suggested in the Onslow memorandum, public support for preservation of native species was growing. The idea of island reserves for the preservation of native birds, which had been ignored when T.H. Potts had first raised it fifteen years earlier, now gained wide publicity. Much of this, however, was generated by a few enthusiastic campaigners -particularly a Wellington businessman, Henry Wright.[153] His letters and articles on

the preservation of native birds and the proposed reserves were printed in newspapers and journals in New Zealand and also in England.[154] Lord Onslow too continued to promote the idea after he returned home; working on the basis that, as he put it, "Colonists are very sensitive to English public opinion", he ensured that favourable comment was published in the London papers and scientific journals.[155] And certainly New Zealand newspapers did pay attention when English editorials described the reserve proposal as "wise beyond the wont of Colonial Government".[156] The chain of encouragement and flattery was maintained by Buller, who sent cuttings to Ballance with the comment that "Lord Onslow could have done nothing without your active co-operation".[157]

The praise from abroad was in some respects premature. Although Resolution Island had been gazetted a reserve, no caretaker had yet been appointed; and Little Barrier Island had no legal status or protection as a reserve and was still being logged. Even so, from an English perspective many aspects of the developments in New Zealand appeared remarkable. Although the British attachment to laissez faire policies was perhaps weakening, the New Zealand willingness for protective government intervention in many areas still seemed surprising. Onslow explained the general policies of Ballance's Liberals to a meeting of the Royal Colonial Institute in London as a kind of Social Darwinism in reverse:

> The State no longer looks passively upon the struggle for existence, but endeavours to make existence possible under conditions less severe than those of constant struggle; as a New Zealand statesman put it, "We are commencing a struggle against the struggle for existence."[158]

Onslow had in mind here the "grandmotherly" legislation of what he called "State Socialism and Labour Government in Antipodean Britain"; nevertheless the ideas of protection for native species and the establishment of island reserves for their conservation were further manifestations of government intervention in areas previously left to the "laws of nature".

But as well as the willingness of the colonial government to intervene, it also seemed surprising from the English perspective that it was possible to propose such reserves at all. New Zealand, like other New World settler societies, had much of its land still in the public domain, as "waste" land, or unallocated state-owned Crown land still in a state of nature -and it was thus possible to set areas aside as national parks or reserves. In England the nearest equivalent to such undeveloped land was not Crown land (of which there was little more than the actual royal estates), but the commons: land which was in fact privately owned but subject to common rights of access, grazing etc. The nearest English equivalent to the New Zealand campaign for the island reserves was the campaign for the preservation of the open spaces of the commons from enclosure and development.[159]

Furthermore, in New Zealand the government was not only ready and able to set aside Crown land for parks and reserves, but in the case of Little Barrier Island was actually proposing to purchase it from its Maori owners for that purpose.[160] No British government would have contemplated any such action; nor was there any legal machinery there for public ownership of a reserve. Not until after 1895, when a preservationist group established the "National Trust for Historic Sites and Natural Scenery" as a private charitable body, were any permanent national reserves established.[161] In New Zealand, however, the idea of land acquisition by the state had long been accepted -at least in the form of purchase of Maori land "for the extinguishment of native title".[162] The Liberal government, under the slogan "lands for the people", had a policy also of purchasing (for closer settlement, hence "bursting-up") the great estates of the colonial gentry.[163] But despite the much-publicised purchase of the Cheviot estate in 1892 by far the greater part of government land purchases were still of Maori land.[164] However, the idea of state purchase for the purposes of public policy was well established in New Zealand. Certainly the campaign for reserves in which the native flora and fauna might be preserved aroused little comment about state intervention, at least among the colonists. As will be seen, the reaction of the affected Maori land-owners and the Maori members of parliament was rather different, but their protests had little effect.

Late in 1892, as the result of a report on Little Barrier Island by Henry Wright, there was a shift in government policy concerning the island reserves. Wright advised that although Little Barrier Island had some disadvantages (cats were very numerous and much Kauri was being felled), he considered it more suitable than Resolution Island for the purposes of "bird-preservation".[165] But it would not long remain so; he therefore urged the "immediate interposition of the Government" to stop the logging and take possession of the island. After receiving Wright's report, Ballance decided to drop the proposal for a custodian on Resolution Island and to concentrate efforts on Little Barrier Island instead. "I do not think it would be prudent at the present time to have both islands", he told Buller when sending him a copy of Wright's report; "neither would Parliament vote the necessary funds".[166] It was decided to station a man on Little Barrier Island to try to restrain further timber felling there (on the basis that the government had bought out a proportion of the owners of the island and therefore had proportional rights to its timber). Wright went back in December 1892 as a temporary Crown Lands Ranger, armed with the necessary injunctions. A permanent caretaker, Charles Robinson (appointed on Buller's recommendation) took over in the following February.

Tenetahi and the other Ngati Wai owners protested that the government had no legal right to impose restrictions on their

use of the island. At the same time Tenetahi expressed the willingness of Ngati Wai to continue negotiations, and also suggested that "he would be a fitter person to remain in occupation and look after [the birds] than a stranger".[167] H.F. Edgar, the Native Land Court officer who had been involved in the earlier negotiations, was impressed by this idea, which appeared to offer a way out of the impasse over the island. In a private report, apparently sent to the Native Minister, A.J. Cadman, Edgar wrote that Tenetahi took pride in the island as his home and had done much to preserve the birds there, especially by preventing the introduction of bees which he believed would compete with and displace the honey-eating native birds. In other words Tenetahi and the Ngati Wai had been acting to conserve the birds long before the colonists had taken up the idea. Edgar suggested that the objects of the proposed reserve could be achieved without buying out all the Maori owners, but leaving them to look after the island with Tenetahi as its nominal custodian.[168] This idea found support in Auckland both in the Auckland Institute,[169] which was still promoting the reserve scheme, and within the Department of Lands, which had administrative responsibility for the reserves. At the same time serious doubts were expressed within the Department about Robinson's suitability for his position as caretaker; he quarrelled unnecessarily with the Ngati Wai (even though he depended on them to bring his stores), and seemed to have no idea of what was intended for the island -his first annual

report suggested that its lower slopes would "make good grazing for sheep if cleared of bush".[170]

After Ballance's death in April 1893 most decisions on the island reserve scheme appear to have been taken by the new Premier, R.J. Seddon (who from September 1893 was also Native Minister) and the Minister of Lands, John McKenzie. In January 1894, following agitation by G.M. Thomson of Otago, McKenzie resurrected the Resolution Island proposal and appointed a caretaker (Richard Henry) for the island. In March the Auckland Institute wrote to Seddon, complaining that the value of Little Barrier Island as a reserve was being eroded: the bush was still being cut and burnt and collectors were still shooting the very birds it was desired to preserve. The Institute urged the government to complete its purchase of the island so that the reserve could be properly established.[171] When a report was received in July suggesting that Tenetahi, frustrated by the government restrictions, was threatening to import bees "to destroy all birds on account of whose rarity it was so anxiously desired to acquire the island", it was decided to pass legislation "to compel purchase on terms [originally] offered by natives".[172]

The Little Barrier Island Purchase Bill was introduced into parliament in October 1894. In the House a few members considered the £3,000 price to be more than the island was

worth, but in general there was little opposition -except from the Maori members. Hone Heke of Ngapuhi, the member for Northern Maori, protested strongly about the compulsory purchase and referred to the promises of undisturbed possession under the Treaty of Waitangi. McKenzie scorned this argument, asserting that "the natives have been very well treated". The Speaker backed up that position, ruling that "it cannot be supposed that the Ministers of the Crown, who are the guardians and trustees of the Natives, would see them wronged in the slightest degree".[173] The Bill was passed without difficulty, and Tenetahi and the other outstanding owners were paid their shares and all eventually evicted from the island in an operation carried out by the military "Permanent Force".[174] Under the legislation Little Barrier Island was proclaimed Crown property, and was then gazetted as a reserve "for the preservation of the native fauna".[175]

Thus the colonial government forcibly displaced the Ngati Wai of Hauturu in order to conserve the native birds, while also asserting that the native people were well treated. As Seddon later put it during the controversy over Fiji, government treatment of the native people generally "had been generous and humane in the extreme, and the State had conserved their lands".[176]

Maori tactics in response to colonial authority during this period have been described by J.A. Williams as "an interplay between protest and cooperation".[177] Certainly Tenetahi continued to protest at the compulsory purchase of his land for the preservation of native birds, especially as "but for my exertions in rigidly excluding bees cats and vermin from the island there would be no such birds to preserve at this day".[178] Protests about the eviction of Ngati Wai continued to be expressed in petitions of Maori grievances under the Treaty of Waitangi guarantee of "full, exclusive, and undisturbed possession of their lands" for many years afterward.[179]

For Tenetahi, neither his offer of cooperation as caretaker for his island nor his protests at its compulsory purchase were to any avail. But at the same time as Ngati Wai were being evicted, another tribe, Tuhoe, were more successful with a cooperative tactic not too different from Tenetahi's. After disputes in 1895 over the Government's wish to have their Urewera country surveyed, Tuhoe accepted the promise of the only Maori then in cabinet, James Carroll, that their land rights would be, as Williams puts it, "conserved" under the law. In September 1895 Tuhoe sent a delegation to Seddon in Wellington to ask that their lands might be "set aside as a reserve for the Native people, where the Natives could develop themselves, and where the native birds, which had been driven out of other parts owing to the advance of

civilization, could be preserved". The main thrust of the Tuhoe proposal was for a system under which they could "develop themselves", and the conservation aspects were in line with this; as well as the protection of their birds and forests they sought the introduction of English birds and fish, to provide further attractions for European tourists and more food for themselves.[180]

Seddon's initial reaction was that all this was "a little too sentimental". But, in a mood of benign paternalism, he agreed with the idea. He referred to the Little Barrier Island reserve and agreed that tourists might come to see "the last remnants of the beautiful birds of the country".[181] Furthermore, granting the Tuhoe request would not cost anything, nor impede the interests of the colonists since Tuhoe's Urewera land was not considered suitable for European settlement. The Urewera District Native Reserve Bill was thus introduced into parliament a few weeks later, in October 1895. In the debate the following year opposition members twitted the Government with making a "complete and revolutionary" change in its Native policy.[182] Most Maori members supported the Bill, but Hone Heke, the member for Northern Maori, was suspicuous that it was a "sham" and that for all its assurances the government would eventually take the land. He referred bitterly to the way Little Barrier Island had been taken from Ngati Wai.[183] But the Bill was passed without difficulty, giving Tuhoe the prospect of

control over their own affairs on their own land.

It is not clear whether the inclusion of the native birds in the reserve proposal by Tuhoe was in any way a tactical move on their part, but it does appear to have helped to win support for their wider aims. The idea that tourists would be attracted to a Urewera District Native Reserve to see the "beautiful" native birds and scenery, was echoed by others in parliament. One opposition member in particular -Thomas Mackenzie -supported the Reserve Bill on this basis, asserting that there "are no birds in the world so beautiful as our native birds".[184]

Certainly, by 1896 the idea that native birds were worth preserving had gained popular and official approval among the colonists. Often, as in Thomas Mackenzie's argument, it was expressed in terms of pride in the special features of New Zealand. This association of ideas of conservation of native species with the rising national sentiment in New Zealand will be discussed further in a later section of this chapter.

Although the Urewera District Native Reserve Act of 1896 did mark a new departure in government Native policy,[185] the cooperative approach to conserving native flora and fauna on Maori land was not pursued. In the following year the Government moved to reserve Kapiti Island, off the Wellington west coast, "for the purposes of conserving the natural

scenery...and providing a preserve for the flora and fauna of New Zealand".[186] Again the Maori owners (in this case of Ngati Toa) protested at the suggestion that their land should be taken. At a hearing before the Native Affairs Committee of parliament one of the committee members, Richard Monk, tried to placate the Ngati Toa delegation by suggesting that as well as preserving the native birds, Kapiti would be preserved as "a memorial of the history of Te Rauparaha and the Ngatitoa". But Ngati Toa were not ready to be consigned to past history. Their spokesman, Hemi Kuti, protested that "the welfare and preservation of human beings should take precedence of birds". Monk agreed -in principle -but suggested indirectly that as preservation of the Maori race appeared to be hopeless efforts should be made to preserve the native birds instead.[187]

As shown in the earlier chapter on ideas of displacement of the natives, it was still widely believed among the colonists at this time that the Maori race was headed for imminent extinction. As Buller expressed the colonial view, "nothing can save them. Our plain duty as good compassionate colonists, is to smooth down their dying pillow".[188] The corresponding belief concerning the native flora and fauna was still held also, although here attitudes had shifted to the extent that there was sentimental concern that the last remnants should be conserved or preserved. But this protective concern for the native flora and fauna did not

extend to the native people. This divergence will be discussed further in the concluding chapter of this study. In the next section of this chapter, the establishment of the Little Barrier Island reserve will be considered again in the context of Buller's involvement, which illustrates other aspects of colonial attitudes toward native things and their value.

5.11: Buller's Dilemma: Conserve or Collect?

The establishment of the Little Barrier Island reserve brought the new policy of conservation of the disappearing native species into conflict not only with the rights and interests of the native people, as shown in the previous section, but also with the established practice in colonial science of taking specimens of the same species for local and metropolitan collections. This is clearly illustrated by Buller's activities in relation to the Little Barrier Island reserve. Although he advocated the new conservation ideas in the Onslow memorandum and advised and assisted Ballance to put them into practice in the establishment of the Little Barrier Island reserve, he continued to hold to the conventional wisdom of inevitable displacement of native species. He thus urged also that museum specimens be preserved for future study while they were still available. Although his "righteous stand" on conservation issues has

been commented on, for instance by A.G. Bagnall[189] the extent of his equivocation has not previously been appreciated even by his severest critics.[190] In order to demonstrate the position he took privately as opposed to that he took in his public pronouncements, and to suggest the motives for each, it is necessary to give further detail of his activities in the collection of specimens on the one hand and his involvement in the establishment of the Little Barrier Island Reserve on the other.

In the discussion which follows, in order to avoid ambiguity, some terms are used in the restricted technical sense employed in biological science. Thus the collecting of bird specimens (by a collector) refers to the actual shooting or trapping of the birds (and the person who wields the gun or otherwise takes the specimen) rather than the assembling of a collection of such specimens. In the latter term, a collection or accumulation of specimens, the technical sense coincides with the general one.

Ornithological science in the nineteenth century was based primarily on the accumulation and study of specimens -as much zoological study, in entomology for instance, still is in the twentieth century.[191] Buller's activities in the 1890s in collecting specimens and encouraging others to collect for him must be seen in perspective, both within this accepted scientific pattern and also within the total trade in birds

in this period.

In the 1880s and 1890s scientific specimens made up only a small part of the total trade in native birds. "Game" species (including a wide range of duck and other waterfowl as well as New Zealand Pigeon Hemiphaga novaeseelandiae and Kaka Nestor meridionalis) were sold by poulterers and were a familiar part of the colonial diet. The native Pigeon was a particular favourite.[192] In 1895 Buller sent, as a great delicacy, a "brace and a half...packed in a small game-box" to Sir George Grey in London, when asking for his support in obtaining the award of the New Zealand Cross.[193] An even wider range of species was sold by taxidermists and dealers catering for the demand for bird-skins, which were used both in ornamental cases of mounted birds as drawing room decorations, and also in feather fashions: feather boas, muffs, collars and hats. Buller bought many of his specimens at the shops of well-known dealers such as Edward Spencer and Sigvard Dannefaerd in Auckland, St Clair and Hector Liardet, and Alexander Yuill in Wellington, William Jewell in Christchurch and William Smyth in Dunedin. Even small towns had their local "bird-stuffer": A. John Jacobs in Masterton, Alfred Avery in Marton.[194]

Supplying the dealers were a host of collectors: men who supplemented their income or even made a living by shooting and skinning birds for the trade. These collectors were, in

effect, another form of predator on bird populations, along with the rats, cats, stoats, weasels and other carnivorous animals colonising the country. In general terms, the impact of the collectors on bird populations was probably not great; and displacement, in the sense of loss of habitat as the colonists cleared the bush, was more significant than any predation. For many species, the changes brought by colonisation transformed the land from one in which they could live to one in which they could not.[195] However, collecting did make a significant impact on populations of some particular species. Collectors were not like other predators; they concentrated on the rare and unusual species -those with the highest market value. Species nearing extinction were the most valuable of all and hence the most rigorously hunted. And if a bird was known to survive only in a restricted area such as an island, the collector's task became easier and his destructive effect all the greater.[196]

There were some professional collectors who went around the world in pursuit of specimens. Henry C. Palmer, for instance, collected on the Chatham Islands for Walter Rothschild in 1890 before going on to Hawaii and the Laysan Islands. Henry Travers, son of the Wellington lawyer and scientist W.T.L. Travers, was almost in this category; he went on organised expeditions in New Zealand and to the offshore islands to obtain specimens to order. But most collectors in New Zealand

were men like William Hawkins on the Chatham Islands, or William Docherty, W.J. Wheeler and S. Percy Seymour in Fiordland and South Westland -fossickers, prospectors and recluses who took the opportunity to make some money by selling the skins of locally available birds. They might receive £1 per skin for species in demand such as Kakapo Strigops habroptilus or Spotted Kiwi Apteryx owenii, or a few shillings for commoner or smaller species.[197]

Buller dealt directly with many of these men and also built up a network of his own collectors: mainly men whose occupations took them to remote localities and who were glad to supplement their incomes by supplying him with rare birds. The lighthousekeeper Charles Robson sent sea birds from Cape Campbell and his son sent birds from the Auckland Islands after visiting there on the government steamer. The Nelson surveyor Jonathan Brough supplied Buller with Kiwi and Bush Wren Xenicus longipes. In the 1880s William W. Smith specialised in supplying the rare Laughing Owl Sceloglaux albifacies which was still to be found on the Albury Estate near Timaru, where he worked as a gardener.[198] Buller also obtained specimens by exchange, especially with Thomas Cheeseman at the Auckland Museum and James Hector at the Colonial Museum in Wellington.

The supply of specimens by colonial scientists to the metropolitan museums and private collections has already been

mentioned in the discussion in Chapter 1.2 on the pattern of colonial science. But again this was only a part of the export of bird skins. The New Zealand dealers and collectors, as well as supplying the local market, also sent large numbers of bird skins to natural history dealers and auction houses in Europe. At times the export of New Zealand bird skins to London in particular was so great that for some species there was a glut on the market. In 1880 one London dealer complained that he had in stock "something like 385 Stringops habroptilus [Kakapo]...and upwards of 90 of the Apteryx oweni [Little Spotted Kiwi]".[199]

Rarer species were always in demand -the rarer the species, the more it was sought after. R.B. Sharpe of the British Museum noted in 1888 that although higher prices were paid in New Zealand than anywhere else for skins of rare birds, "even the high rewards offered are insufficient to procure a single specimen of some of the nearly extinct species".[200] Buller could afford to bid high prices for the birds he wanted, but a few were too expensive even for him. For instance, only four specimens of the Takahe Notornis mantelli were obtained in the nineteenth century. The first two went to the British Museum; Buller offered £50 for the third in 1879 but the owner sent it to England where it fetched £110 at auction. The man who obtained the fourth specimen (in 1898) was said to have been offered over £350 for it, but showed his patriotism by accepting £250 from the New Zealand

government to retain it in a local museum.[201] By comparison, the average male wage in New Zealand was then about £85 per annum.[202]

Buller obtained most of his specimens from dealers and collectors, but did occasionally go on collecting expeditions himself. For instance, in November 1882 he obtained permission from Tawhiao, the Maori King, to hunt for Kiwi Apteryx australis on Pirongia. After a week there, accompanied by the artist Gottfried Lindauer and three Maori Kiwi-hunters with dogs, he returned with forty Kiwi, nine eggs, and one newly hatched bird. "After sketching the likeness of this defenceless chick", he wrote in his account of the hunt, "I sacrificed his little life on the sacred altar of science and made a pretty cabinet specimen of the skin".[203]

But although ornithological science was still based primarily on the accumulation and study of specimens, by the 1880s it was no longer enough to be simply a cabinet worker, one who saw birds only as labelled skins in museum drawers. Field observations were becoming valued also, even if they were made in the course of collecting specimens. This new interest in the way the birds lived reflected changing Western sensibilities toward nature, wild animals and wild places. In Europe and North America the urban classes were rediscovering nature, whether by feeding the birds in winter or rambling in

the country. Nature study was becoming a popular recreation.[204] At the same time, scientists were beginning to pay serious attention to questions about the mode of life of living organisms and the role each played in the general "economy of nature".[205] Buller's ornithological studies in New Zealand followed these trends -although he had first obtained Kiwi skins in 1859 (and immediately sent some to Richard Owen at the British Museum[206]), and had kept live birds in his aviary since the 1860s, his 1882 expedition to Pirongia was the first time he had studied the Kiwi in the wild. The new interest in observation of the living bird also led to the adoption of a new item of ornithological equipment: about this time Buller, like other New Zealand scientists, began to mention the use of a pocket telescope or binoculars.[207] This was not just a matter of instruments of sufficient optical quality having become available; binoculars, for instance, had been available for some time and had already found many other uses as military officers' field glasses, opera glasses, or "double race glasses" before ornithologists took them up. Even in science, fashion rules.

In the 1880s and into the 1890s Buller made special expeditions to collect one other species: the Huia Heteralocha acutirostris. On one of these expeditions in October 1883 Buller and his brother-in-law Gilbert Mair spent three days with a Maori Huia-hunter in bush country in the Wairarapa region south-east of Masterton. They shot sixteen

Huia and caught another pair alive. The Huia was not difficult to catch. It flew only weakly, generally progressing by leaping from branch to branch. It would respond to an imitation of its whistle by bounding up to investigate. Buller's guide attracted one so close this way that, as Buller wrote, "I could easily have knocked the pretty creature over with a stick, but had not the heart to do so. I was less scrupulous, however, about having him caught".[208] The live Huia went to his aviary in Wellington, which at this time held a wide assortment of native birds.

Apart from taking specimens for his own ornithological studies, Buller supplied New Zealand birds to museums and private collections in many countries, but especially in England. Indeed, as suggested earlier, the apparently disparate positions Buller took in the 1890s on the issues of collection and conservation of native birds have as their common feature his association with socially eminent English men of corresponding views. The most notable of these men were Lord Onslow and Walter Rothschild. Buller's association with Onslow in the campaign for the establishment of the island reserves and the legal protection of the Huia in particular has already been described; here we will examine Buller's contemporaneous dealings with Rothschild.

After selling his collection of birds to Rothschild in 1888, Buller continued to ship further specimens to him -and also accumulated many more on his own account. In March 1892 he wrote to Rothschild explaining that when he had seen that the Huia was about to be gazetted a protected species, "I sent out two parties of Maories into the woods....they did not bring in many -only three, all of which I am sending you in spirit....I have been most anxious to obtain a live pair for you, and another pair for Lady Onslow; but it is too late now".[209] Nor was there any hope of obtaining the even rarer Takahe Notornis mantelli since the government had made Resolution Island, where it was thought to survive, a reserve. "It is an excellent step", Buller told Rothschild; "but I cannot help regretting that I was unable to get you a specimen...before this was done."

In 1891 and 1892, as well as collecting specimens for Rothschild, Buller promoted "Lord Onslow's proposal" for the preservation of native birds on island reserves, both in his addresses to the Wellington Philosophical Society and in his private communications with the Premier, John Ballance. Ballance, who appears to have taken personal responsibility for implementing the proposal, was ready to take Buller's advice and assistance. Thus in September 1892, when it appeared that parliament would vote no further funds than the £200 for the custodian's salary for the Resolution Island reserve, Ballance asked Buller to approach the

acclimatisation societies to see whether they would finance the building of a hut on the island, so that a custodian could be appointed and begin the work of transferring birds there.[210]

That Ballance involved Buller in this process appears to reflect several considerations. Although Buller had no official status as a scientific adviser he was New Zealand's pre-eminent ornithologist, President of the Wellington Philosophical Society, and had publicly supported "Lord Onslow's proposal" for the island reserves. At the same time Buller had been cultivating Ballance's acquaintance, had become an important Liberal supporter and had offered a substantial financial contribution to the Liberals' purchase of the New Zealand Times newspaper.[211] Earlier, Buller had expected to be appointed to the Legislative Council,[212] but Ballance was now suggesting another honorary appointment for him, in London -as a New Zealand representative on the governing body of the Imperial Institute. The Institute was a grand scheme of the Prince of Wales intended to commemorate the 50th jubilee of Victoria's reign in 1887. The initial floating of the idea at the Colonial and Indian Exhibition of 1886 had been assisted by Buller's contribution of £5,000, for which he had been rewarded by a knighthood in the colonial Order of St. Michael and St George. The scheme for the Imperial Institute had been beset by opposition at home and apathy in the colonies, and

by 1892 it was only just becoming established.[213] Buller's appointment as New Zealand representative[214] (along with Westby Perceval, the Agent-General) was of little consequence for the government and no financial support was provided. Buller, however, energetically promoted and organised a display of New Zealand products to take to London for the opening of the Institute. At the same time, Ballance used his assistance and took his advice in the island reserves scheme.

The idea that the acclimatisation societies might assist in the scheme had been suggested by Sir James Hector, the government's scientific adviser, in his official report on the Onslow memorandum. The notion that the societies should be involved is an indication both of the lack of any other established body with an interest in bird preservation, and of how far the role of the acclimatisation societies had shifted. Their original role of introducing and establishing new species had almost disappeared; indeed in 1895, partly as a result of an approach by some of the acclimatisation societies, the relevant legislation (the Animals Protection Act 1880) was amended to prohibit the introduction, importation, or release of any animal or bird for "sport, or acclimatisation, or as game", or of any reptile or insect at all, without the consent of the Minister of Agriculture[215] -in other words to ban acclimatisation in its older sense. By the 1890s the acclimatisation societies, although they retained that title, had become more involved in raising,

preserving and administering the existing animals of interest to sportsmen, rather than in introducing new ones. The term "acclimatisation" was accordingly becoming little more than a label for such fish and game organisations and their activities.

During 1892 Buller continued to lobby Ballance concerning "Lord Onslow's proposal" for the island reserves. In June, when news reached Wellington that the Ngati Wai of Little Barrier Island had sold cutting rights for the Kauri timber there, Buller was among those who wrote to Ballance to protest. He urged that the Government take action to stop the felling and to complete its purchase of the island: "Just at this moment when every right thinking man in the Colony is rejoicing that your Government is doing what former governments have only talked about, comes this deplorable fact that this work of destruction has already commenced!"[216]

When, however, as a result of Henry Wright's subsequent report to the government on Little Barrier Island, Ballance decided to concentrate all efforts in the reserve programme on that island and to drop the proposal for a custodian on Resolution Island, Buller was rather put out. He complained to Ballance's secretary that the move placed him in "a very false position" in relation to the acclimatisation societies from which he had obtained finance for the Resolution Island

reserve. Furthermore, he had also led one of his collectors, Charles Robinson, to expect that he could get him the job as custodian at Resolution Island.[217] Ballance, however, favoured Wright as custodian at Little Barrier. Wright was an enthusiast for preservation, and a man of some education. Robinson's main interest in the custodian's position was that it was a government job with a secure income to support his young family. He had experience with native birds, but only in the business of supplying Buller with specimens for scientific purposes. He had pinned his hopes on Buller -he had even named his latest child after him. Buller was rather embarrassed about his promise to Robinson, but he had to agree with Ballance that Wright was better suited for the task.[218] In December 1892 Wright was sent to Little Barrier Island with injunctions restraining the timber felling there.

At the same time, Ballance also raised with Buller the issue which had been particularly stressed in the Onslow memorandum -preserving the Huia. Earlier, the idea of transferring some of these birds to Resolution Island had been considered and Buller had suggested that Robinson should be sent out to capture some for that purpose.[219] Ballance now asked whether Huia would thrive on Little Barrier Island. Buller gave his considered scientific opinion that they would. And, making the best of the changed situation, he suggested that the government should employ not only Wright as custodian but

Robinson as well, "to assist in systematically stocking the Island by catching Huias Kiwis Kakapos Crows [Kokako Callaeas cinerea] and Thrushes [Piopio Turnagra capensis]".[220] Ballance acted on Buller's advice and set the scheme in motion.

The minutiae of this scheme would be of no particular interest except that it appears that Buller managed to divert this official effort at conservation of native birds to the collection of specimens for his own private purposes. The available records will thus be surveyed in some detail.

On 14 January 1893, after Buller had introduced Robinson to Ballance,[221] a permit was signed by the Colonial Secretary under the provisions of the Animals Protection Act allowing Robinson "to catch or take some specimens of the bird known as the Huia (Heteralocha acutirostris) for the purpose of placing the same on Little Barrier Island".[222] On 17 January Buller reported to Ballance that "Robinson went off yesterday morning in high spirits on his Huia Expedition. I gave him all the necessary introductions and directions".[223] Robinson returned from his expedition two weeks later and went on to Little Barrier Island where he took over as custodian. Wright, it seems, had not wanted that position permanently. Robinson eventually sent in a report on his progress, with a request for payment of his expenses. But, complained Ballance in reply, "you did not make any

allusion to your success or non-success in obtaining Huias".[224] A month later Ballance died and Robinson's efforts to obtain Huia for Little Barrier Island were forgotten.

More of what had happened is indicated by a letter Buller wrote to Rothschild on 3 February 1893:

> After three years' persistent effort, I have at length, I am delighted to say, obtained a beautiful pair of live Huia (Heteralocha acutirostris) for you. As I have mentioned before, this bird is now protected by the Government from being shot or taken alive under a heavy penalty. I managed, however, to get a dispensation from the Colonial Secretary for the man who brought these into Town.
>
> As I am going Home myself by the "Coptic", leaving this port on the 2nd March, I will not trust these birds to any one but will keep them here this month and take charge of them myself on the voyage.[225]

Not surprisingly, Buller left few traces of his double-dealing over the Huia plan.[226] But although his diversion of the Huia intended for Little Barrier Island appears to have gone quite undetected, there were many general rumours that he was trafficking in rare and protected species. Hardly had Robinson landed on Little Barrier Island before rumours began that he was sending birds from there to Buller. By August 1893 when the New Zealand Graphic ran a feature article on Buller describing him as the most popular colonial in London, it alluded also to the "rumour which probably does him great injustice.... It is almost

inconceivable that a man in his position and of his opinions should privately countenance such things".[227]

When word of this reached Buller in London he quickly wrote to try to scotch the rumour:

> Seeing that I was actively associated with Lord Onslow in getting both Resolution Island and the Little Barrier set apart as bird preserves, and that I am practically responsible for the appointment of the excellent custodian of the Barrier, Mr Charles Robinson, it is difficult to conceive how I could connive at any practices calculated to defeat our object.[228]

Here Buller is exercising his skill in advocacy on his own behalf. It might have been difficult to conceive that he could connive at such a thing, but he did not deny it directly, for that was exactly what he had done. Not, perhaps, by directly smuggling birds from the island as rumour had it, but certainly in the case of the Huia intended to be released there.

Robinson appears to have been no more than a pawn in the whole affair. He had Buller to thank for the custodian's position on Little Barrier Island and may well have regarded him as having some official standing or authority. And certainly Robinson was not at all clear about what he was supposed to do in his new position on the island. This was not really surprising, for no one else seemed to know either. In 1893 negotiations to purchase the island were at a stalemate and although there had been much talk of making the

island a reserve and of protecting the Stitchbird Notiomystis cincta (a species which survived only on this island), no formal steps had been taken to do either. Robinson's powers and duties were thus very vague. When J.H. Boscawen, the Department of Lands chief clerk in Auckland, visited to check how he was doing, Robinson told him that he had not even seen any Stitchbirds -and casually added that when he did he would try to shoot some "for scientific purposes".[229] For many years he had supplied birds as scientific specimens to Buller and evidently did not realise that his new job was supposed to be any different.

When rumours continued that birds were being smuggled from the island and that Buller was somehow involved in the illicit trade, Buller made a further effort to put an end to them. In November 1894 he turned against Robinson: he went to Robinson's departmental head, the Surveyor-General, S. Percy Smith, and informed him confidentially that he had reason to believe that Robinson was indeed shooting birds on the island and sending them to dealers in Auckland. Buller urged that action be taken to put a stop to this, but insisted that his name was not to be mentioned as the informant in the matter.[230]

As a result a police investigation was instigated. Tenetahi and the other Ngati Wai still living on Little Barrier Island were questioned, Robinson's mail from the island was watched,

and in June 1895 he was interrogated there. When informed that he was under suspicion of "shooting and trafficking in Stitch Birds", Robinson admitted being in correspondence with Sir Walter Buller but insisted that he had sent only one box to him, and that contained only insects. He denied shooting any birds at all -apart from Pigeon and Kaka for the pot, and a Kingfisher he had shot without thinking. His tent was then searched, but nothing incriminating was found. The police concluded that the charges against Robinson were "entirely unfounded".[231]

But the rumours continued and questions even began to be raised in parliament.[232] In August 1895 Buller himself added fuel to the flames by an incautious statement in a paper to the Wellington Philosophical Society. While arguing that a "complete series of our existing native birds" should be obtained for the New Zealand museums "before it is too late", he mentioned Rothschild's museum as a model of excellence and spoke admiringly of its "huge series" of New Zealand birds, including "seventy or more" Stitchbirds.[233] This last reference was reported in the newspapers and drew a strong reaction. Correspondents condemned collectors in the strongest possible terms: they were "far greater destroyers of our birds than stoats and weasels". There was great indignation that Little Barrier Island had been plundered despite the government protection, and that "the most interesting and unique bird fauna in the world should be

destroyed to satisfy the greed of a few unprincipled collectors, and to enrich public and private collections in Europe, while our own museums are neglected".[234] As the last comment indicates, the sentiment in favour of protecting native species was outweighed by the perceived affront to local pride. This feeling of local or national pride in relation to native species, which became an important element in the colonists' attitudes toward them, will be considered further in the next section of this chapter.

Ironically, shortly after Buller presented his paper praising Rothschild's "huge series" of specimens, a letter arrived from Rothschild complaining that Buller was sending him too many skins that he had "no use for". Rothschild did not want any more Stitchbirds -there were eighty or ninety in his museum already. "I cannot quite make out what species I have sent that you disapprove of", Buller replied, in hurt tones. "I really think there is some mistake". He had sent only twelve Stitchbirds "and all of these were collected by [Edward] Spencer before the Little Barrier Island was proclaimed a reserve". And he proceeded to despatch his latest consignment of fifty-five bird skins, plus two insects -Giant Weta Deinacrida heteracantha from Little Barrier Island, evidently those sent by Robinson.[235]

In October 1895 the question of trafficking in Stitchbirds from Little Barrier Island was raised again in

parliament.[236] Buller wrote directly to the Minister of Lands, John McKenzie, categorically denying any involvement. "I have never received a skin from [Robinson], directly or indirectly.... I think the man is thoroughly trustworthy, and, seeing that I recommended him for the post, I should regret very much to find myself deceived".[237] He explained that the dozen Stitchbirds he had recently obtained came from a dealer in Auckland, and were old skins prepared by Andreas Reischek long before there had been any idea of making Little Barrier Island a reserve.

By this time Buller had aroused McKenzie's ire over another issue concerning Maori land at Horowhenua. Buller, who had bought and leased part of the Horowhenua block from Keepa Te Rangihiwinui ("Major Kemp"), was acting for Keepa in actions challenging the legality of the Government's purchase of another piece of the block for a State Farm. McKenzie was particularly annoyed by the many newspaper editorials, evidently written by Buller, which accused him of making surreptitious and improper payments to obtain the land. McKenzie considered, with justification, that Buller's own titles in the Horowhenua land had been obtained by dubious means. McKenzie believed passionately in the cause of "lands for the people" and in parliament would recall with anger the evils of the Highland Clearances when tenant farmers had been evicted to make way for the sheep runs of absentee landowners. But, as McKenzie's support for the Little Barrier

Island Purchase Act showed, his concern for the rights of small-holders was only for colonists; it did not extend to Maori small-holders. Further details of the complex Horowhenua Case, which eventually developed into a major public feud between Buller and McKenzie, lie outside the scope of this study,[238] but it poisoned Buller's relationship with the Seddon Government from 1895 until McKenzie's death in 1901.

Thus when Buller wrote to McKenzie in October 1895 denying any involvement in the rumoured trafficking in birds from Little Barrier Island, his letter did nothing to dispel McKenzie's distrust. He called in his departmental head, S. Percy Smith. What passed between them is not recorded, but the same day Smith wrote to his Auckland officers requesting that they see Tenetahi about reports that he had seen Robinson skinning Stitch-birds, and obtain from him a statement "in such a form as it could be made use of".[239] As soon as a sworn statement was obtained from Tenetahi that he had actually seen two Stitchbird skins in Robinson's tent, McKenzie ordered that Robinson be dismissed.[240] The Auckland Lands Department staff, who were evidently rather sorry for Robinson in his Crusoe-like existence on Little Barrier Island, apparently let him believe that his services were no longer required -that the government no longer required a caretaker there. Robinson returned to his family in Wellington. For years afterward he wrote to Seddon and

other Ministers, not complaining that friends and fortune had deserted him, but begging for some other employment in the government service.[241]

Even by the rather flexible ethical standards of the time, Buller's action in diverting the Huia -misusing both his position of trust with Ballance and Robinson's trust in him, and sabotaging the reserve scheme which he had promoted for Onslow, -was thoroughly dishonourable. Viewed in retrospect the enormity of his action appears even greater, for Robinson's Huia proved to be some of the last ever taken into captivity before the species became extinct.

The subsequent history of efforts to conserve the Huia can be briefly sketched before considering the context of Buller's conflicting roles. McKenzie, who dealt with matters relating to the island reserves after Ballance's death, did not have Ballance's personal interest in the reserves scheme, though he did carry it on. Nor did McKenzie take any advice from Buller; in fact he developed an obsessive antipathy toward him during the Horowhenua Case. But whether or not McKenzie's suspicion of an idea promoted by Buller had anything to do with it, no further efforts to obtain Huia for the island reserves were made while McKenzie was in charge.

In April 1899 McKenzie sailed for London to seek medical treatment for the cancer he was suffering from. Shortly after

he left, Percy Smith tried to arrange for a collector to obtain some Huia for Little Barrier Island. Smith was encouraged by the only Maori in Cabinet, James Carroll, who as acting Colonial Secretary granted the permit for the protected birds to be taken.[242] Their efforts, however, came to nothing. In subsequent years many official expeditions were sent out, but none were successful; no Huia were found.[243] Or if they were, the price on their skins or feathers was so much more than the government offered that they were never brought back alive.[244] The legislation protecting the birds was no deterrent. The dealers Henry Travers and A.J. Jacobs, for instance, were both convicted and fined £5 in 1896 for shooting seven Huia[245] -but each skin could fetch more than that. During the royal tour of 1901, when the Duke of Cornwall and York visited Whakarewarewa his guide Makareti ("Maggie Papakura") gave him a Huia tail-feather to wear in his hatband. This Maori insignia of rank instantly became fashionable and the price paid for feathers rose accordingly, soon reaching £1 apiece.[246] A Huia with a full complement of twelve tail feathers thus became a very valuable commodity and all available supplies were raided. Specimens in museums or stuffed in private display cases had their tails tweaked; living birds became worth too much to leave alone. Market forces operated; any sentiment in favour of protection or even for conserving a continuing supply was overwhelmed by simple cupidity. The hunting pressure on the already

dwindling Huia population intensified, hastening the final extinction of the species. The last recorded sighting of a living bird (or rather the last to be accorded scientific credibility) was in December 1907.[247]

Buller's motivation in diverting Robinson's Huia to Rothschild was evidently rather more complex than mere cupidity. He did receive considerable sums from Rothschild for specimens[248] but this was not the only consideration, as his public addresses and his private letters to Rothschild show. It is clear that although he continued to publicly express some hope that native birds such as the Huia could be preserved on the island reserves, privately he was never convinced. But he had become concerned that efforts should be made, for, as he told the Wellington Philosophical Society, such efforts "whether in the end completely successful or not, will in any case save us from the reproaches of posterity" -the same rationale as he gave for smoothing down the pillow of the dying Maori race.

Apart from a general concern for appearances, several more personal concerns may be suspected in some of the sentiments Buller expressed at meetings of the Wellington Philosophical Society. For instance, in a paper presented there in August 1895 Buller applauded the "wise action of the government in setting apart two islands...for the conservation of the indigenous fauna and flora".[249] At this time he was still

on close terms with Seddon and other ministers (though not with McKenzie), and had hopes of some important government appointment.[250] He even praised McKenzie for his decision to acquire Kapiti Island as a further reserve. Then he added a further appeal:

> I only wish I could report that steps were being taken to give effect to Lord Onslow's original proposal, to collect rare birds in various parts of the country and turn them loose on the island preserves -such birds, for example, as Kakapo, Kiwi, Huia....[251]

He repeated this appeal in his papers so often as to suggest the compulsion of guilt. "For my own part, I am most anxious that we should escape the reproach of posterity", he kept telling the Philosophical Society.[252] In his Supplement to the "Birds of New Zealand", written in London in the last years of his life, while referring to the "celebrated" Onslow memorandum which "gave the first impulse to this insular-conservation which has so taken hold of the popular fancy",[253] he also alluded to the matter of the Huia five times more. "I remember urging upon Mr Ballance that a few Huias Piopios and Kokakos should be taken alive, whilst that is still possible, and liberated on the island.... but I fear this has not yet been seriously attempted".[254] These appeals were rhetorical only; he did not make any representation directly to the government. As already mentioned, many further official attempts to obtain Huia were in fact made, but without success.

At the same time, believing as he did that the indigenous species were bound to die out, he argued that it was a duty to science and posterity to take specimens while they could still be found. As he went on to tell the Wellington Philosophical Society in his paper of August 1895, "it is surely high time that an effort was made to collect for each of our museums, before it is too late, a complete series of our existing native birds.... It will be a sad reproach to us, living as we do in this boasted nineteenth century, if in this respect we fail in our manifest duty".[255]

Buller clearly enjoyed acquiring and handling specimens of rare birds. When the third Takahe Notornis mantelli known to science was captured in 1881, although his bid to acquire it for his own collection failed, he was asked to describe it for colonial science before the specimen was despatched to London. As he related it to the Wellington Philosophical Society, this was not so much an assignment as an assignation: "retiring to the Museum Library, I shut myself in with Notornis, handled my specimen with the loving tenderness of a true naturalist, sketched and measured its various parts, and made a minute description of its plumage".[256] Notornis was perhaps the pinnacle of desire, for it was all but unattainable; in the eyes of connoisseurs like Buller and Rothschild, the rarer the species, the more desirable the specimen. Buller thus

continued his efforts to obtain specimens of rare New Zealand species for his own collection and Rothschild's -especially Rothschild's. Sending specimens to Rothschild meant that he could take pride in building up a collection "richer in New Zealand things than the British Museum, or indeed any Museum in the world"[257] -without the problems of housing and looking after it.

But underlying all of this was Buller's orientation toward England as the centre of his scientific and social universe. For Onslow he advocated the protection of the Huia and for Rothschild he obtained specimens of it. The anomaly was more in the first than the second: sending back specimens and live animals from the colony for private and public collections at "home" was expected of colonial scientists and for many years Buller had fulfilled this role and exploited it to his advantage. In the imperial centre the expectation was still strong, and the rewards still available. Rothschild was only one of many who asked Buller to oblige them with specimens. Alfred Newton, for instance, while decrying the disappearance of native New Zealand birds, continued to seek specimens of them for his Cambridge University Museum. And Buller continued to supply them -finally being rewarded in 1900 with an honorary D.Sc. As the University orator explained at the ceremony:

> Quantum autem liberalitati eius etiam nostra Academia debeat, Musei nostri parietes, avium et animalium aut

> prorsus aut prope extinctorum exemplis ornati, satis clare loquuntur: "the walls of our museum, adorned with specimens of birds and animals, either quite or almost extinct, tell clearly enough how much our academy owes to his generosity".[258]

Buller's activities in getting and sending specimens were thus part of an established colonial pattern. As the birds became rarer the demand for specimens for the metropolitan collections grew, and the colonial suppliers and their collectors thus redoubled their efforts, especially as the protective restraints of conservationist policies threatened to make the birds even less available. In Buller's case this redoubling of collecting effort can be demonstrated from the available records of the specimens that passed through his hands. Analysis of lists of specimens supplied and of his labels on specimens still held in museums around the world, indicate that he greatly increased his collecting activities in the 1890s and especially in 1892, at the time the government was moving to implement the recommendations of the Onslow memorandum to protect and conserve the native birds.[259]

His activities in obtaining Huia followed this general pattern. Early in 1892, knowing the government was about to gazette the Huia a protected species, he sent out two parties of Maori Huia-hunters and also went on an expedition himself to collect specimens of the bird.[260] As he told Rothschild afterward, he was not as successful as he had hoped: "I have been most anxious to obtain a live pair for you, and another

pair for Lady Onslow; but it is too late now".[261] However, as his specimen labels and other records show, he continued to obtain Huia despite the protection gazetted in February 1892. In November he went on another expedition to the Puketoi range (east of Pahiatua in the Wairarapa district) and shot several more.[262] Robinson's live pair in January 1893 were but two more in a long series.

At the same time, the idea of conservation had, as he put it in 1898, "taken hold of the popular fancy" in New Zealand.[263] Although, as the Onslow memorandum demonstrates, this development too was partly in response to metropolitan ideas and opinions, there was a strong element also of a new interest and pride among the colonists in those things characteristic of New Zealand and a new opposition to their being taken as specimens for foreign museums. This "nationalistic" context of conservation ideas will be examined further in the next section.

5.12: Collecting, Conservation and National Sentiment

Although Buller and others continued through the 1890s to trade in specimens of native species, colonial attitudes on such activities were changing. The persistence of the rumours about "trafficking" in skins of rare birds from Little Barrier Island, and the fact that they were taken seriously

enough to raise in parliament, clearly demonstrate this. The activities of the collectors -taking and exporting such specimens -were beginning to be regarded unfavourably and a new sentiment was becoming heard: that indigenous things identified particularly with New Zealand should be retained and preserved in their native land. In this section the case of the extinction in 1894 of the Stephens Island Wren Traversia lyalli, and the reactions of Buller and others to it, will be discussed to provide comparisons and contrasts with the developments at Little Barrier Island and to illustrate further the conflict between older ideas of native species as subjects to be collected for imperial science, and newer sentiments of colonial patriotism which called for them to be retained and protected in New Zealand. The section, and this chapter, will conclude with a discussion of this patriotic sentiment for New Zealand and its native life, especially as expressed by Buller.

The shift, by the 1890s, in attitudes toward native things can be seen in the comments by parliamentarians such as Seddon on the one side or Thomas McKenzie on the other, about the "beautiful" native forests and birds and the importance of "preserving what is so beautiful and so rare" -and even in the re-emergence of references to the "noble" Maori race,[264] -although, as mentioned in the discussion of the tension between conserving native species and conserving the rights of the native people, the colonists' newly protective

sentiment did not extend to the Maori people.

The shift in attitudes can also be seen in the opinions expressed in the philosophical societies. In the 1870s the early conservation proposals of T.H. Potts had been largely ignored and the scientific practice of collecting specimens accepted as a matter of course. In July 1894, however, Buller prefaced one of his regular papers of observations of rare species and descriptions of specimens, with a lengthy discussion of the progress in "conservation" of Little Barrier and Resolution Islands (using the word in the sense of official reservation).[265] In the discussion following his paper Buller was praised for "protesting so strongly against the wholesale destruction of our native birds".[266] This identification with "our" native things, which had been unusual when Potts made it in 1870, was becoming more common. Colonists who at first had missed the familiar creatures of the old country were beginning to identify more with those of the new, and especially with those distinctive to New Zealand.

The contradiction between Buller's protestations about the destruction of native birds and his display of newly acquired specimens no longer went unremarked in the philosophical society. Privately, some members (including James Hector) protested against the wholesale destruction by Buller's collectors. Many of the specimens he described in his paper

had been collected by Henry Travers during a recent patrol by the government steamer Hinemoa round the subantarctic islands. Buller had obtained special permission from the Premier, Seddon, for Travers to go on the Hinemoa. As Buller explained to Walter Rothschild, when sending him a shipment of 136 skins and four live birds, Travers had taken full advantage of his opportunities.

> Sir James Hector is so alarmed at what has been done that he is moving the Government to absolutely prohibit the taking of any kind of bird on the islands by the officers and crew of the 'Hinemoa', which is a Government gunboat, and the only visitor to these remote islands. Now that you have got a good representative series in your unique museum, I am prepared to go heartily with Hector, and to put a stop to the killing; for unless something be done soon these singular island-forms will assuredly become extinct.[267]

By the time he next wrote to Rothschild, Buller had forgotten about going "heartily with Hector" to put a stop to collecting on the subantarctic islands. "In spite of the ridiculous Government prohibition", he assured Rothschild, "I hope to get some good Island-species for you on the return of the 'Hinemoa'".[268] Despite the growing sensitivity about "trafficking" in rare native species as shown by the comments in the Wellington Philosophical Society and the rumours at this time about Buller's activities in relation to Little Barrier Island, and despite the prohibition which banned Henry Travers from further collecting trips on the government steamers -for all this, members of the crews of the steamers could still be persuaded to bring back specimens for Buller

from the islands they visited when checking for castaways or servicing lighthouses. The most notable find came from A.W. Bethune, second engineer on the Hinemoa. Bethune was particularly interested in birds and had begun a collection of his own. Late in 1894 he showed Buller some bird skins he had obtained at the new lighthouse on Stephens Island in Cook Strait. Among them Buller was surprised to see one which was a new species, unknown to science.

There is probably nothing so refreshing to the soul of a naturalist as the discovery of a new species", Buller wrote in 1895 when describing the occasion. "Quite apart from the satisfaction of being able to impose a specific name which, according to the accepted rules of zoological nomenclature, must be respected for all time, there is an indescribable charm in the mere fact of discovery.[269]

Apparently the tiny dappled bird had been found by one of the lighthouse keepers after it had been caught by a cat. Buller persuaded Bethune to lend him the skin so that he could give the new species a proper scientific description and have it illustrated in London.[270] He wrote up a paper naming it Xenicus insularis, the Island Wren, and sent the paper and the skin to Ibis, the journal of the British Ornithologists' Union.

On Stephens Island, when the cat brought in more of the birds one of the lighthouse keepers thought they might be valuable and sent them to Henry Travers in Wellington. Travers wrote immediately to offer them to Rothschild, mentioning that "I shall be glad if you will cause the name of Mr D. Lyall, Lighthouse Keeper Stephens Island to be mentioned as the discoverer, & that it was forwarded to you by me".[271] Rothschild took the hint and wrote a paper describing the new species in a new genus: Traversia lyalli. At the next meeting of the British Ornithologists' Club (the London social and scientific club of the British Ornithologists' Union) Rothschild's museum curator read the paper, even though members mentioned that Buller's was already in the hands of the editors of Ibis. Consequently, Rothschild's paper was published in the Club's Bulletin a few weeks later in January 1895, while Buller's, delayed while Keulemans drew the illustration, did not appear in Ibis until April.[272] Rothschild's name thus had priority over Buller's.

This of course spoiled Buller's delight in the discovery of the new species. He complained that Rothschild should have withdrawn his paper when he learned that Buller's was already in the press. Buller petulantly refused to accept Rothschild's name. "Any technical construction of the rules of nomenclature notwithstanding, I think I am justified, under the circumstances, in adhering to the specific name

originally bestowed by me".[273] Some of his scientific fellows in New Zealand followed him in this, but none in England. The rules of scientific nomenclature make no exceptions for discourtesy, but it is interesting to speculate on what the outcome might have been had it been the other way about and colonial Buller had tried to push in ahead of the Hon. Mr Rothschild.

In the meantime Buller had written to David Lyall, the assistant lighthouse keeper on Stephens Island, asking for more specimens of the wren; and Henry Travers had gone there himself to look for them. Only a few more were captured (mostly by the lighthouse keepers' cat) but by the end of the year there were none left.

The pathetic story of the Stephens Island Wren exterminated by the lighthouse-keepers' cat has since entered popular and scientific conservationist literature as a classic example of the rapid extermination of a native species by an introduced predator.[274] It is worth pointing out that the case is not quite as extreme as it is usually painted: the 16 or 18 birds Travers, Buller and Rothschild obtained may possibly have been brought in by a single cat, but these birds were not the entire population of the species, and nor was this cat the sole agent of their destruction -the island was overrun with cats.[275]

While the Stephens Island Wren drew most attention, many other species on the island were sharing the same fate. When construction of the lighthouse had begun there in 1892 the workmen had found themselves surrounded by birds. The island was small, isolated, and cliff-bound, and until then it had rarely been visited. It was still covered in bush, and no rats, stoats or other foreign predators had been introduced. It was like a lost world: Piopio Turnagra capensis, Saddleback Philesturnus carunculatus and other birds then scarce on the mainland flocked like sparrows about the men's camp and at night there were so many Tuatara "lizards" (Sphenodon punctatum) about that it was almost impossible to avoid treading on them.[276]

Word of this abundance had soon reached the collectors. In January 1893, Buller reported to the Wellington Philosophical Society that he had received specimens of Piopio and Saddleback from Stephens Island, "so it is to be hoped that these small island sanctuaries will be the means of preserving many of these rare forms".[277] At this time Buller was organising Charles Robinson's Huia expedition and advising Ballance about the "native birds' sanctuary" proposed for Little Barrier Island. His argument here seems to be that if "rare forms" could survive on Stephens Island then they should also survive on the proposed sanctuaries of Little Barrier and Resolution Islands. He might well have carried his argument about Stephens Island a logical step

further: here was an island which was a natural sanctuary, already stocked with rare birds, and already under government control. Why not add it to the Onslow scheme and proclaim it a reserve as well? But at this time neither Buller nor anyone else seems to have made the suggestion.

By 1894 it was already too late. Sheep, cattle and cats had been brought to the island and the lighthouse keepers had begun clearing the bush for their stock. Early the following year David Lyall reported to Buller that "the cats have become wild and are making sad havoc among all the birds". The Wren had already gone and the Piopio and other species were disappearing rapidly.[278]

However, the extinction of the Stephens Island Wren did not go unnoticed in the popular press as it might have done in earlier years. "This is probably a record performance in the way of extermination" commented the Christchurch Press. "The English scientific world will hear almost simultaneously of the bird's discovery and of its disappearance". And as well as the nod to England the paper added a new note of national feeling. "Not only scientists, but all New-Zealanders who take an interest in the preservation of whatever is especially characteristic of the colony, will deplore the extermination of such an interesting creature".[279] Here was a case of the extinction that Buller had always expected would be the fate of all native

things. Thus although he allowed that it was "impossible not to agree" with the regret expressed by the Press, he was more concerned that no local museum had managed to acquire a specimen.[280]

But, as the reaction of the Press indicates, just as colonists were beginning to regard themselves as "New-Zealanders", their attitudes to the loss of native species were changing. In particular, there was increasing criticism of the activities of collectors taking specimens of rare native species, especially when the specimens were sent out of the country. In 1895 W.W. Smith (who ten years earlier had himself supplied Buller with specimens) wrote also to the Press urging government intervention to stop the "marauders, commonly called natural-history collectors, from visiting the outlying islands of New Zealand and carrying off the Tuataras and rarer birds by hundreds".[281]

As Smith's comments suggest, there was particular sensitivity by this time about the Tuatara Sphenodon punctatum. Specimens of this reptile had been in great demand among European scientists since Alfred Gunther of the British Museum had discovered in 1867 that the Tuatara was unlike any other living species, belonging to an Order known otherwise only from fossils.[282] As T.H. Huxley put it, the animals of New Zealand -"so remarkable and so isolated from all other faunae" -appeared to be "a remnant, as it were, of a life of

the Poikolitic period which has lingered on isolated and therefore undisturbed, down to the present day".[283] It appears to have been this idea of the Tuatara as a "living fossil" peculiar to New Zealand, which gave it its popular interest among the colonists, for it was also described in newspaper accounts as "the ugliest of all creeping things".[284]

When suggestions were eventually made in January 1895 that Stephens Island should be proclaimed a reserve it was the Tuatara that was specifically referred to. However, again the proposal for reservation was not made in the philosophical societies but at the Australasian Association for the Advancement of Science, then meeting in Brisbane.[285] As in 1891, the New Zealand government responded promptly to the request from AAAS and on Hector's advice gazetted the Tuatara a protected species under the Animals Protection Act, and requested the Stephens Island lighthouse keepers to protect the reptiles and prevent the introduction of further predators.[286] Later, in September 1898, the protection was extended to explicitly include Tuatara eggs, apparently in response to doubts raised by the collecting activities of two German scientists in particular: Hugo Schauinsland, who visited Stephens Island in January 1897 and G. Thilenius, who sought passage there by the government steamer in 1898.[287]

At a meeting of the Wellington Philosophical Society Buller applauded Hector for obtaining "protection for that unique representative of an ancient fauna.... rendered necessary by the wholesale way in which Tuataras were being collected for trade with Europe and America". But at the same time Buller made it plain that he was still convinced of the inevitable displacement of native species, whose "ultimate extinction within measureable time is a matter of certainty, except in so far as a remnant may be preserved through the protective action of the Government".[298]

Buller's comments here may be compared with the idea he expressed earlier in the Onslow memorandum, that native species could be helped by government intervention to "linger longest" on island reserves. His limited view, constrained by prior assumptions of displacement, is representative of much of the thinking of the time on "preservation" or "conservation" of native species. Thus it was felt that government protection or "conservation" might isolate the disappearing forms from colonisation and progress, and help them to linger on, but their ultimate extinction could only be postponed.

At the same time, however, there was certainly a growing sentiment in favour of preserving and retaining those species distinctive to the country, rather than allowing them to disappear or to be exported, even to England. Several

expressions of this sentiment have already been noted: W.W. Smith's indignant protest in 1895 about "marauders" raiding Stephens Island and "carrying off the Tuataras and rarer birds by hundreds";[289] and the complaints in the same year about continued collecting on Little Barrier Island, on the basis that "the most interesting and unique bird fauna in the world" should not be "destroyed to satisfy the greed of a few unprincipled collectors, and to enrich public and private collections in Europe".[290]

A strong element of affronted patriotic feeling and national pride is evident in such expressions. However, other influences behind the new support for ideas of protection and conservation of native species should also be considered. For instance, it might be argued that the increasing popular interest among the colonists in New Zealand native birds simply reflected contemporary developments elsewhere in the Western world, where sentimental interest in animals, and especially birds, was increasing. In Britain the more brutal animal sports -bear baiting, bull running, cock-fighting, hare coursing, pigeon shooting -had been progressively going out of favour.[291] Feeding the birds was becoming an accepted practice especially in urban areas. On both sides of the Atlantic a host of protectionist pressure groups were springing up to oppose cruelty to animals, vivisection, and the fashion trade in fur and feathers.[292] The movement for protection of wild birds, in Britain in particular, was

strongly associated with these latter concerns. The passing of the (British) Wild Birds Protection Act of 1872 as a result of protests about "bird murder" has already been mentioned in Chapter 5.4; further Protection Acts were passed in 1876, 1880, 1881, 1894 and 1896, supported by organisations such as the Association for the Protection of British Birds, and the Royal Society for the Prevention of Cruelty to Animals.[293] The combination of concerns is well represented by the Selborne Society for the Preservation of Birds, Plants, and Pleasant Places, formed in 1886 by the amalgamation of the Plumage League with the Selborne League (named by association with the rural district immortalised by Gilbert White's Natural History and Antiquities of Selborne). Similarly, the Society for the Protection of Birds was founded in 1889 to oppose the plume trade and later widened its interests to conservation of birds generally.[294] The SPB, like the SPCA, gained royal patronage -in 1904 and 1840 respectively.

However, the particular issues of concern in Britain were of less direct importance in New Zealand. The local plume trade aroused little disapproval; at the New Zealand Industrial Exhibition in Wellington in 1885, Hector Liardet, a local taxidermist, was awarded a "First prize" for his "very fine exhibit" of muffs and collars made from skins of mainly native birds. The three jurors included Buller and T.W. Kirk, both in later years advocates of conservation.[295]

Similarly, the issue of cruelty to animals aroused comparatively little attention in New Zealand; legislation was passed without debate and the Society for the Prevention of Cruelty to Animals (first established in New Zealand at Dunedin in 1882) gained little publicity.[296] Sports such as hare coursing and trapshooting of sparrows and pigeons were pursued in New Zealand without arousing much controversy -trapshooting of live birds continued in New Zealand until 1954, long after it had been banned in Britain.[297] The issues of prevention of cruelty to animals and of protection of native species were not linked in New Zealand as they were in Britain. Although the New Zealand moves to protect native species received encouragement from Britain, this was at a general level only and cannot be regarded as a driving influence.

Historians of American conservation ideas have noted the influence there of the reformist political philosophy of Henry George, opposing monopolistic control and exploitation of resources.[298] George's book Poverty and Progress was widely read in New Zealand and his influence can be seen in the land reform rhetoric, if not the policies, of Ballance's Liberals.[299] It might be argued that the same philosophy can also be seen in their support in the 1890s for ideas of nature conservation, or in the protests heard increasingly at that time about the activities of collectors taking rare birds and other animals -that the wild life belonged to the

whole country and should not be taken for the profit of the few.

Certainly there was in New Zealand a quite un-British enthusiasm for state intervention for any desirable end. The Liberal government was prepared to act in areas previously considered best left to individual charity and the "laws of nature": pensions were provided for the elderly poor; sanctuaries were established for the native birds. Indeed, by the end of the century there was much pride that New Zealand had led the world in such developments.[300] Buller, for instance, in his final Supplement to the "Birds of New Zealand" (1905), praised official actions toward the establishment of reserves and the legislative protection of rare species. "The Seddon Government, whatever it may have done or left undone" (at the time he was petitioning parliament for payment of costs awarded him by the Supreme Court in 1897 after the unsuccessful government action against him for fraud in Native Land dealings) -the Seddon government "has at any rate established this claim on the gratitude of posterity, that it has accomplished more than any other Colonial Government in New Zealand or elsewhere, in the way of conserving the native fauna and flora".[301] There are echoes here of his British Empire Review exposition of the "official" view of New Zealand race relations: as with the liberal treatment of the indigenous people, so with the conservation of the indigenous plants and

animals; New Zealand, Buller asserted, "should be an object lesson to the whole world".[302]

However, any element of reformist philosophy in the new impulse to conserve and retain the native fauna and flora in New Zealand was minor compared with the trumpeting of national pride. Support for government intervention to preserve native species was not confined to those of reformist political inclinations. Thomas Mackenzie, for instance, was prepared to vote with the Liberals to preserve the native forests and birds -"so beautiful and so rare".[303] One of the clearest statements of the new sentiment was expressed, once again, by Buller (who was certainly no reformer). At the same time as he looked to England for approval and acceptance, he also articulated before the Wellington Philosophical Society the new, more patriotic, conservationist ideas, that those things indigenous to New Zealand should be protected, preserved and retained in the country:

> I regard with extreme satisfaction this gradual awakening to the fact that we have animal and vegetable forms of life indigenous to the country which ought to be protected and cherished; that we have bush scenery of matchless beauty that ought to be preserved; and that, new as our record is, we have sites of pas and other places of historic interest that ought, at any cost, to be handed down unimpaired to those who will come after us. That this growing feeling is becoming part of our national life must surely delight every true lover of New Zealand.[304]

Here Buller drew together ideas about various features of the

land, all embraced within a growing national pride. As will be seen, the concern he expressed that indigenous plants and animals, bush scenery and historic sites should all be "protected and cherished" and "handed down unimpaired" became signified in terms such as the "patrimony" or "heritage" of New Zealanders.

Buller's allusion to bush scenery of "matchless" beauty may well have been deliberate paronomasia. Six months earlier, in February 1895, a neighbouring farmer's "burn-off" had spread and burnt part of the bush around the lake on his Papaitonga estate at Horowhenua. Buller took a court action against the farmer, seeking damages for his loss of scenic amenity. It was probably one of the first such cases in New Zealand and the defence lawyers argued that the idea that bush had any intrinsic value as scenery was "sentimental" only, upon which no monetary claim could be based. Buller's action failed.[305] The Wellington Scenery Preservation Society subsequently passed a motion of sympathy with him for his loss. Public feeling was increasingly in favour of preserving "our native woodland scenery", Buller wrote in reply; "I shall spare no pains to preserve [Papaitonga] in all its native beauty, as a heritage for those who may come after us".[306]

The contradictions in sentiments such as these are considerable. Buller's apparent generosity in looking to hand

down Papaitonga as "heritage" hides the rapacity by which he had gained possession of this particular piece of Maori ancestral land, which had indeed been part of the patrimony of the Muaupoko people of Horowhenua. There is also the more general contradiction of the colonist, having amassed a fortune from the spoils of colonisation -displacing the native life from the land to make way for the colonists' farms and towns -then finding a retreat among the last remnants of "native beauty", and railing against his less fortunate neighbours for continuing the process.[207] Buller was not totally unaware of the contradictions of his position. Thus in November 1892 when he went on his illicit Huia-hunting expedition to the Puketoi range, he noted how the country had changed:

> the bush has completely disappeared before the advancing wave of European settlement. From Pahiatua we rode for twenty miles through clearings exhibiting nothing but charred and naked stumps, the whole of this country being at the time of my former visit covered with beautiful forest. From the practical standpoint of material advancement there is nothing regrettable in this; but the fact remains that the home of the Huia is being swept away, and...the date of their extinction cannot be far distant.[208]

In a further account of the November 1892 expedition (written in England in 1905) Buller revealed more of the contradictions between the viewpoints of the colonist, the patriotic New Zealander, the conservationist and the collector. He described the district where he had obtained his Huia specimens ("long before the introduction of the

prohibitory law") as "now entirely covered with green fields and smiling farms...."

> One is glad, of course, to see the country thus reclaimed, but it is no less gratifying to reflect upon the fine representative series of these birds obtained, before it was too late, for the student of the future. No one is more in sympathy with the protective legislation than myself, that is to say where it can be applied with any success[209]

Similarly, although Buller publicly supported the ideas of preservation of native birds and bush scenery as "part of our national life", he showed little interest in the groups also active in New Zealand during the 1890s directly promoting national sentiment: the New Zealand Natives Associations, formed among native-born colonists "to create a feeling of patriotism and nationality...a young New Zealand party in the widest and best sense".[210] The label the "New Zealand Natives" adopted had previously applied (often with connotations of inferiority by comparison with "English", "European", or even "colonist") to the indigenous people, the Maori.[211] Indeed there was uncertainty among the New Zealand Natives Associations whether Maori even qualified for membership.[212] The new New Zealand Natives were not joining with the other, older ones; their "feeling of patriotism and nationality" were for the British colony of New Zealand.

Buller, although one of the most eminent and successful native-born New Zealanders, appears to have taken no interest in the New Zealand Natives Association, although he had long expressed support for the idea of a "Young New Zealand Party". The expression "Young New Zealand" had many connotations, more or less nationalistic.[313] It was often used to refer to the native-born New Zealanders (as opposed to the "old colonists", the pioneer immigrant settlers) or to the emerging New Zealand identity generally.[314] The political label of the "Young New Zealand Party" has been noted especially by Sinclair in relation to W.P. Reeves and other "locally-born MHRs" in 1887,[315] but the tag was earlier than that. In 1879 Indian-born C.A. de Lautour and his splinter liberal group in parliament called themselves the "Young New Zealand Reform Party".[316] When Buller stood for parliament in 1881 he aligned himself against the old political groupings and especially "foreign adventurers" like Vogel, and instead with the new generation of "rising politicians just in their full vigour.... from the ranks of young New Zealand". Rejecting de Lautour's "effete organization" he identified himself with "what may be called the Progress Party of Young New Zealand". Buller repeated this line when he stood for parliament again in 1891,[317] and even in 1895 when, as chairman of the Ward reception committee, he welcomed home the Liberal hero of the hour. By this time he evidently meant the phrase as a flattering description of the Liberal party.[318]

Buller's actions and attitudes, for all their contradictions, can be seen in terms of the orientation of the colonist toward the "old country" on the one hand and his ties to the "new country" on the other. Although when in New Zealand in the 1890s he spoke approvingly of "Young New Zealand" and the growing feeling of national pride in the native birds and scenery, at the same time he was still drawn to the "old country". After his first visit to Britain in 1871-1874 to publish his A History of the Birds of New Zealand he returned three times more (1886-1890, 1893-1894, 1899 to his death in 1906); after retiring in 1886 from the career in law that had made his fortune, he spent as much time in England as in New Zealand. Given the choice he probably would not have returned to New Zealand at all; both his visits back in 1890-1893 and 1894-1898 were forced by the need to protect his business interests there from collapse and his land-holdings from legal attack.[219] Like other successful colonists of the time he enjoyed the position at "home" that his colonial fortune brought. He was a little different from most, for he was not really returning home, but by the time he went for the last time in 1899, colonial-born Buller had become practically an Englishman. At the same time, however, he had also developed a new pride in New Zealand, almost like an expatriate's feeling for his home land. When the Governor of Fiji insulted its government, he rose in defence. When Rudyard Kipling wrote complimentary lines about it ("Last,

loneliest, loveliest, exquisite, apart..."), he mentioned him in his scientific writing to agree that New Zealand was indeed "the most lovely country on the face of the earth".[320]

Expatriate is not entirely appropriate as a term for Buller -a colonial moving to the centre of the empire. England was not a foreign place, but "home", the "mother country". New Zealand was still "the Colony"; national feeling had not developed to the stage where it was generally considered a separate, independent country. Long after New Zealand graduated beyond formal colony status, native-born New Zealanders would have agreed with the sentiment expressed by F.H.D. Bell, that "my patriotism begins but does not end in this country".[321]

By contrast with Buller's progress toward "home", most of his scientific contemporaries in New Zealand had moved in the other direction.[322] F.W. Hutton, for instance, after emigrating from England to New Zealand in 1866 became a leader in colonial science. He was actively involved in the early developments toward national New Zealand scientific institutions: he was active in the Australasian Association for the Advancement of Science and was elected its President in 1902; he helped reform the New Zealand Institute on James Hector's retirement in 1903 and was then elected its first President. Hutton made his life and fulfilled his ambitions

in a career as a professional scientist in New Zealand. Buller, by contrast, exploited the opportunities of colonial science to advance himself in London. He showed little interest in such intercolonial developments as the Australasian Association for the Advancement of Science, although he attended several of the conferences of its British counterpart. Once the brash colonial boy anxious to prove himself, he eventually became quite at home in London, a gentleman of science and a man of substance in the City. Hutton never rated a listing in Who's Who, but Buller was there, with his British and foreign knighthoods and his books. His scientific activities were listed as "recreations".[323] In 1905 when the fourth International Ornithological Congress was held in London delegates were named to represent many countries, including Australia. New Zealand was not represented -Buller was listed among the committee of delegates representing Great Britain and Ireland.[324]

During 1905 Buller spent much of his spare time completing a "Supplement" to his A History of the Birds of New Zealand. He employed the old team once again: R.B. Sharpe to edit the text and J.G. Keulemans to produce the illustrations. Buller passed the second and final volume for publication shortly before his death in July 1906. The Supplement to the "Birds of New Zealand has never been accorded as high a place in New Zealand or ornithological literature as the 1873 or 1888

editions, but although Buller's text contains little of scientific importance it is of interest for the images it conveys in relation to contemporary colonial perspectives toward the imperial mother country, the development of a New Zealand identity, and attitudes toward native New Zealand things.

There is much mention, for instance, of Papaitonga, Buller's country estate in New Zealand, in the Horowhenua district near Levin. Although he did not mention the fact in his Supplement, his acquisition of Papaitonga in 1892 had been the subject of a long and bitter controversy in New Zealand. While it continued Buller had been constrained from returning to England. The Minister of Lands, John McKenzie, had accused him of obtaining Papaitonga from the Muaupoko, the Maori owners, by fraud, and had persisted in scrutinising Buller's transactions in obtaining possession through a series of parliamentary inquiries and court actions. The case had become notorious in New Zealand -not so much as a crusade against a lawyer's sharp practice in alienating Native Land to himself, but as a vendetta by "Jock" McKenzie against one of the wealthy landowners he detested.[325]

None of this appeared in Buller's Supplement. Nor did his portrayal of Papaitonga have much relevance to his scientific account of New Zealand birds; it is more a literary expression of nostalgia for a place whose image he treasured,

though he was not sufficiently drawn to it to actually live there. Buller wrote of Papaitonga as "my country home in New Zealand" and described it as a "romantic spot" of "surpassing beauty", with its "woods", the lake with "two exquisite islands covered with bright vegetation" and the stream "fringed with beautiful ferns and other evergreens, and its sparkling waters well stocked with trout".[226]

In many respects this image belongs more to England than to New Zealand. Buller's English friends all had their country homes: Sir Robert Herbert had his family estate at Ickleton in Cambridgeshire, Sir Joseph Hooker a country house in Berkshire, and even R.B. Sharpe had a retreat at "The Hangar" near Selborne. They could easily have visualised Buller's Papaitonga as something like the well-tended parklands of an English country estate. On the other hand Buller's colonial neighbours at Horowhenua would hardly have recognised their picnic spot by the lake, down the track through the sheep paddocks and the cut-over bush; nor would the Muaupoko from whom he acquired it have recognised their Papaitonga with its old eel weirs and bird-snaring trees, and the island where the bones of their ancestors still lay.

In his 1888 edition of A History of the Birds of New Zealand, Buller had contrived by implication to redefine his birth and background from nonconformist to established Church, and adopted the tone of the colonist pining for the

remembered things of "home". The image and identity he conveys in the Supplement are more complex, reflecting in part the shifting colonial perspective. As the passages on Papaitonga illustrate, he expressed a heightened sentimental feeling for New Zealand but clothed it in the imagery of the English landscape and landed gentry.

Some of the dissonances in Buller's text in the Supplement arise from the way he put it together: he wrote some new material in England, and also reused many passages from papers written years earlier for the Wellington Philosophical Society. But there are also the tensions described in the previous section, between his continued colonial orientation toward the imperial centre, as shown in such things as his continued supply of specimens of the native New Zealand fauna to important men in England; and his support for the growing New Zealand national feeling -especially as expressed in terms of preservation in the country of those same native things. The Supplement shows this same divided sense of identity, between the old desire for acceptance and approval in England and the new sense of pride in New Zealand.

Buller's perspective had certainly changed: in his 1888 A History of the Birds of New Zealand he had been philosophical about the decline of the native New Zealand birds, and had welcomed the introduced birds that were taking their place. However, in his Supplement he wrote of the

English birds in New Zealand as both "familiar" and "foreign", as in his plaintive anecdote of a walk he had taken in a "beautiful clump of native bush" just before he left for England:

> How changed everything was now from what it was a few years ago! Instead of the song of native birds, you have on all hands the familiar notes of the Sparrow and the Greenfinch, the Linnet and the Goldfinch. Nothing else of the native element remained but the soft trill of the Grey Warbler, warbling to himself in the underwood. I could scarcely realise the complete change and could quite appreciate the Maori's pathetic reference to it when he remarked, "So is the Pakeha replacing the Maori on the lands of our ancestors!" For a short time certainly there was a Tui singing gaily in a lofty tree-top; and then, moved by some sudden impulse, he darted downwards, passing through a sunlit glade in the forest, his white epaulettes shimmering in the light. Then all was silent again, save for the lively twittering of the sparrow and his foreign friends.[327]

The nostalgia Buller indulged in here is not only expressed in English literary terms; it is for a New Zealand that no longer existed -the "primeval" state of his childhood on the mission station, before the progress of colonisation cleared the bush, displaced the native birds and the Maori people, and despoiled the scenery. This progress was now being seen by colonial New Zealanders in dramatic terms as both epic -the birth of a new nation -and as tragic loss and destruction of its native heritage.

Clearly, Buller's part in the development of ideas of conservation -that native New Zealand scenery, flora and fauna were part of the "heritage" of New Zealanders and

should be preserved and protected -was complex and contradictory. But perhaps his greatest influence has so far been hardly touched on in this study. The very success of his magnum opus, A History of the Birds of New Zealand (first edition 1873, second edition 1888 and Supplement 1905) helped to foster the perception among the colonists of the native birds as "the most interesting and unique bird fauna in the world". The birds became valued accordingly: previously as ephemeral curiosities or perhaps as commodities to be traded for profit, but by the 1890s inceasingly as objects of national pride. Some birds -Kiwi, Huia, Bellbird and Tui in particular -were already beginning to be used as emblems. And their images were drawn largely from Buller's books, for in most cases the living birds were rarely seen. The next chapter will describe "Buller's Birds", which provided the ubiquitous images of New Zealand birds; and the process by which some of the birds became adopted as symbols of a New Zealand national identity.

CHAPTER 6

THE ICONOGRAPHY OF NATIVE NEW ZEALAND BIRDS: FROM SCIENTIFIC IMAGES TO NATIONAL EMBLEMS

6.1: Buller's A History of the Birds of New Zealand and its Influence

Buller's books, especially his A History of the Birds of New Zealand, brought him honours and acclaim, and also popularised the native New Zealand birds. The honours and acclaim were sought -and gained -primarily in England; in New Zealand (at least initially) the books, and their descriptions of the birds, appear to have been valued largely by virtue of their English reputation. But through their excellent illustrations Buller's books also provided images which went on to become the New Zealand stereotypes of the national birds. In this section Buller's books and their illustrations will be described and their influence assessed; the next will examine the elevation of some of the native birds they portrayed into symbols of New Zealand identity.

Buller's scientific efforts, while based on the collection, description and illustration of the native New Zealand birds, were aimed at succeeding in metropolitan circles. He achieved this success. While still in New Zealand Buller gained election to Fellowships of a number of lesser London learned societies, which required only the nomination of another

Fellow and the payment of the requisite fee. In this way he became Fellow of the Linnean Society in 1858, the Geological Society and the Royal Geographical Society in 1869, and Corresponding Member of the Zoological Society in 1867.[1] Then, by sending copies of his 1865 Dunedin exhibition essay "On the Ornithology of New Zealand" to key members of the scientific establishment he gained notice in London and reviews in Ibis and the Zoological Record. The German ornithologist Otto Finsch, who had been making his own studies of New Zealand and Pacific birds, translated and reprinted the essay in the Journal fur Ornithologie and at Buller's request used it to obtain for him a Doctorate in Natural Science from the Royal Wurtemburg University of Tubingen, conferred in 1871. But the important honours were gained after Buller went to London himself and published his book A History of the Birds of New Zealand there: Member of the British Ornithologists' Union in 1872, Companion of the Order of St. Michael and St. George (CMG) in 1875, and what he called "the blue riband of science" -Fellow of the Royal Society of London (FRS) in 1879.[2]

Another aspect to this orientation toward London for scientific recognition and reward is more relevant here: in the nineteenth century -and even in the twentieth -it has by no means been as a matter of course that it should be a colonial New Zealand scientist to write the definitive scientific treatise on any group of native New Zealand

species.[3] In botany, for instance, the standard New Zealand flora until 1906 was that by J.D. Hooker of Kew.[4] In Australia the standard nineteenth century works on plants, mammals, and birds were all by English experts.[5] This dominance was not just that of the imperial centre over its colonies; since the eighteenth century natural history had gained such a large following in England that naturalists from many countries were drawn there. In the eighteenth century many of the disciples of Linnaeus found places in England, and after his death his collections went there as well. In the nineteenth century, the American John James Audubon went to Edinburgh and then to London to produce his great Birds of America, and found far more subscribers there than in America.[6]

In the field of ornithology in particular, by the mid nineteenth century John Gould's books set the standard. Audubon and his book were celebrated, but Gould achieved much wider success. He was a London scientific entrepreneur who perfected the system of publishing lavishly illustrated, large format books by parts: he solicited subscriptions ahead of publication of his sumptuous books on birds, and then issued them in a series of parts (each with a quota of brilliantly coloured illustrations), which could then be bound in a style to suit the subscriber's taste. Gould's were scientific books, but above all fine books, designed to grace the shelves of the country house library: impressive in size,

liberally illustrated in the best artistic fashion, and written in an easy literary style not overburdened with scientific minutiae (Gould normally published his technical descriptions of new species separately in journal articles). Working to a tight schedule he and his team of artists produced a long series of folio volumes on the birds of Asia, Europe, Great Britain, Australia, and New Guinea, and also on some particularly colourful or "exotic" (from the English perspective) bird families such as the Ramphastidae (Toucans), Trogonidae (Trogons) and Trochilidae (Humming-birds). These enterprises were both imperial, being based on specimens gathered by visiting expeditions or sent back by native collectors, and "aristocratic", being aimed at satisfying the requirements of the wealthy, leisured, English upper classes. Gould's The Birds of Australia, for instance, published in parts between 1840 and 1848, cost £115.

Gould began in the 1830s with the intention of describing the birds of New Zealand along with those of Australia. His preliminary A Synopsis of the Birds of Australia and the Adjacent Islands (1837-1838) included the first scientific description of the Huia (whose two sexes he named as separate species: Neomorpha acutirostris and N. crassirostris). At that time he wrote that he contemplated "visiting Australia, New Zealand, etc., for the space of two years, in order to investigate and study the natural history of those

countries".[7] He did subsequently visit Australia, but not New Zealand, and included only a few New Zealand species in his The Birds of Australia and its Supplement, which were published in a total of 41 parts in 1840-1848 and 1851-1869. He evidently had further parts planned, but whether he considered publishing specifically on the birds of New Zealand is not known. In 1875 (after the publication of Buller's A History of the Birds of New Zealand) he began publication of The Birds of New Guinea.

Another metropolitan expert who evidently did have plans for publishing a treatise on New Zealand birds was Otto Finsch of Bremen.[8] At the time Buller's exhibition essay reached him in 1867 he had monographs in progress on parrots (including the New Zealand species) and on the birds of the Pacific.[9] Finsch translated and reprinted Buller's essay along with his own detailed critique in the German Journal fur Ornithologie.[10] A.G. Bagnall, commenting on this in his biographical note on Buller, describes Finsch as a "world authority" and Buller's essay as "an admirable summary for a student of 27",[11] but this takes an unduly colonial perspective. Finsch (who was in fact a year younger than Buller and socially of even humbler origins) noted in his critique that despite Buller's opportunities for observing his subjects in a state of nature his essay was derived largely from the writings of G.R. Gray of the British Museum.[12] Finsch also rejected several of the new species

Buller had named.

In the series of rejoinders and further critiques which ensued Buller demonstrated both his lack of colonial deference to Finsch's "world authority", and his developing skill at controversy -quietly conceding his own errors while loudly criticising Finsch's, and gaining notice for himself in the process. In the early stages Finsch appears to have regarded Buller's efforts as providing useful material toward a monograph on the birds of New Zealand which he had in mind to write. He considered Buller neither capable nor qualified to do this. In private letters to his compatriot Julius Haast in New Zealand, Finsch complained that Buller was only "ein eifriger Dilletant" (an eager dilletante) with too high an opinion of himself and that until he had handled large numbers of specimens as could be found in European museums, he would not develop a true ornithologist's judgement.[13] As Buller continued to publish papers both in the Transactions and Proceedings of the New Zealand Institute and in the British journal Ibis describing new species from New Zealand, Finsch continued to point out that in most cases the "so-called new species are by no means new to science".[14] It was not that Buller's understanding of what constituted a species was faulty -it was essentially similar to Finsch's own, although they could argue over details -but that the species had already been described and named by European authorities.

Most New Zealand scientists tended to agree that "new species must be referred to Europe before it is safe to name them".[15] Buller's deference to metropolitan authority was more selective. He refused to give way to Finsch and pressed ahead with his idea of publishing his own illustrated treatise on the birds of New Zealand, having first received promises from Sir George Grey of help with "the needful by way of subscription list a la Gould",[16] and encouragement to proceed both from James Hector,[17] the dominant figure in colonial science, and from from key English ornithological authorities: P.L. Sclater of the Zoological Society and Alfred Newton of Cambridge.[18]

In 1871 Buller obtained eighteen months leave on half pay (i.e. £300 per annum) from his position as Resident Magistrate in Wanganui, plus a government grant of £300 and a free passage to London in order to publish his proposed book there. He was also appointed as private secretary to Dr I.E. Featherston, New Zealand Agent-General in London, at a salary of a further £300 per annum.[19] This generous arrangement attracted considerable opposition in the New Zealand parliament and criticism in the colonial newspapers. The government was accused of patronage (Buller was described in parliament as "one of those colonial pets...kept in affluence during their natural lives") and Buller's collection of bird skins, presented to the Colonial Museum in return for the

£300 grant, was contemptuously referred to as "sparrows".[20]

However, by a combination of influence, ability and sheer effrontery Buller was enabled to successfully publish his A History of the Birds of New Zealand in London. Although his initial plan had been for a relatively modest octavo, once in London he followed the advice of Newton and Sclater and produced a much more lavish quarto with 35 colour plates, published in 5 parts in 1872-1873. While not as magnificent as Gould's books, or perhaps as scientifically accurate as Finsch's, it stands well with any of the ornithological treatises published at the time.

All this is by way of introduction to the two aspects of direct relevance to the present argument: the influence of the book generally and its illustrations in particular in popularising the native birds in New Zealand.

Various lines of evidence suggest that Buller's book may have been esteemed, initially at least, more in the metropolitan centres than in the colony. It evidently attracted more subscribers and buyers outside New Zealand than in it.[21] The entire edition of 500 was sold (at £3/3/- to subscribers and £5/5/- to others) within a few months of publication being completed, and thereafter high prices were paid for copies at auction. But by the latter measure also the value

set on the book was higher in England than in New Zealand. By 1888, according to Buller's prospectus for his second edition, auction prices for the first edition had reached £20 in New Zealand, £26 at Sotheby's in London, and an "extraordinary" £37/10/- in Melbourne.[22] T.H. Potts's copy brought a more modest £5 in Christchurch in March 1888.[23]

Again, judging by the cuttings that Buller collected, English reviewers gave the first edition higher praise than did their colonial counterparts. "New Zealand may be congratulated on having outstripped the other colonies in the race for scientific honours", wrote the London Home News for India and the Colonies.[24] English reviewers generally agreed that "the plates are as beautiful in execution as the text is excellent in quality". The Daily Telegraph went so far as to compare Buller with the most famous of all backwoods naturalists and bird-book entrepreneurs and called him "the Audubon of New Zealand".[25] The comparison was flattering, but indicates that most of the popular esteem for Buller's book was for its illustrations, provided by his London journeyman artist J.G. Keulemans. Not that Buller's text was ignored; his descriptions of New Zealand and New Zealand birds moved some English reviewers to rhapsody. To the London Spectator they conjured up "a land of exquisite beauty, once inhabited only by the fairest and brightest of creatures and in which dwelt no hateful or hurtful thing".[26]

New Zealand reviewers were more restrained. F.W. Hutton in particular, writing in the New Zealand Magazine, was decidedly qualified in his praise. Hutton, however, was one of Buller's rivals in colonial science; the two had fallen out over Hutton's Catalogue of the Birds of New Zealand (1871), and especially its passing comment about the collection of birdskins in the Colonial Museum "purchased from Mr Buller" -which Buller felt improperly suggested that he was a mercenary "dealer".[27] Hutton, in his review wrote that a few of the illustrations in Buller's first edition were "somewhat of a failure" and that Buller had taken too much credit for observations in his text which he had borrowed from T.H. Potts.[28]

However, the English acclaim was noticed in New Zealand, especially when, soon after his return, Buller received the honour of CMG from the Queen "in consideration of the ability and attainments displayed" in his book. In the Philosophical Societies his friends were surprised, but congratulated him. "Although born and bred in the Colony", said the vice-president of the Wellington society, Buller had "achieved a position of great distinction". Much of the comment in the newspapers, however, was frankly disparaging. The Wellington Evening Post jeered at his book as "a series of burlesque illustrations of New Zealand birds" and at him as a "Colonial antitype of the immortal Peter Pangloss, L.L.D. and A.S.S." -a greedy, pompous pedant.[29]

By the time Buller returned to London in 1886 there was not so much disparagement. The New Zealand Herald reported that he was working on a new edition of "his celebrated work on 'New Zealand Birds,' which has given him a European reputation".[30] The colonial perspective is still apparent in this looking to Europe for validation.

Buller clearly intended his new edition to supersede the earlier one in every way. It was in two volumes with about twice as many pages as before and in a larger format (Imperial rather than Royal Quarto). The plates were printed in colour by chromolithography, rather than the older method of a lithographed drawing coloured in by hand. The technicalities of the two methods, and how they influenced the images produced, will be outlined below. Here it should be noted that chromolithography had not previously been used for a large-format bird book. Thus in a small but significant way, Buller was attempting to transcend his colonial position: rather than working to the standard set in the European centres, he was risking a new departure to set a new standard himself.

He published his new edition in London in 13 parts during 1887 and 1888. The subscription lists and the reviews both show a shift from the first edition 14 years earlier. Fewer copies were now subscribed for in Britain than in New Zealand (and more than half those taken in Britain went to

booksellers).[31] The reviews in London journals were also less enthusiastic this time. The Spectator spoke for many when it expressed surprise that after Buller's "splendid" previous work there was "anything more to say on the subject of New-Zealand ornithology".[32] Again much of the comment was on Keulemans's illustrations, which The Times thought "absolutely perfect".[33] But although the chromolithographs were admired Buller did not set a trend; hand-coloured lithographs remained the preferred mode for illustrating fine bird books.

In New Zealand, however, reviewers were more complimentary. "We have rarely seen a more distinct advance in a second edition over a first", T.J. Parker wrote in the Otago Daily Times; the new edition was "truly magnificent". The change in attitude went deeper than mere appreciation of a book which, as Parker put it, "any naturalist might be proud to write, and any lover of either books or birds proud to possess".[34] In 1891 Sir James Hector told the Australasian Association for the Advancement of Science that Buller's "great standard work on our Avifauna has gained credit and renown for the whole colony."[35] Parker expressed a similar view from a less colonial perspective: "we consider the book to be a work of great scientific and, indeed, of national importance".[36] The increasing national feeling by the 1890s was thus reflected in an increased pride in works such as Buller's; whether Buller's books contributed to that

national feeling will be considered more directly in the following section.

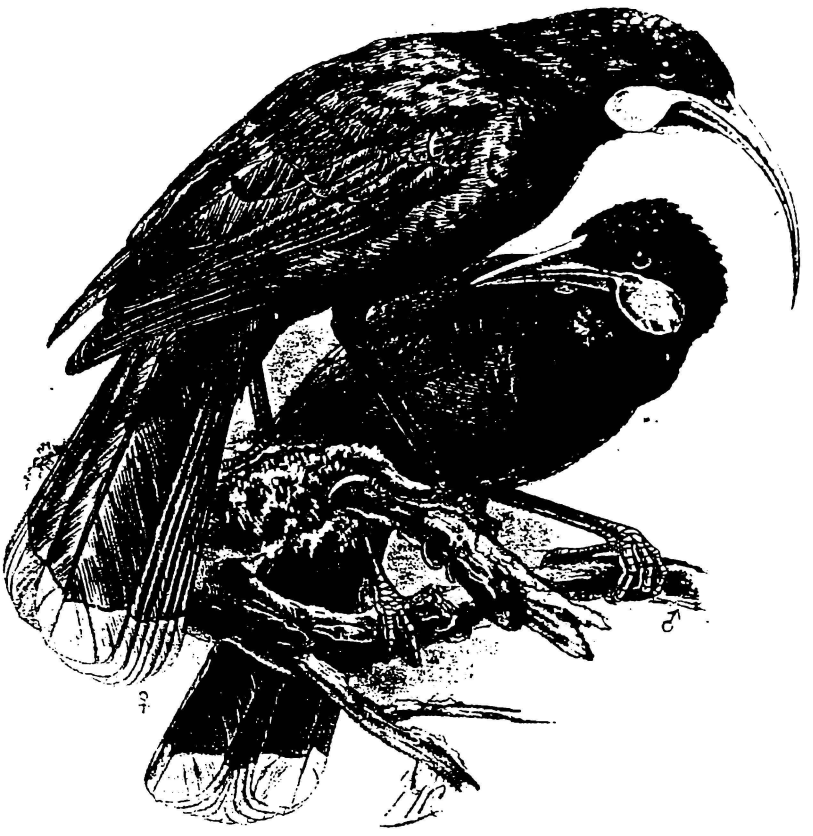
From the reviews it is clear that most of the impact of Buller's books was in their illustrations. Before tracing their influence, some of the technicalities of their production should be explained. Buller's books were published and the illustrations produced and printed entirely in London. When Buller went to London in 1871 to publish the first edition of his A History of the Birds of New Zealand he initially tried to engage Josef Wolf, the most famous natural history artist working in London at the time, but Wolf declined. Instead, Buller obtained the services of the rising young Dutch artist Johannes Gerardus (John Gerrard) Keulemans, who was then establishing himself in London.[37]

Keulemans's paintings were reproduced as hand-coloured lithographs, a technique first used for bird illustrations by William Swainson. Keulemans first made sketches of the birds, based on skins or mounted specimens. Once Buller had approved the preliminary sketch, Keulemans worked it up into a finished painting which was then reproduced by lithography. The painting was copied onto a prepared block of limestone using a special greasy crayon. The stone was then wetted, inked with greasy ink (which was thus retained only by the crayon lines) and used to print off the 500 copies required for the book. The printed lithographs, which had the

appearance of drawings in soft black pencil, were then sent to a team of colourists who finished each one with background washes and body colour in watercolours, following Keulemans' original pattern. The laborious process was economically feasible only because the colourists were paid so little: the usual rate was sixpence or less per finished plate. Keulemans received £2 for each of his paintings of a single bird or £3 for a pair.[38]

Lithography allowed a far greater freedom of line than the older engraving techniques and, when combined with skilled water-colouring, the process was capable of producing superb illustrations. Keulemans's work, though falling short of the artistry of Wolf's, was always of a high standard, especially considering that he rarely saw the living bird but worked from mounted specimens or even study skins -the disembodied specimen skins with extended necks and legs as kept in museum cabinet collections. Keulemans usually managed to give life to his birds, with only a certain stiffness in the pose and the way the feet wrapped loosely over their perch to belie the illusion. The lithographs Keulemans did for Buller were among his best, and Buller examined every plate to make sure the colourists maintained the standard.[39]

The plates of the first edition were brought to wider public notice in New Zealand by Buller's Manual of the Birds of New Zealand, published in 1882 by Hector's Colonial Museum and



THE HUIA.
HETERALOCHA ACUTIROSTRIS.

Fig. 4. The Huia, from Keulemans's lithograph in Buller A History of the Birds of New Zealand first ed. (1873).

Geological Survey Department. This was intended as a popular treatment "for the use of students in the colony" -superseding Hutton's Catalogue of the Birds of New Zealand. It was illustrated by reduced monotone reproductions of Keulemans's plates from Buller's larger History plus a few from other sources, executed very successfully by the Government Printing Department in Wellington. The technique used was photolithography: the image was transferred to the lithographic stone, not by direct drawing by the artist, but from a photographically prepared print. The process was fairly standard apart from a few colonial improvements. A glass plate photographic negative of the desired size was made and then a positive contact print taken using light-sensitive gelatinised paper. When this was coated with greasy ink and floated on water, the ink was retained by the developed image but could be wiped off the rest. To finally transfer the image to the lithographic stone, the paper was dried and pressed on the stone, which absorbed the greasy ink. Standard lithographic printing techniques were then used to print off as many copies as were required.[40]

The Manual was a great success and became Buller's most widely read book. People wrote to him from all over New Zealand about birds they had identified by comparison with its descriptions and illustrations. When Hugh Martin presented his proposals for "The Protection of Native Birds"

to the Nelson Philosophical Society in 1885, he drew his list of birds from Buller's Manual.[41] The Manual began the process of reproduction and reuse of the Keulemans illustrations which, as will be seen, did much to familiarise the colonists with the native New Zealand birds.

For the second edition of his A History of the Birds of New Zealand Buller engaged Keulemans again to produce a completely new set of illustrations, which were reproduced by chromolithography. Although more mechanised than hand-coloured lithography, chromolithography was still a laborious process. As before, Keulemans did an initial sketch for Buller's approval and then a finished painting. But then the process became more complicated. Instead of a single outline sketch on the lithographic stone, Keulemans drew a whole series of separate images or patterns -one for each basic hue in his original painting. This was the hand equivalent of the process of "colour separation" which is done photographically in modern colour printing. It was a little like copying the original painting one colour at a time, with each colour on a new sheet, so that when all were put together they would build up a full-colour facsimile of the original.

The series of colour patterns were drawn on separate stones which were then used in the printing press in turn using suitably tinted inks. The successive impressions were

carefully superimposed to build up the fully coloured plate. Only a few highlights were touched in by hand.

For chromolithography the artist had to use a very different technique of drawing on the lithographic stone than before. Lithographs intended for hand colouring were required to give only outline and detail to the plate, but for chromolithographs they had to provide broad areas of colour as well. And the artist could no longer use a free-hand style when drawing on the stone as in the single lithograph for hand colouring, but had to control his drawing to ensure that the patterns on each successive stone all matched up. Thus chromolithographs lacked the spontaneity and freedom of line of the single lithograph. And while chromolithographs were certainly more consistent in colouring, the special greasy inks required for the lithographic process led to a predominance of olive tones with little of the freshness of the water colours used for hand-coloured lithographs.

By the 1880s chromolithography was widely used for cheap, mass-produced decorative prints or "oleographs" -often in only two or three colour impressions, roughly superimposed. Chromolithography was also used in some smaller scale scientific illustrations: Keulemans had used the process for illustrations in the journal Ibis and for Lord Lilford's Coloured figures of the birds of the British Islands (London, 1885-1897). The large quarto size of Buller's plates



PLATE 10
TUI

Fig. 5. Tui, from Keulemans's chromolithograph in Buller A History of the Birds of New Zealand second ed. (1888)

and their fully coloured backgrounds made the job much more difficult. In order to achieve the required detail and tonal quality, six colour impressions were used, superimposed with a high degree of precision.[42] However, Keulemans and the printers Judd & Co. produced a technical tour de force, and the plates were much admired. But they were not cheap to produce: they cost Buller about half as much again as hand coloured lithographs would have done.[43] Keulemans of course drew all the birds in London; he never saw New Zealand. But this time he made more effort to include recognizably New Zealand "accessories" of foliage, flowers and background scenes -based in part on drawings provided by Buller's son Percy. For the birds themselves, Buller had made an effort to bring some live birds and there were a few more species at the Zoological Society's gardens -the Zoo'.[44] But in general Keulemans still worked mainly from dead specimens.

In London, Buller's chromolithographs were examined critically to see how the latest technology compared with the old. Reviewers disagreed on whether they represented an advance or not. Buller himself, when he published his Supplement to the "Birds of New Zealand" in 1905, reverted to the use of hand-coloured lithographs.[45] But in New Zealand the chromolithographs of the second edition were very highly regarded.[46] Indeed, Buller's birds as portrayed in Keulemans' chromolithographs eventually became the standard,

definitive images of New Zealand birds.

Before tracing some of the processes of use and adaptation by which this occurred, it should first be stressed that, taken as a whole, Buller's illustrations of New Zealand birds marked a major advance in local iconography. The thirty-five plates of the first edition of his A History of the Birds of New Zealand and the forty-eight of the second, especially as reproduced in many cheaper and more widely available books including his own 1882 Manual, provided more distinctive and identifiable images of a wider variety of the native birds than anything generally available in New Zealand then or for many years afterward. Richard Taylor's illustrations in the two editions of his Te Ika a Maui (London, 1855 and 1870) are crudely-drawn caricatures by comparison with Keulemans's artistic designs and relatively accurate representations. The only illustrations of New Zealand birds of comparable standard prior to 1872 were scattered in Gould's expensive folios and a few even less accessible expedition reports.[47] It is therefore not surprising that when, toward the end of the nineteenth century, some of the native New Zealand birds -Kiwi, Huia, and Tui in particular -began to become emblems or symbols of a new national identity, their images were usually drawn directly or indirectly from "Buller's Birds".

This process was illustrated in 1895 when the government

decided to break with the tradition that all postage stamps should carry an effigy of the queen, and held a competition for designs representing "characteristic or Notable New Zealand scenery or genre".[48] The possibilities were recognised for advertising the attractions and features of the country. The winning entries portrayed mountain and lake scenery, and native birds: Huia, Kiwi, Kea and Kaka. These, it seems, were the images that were considered as setting New Zealand apart, not green pastures and sheep. The Kiwi design was rather crudely drawn, but the Huia and especially the Kea and Kaka pair were much more polished, having been taken from Keulemans's compositions in Buller's first edition, or more probably from the reproductions in the 1882 Manual.[49] The influence of the use of such images on everyday items is indicated by Johannes Andersen's comment thirty years later that the Huia was "well known to all stamp collectors".[50] The bird itself may have disappeared, but the image created by Buller and Keulemans lived on.

From the time they were first published, "Buller's Birds" have never been out of print. During his lifetime they were copied, with or without his consent, to illustrate New Zealand birds in many contexts. They were used outside New Zealand in books on a range of subjects, from natural history, both popular[51] and scientific,[52] to political history[53] and popular ethnology.[54]

In New Zealand they were used so widely as to become ubiquitous. James Drummond obtained Buller's permission to reproduce them[55] and they thus appeared in reduced monochrome photographic versions in his Nature in New Zealand (1902) and several of his subsequent popular natural history publications: The Animals of New Zealand (1904), and Feathered Friends of the Bush [1907]. Drummond's books had very large print runs for the time -over 13,000 for Nature in New Zealand and 4,000 for successive editions (1904-23) of The animals of New Zealand.[56] These numbers do indicate a heightened level of interest in the native fauna and flora generally and the birds in particular, although they must also be seen in the context of contemporary educational developments in New Zealand. In January 1904 the new syllabus drawn up by George Hogben introduced nature studies into the school curriculum. Later that year H.G. Ell suggested in parliament that posters of Buller's birds be printed for schools "so as not to compel teachers to use pictures of the bird-life of the Old Country as they did at present".[57] Buller was approached accordingly,[58] but the proposed bird prints appear to have been pre-empted by Drummond's Nature in New Zealand, which was included on the list of recommended school texts gazetted in 1905.[59] Subsequent texts written specifically to cater for the nature study section of the new syllabus also incorporated the Buller illustrations.[60] Nevertheless, whether by the push of official endorsement or the pull of

popular interest, these books helped to make the native birds -in the Buller images -more familiar than ever, especially to school-children.

After Buller's death in 1906 his illustrations were used also in official publicity material published by the Department of Tourist and Health Resorts.[61] This Department and its successors (by 1952 the Tourist and Publicity Department), and Whitcombe and Tombs (Drummond's publishers) subsequently made free use of the plates in many further publications.[62] The monochrome reproductions included some from both editions of Buller's A History of the Birds of New Zealand. From the 1930s, with the advent of cheaper colour printing, the chromolithographs of Buller's second edition in particular were reproduced all over again in a number of popular picture books.[63] These were mainly printed by Coulls, Somerville, Wilkie of Dunedin, who also used the colour plates to illustrate volumes of nature stories and even of verse.[64]

There were some competing images: in the 1930s the New Zealand Native Bird Protection Society (later the Forest and Bird Protection Society), whose founders disapproved of Buller and his collecting activities, sponsored the production of new, alternative bird illustrations by the artist Lily Daff.[65] These were used in the Society's own publications,[66] and in many popular bird books and other

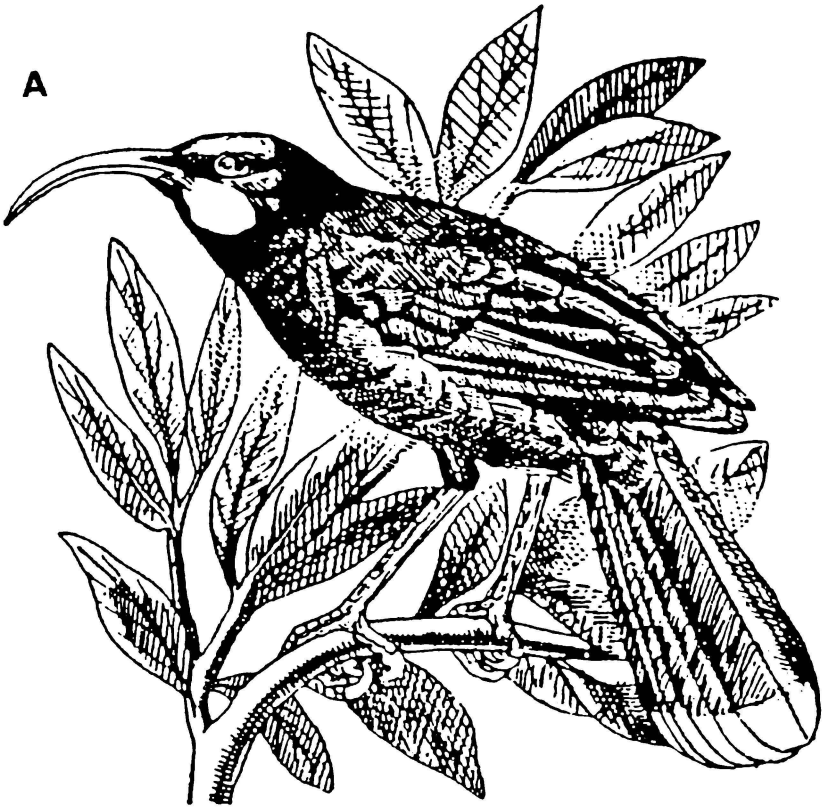
books published by Whitcombe and Tombs.[67] But Buller's birds were never displaced; they continued to appear in innumerable publications, and in many other guises. Whitcombe and Tombs returned to them in 1967 with the publication of Buller's Birds of New Zealand: full-sized reproductions of Buller's plates from the second edition of A History of the Birds of New Zealand, plus extracts from his text "edited and brought up to date" by E.G. Turbott. This publication has been extraordinarily successful for an expensive, large-format, colour-plate book: it is still (in 1989) in print, unchanged, more than twenty years later.

Even the Forest and Bird Protection Society eventually succumbed: when its Tui emblem was redrawn about the time of its fiftieth jubilee in 1973 it emerged in the Buller/Keulemans image. For its 60th jubilee in 1983 the Society published a lavishly-produced facsimile of the first edition of Buller's A History of the Birds of New Zealand.[68]

Along with all the reprints and reproductions Buller's birds have been adapted in turn for other uses. Many of these (such as postcard and calendar illustrations), although influential in familiarising the images, are, in bibliographic or museological terms, ephemeral and difficult to retrieve or trace. Others, such as the stamps already mentioned, are well recorded. Another application which is relatively well



TUI.



HUIA.

Fig. 6: Trademarks based on "Buller's Birds". Both were used by the Castle Tea Company of Wellington -the Tui in 1902 and the Huia in 1901.

documented is in trademark symbols and designs, which have been registered in New Zealand since 1889. Richard Wolfe's survey of these shows that native bird designs were common from that time, with Moa, Kiwi, Tui, Huia, Kea and Kaka being the species most frequently depicted.[69] The Moa and Kiwi images were drawn from a variety of sources, which will be discussed in the next section, but, apart from these species, Keulemans's designs form the basis for the majority of all the native bird images depicted by Wolfe.[70]

The process could be followed to its farthest verge but enough examples have been described to demonstrate that Buller's birds have become ubiquitous images in New Zealand. They are still reproduced, copied and adapted on everything from school stationery and post-cards to tea-towels. They define the way the birds should look: the Fantail with its tail perfectly spread; the Takahe plump and deliberate; the Huia posing elegantly, every feather in place. Buller's birds have become New Zealand icons, images still familiar to the eye even when the birds themselves have gone.

6.2: National Birds

Some evidence has already been given of a correlation between the increasing interest during the 1880s and 1890s in the native New Zealand birds, and the growing sense of national

identity at that time. But one of the clearest indications of the link is the elevation of a native bird, the Kiwi Apteryx australis, to the status of a New Zealand emblem and symbol of national identity -eventually, in the mid twentieth century, becoming eponymous for a New Zealander. This process was clearly driven by popular opinion rather than governmental dictate: official recognition lagged far behind and symbols such as the four stars of the Southern Cross, or the fern leaf continued in official use while the Kiwi became the universally recognised symbol and name for New Zealand, its people, and eventually even its currency.[71] Keith Sinclair, in describing the early stages of this process (about 1900-1920), was rather puzzled by it: "For some reason, at present mysterious, the kiwi was acquiring a new appeal to the New Zealand imagination, as a uniquely national emblem".[72] In Sinclair's view, the Kiwi "was obviously chosen because the bird was unique to New Zealand and -unlike some other local species, the weta or the tuatara, for instance -was thought to have a certain charm". The question of how or why the Kiwi in particular was chosen may not be capable of a definitive answer, but some further evidence can be given which bears both on this and the more general issue of the connection between the new attitude toward native things (and birds in particular) and the growing feeling of national identity.

When reading nineteenth century popular and semi-scientific

literature on New Zealand birds the question which arises is not so much why the Kiwi became the national bird, but why the Tui Prosthemadera novaeseelandiae did not. From the time of Cook in 1769 the Tui was the most often noticed and illustrated species of New Zealand bird in European accounts.[73] When colonists began writing about the country the Tui was usually the first New Zealand bird to be mentioned, as the "best known", although the Kiwi was usually described as the "most remarkable and curious bird in New Zealand" -i.e. of most scientific interest.[74] The Tui clearly became something of a sentimental favourite for its song, its flamboyant appearance and behaviour, and its relative plenty when other native birds were disappearing. Both Maori and colonists commonly kept it as a cage-bird. It was the first native bird for which protection was sought for sentimental rather than gamekeeping or utilitarian reasons. In 1872 William Rolleston specifically mentioned Tui and Kiwi as "birds which were characteristic of the country" when suggesting that a clause might be added to the Animals Protection Act to prevent their loss.[75] The Tui was added to the schedule of protected game in the following year; the Kiwi had to wait until 1896.[76] By the 1890s, sentiment about the Tui in particular began to show even in the solemn prose of the Transactions and Proceedings of the New Zealand Institute, in calls for protection for "these beautiful birds", "our king of birds".[77] It was certainly a favourite of English visitors and colonists writing for an



Fig. 7. Moa and Kiwi, from Hochstetter Neu-Seeland (1863)

English audience: Mrs M. Wilson in 1894 titled her New Zealand journal In the Land of the Tui, and in 1909 Sir Arthur P. Douglas judged the Tui, "without fear of contradiction...the best known and best beloved of New Zealand's birds". By contrast, Douglas considered the Kiwi heavy footed and "most ungraceful".[78]

By the 1890s also, as described in the previous section, bird designs were becoming popular motifs for such purposes as labels and trademarks -with the Moa, the Kiwi, and the Tui being those most commonly employed. As has been shown, the image of the Tui was generally drawn not from nature but from Buller's books. In the case of the extinct Moa and the nocturnal, rarely-seen Kiwi, published illustrations (along with specimens of the taxidermist's art) were even more important in providing popular images of the birds. For instance, a woodcut of the Moa first published in Hochstetter's Neu-Seeland (1863)[79] was reproduced in many subsequent publications, including the second (1888) edition of Buller's A History of the Birds of New Zealand,[80] and provided the basis for an assortment of trademarks.[81] Many later illustrations and trademarks were based on the Otago Museum "moa reconstruction" -a full-sized model constructed by Augustus Hamilton and clothed with emu feathers -especially after it was used in 1899 for a posed photograph with Maori "moa hunters".[82]



Fig. 8. Kiwi, from Gould Birds of Australia (1848) (above) and Buller A History of the Birds of New Zealand (1873) -as reproduced in his Manual (1882).

The iconography of the Kiwi is rather more complex. As a species of unusual form and therefore of great scientific interest it was illustrated in European publications from the time the first Kiwi skin reached London in 1812. Initially, European artists and taxidermists, having no conception of how the bird appeared in life, produced images of the Kiwi combining the elongated narrow-gutted appearance characteristic of an empty skin, and the form of more familiar birds. The Kiwi was first represented in an upright penguin-like stance,[83] then in 1833 Elizabeth Gould (John Gould's wife and illustrator) redrew the same 1812 specimen with a lower heron-like stance.[84] The latter image, with its characteristically elongated neck, is seen in all of John Gould's subsequent illustrations of Kiwi,[85] which were copied in turn in popular and scientific books and journals.[86] Once established, the "Gouldian" image was quite persistent. Its influence continued into the 1890s: the heron-like neck can be seen in the Kiwi design used in the 1898 pictorial postage stamps. But by then it was something of an anomaly;[87] a rather different, more rounded image than Gould's had become more widely used.

The rounded form, in a static, side-on, beak-down pose eventually became the stereotyped image of the Kiwi in New Zealand and elsewhere.[88] Its derivation is not entirely clear. Perhaps the earliest published example of the "rounded" Kiwi form in European art is a plate in the report

of the expedition of the Astrolabe and Zélée (1837-1840), which apparently was based on a bird preserved entire, rather than a disembodied skin.[89] Whether this plate in the expensive report of a French expedition had much influence in changing the European image of the Kiwi is difficult to say. Illustrations published in England also took on the "rounded" look at this time, after the first living Kiwi reached the Zoological Society of London and was placed on display in Regent's Park in December 1851.[90] Scientists went to look at it[91] and later in December the Illustrated London News published an article on it with a woodcut showing it in three-quarter view, in the hunched-up, beak-down pose of a Kiwi held unnaturally in the light of day, huddled in the corner of its enclosure.[92]

The first published illustration of the Kiwi by a colonial New Zealand artist appears to be that by the missionary Richard Taylor in his Te Ika a Maui, published in London in 1855.[93] Taylor had seen living Kiwi, and gave a crude sketch of a very rounded bird in side view. By comparison, the illustrations by J.G. Keulemans in Buller's A History of the Birds of New Zealand (1873 and 1888) and his Manual of the Birds of New Zealand (1882), while again in the rounded form, are much more polished and lively designs. But although Keulemans's designs certainly had some influence, the stereotyped image of the Kiwi which appeared in New Zealand trademarks and emblems from the 1890s had more in common with

the static, side-on, beak-down pose of Taylor's sketch than with the more polished and lively designs of Keulemans's illustrations. This may be an example of convergence rather than copying -clearly many of those who drafted trademarks and emblems were, like Taylor, of limited artistic skill.

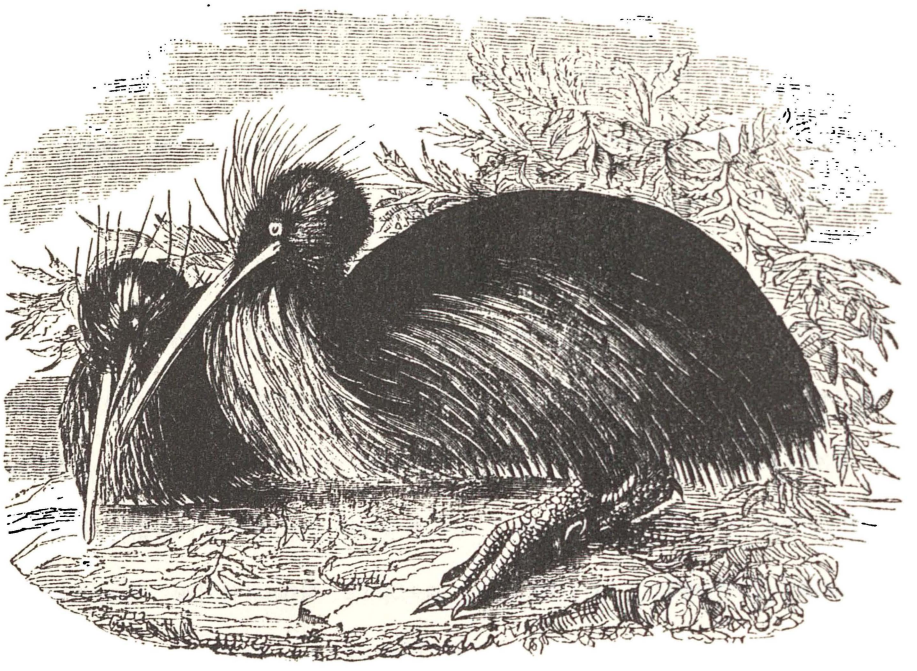
The Kiwi was used as a motif by the colonists in New Zealand as early as the 1860s, for instance in the medal designed for the New Zealand Exhibition held in Dunedin in 1865,[94] but it did not really come into vogue until the 1890s. The Kiwi design among the pictorial postage stamps of 1898 has already been mentioned. The pictorial letter cards issued by the post office from 1895 also featured Kiwi, drawn this time from Buller's birds.[95] The stamp-like labels issued at the New Zealand International Exhibition in Christchurch in 1906 included a Kiwi design, and also a Tui (drawn from Buller's birds).[96] Again, from 1904 the Kiwi was often depicted on the medallions struck to commemorate exhibitions, jubilees and royal occasions.[97] Colonial companies expanding their operations beyond New Zealand -notably The Bank of New Zealand and the New Zealand Insurance Company -made particular use of Kiwi designs. By 1897 the Kiwi "was firmly established as a [New Zealand Insurance] company emblem".[98] The Bank of New Zealand incorporated a Kiwi design (based on the bank's seal) on all its banknotes from 1870 (including those issued in Australia, Fiji, and Samoa). In 1898 it gave the Kiwi special prominence on its new £1

note.[99]

The process was self-reinforcing: the Kiwi and the other birds were chosen for stamps and trademarks because of their popular appeal and their association with New Zealand, and their use in this way promoted that association and widened their appeal. "From the fact that bank notes, postage stamps and advertisement chromos, generally have a portrait of this unholy looking bird on them, it is evident that the kiwi is the accepted national bird of New Zealand", commented Charles ("Mr Explorer") Douglas, writing in about 1899. He disapproved of the choice. "In a new country that has hopes of someday becoming a nation, people should be carefull how they select a national bird or beast". Douglas, independent of mind and reclusive of habit, accepted that the Kiwi was "well known all over the world, better known than perhaps any other bird in the country" but considered it "of neither use nor ornament". He preferred the intelligent and companionable Weka -"long may they flourish in the land".[100]

The popular vote, however, was for the Kiwi. When competitions were held in 1906 and 1908 for a New Zealand coat of arms, the majority of the entries incorporated native birds: predominantly Moa or Kiwi, although one entry also included Tui, Huia, Fantail and Pukeko among an assemblage of every imaginable national motif, both indigenous and introduced, from Mitre Peak, Tree-fern, Tiki and Taiaha, to

A REMARKABLE BIRD FROM NEW ZEALAND.



THE APTERYX, (*Apteryx Australis.*)

THE figure we have given above of this singular bird, has been copied, by permission of the author, from the last part of Mr. Gould's splendid work on the birds of Australia.

Fig. 9. The Kiwi, Saturday Magazine, 1838.

the Waihi gold-mine and grazing sheep.[101] The official choice, however, was a conservative one: it omitted Kiwi -or any bird -but retained the Southern Cross, fern leaves, and a sheep in the form of a heraldic fleece.

The evidence of the process of popular identification with the Kiwi is clear enough, but why was it in particular chosen? Two lines of evidence may be offered. It was the Kiwi which "first drew the attention of scientific men to the Fauna of New Zealand".[102] It was of great interest to scientists in Europe, first because of its unusual, un-bird-like characteristics (when the first specimen reached Europe in 1812 it was considered a freak or even a hoax[103]), and then because of its relationship with the even more interesting, but extinct, Moa. Even the popular English journals took notice of the "remarkable" and "singular" Kiwi[104] But in New Zealand, until later in the century, there seems to have been relatively little interest in it outside the Philosophical Societies, except as a source of food for gold-diggers, skins for local or London bird-stuffers, and feathers for millinery or muff manufacturers. In the 1876 debate in the New Zealand parliament over Alfred Newton's warning from England of the effect introduced mustelids would have on the flightless New Zealand birds, a member of the Legislative Council, Matthew Holmes, ridiculed Newton's concern for the Kiwi -"a bird [we] only saw in a live state about once in seven years."[105]

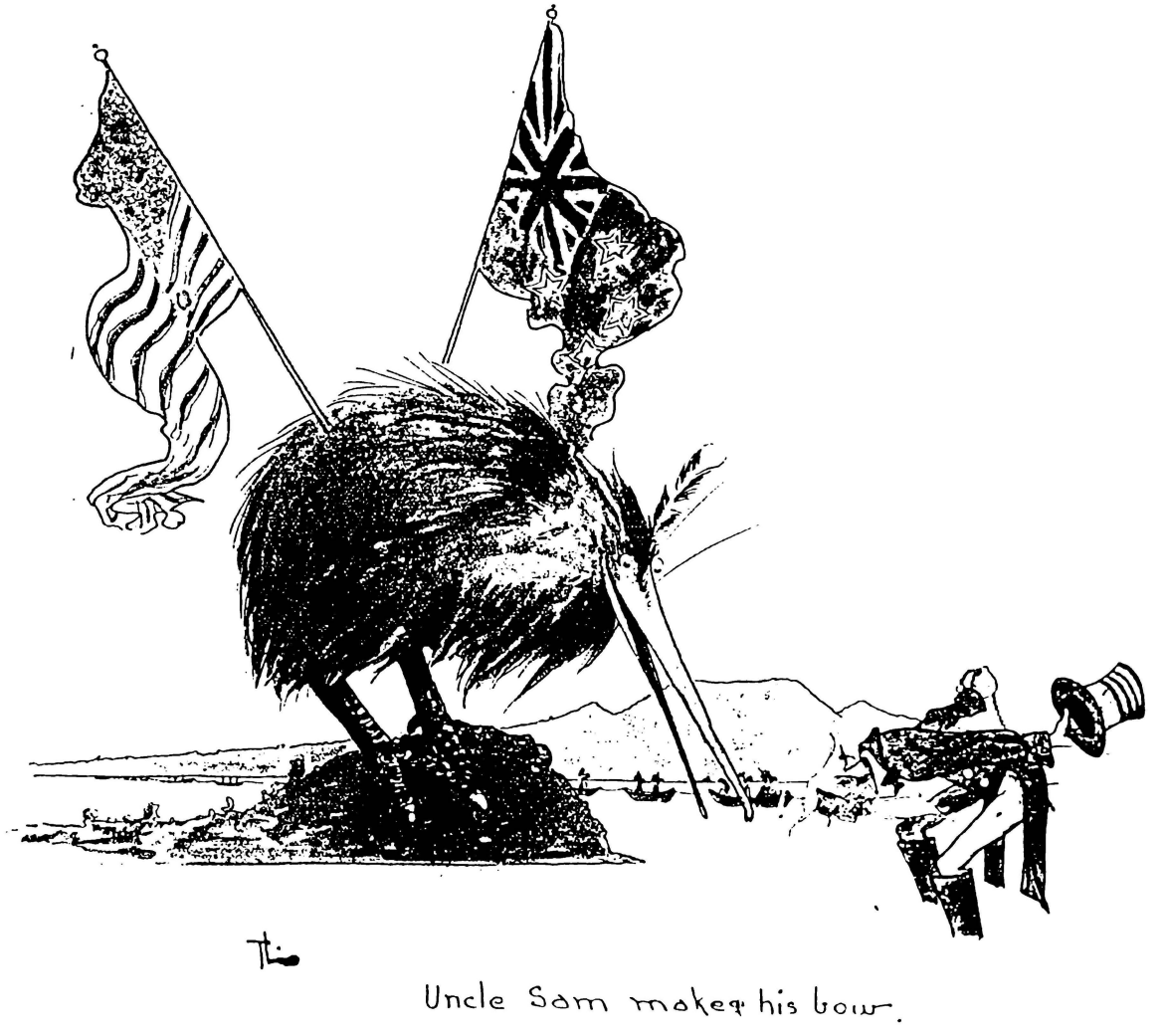


Fig. 10. The Kiwi as New Zealand: a Trevor Lloyd cartoon from Auckland Weekly News, 13 August 1908.

However, from the 1890s some local writers, beginning with the scientists, showed more patriotic pride in the Kiwi. T.J. Parker wrote in the New Zealand Journal of Science in 1891 that the Kiwi "is the most anomalous and aberrant of existing birds, and, living as it does only in the three islands of the New Zealand group, may be considered as one of the proudest possessions of our colony".[106] The sentiment was repeated by James Drummond in his popular The Animals of New Zealand (1904): "In the absence of the extinct Moa, the Kiwi is the most notable living bird of New Zealand, and should be classed among the colony's treasured possessions".[107] Drummond's line was plagiarised in turn by E.K. Mulgan in The New Zealand Nature-Study book (1905), written to cater for the new nature study syllabus in schools.[108] The scientific interest of the Kiwi thus became translated into popular appeal.[109]

The other line of evidence is even less substantial. Sinclair has pointed out the use of the Kiwi to represent New Zealand or New Zealanders in cartoons from about 1905.[110] The Auckland cartoonist Trevor Lloyd in particular popularised this device; in 1908, for instance, he celebrated the arrival of the American fleet in Auckland with a cartoon showing a friendly smiling Kiwi (wearing a Huia feather) greeting a bowing Uncle Sam.[111] The Kiwi seems to have been a favourite subject in Lloyd's drawings generally, but it may be also that the wingless, tail-less, heavy-footed Kiwi was

used in cartoons because it lent itself better to anthropomorphic adaptation than, say, the Tui. A contemporary illustration of this contrast can be seen in Mrs K.McC. Clark's A Southern Cross Fairy Tale (1891) depicting children dancing with an assortment of traditional English fairies and New Zealand bush creatures; her artist managed to make a passable dancing figure of the Kiwi, but the Tui defeated him.[112]

The Kiwi was already being adopted as a national emblem by 1900, as Charles Douglas's comments indicate. Entrants in the 1908 design competition for a New Zealand coat of arms explained that they included the Kiwi because it was "typical only of N. Z." and emblematic of "the oldest New Zealanders".[113] The identification by New Zealanders of themselves as "Kiwis" occurred more gradually, not becoming general until some time after the Second World War.[114] But Colonists were becoming Kiwis. As Sinclair points out, the identification with the bird was not totemic. "There was no mystic association; no identification of the New Zealand man with nature".[115] At the same time, however, the native creatures that had once been seen as little more than scientific curiosities, among the lesser breeds that colonisation must necessarily displace from the land, had become part of the heritage of the New Zealander and a focus of national pride.

CHAPTER 7

CONCLUSION: CONSERVATION IN CONTEXT

Walter Buller and all his works have formed a framework on which to base this study. At the time of his birth in 1838 the first great wave of European colonists was about to flood into New Zealand; by the time of his death in 1906 they and their progeny were well established and the colonial government was about to consider dropping the style of "Colony" to become a British "Dominion". The colonists had indeed taken dominion over the earth; in the process the native people had been displaced to the social and economic periphery, and the native flora and fauna had been largely cleared away and replaced by English grasses, sheep, and sparrows. The presupposition under which the colonists had laboured, of the inevitability of the displacement of native species and native people by the more vigorous European immigrants, appeared to have been borne out. But by 1906 attitudes toward the displaced natives were changing. Regret was being expressed at the passing of the "noble" Maori race; sanctuaries were being established to conserve the last remnants of the disappearing native bush and native birds. And as British colonists became settled New Zealanders they began to develop a sentimental attachment to native bush scenery and birds, and to elevate images of them into symbols of their new country and their new identity.

This concluding chapter will both sum up the findings of the earlier chapters on colonial attitudes and developments during Buller's lifetime, and look beyond 1906 to developments afterward. Buller and his works will thus take their place in the background rather than at centre-stage. Indeed, as this study has shown, colonial scientists in general, and Buller in particular, had an important role in the colonial milieu. Although less attention has been paid to them than to the politicians and poets, they were not peripheral in colonial society; their ideas and images helped to form the colonists' view of New Zealand.

In this chapter the main themes developed in this study -the colonists' presupposition of displacement, the emergence of ideas of conservation of native species, and the interrelation of both with ideas of colonial nationalism -will be reviewed; some of their influences on later attitudes discussed; and some of the implications for the historiography of colonisation and conservation in New Zealand identified.

Although the three themes mentioned will be discussed in turn they cannot be considered in isolation; there are connections and contradictions between them. Indeed one of the conclusions of this study must be that by the end of the nineteenth century colonial attitudes toward native things

were characterised by their contradictions -contradictions which still remain largely unresolved.

7.1 The Ideology of Colonisation: Displacement of Native Forms

We saw in earlier chapters that British colonisation of New Zealand proceeded under a set of assumptions and attitudes which together led to the belief that the displacement of the native people and of the native flora and fauna by European immigrants and introductions must necessarily and inevitably occur. Just as the colonists' attitudes toward the Maori people combined the fundamental assumption of European racial and cultural superiority with the expectation of Maori extinction, their attitudes toward the native flora and fauna on the one hand, and the "acclimatised" European species on the other were based on the perceived superiority (in terms of both desirability and vigour) of the latter, and the decadence and imminent extinction of the former. Ideas concerning the native people on the one hand and native plants and animals on the other were closely connected: displacement and extinction of the Maori race was expressed in biological metaphors and "explained" by perceived analogies with the displacement and extinction of the native vegetation and the native birds -and vice versa.

Indeed, as the analysis in Chapter 2 of the writings of Buller and his contemporaries has shown, the displacement of the natives by European immigrants was seen as a general phenomenon, embracing the decrease of the Maori race on the one hand and the disappearance of the native plants and birds on the other. Much of the force of the idea of displacement was in its apparent comprehensiveness: that all the natives -rats, birds, plants, and people -were less vigorous, progressive, advanced or competitive as the corresponding European immigrants and that all would inevitably be displaced by them. Hence, it was observed, the "native" rat was annihilated by the spreading "English" one; native birds disappeared while introduced birds such as sparrows multiplied so rapidly as to become pests; the native bush receded while European plants grew abundantly; and the Maori race decreased while the European colonists flourished. All these were seen as manifestations of the one basic phenomenon of native inferiority, leading to the same conclusion: displacement of the native. The apparent parallelism between the various manifestations gave strength to the argument, and obscured the cases where European species did not flourish -or natives did.

The view that displacement of the natives was an inevitable process fitted easily into the colonist's ideology. As the colonial scientist W.T.L. Travers told his fellows in 1869, "in all that is taking place around us, we see the energies

of our race forming a new and vigorous state. The face of the country, the life native to its soil, and the aboriginal race which claimed it, are all being modified, effaced, and displaced".[1] It was frequently suggested that all these changes were somehow destined to occur; that displacement of the natives was part of the working out of the law of nature. Whether this law was expressed in terms of divine providence or of Darwinistic survival of the fittest, it seemed that the progress of colonisation was not merely assured, but pre-ordained.

However, by the end of the nineteenth century, colonial attitudes had shifted to a small but significant degree. Displacement of the natives was still widely held to be inevitable, but more regret was being expressed about it. The cant phrases of the ideology of displacement remained in vogue: "survival of the fittest"; Buller's "smooth down their dying pillow"; the proverb "which they [the Maori people] themselves say" concerning the native rat being supplanted and exterminated by the European rat. The last was included even in the New Zealand Graphic Reader, a school reader published about 1905.[2] Other variants on the theme of displacement also persisted: the idea expounded by F.D. Fenton, A.K. Newman and Buller, of the Maori as an "effete" race -in decay even prior to colonisation -was expressed most succinctly in Johannes Andersen's prizewinning 1906 Christchurch "Exhibition Ode": "Ye were dying when we

came!"[3] But by 1906 colonists often referred to the displacement in terms of regret. Andersen's ode alluded to the possibility that colonists might feel some "shame" at the passing of the Maori race. In the Auckland Institute, Archdeacon P. Walsh presented a series of papers deploring the destruction or "rapid extinction" of the native bush, and contrasted the tattered remnants with the "magnificent growth" once shown by the forest in its "virgin state".[4]

Similar sentiments were expressed about the "passing of the Maori". The New Zealand Graphic Reader concluded its lesson on "Life Among the Maoris" on this note: "It would be sad, indeed, for us to reflect that the civilisation we brought into the country had been the means of exterminating a race whose finer qualities we can so thoroughly appreciate".[5]

Furthermore, although the colonial presupposition that the native would be displaced still held, many of the basic elements which had supported it -the assumption of European superiority; the expectation of native extinction; the correlation between displacement of the native race and of native species; and the attribution of the whole process to a law of nature -were being challenged or modified.

The increases in the Maori population statistics in each census from 1901 presented a particular challenge to the idea of inevitable native extinction. While many colonists ignored

or explained away the evidence that did not conform to the expectation, some did accept that the Maori might persist as a living people. In 1902, after the first rise in Maori census figures, O.T.J. Alpers, in his chapter on "The Maori at the End of the Century" in The Progress of New Zealand in the Century wrestled with the "deliberate verdict of one of the most sympathetic students of the Maori problem upon the fate of his own race" -that "The Maori is going to his doom".[6] Alpers considered it "absurd" to regard the extinction of the Maori race as "in some way mysteriously fated and inevitably foredoomed" and in this context described "survival of the fittest" as a "scientific platitude".[7] In the same year Henry Hill told the Hawkes Bay Philosophical Institute that "There is something fascinating in the Maori race.... I have little but praise to bestow upon this fading but noble race of people".[8] They were no longer, Hill explained, "a factor to be considered by colonists...at the present time no one thinks that any danger is likely to result from disaffection among...the native tribes". The success of colonisation in displacing the natives permitted the colonists the luxury of a rather ambiguous sentiment of condolence.

After the 1906 census and the second successive rise in the Maori population statistics, James Cowan wrote in The Maoris of New Zealand that "the decay of the race has at last been stayed".[9] This view, however, was still not widely

accepted among the colonists. In the preface to Cowan's book James Hight (professor of history at Canterbury University College) not only relegated the Maori to the past, but, taking the colonist's perspective at its most narrow, declared that in its time the "old Maori community" had "done little to shape the country so as to satisfy the Pakeha's economic needs" -or in other words the Maori "had not learnt how to re-act upon Nature and to modify his environment with the skill of the Englishman, 'heir of all the ages'...[by] roading, bridging, deforesting, prospecting...." In Hight's view contemporary New Zealand life was only faintly "tinged" by any influence from the "dispossessed people".[10]

In 1907 Archdeacon P. Walsh, in an address to the Auckland Institute entitled "The Passing of the Maori: An Inquiry into the Principal Causes of the Decay of the Race", categorically rejected the rising trend in Maori census statistics as illusory -an artefact of increasing accuracy of enumeration. He was certain that the race was doomed under the fatal impact of European colonisation. Like other colonists at this time, he regarded this as a matter for regret, if not contrition: "However humiliating to the self esteem of the white man, it must be confessed that it is the contact with European civilisation that has proved the ruin of the race".[11] Walsh argued his case for the displacement of the native people by analogy with the displacement of native species. He saw parallels in the effects of direct attack,

competition, changed conditions, disease and even humanitarian charity:

> The case of the Maoris is analogous to that of the New Zealand bush. The magnificent growth that has withstood the storms of countless centuries...is gradually perishing before the advance of European settlement. Even the portions that have so far escaped the bushman's axe are unable to support the new conditions. The browsing cattle, the competition with foreign plants, the incursion of imported blights, all contribute their share in the general destruction, while even well-meant efforts at preservation often serve only to hasten the decay.[12]

The Maori is "sick unto death, and is already potentially dead", Walsh concluded, and quoted the proverb (which "They themselves say") that "as the Maori rat was destroyed by the pakeha rat, so our people also will be gradually supplanted and exterminated by the Europeans". Walsh was so convinced of the inevitability of extinction that he confidently predicted the next census would "show that the Maori population, instead of increasing, has been diminishing all the time".[13] The next census in 1911 showed a further increase. But the colonial expectation of native extinction persisted. One of the Enumerators for the 1911 census wrote in his official report that "the position is hopeless...the race is dying...and that all that can be done now is to make things easy as possible for them"[14] -in other words, to smooth down their dying pillow.

However, even apart from the evidence of the census figures, such views no longer went unchallenged. Among Walsh's

audience when he gave his 1907 address at the Auckland Institute were two university educated Maori, Drs. Maui Pomare and Te Rangihiroa, who politely but firmly rejected Walsh's view of impending Maori extinction.[15] They also took the further step of joining as members of the colonial scientific societies (the Wellington Philosophical Society and the Auckland Institute respectively) -apparently the first Maori to to do so.[16] They, along with Apirana Ngata, were prominent members of the "Young Maori Party", a group which had formed initially among students of Te Aute College to promote the "amelioration of the Conditions of the Maori race".[17] By 1911 they held three of the four Maori seats in the New Zealand parliament. Te Rangihiroa (also known as Peter Buck) was of the Ngati Mutunga people of Taranaki. After successful, though brief careers in politics, military service, and public health among the Maori people, he won particular renown as an anthropologist.[18] In one of his earliest papers before the Auckland Institute, in 1922, he enjoyed the irony of reusing Walsh's title ("The Passing of the Maori") and of quoting Walsh's diagnosis that the Maori race had been (in 1907) "already potentially dead".[19] Here Te Rangihiroa (who was at the time Director of the Division of Maori Hygiene in the Department of Health) departed from his written text to comment, "then all I can say is that it is a good, healthy corpse".[20]

He went on to survey the views which had been expressed in the philosophical societies on "the passing of the Maori", from A.K. Newman in 1881 writing off the Maori as an "effete" race; Buller's invocation in 1884 to "smooth down their dying pillow"; Henry Hill's peroration in 1902 on the "fading but noble race"; and Walsh's requiem in 1907 for the race "already potentially dead". Te Rangihiroa pointed out that none of their gloomy prognoses had been borne out; in fact "The wonder is that extinction was still being argued about in 1907". He suggested that Newman's view of the Maori dying from some innate decadence even prior to British colonisation was "in the nature of an excuse"; and rejected the others' "implied law that all dark-skinned races die out after contact with civilisation".[21] Referring to the analogy of the Maori becoming extinct like the native rat, which had been quoted as a Maori proverbial saying by Buller, Walsh and many others, Te Rangihiroa -while accepting their statements that it had been expressed by despondent Maori in the past[22] -rejected it as well: "the present generation refuses to comply with the picturesque but illogical simile of following the way of the vanished Maori rat and the extinct Maori dog. They do not appear to belong to the same class of mammal".[23]

Te Rangihiroa's paper is important not only for its Maori perspective on colonial notions of displacement and extinction, but also as an influence on subsequent academic

writings concerning relations between the races in New Zealand. Similar sentiments had been expressed in colonial forums by other Maori -James Carroll's comments in 1891 rejecting the "mistaken theory" of Maori extinction and dismissing the notion of smoothing down their dying pillow as "sentimental nonsense" have already been noted in Chapter 2.5 -but in 1922, after five successive censuses had shown increases in the Maori population, Te Rangihiroa's sardonic debunking of these colonial ideas of displacement and extinction of the Maori race had more impact. Not only were few unqualified assertions of Maori extinction made from this time,[24] but such stock phrases as "smooth down their dying pillow", or the analogy of the native and the European rat, became used in both academic and popular historical writing, not in support of the ideas of displacement and extinction of the natives, but to reflect on these ideas as held in the colonial past.

The rat analogy, in the form of a supposed Maori saying, thus became used to support scholarly conjectures that during the latter part of the nineteenth century the Maori people had passed through a period of psychological depression and despair.[25] In a similar fashion the phrase "smooth down their dying pillow" became used to reflect on the now-disowned attitudes of nineteenth century colonists. In Buller's picturesque and quotable version it began to gather the status of tradition. Several old colonists recorded

versions in their reminiscences,[26] but most of its momentum came from its quoting by Te Rangihiroa.[27] I.L.G. Sutherland, in The Maori Situation (1935) and The Maori People Today (1940), eulogised Te Rangihiroa and the other leaders of the "Young Maori Party" and quoted the line from the survey of colonial views on Maori extinction which Te Rangihiroa had given in his 1922 paper to affirm that the "widespread belief...cherished by the average white New Zealander, that no native people has ever been so fairly treated by Europeans as has the Maori people...is based on legend".[28] Though by no means the first to look critically at relations between the races in New Zealand, Sutherland's writings were influential in questioning the old Eurocentric assumptions; from his books in turn the line "smooth down their dying pillow" has been quoted and misquoted by innumerable New Zealand writers,[29] and has also found its way into the international literature on race relations as an apt expression of the nineteenth century colonial expectation of Maori extinction.[30]

The other main element on which the presupposition of displacement had rested -the assumption of European superiority, both of people and of species generally -also became modified, but in a more complex way. The shift can be seen in the terms colonists used to compare native New Zealand species with their European counterparts. For instance the English-born colonist Alfred Domett, in his

rambling romantic verse epic Ranolf and Amohia (1872), descanted upon a number of the native New Zealand birds, including "The large red-breasted robin -kinsman true/ Of England's delicate highbred bird of home"[31] The reference to the "delicate" nature of the English bird perhaps reflects its failure, for all the colonists' attempts, to become acclimatised in New Zealand. But compare Domett's view of the superior breeding of the English bird with that shown in the description, written in 1907 by the New Zealand-born journalist James Drummond, of the "struggle" which had occurred in New Zealand between the "new fauna and the old one":

> The result was never in doubt. The members of the old fauna, which may be regarded as aristocrats of the Animal Kingdom, had absolutely no chance against the shrewd, vulgar, hard-headed, cunning, practical, greedy, and ferocious invaders, who who were inured to hardship and had walked hand in hand with adversity through many generations.[32]

Drummond, following Buller and other colonial authorities, remained certain that the displacement of the natives had been inevitable, and he employed an implicitly Darwinistic explanation, that European species were the product of more rigorous competition -the "harder school" view of European superiority. But the terms of superiority have shifted: Drummond -like Buller, a New Zealand-born colonist[33] -not only used the image employed by Buller of colonising species as "invaders"[34] but also portrayed them as tough and vulgar -Cockney sparrows, perhaps, or to relocate the

European metaphor, sans culottes -and the natives as the refined but doomed nobles of the New Zealand ancien régime. Domett's "highbred" image has been transferred from the European to the native species. Drummond's perspective, however, was a rather ambivalent one; he himself, although native-born, still belonged among the invading, displacing colonists.

Such ambivalence about the supposed superiority of European species is also seen in the colonial attitude toward "acclimatisation" or introduction of European plants and animals. After the passing of the Animals Protection Amendment Act 1895, the importation of new species required government approval but this was evidently readily given; not only did the acclimatisation societies continue their activities but a number of government departments became increasingly involved as well. The Department of Tourist and Health Resorts, which was established in 1901, became one of the strongest advocates of acclimatisation. The Department's promotional literature gave an image of New Zealand as a combination not only of an Arcadian ideal ("a good land...wherein thou shalt eat bread without scarceness"[35]) -an image claimed for many colonies[36] -but also a "sportsman's paradise" well stocked with waterfowl, trout and deer, and all among "magnificent" scenery, "beautiful" native birds and "picturesque" native people. In an effort to improve this "paradise", the Department's energetic

superintendent, T.E. Donne, arranged for the importation of further game animals to stock the national parks and reserves. In 1907 the Department's Annual Report recorded that elk (wapiti) had been liberated in Fiordland National Park, red deer in Tongariro, and thar and chamois at Mt Cook. The latter were obtained from the Emperor of Austria in return for a shipment of New Zealand native species, in particular Tuatara and Kiwi -the native "heritage" was a negotiable asset.[37]

Experts and enthusiasts in other government departments assisted in the task of acclimatisation. L.F. Ayson, the Chief Inspector of Fisheries in the Marine Department, arranged for the importation of salmon ova from the United States in 1901 and their hatching and successful introduction into the Waitaki river in Otago.[38] From about 1912 the newly appointed Commissioner of Police, John Cullen,[39] used all his influence and (from 1916) his position as honorary warden of Tongaririo National Park in a personal campaign to "fit out" several thousand acres of the park as a "moor for game" by "replacing" the native tussock with Scottish heather. His plan was to then introduce grouse, in order to provide sport for wealthy "shootists".[40] Cullen's efforts drew a number of objections, especially from scientists such as H.B. Kirk and Leonard Cockayne, and politicians such as H.G. Ell and G.M. Thomson, who considered that the national park should be "maintained as a sanctuary

for native birds and native flora";[41] but in general the continued "acclimatisation" of game animals and other species (Donne also introduced Australian opposum[42]) had wide support.

The contradictions in attitudes on "acclimatisation" were clearly shown by James Drummond's survey of colonial opinion on "Our Feathered Immigrants" (introduced birds), carried out in 1906.[43] Drummond found general agreement that the introduction of "small birds" (European finches and sparrows) had been "a terrible mistake" and that "as with most aliens it would be better if they had stayed at home".[44] The chauvinism of the reference to "aliens" might be taken as evidence for a sentiment of colonial nationalism, rather like the anti-"Homie" sentiment described by Keith Sinclair,[45] although the allusions in the expression that aliens should stay at "home" are complex and ambiguous. Drummond (who was New Zealand-born and generally referred to England as "the Old Country" rather than "home") was rather surprised to find that most of his correspondents, despite their thoughts on the small bird problem, were in favour of further introductions of English birds, especially the "robin redbreast". As Drummond commented, "sentiment in regard to the birds of the Old Country is not dead".[46]

Through the nineteenth century, colonists in New Zealand had generally taken the view that the displacement of the native

plants, animals and people by European immigrants was a natural, inevitable process: it was a law of nature. Scientists such as Buller argued this way even when making a case for protection and conservation of native species. But by the early years of the twentieth century this view also was being challenged.

As early as 1869 the colonial scientist W.T.L. Travers had suggested that the displacement of native New Zealand birds and plants had been primarily accomplished, not by the operation of any law of nature, nor by the competitiveness or vigour of the introduced species, but by human intervention.[47] This argument, based on the ideas of the American writer G.P. Marsh, did not prevail against the orthodox dogma, which continued to be supported by both colonial and metropolitan scientific authorities, at least until the end of the nineteenth century. For instance, the idea that New Zealand native plants were displaced by the aggressive colonising vigour of northern European or "Scandinavian" species, which was expressed in 1860 by J.D. Hooker of Kew and repeated by A.R. Wallace in 1880, was first seriously questioned by the colonial botanist Donald Petrie in 1900.[48] In 1911 another colonial botanist, Leonard Cockayne, showed by means of ecological studies of "plant associations" (the assemblages or "communities" of species found in particular habitats or situations) that introduced species did not gain a foothold in New Zealand except in

conditions modified by human action.[49]

Paradoxically, although this denial of the idea that displacement occurred by some natural necessity was not generally accepted by scientists until well into the twentieth century,[50] in another form it had long been accepted among the colonists, especially in the bush country of the "back blocks": the indigenous forests and the forest-dwelling birds were replaced by grass and sheep only by the aid of much human labour.[51] The struggle to "break in" the land, to establish "improved" English pasture on it, and to prevent it "reverting" or "going back" to native scrub became central to the New Zealand pioneer ethos, even while it was still firmly believed that the displacement of native species by superior, more vigorous introduced species was a natural, inevitable process.

To Buller and his contemporaries the analogies between the displacement of the New Zealand native plants, the native birds, and the native people, appeared to demonstrate the universality of the phenomenon of displacement -its force as a law of nature. Observed with the benefit of hindsight, and from a changed perspective on native vigour, the parallels between the various instances of displacement can be seen to be superficial and only partial. The bush was indeed receding, many birds disappearing and (up to the 1890s) the Maori population decreasing; but not from some general and

ineradicable inferiority attaching to native things generally. All were responding and adapting in different ways to the radically changed conditions. When the bush was burned, cut and cleared, it was not just the sown European grasses and the adventitious European weeds that sprang up in its place, but Bracken fern, Manuka and other native "weeds" as well. Some European plants -various grasses, thistles and gorse, for instance -grew well, but others did not. For all the efforts of the colonists to establish their favourite English woodland flowers -primroses, cowslips and violets -these never did grow wild in New Zealand.[52] Again, although the native forest-dwelling birds disappeared along with their forest habitat, those of the open country increased as their habitat expanded. The Harrier hawk Circus approximans, for instance, flourished -despite the large numbers killed for the bounty paid by the Acclimatisation Societies, which saw the hawks as vermin attacking the European game-birds that they were working to introduce.[53] On the other hand, although some of the introduced European animals became so well established as to become pests (as witness the notorious case of the rabbit) others, again including sentimental favourites such as the English robin and nightingale, disappointed the Acclimatisation Societies and themselves died out.[54] In the case of the decrease of the Maori population, probably the major factor was the severe mortality from epidemics of infectious diseases such as measles, whooping cough, typhoid and influenza. The Maori,

who had not previously been exposed to these diseases and had no natural immunity, suffered far more than the European colonists who brought them. The Maori population was not decadent or constitutionally weaker as the colonists assumed, but immunologically less protected. By about 1880, when most of the Maori population had been exposed to the new infectious diseases, the mortality rate fell and the population decline halted.[55]

As indicated in Chapter 2.6, by the end of the nineteenth century even the the prototype of displacement -the "extirpation" of the Kiore by the Norway rat -came under question, although the associated proverbial saying persisted. Evidence was presented, for instance by Buller in 1892 and Taylor White in 1894, suggesting that the Kiore had not been entirely displaced and exterminated.[56] In 1909 Elsdon Best refused to accept this, in much the same way as most colonial authorities at the time refused to accept the evidence of the census statistics that the Maori race was not dying.[57] In the view of ecologists of the 1980s, the idea that the European species supplanted or exterminated the Polynesian one is regarded as misleadingly oversimplified; under some conditions the Kiore still thrives in New Zealand, even alongside its European counterparts.[58] Indeed ecologists have observed that the processes of dispersion and displacement of species have not always worked to the detriment of native New Zealand species, some of which have

in fact spread to and colonised other parts of the world, including Europe.[59] Such instances, however, which run against the popular perception of native inferiority and European vigour, have attracted very little attention in New Zealand.

Many of the premises upon which the nineteenth century colonists' presupposition of displacement had originally rested -the expectation of inevitable native extinction; the perception of native inferiority; the linking of both into a law of nature -were, by 1906, being abandoned or modified. At the same time, however, the displacement which had been anticipated had indeed occurred. The aim of the New Zealand Company in the 1840s to "transplant English society...everything of England, in short, but the soil"[60] had very largely been accomplished. Furthermore, as A.J. Harrop observed in England and New Zealand (1926), not only was New Zealand, to all appearances, "quite as British as the British Isles", but "New Zealanders themselves" (among whom he evidently did not include the Maori people) were "inclined to take the fact for granted, and to assume that the British colonization of New Zealand was a perfectly simple and inevitable phenomenon".[61] Displacement of the natives by the colonists had passed beyond an expectation to become accepted as the "natural" or "normal" state. That New Zealand should be a "Britain of the South", a "neo-Europe" in the South Pacific, had become an unquestioned element in the

ideology of the new New Zealanders.

7.2 The Aftermath of Colonisation: Conservation of Native Forms and the Colonial Search for a Native Identity

By the end of the nineteenth century the colonists' view that in the progress of colonisation the "face of the country, the life native to its soil, and the aboriginal race which claimed it" would be "modified, effaced, and displaced",[62] had shifted to the extent that some of the consequences of this displacement were being deplored, and its inevitability as a law of nature was being questioned; but the fact of displacement had become taken for granted. The predominance of English plants and animals, English people and English law and custom went unquestioned; to the colonists all these had become "normal" in New Zealand. At the same time the contrasting and in many ways contradictory view became accepted that native scenery and native species should be retained and preserved as the "heritage" of New Zealanders and symbols of their country. The development and acceptance of the idea that native species should be preserved has been described in some detail in Chapter 5: the early proposals of T.H. Potts and others, which were largely ignored; the debate about state forest management or "conservation", which made that concept a familiar one in the colony; the growing

aesthetic and sentimental interest in native birds and the perception that they were being rapidly exterminated by introduced stoats and weasels; the establishment in the 1890s of island reserves as sanctuaries for the birds; and the adoption of some species as symbols or emblems of a new national identity. It has been argued that although the ideas of preservation or conservation were drawn or modified from American or British precedents, they gained particular acceptance in New Zealand by association with the developing national sentiment among the colonists.

A number of strands in colonial support for preservation or conservation of native species have been noted, including the scientific importance or value accorded to the native species by metropolitan authorities; the special romantic appeal attached to "dying races" or species approaching final extinction and the "reproach of posterity" if no effort was made to avert their fate;[63] an aesthetic or sentimental interest in wild nature and "our feathered friends of the bush".[64] However, by the 1890s when such preservation became, in Buller's phrase, a "popular fancy", it was expressed particularly in terms of colonial pride and identification with species seen as especially characteristic of New Zealand. Here we will expand on some aspects of the argument which have been touched on in earlier chapters, in particular this link between national sentiment and the preservation of native species; the construction of ideal

images of native species, native scenery and the native people; and some of the contradictions inherent in colonial attitudes toward native things.

The issue of the growth of a New Zealand national identity is a large one, aspects of which have been explored particularly by Keith Sinclair.[65] In his account of the New Zealand Natives Associations of the 1890s, Sinclair notes that they advocated, among other things, various "more-or-less patriotic causes, such as forest conservation and native bird protection".[66] These causes are not intrinsically patriotic; rather, as argued in this study, as British colonists became New Zealanders they invested images of the native New Zealand scenery, flora and fauna with newly patriotic significance and elevated particular native species as emblems or symbols of New Zealand identity. Protecting native birds, especially against the depredations of collectors taking specimens out of the country, thus became a matter of patriotic or national pride.

There is a problem of terminology here: whether the colonists' growing feeling of local pride and of New Zealand identity can be properly called either "colonial nationalism" or "colonial patriotism". It has been argued, for instance by Douglas Cole, that the term "nationalism" has been too loosely applied in British settlement colonies.[67] On the other hand there is an inherent ambiguity in applying the

term "patriotism" -meaning an attachment to a "fatherland" or native land -in reference to a colonial or settler society in which not only had a large proportion of the settlers been born elsewhere -in Britain -but many of the native born also professed an almost "patriotic" loyalty and attachment to that distant country as "home".[68] The patriotism of the colonists was a dual one, for both the old homeland and the new.[69]

This duality became obvious only in the later nineteenth century. After visiting New Zealand in 1839-1841 Ernest Dieffenbach commented that "in a native the love of his country is much stronger than in a colonist". He was referring to the attachment of the Maori people to their land; he wrote scathingly of British colonists generally as an "imported race of shopkeepers, who only strive to dissolve the ties which should bind them to the land of their birth and who pride themselves on their own ignorance regarding everything that belongs to the original inhabitants", and "have no interest in the country, no regard or attachment towards it, beyond its money value".[70] But by the end of the nineteenth century a feeling of local pride and separate identity was certainly developing among the colonists in New Zealand. Sinclair quotes the sentiment expressed by Edith Searle Grossman in 1905, that "A strong patriotic feeling has grown up for the land of our birth.... The bush is no longer an empty and lifeless waste; it is haunted by the memories of

our childhood".[71] There is a slight ambiguity in Grossman's "patriotic feeling" for the "land of our birth": although writing of New Zealand, she had in fact been born in Australia.

It should also be noted that the feeling for the bush which she expressed was not a universal element of colonial patriotism. M.H. Holcroft, who was born in New Zealand in 1902, wrote in his prizewinning essay for the New Zealand Centennial in 1940 -celebrating one hundred years of European colonisation -that "We are still strangers in the land" and, maintaining a rhetorical separation between colonist and Maori, described the New Zealand native bush as "something that is not ours, something that has never belonged even to the Maori".[72]

Nor, it must be stressed, was patriotic or national pride the only influence in the acceptance of ideas of protection or conservation of native species in New Zealand. As noted in Chapter 5.12, during the nineteenth century there was a shift to more sentimental, protectionist attitudes toward animals generally in many Western countries.[73] Many of the developments which have been described here from New Zealand -such as the movements for scenery preservation, and for the establishment of national parks and of reserves for the preservation of native flora and fauna -were also occurring in other Western countries, especially in the British

colonies and the United States, during the same period.[74] But just as Americans after Independence had turned to nature, as seen in the Romantic mode of the time, to show that their new country was second to none;[75] so New Zealanders during the 1890s, in their own search for national identity, exalted the "magnificent" scenery and the birds, "so beautiful and so rare", and took up with particular enthusiasm the current idea that efforts should be made to preserve and protect them.

The fact that it had been the progress of colonisation in clearing the bush and displacing the native species which had made the efforts at preservation necessary did not go unnoticed. As James Drummond suggested in Feathered Friends of the Bush (1907) the tribulations of the native birds in particular had "endeared them to the hearts of New Zealanders":

> They have been shamefully harried, bullied, robbed of their heritage, and scourged with the besom of destruction. This wickedness has been carried on so thoroughly that they have been driven from large tracts of country where formerly they were very numerous.
>
> For twenty or thirty years the colonists have deplored this tragic state of affairs and the awful fate that seemed to be impending.... Somewhat late in the day, the Government has established three Bird Sanctuaries.[76]

The conflict between the ideology of colonisation and progress and the urge to preserve and protect the "primeval" bush and the native birds will be explored further below.

But, to reiterate the point of the present argument, the colonists' heightened sentiment in favour of the native species -the birds in particular -was generally associated with their new-found patriotism. To quote Drummond again:

> The bell-bird's song is even more bewitching to a New Zealander than the lark's song is to an Englishman. The notes go straight to a New Zealander's heart. They send the blood tingling through his veins; childhood's days crowd in upon his memory, and there arise visions of stately trees, drooping ferns, mossy dells, and all the beauty of the New Zealand forest.[77]

7.2.1 Ideal Images:

(i) "Beautiful" Native Birds

The illustrations of the bell-bird and other native birds in Drummond's Feathered Friends of the Bush were, of course, from "Buller's Birds". The influence of these in shaping colonial images of the native birds has been discussed in Chapter 6. It is clear that for most colonists the image of the native birds -"so beautiful and so rare"[78] -was an idealised one with little relation to their everyday experience of well-acclimatised English thrushes in the kitchen garden and English sparrows scavenging from horse-droppings in the streets. As Buller observed in 1887, "in New Zealand one may now live for weeks and months without seeing a single sample of its indigenous birds, all of which, in the more settled districts, have been supplanted by the

aliens that have been imported".[79]

Earlier accounts of the native birds had sometimes shown an aesthetic appreciation for particular species. For instance, in 1835 William Yate described the pigeon Hemiphaga novaeseelandiae as "one of the most beautiful birds the country possesses", and judged that Kotihe (Stitchbirds, Notiomystis cincta) were "as beautiful as the [English] linnet in their plumage, and surpass him in the delicay and elegance of their shape".[80] Other species often described as "beautiful", were the Huia Heteralocha acutirostris, Tui Prosthemadera novaeseelandiae, and Saddleback Philesturnus carunculatus.[81] In the first edition of his A History of the Birds of New Zealand (1873) Buller wrote of the pigeon Hemiphaga novaeseelandiae that "In its native country it is less esteemed for its beauty than for its value as an article of food; and to both Maoris and colonists, in every part of New Zealand, pigeon shooting, at certain seasons of the year, affords agreeable recreation, while to many it is a source of profitable employment."[82]

Buller's illustrated books helped to foster both the colonists' perception of the native birds as "the most interesting and unique bird fauna in the world" and their aesthetic appreciation of images of the native birds they rarely saw. By the 1890s the adjective "beautiful" was being applied to native birds in a general way in expressions of

local pride.[83] Idealised images of particular species -often drawn from Buller's books -were being used on stamps and postcards, and adapted as trademarks and emblems, thus promoting their association with New Zealand and further widening their appeal. Some birds -Kiwi, Huia and Tui in particular -were already beginning to be used as emblems or symbols of New Zealand national identity.

The Kiwi had never been called "beautiful"; in the 1840s and 1850s it was variously described as "the ugliest bird one can well imagine.... a cross between a snipe and a monkey",[84] and "grotesque-looking...a hairy hedgehog on stilts".[85] But by the 1890s the terms used to describe it were more reverent and solemn: "curious", "interesting", "remarkable". In 1907 James Drummond included the Kiwi among his Feathered Friends of the Bush and, extending his image of aristocratic natives, described it as "the most notable living bird of New Zealand", with "the most ancient lineage of all living birds".[86] By this time symbolic kiwi were appearing in trademarks, cartoons and coats of arms to represent a New Zealand origin or identity. One of the first uses of the kiwi to symbolise New Zealanders in a nationalistic sense linked it to another facet of the developing New Zealand mythology: in December 1905 after the touring New Zealand "All Black" rugby team lost to the Welsh team in a controversial decision, Trevor Lloyd drew a cartoon for the Auckland Weekly News showing a kiwi on the rugby ground, having

downed Scotland, Ireland and England, choking on Wales.[87]

However, as already noted in Chapter 6.2 there was some ambivalence about the choice of a "national bird".[88] The adoption of a native bird as a symbol or emblem of national identity was not at issue, but it was sometimes queried whether the Kiwi was the best choice. In 1939 the New Zealand Centennial News, after reporting that the yellow Kowhai was the most popular choice for a "National Flower", noted that although the Kiwi was usually regarded as the national bird, "how many New-Zealanders have seen or heard a live kiwi?"; the preference, it suggested, would be for "the lovable tui, one of the world's best chanters".[89] The combination of the Tui and the Kowhai was in fact adopted as the emblem of the New Zealand Native Bird Protection Society, later the Royal Forest and Bird Protection Society of New Zealand.

7.2.2 Ideal Images:
(ii) Scenic "Beauty-Spots"

By the end of the nineteenth century the colonists held idealised images not only of native birds but also of New Zealand scenery and native bush. And just as some birds gained iconic status as symbols or images of New Zealand, so too did certain images of New Zealand scenery. The pictorial

letter-cards issued by the New Zealand Post Office in 1895 combined vignettes of kiwi, Mt Cook, Milford Sound, Tongariro and Lake Taupo, and the Sutherland Falls.[90] A similar selection of "scenic gems" were presented over and over again on stamps, postcards, and in literature promoting New Zealand's "magnificent scenery".

From the 1890s there was an upsurge in support among the colonists in New Zealand for the idea of native bush and scenery as a "heritage" to be protected -always provided settlement and progress were not impeded. The Wellington Scenery Preservation Society which commiserated with Buller when the bush on his Papaitonga property was burnt in 1895 was only one of many such societies active at that time.[91] These societies were primarily urban and in practice concentrated on protecting local parks and reserves from development and on urban beautification generally, much in the style of the "beautifying societies" later formed in many New Zealand towns.[92] However, they also promoted the idea that New Zealand bush or "native scenery" was part of the "national heritage" which was worth preserving from unnecessary destruction.[93]

The rhetoric of the Scenery Preservation Societies contained much local and national pride; however, again other possible influences should be considered. One reason for the modification of the colonists' general perception that native

bush was an obstacle to progress which should be cleared away as quickly as possible ("one blade of grass [is] worth two trees"[94]) was the realisation that tourists would pay to come to see the picturesque native scenery (including the native birds, trees and the native people). And although the American philosophy of conservation developed along rather different lines, with a much greater emphasis on the "wise use" of resources, some particular American ideas were adopted in New Zealand. The American precedent for the concept of "National Parks" has already been mentioned; another American innovation which was taken up in New Zealand (but not in Britain) was that of "Arbor Day" -a day on which children in particular were encouraged to plant trees, especially for their aesthetic value. Arbor Day began in Nebraska in 1872 and was instituted in many American States. It was first copied in New Zealand in the Wairarapa settlement of Greytown in 1890 and two years later, after a campaign by Alexander Bathgate of Dunedin, was officially gazetted to be observed nationally.[95] It is interesting to note that Bathgate considered that unlike America, New Zealand in 1891 lacked "anything like a patriotic spirit".[96] From 1894 some American States celebrated a combined "Arbor and Bird Day",[97] but this was not followed in New Zealand.[98]

In the 1890s and 1900s the preservation of both native birds and of native bush was promoted in the New Zealand parliament

by enthusiasts such as Thomas Mackenzie and (from 1900) Harry Ell.[99] By 1903, Ell's efforts, the growing national pride in the special features of New Zealand, and the appreciation of their potential value as tourist attractions, led to the passing of a Scenery Preservation Act "to provide for the Acquisition of Lands of Scenic or Historical Interest".[100] Members of parliament spoke lyrically of the need to "conserve the beauty-spots" of the New Zealand bush. The Premier, R.J. Seddon, argued that "the time has arrived in the history of our colony when our scenery should be preserved, when the historic and beautiful places should be for all time conserved".[101] Not a single member opposed this general principle, although one, Job Vile, who described himself as an "old settler", suggested that it would be a waste of money trying to preserve bush which was sure to disappear anyway.[102] But this objection was brushed aside. A Scenery Preservation Commission was established to report on areas which should be acquired to be "fenced, preserved, and conserved intact as and for an inalienable patrimony of the people of New Zealand".[103]

But here again, while New Zealand bush scenery was being enshrined on innumerable picture postcards and in books with titles such as Beauty Spots in "God's own Country": Gems of New Zealand Scenery,[104] it is clear that the colonial image was an idealised one; as Archdeacon P. Walsh complained in 1893, there were "many native-born New Zealanders who

could not distinguish between a rimu and a kauri".[105] P. Walsh, "Public Ferneries: A Suggestion" TNZI 26 (1894), 621. Rimu Dacrydium cupressinum and Kauri Agathis australis were (and still are) two of the species most idealised as "beautiful" or "noble"; both were also heavily exploited for timber.

7.2.1 Ideal Images

(iii) The "Old-Time Maori"

The building of an ideal image with romantic, sentimental or patriotic appeal occurred not only in relation to native birds and scenery but also in relation to the native Maori people. The process is of interest on several counts. Not only can it be seen as part of the colonists' construction of a national mythology; but the disparities between the idealised images and the existing natives help to explain some of the apparent contradictions of colonial attitudes manifest in, for instance, the compulsory purchase of Little Barrier Island from its Maori owners and their forcible eviction to provide a reserve for the preservation of native birds.

Many colonial images of the native people can be identified;[106] the one which is particularly relevant here is that of the "old-time" Maori -"The Maori As He Was". When Buller gave his address in 1884 in which he quoted the line

that "The Maoris are dying out.... Our plain duty is to smooth down their dying pillow", he argued that it was also the "duty" of the philosophical societies to collect and preserve material to "illustrate the former habits of the [Maori] people".[107] Buller took this "duty" seriously. He not only assembled large collections of Maori artefacts but gathered material toward an illustrated "History of the Maori Race" -which was to be in two volumes, uniform with his A History of the Birds of New Zealand.[108] In the event, Buller did not carry out his plan.[109] But the concept of the two Histories, large quarto volumes enclosing all that could be said on the dying races of the native birds on the one hand and the native people on the other, suggests yet again the parallel perspectives in which both were seen. Buller's plan, however, did have some features which went beyond this. In 1890 he wrote to Sir George Grey that the first volume of his proposed "History of the Maori Race" was to be on the "Ancient History of the Maori people"[110] -a standard ethnographic compendium, or reconstruction of what later writers called "The Maori As He Was". The second volume was to follow a less familiar path, charting the history after the colonial encounter, or, as Buller put it, "from the time of Cook's discovery":

> their early christianization and rapid advance toward civilization...their long and well fought wars with the Imperial troops and colonists, and their gradual absorption into the body politic.... The story is worth telling well; for I doubt if the world's history presents

> the parallel of a race passing, in scarely more than half a century, from the lowest barbarism to a comparatively high state of civilization![111]

This approach, with its more positive view of a present, living Maori people, was hardly taken up again by colonial commentators until the 1930s,[112] although Buller did express some aspects of it in his 1901 British Empire Review paper, where he presented the progress of the Maori people under colonial New Zealand government as an argument in support of the extension of that same benevolent rule to the islands and people of Fiji. Instead, attention was concentrated on looking back; by the early years of the twentieth century even those colonial observers who expressed optimism about the survival of the Maori race tended to concentrate their attention not on the living but on the dead: on the antiquarian reconstruction of an abstract "old-time" Maori. The succession of chapter- and book-length expositions on "The Maori" published between about 1900 and 1930 were almost entirely concerned with capturing this image of "The Maori As He Was" in an idealised pre-European, pre-colonial past.[113]

In 1903 the Superintendent of the Department of Tourist and Health Resorts, T.E. Donne, wrote in his annual report that he was concerned to "preserve and revive the picturesque Maori"[114] -to dress modern Maori in the "old-time" garb to maintain the image that tourists had come to expect. In general, however, the "old-time Maori" and the "dying Maori"

were seen as but two aspects of the same image. The combination was idealised and popularised by the paintings of colonial artists, most notably C.F. Goldie.[115] Colonial ethnologists not only collected and conserved "traditional", "classic" Maori artefacts and artistry,[116] but also proposed a "National Maori Museum" to house and display them as "a permanent memorial of the past history of the Maori people".[117] The Maori people were in fact flourishing; it was not they but the notional "old-time" Maori whose passing the colonists sought to memorialise and whose way of life was becoming fixed in the timeless "ethnographic present"[118] of the museum case.

All the idealised images -of "beautiful" and "curiously interesting" native birds, of "magnificent" New Zealand scenery, and of picturesque "old-time" Maori people -were drawn into the mythology of colonial New Zealand nationalism. They were presented in all manner of publicity about the country. At the New Zealand International Exhibition of Arts and Industries, held in Christchurch in 1906-1907, the display mounted by the government Department of Tourist and Health Resorts included (among an array of deer heads and stuffed trout) paintings and photographs of the usual "scenic gems", alongside specimens of native birds and Maori wood-carving.[119] Outside in the Exhibition grounds there was an aviary with some living specimens -including Kiwi, which, James Cowan wrote in the Official Record of the

Exhibition, "more than any other living feathered denizen of New Zealand has come to be considered typically representative of this country".[120] There was also a full-sized reconstruction of an "old-time" Maori pa ("a stockaded village of the olden time") since, as Cowan commented "very many New-Zealanders even have but a vague idea of the Maori as he was".[121] Clearly, colonial New Zealanders had little knowledge or understanding of Maori people as they had become; living Maori in colonial dress were of less interest than the picturesque, idealised image of the "old-time Maori" of the past. And it was the latter image that was being incorporated into the colonists' new national mythology. In 1890, J.C. Firth opened his book Nation Making with the comment that "The Maories...are passing away";

> perhaps the most interesting of all the savage races with which England has come in contact in her career of conquest and colonization.... In this fair young land the stern lessons of the heroic struggles between the two races in the past are of romantic interest and will be of service in the Making of the New Zealand Nation.[122]

7.2.2 Conservation: Conflicts and Contradictions

(1) with Maori Rights and Custom

The contrast between colonial policies concerning native birds on the one hand and native people on the other has

already been noted: sanctuaries or reserves for native birds were in some cases established by legal and forcible displacement of the native people who owned and occupied the land in question. The colonists' attachment to an idealised image of the "old-time Maori" of past times obscured their view of the living Maori people. Thus in 1897 when the Ngati Toa people protested at their island of Kapiti being made a reserve for the purpose of "conserving the natural scenery...and providing a preserve for the flora and fauna of New Zealand", parliamentarians tried to placate them by suggesting that it would also be "a memorial of the history of Te Rauparaha and the Ngatitoa".[123] Te Rauparaha had been a famous Ngati Toa leader; to the colonists of the 1840s he had been notorious as a fierce and cunning warrior, a Maori "Napoleon", but by 1897 was safely of the past. In the reserve proposal for Kapiti Island, which had been his "stronghold", the romanticised "old-time Maori" were being memorialised; the concerns of the living, changing Maori people were barely noticed.

Even apart from the cases where Maori land was appropriated to make fauna and flora reserves, colonial ideas of protecting or conserving native species impinged on Maori usages in other ways. To the colonists, Maori ideas of conservation were of ethnological interest only. As Elsdon Best explained:

> The outlook of the Maori, as in connection with natural phenomena and nature generally, often differed widely from our own; thus he looked upon the far spread forests of his island home as being necessary to his welfare, and also as being of allied origin. This peculiar outlook was based upon the strange belief that man, birds, and trees are descended from a common source.... Assuredly the Maori prized the forest, and his aim was to conserve it.... The old-time Maori was wont to speak of his two "food-baskets," namely the forest and sea.[124]

Best, while rhetorically distinguishing the Maori view from that of "our own" (i.e. of the colonists), also relegated the Maori to the past. In general the colonists did not appreciate that the Maori view of conservation of native species still persisted. Some of the contradictions in colonial views on the subject, and the conflict with Maori usage, emerged in an exchange in parliament in 1907 between Thomas Mackenzie and Hone Heke. In the debate on the Animals Protection Bill (consolidating earlier legislation on acclimatisation, the regulation of game hunting, and the protection of particular introduced and native species), Mackenzie, riding his hobby-horse of protection for "our beautiful native birds", appealed for the support of "the Natives of this country. They ought to unite with the Europeans in protecting that which is really so delightful and beautiful and makes so much towards the interesting fauna of this country".[125]

Heke responded tartly to Mackenzie's appeal, noting that it was the colonists, not the Maori, who "want to get the land in order to knock the bush down", and that the Maori people

had a long tradition of conserving the the birds. As he had explained earlier in the debate, they regarded the birds such as pigeon Hemiphaga novaeseelandiae (which the legislation defined as "native game") not as something to be killed for sport, but as a valuable food supply to be carefully conserved. Mackenzie was evidently bewildered by Heke's response. He expressed himself "astonished" that Heke would not support his call to "protect the birds of this beautiful country -his [Heke's] native land". Mackenzie went on to suggest that "notwithstanding the Treaty of Waitangi...if the Natives will not assist in protecting that which is so beautiful, then the laws of the country will have to do so".[126]

The colonial perception that the rights and interests of the native people might properly be overriden in order to conserve native species is still apparent in a twentieth century judgement on the establishment of the Little Barrier Island reserve, written by the scientist W.M. Hamilton in 1935:

> the action of the Crown in compulsorily purchasing the island at a fair valuation may be hard to justify as a standard of policy for dealing with the Native owners of land, who believed their titles sacrosanct under the Treaty of Waitangi. Be that as it may, it still remains that, viewed in perspective, the purchase of the island created for the flora and fauna of New Zealand a preserve, unequalled elsewhere, and the value of which, as such, might well have been seriously diminished had its purchase not been effected when it was.[127]

Whether Mackenzie or Hamilton were at all familiar with the terms of the Treaty of Waitangi may be doubted.[128] Under that Treaty, by which New Zealand had been annexed as a British colony in 1840, Maori tribes (or some of them) had ceded their rights of sovereignty in New Zealand to the Queen of England and in return accepted guarantees that they would enjoy both "all the rights and privileges of British subjects" and also the "full exclusive and undisputed possession of their Lands and Estates Forests Fisheries and other properties" for as long as they wished to retain them.[129] Mackenzie's willingness to override the Treaty, or Hamilton's distancing himself by viewing its violation "in perspective" indicates how lightly it was regarded by colonists in their time.

Viewed from a Maori perspective, the conflicts between the colonists' notion of "conservation" of native species and the Maori one, and with the rights of "undisturbed possession" guaranteed under the Treaty, continued to be seen rather differently. "From the Maori standpoint", Apirana Ngata wrote in 1940, the principles of the treaty had turned out to be "contradictory and mutually destructive". British sovereignty and the rights of British citizenship meant that under the doctrine of "eminent domain" lakes and fishing grounds were "discovered to be the property of the Sovereign"; while "as to the forests, with their rich food resources, the protective sentiment and aesthetic sense of the <u>pakeha</u>

revolted against the destruction of native birds and plants, while conniving at the wholesale destruction of berry-bearing trees in the wake of the resistless advance of settlement!" The conflict continues: in August 1989 a Maori charged with shooting "protected wildlife" (native pigeon) claimed in defence his traditional hunting right, guaranteed by the Treaty of Waitangi. The court rejected this -the traditional right had been extinguished, the judge ruled, "in the overriding national interest.... to conserve and protect the wood pigeon".[120]

7.2.2 Conservation: Conflicts and Contradictions (ii) with English Loyalties

Although the colonists generally may have been largely unaware of the contradictions of their preservationist sentiments in relation to the rights and interests of the Maori people, they were sometimes discomforted by conflicts in another direction, in relation to their loyalty or deference toward their English "home" country.

This can be seen in official reaction in the 1890s to the sending of museum specimens out of the colony, which by this time was becoming a sensitive issue. In September 1898 questions were raised in parliament by a native-born member, Robert McNab, about the loss of specimens of "Native art"

(Maori carvings) and of rare native birds. It was rumoured that the latest specimen of the Takahe Notornis mantelli -only the fourth to be obtained -might be sent to Europe like the three earlier ones. McNab was opposed to such specimens going to Europe or even to the British Museum. The Premier, R.J. Seddon, tended to agree. Expressing the dual patriotism of the colonial New Zealander, he recalled that on his last visit to England he had "never felt so much at home...[as] when he visited Clandon Park, Guildford, the Earl of Onslow's country seat at Home, and saw the Maori whare which had been erected there".[131] He also expressed the hope that the Takahe specimen would be retained in a colonial museum. The government subsequently paid £250 for the specimen and deposited it in the Otago museum, Dunedin.[132]

Later the same month (September 1898) the government received a request through the Governor, Lord Ranfurly, for specimens of a long list of New Zealand native birds required by the zoology department of the British Museum of Natural History. The request was referred to the government's scientific adviser, James Hector, who reported (with some exaggeration) that the birds requested were "all very rare varieties and are not in the Colonial Museum", and that obtaining specimens would involve "a large expenditure".[133] But the British Museum, and Lord Ranfurly, were not easily put off. The request was renewed, again through Lord Ranfurly, and signed this time by the Director of the Museum, E. Ray Lankester.

His letter noted that the species listed were "desiderata" for "the national collection" (i.e. the British national collection[124]) and that their acquisition would "greatly enrich" its representation of the birds of New Zealand. "I trust", he concluded, "that the Government of that Colony may be kindly disposed to help the Museum in the way suggested".[125] From the metropolitan British perspective, although the colonies might be self-governing they were not nations in their own right but members of the British empire, subordinate parts of the wider British nation. Colonial deference was still expected. And the New Zealand government did eventually set aside its colonial nationalism on the issue of retaining and preserving native species, and deferred to the British demand. In 1901 the conservator of birds at the Resolution Island reserve, Richard Henry, was instructed to provide specimens of those species he could obtain there, and the Governor's annual summer excursion on the government steamer that year and again in 1902 were made the opportunity for intensive collecting expeditions around the offshore islands of New Zealand. Lord Ranfurly was thus able to send over 200 specimens of the rarer New Zealand birds to the British Museum, including four Auckland Island Mergansers Mergus australis -which proved to be the last of this species ever taken.[126]

The way the government bowed to the wishes of Ranfurly and the British Museum may be compared with Buller's action in

diverting the captive pair of Huia intended for release on the Little Barrier Island reserve in order to satify his English friend Walter Rothschild's demand for museum specimens. Buller's action was surreptitious and perhaps venal, but the choice he faced was the same: between the conflicting demands of a dual "patriotism", between the new colonial nationalism seeking the retention and preservation of native species in their native land, and the old colonial loyalty and deference toward calls from the social and scientific aristocracy at "home" that the rare species were wanted as specimens there. Buller, like the Seddon government, yielded to the latter. The dependent colonial relationship -the "happy infantile relation to the 'mother country'"[127] -persisted and sometimes impeded the colonists' search for a New Zealand identity.

7.2.2 Conservation: Conflicts and Contradictions

(iii) with Ideas of Extinction

Although for the purposes of this study colonial attitudes toward native species have been discussed as two contrasting sets of ideas -on the one hand, that with the progress of colonisation the native species would inevitably be displaced and disappear; and on the other, that they should be protected and preserved -these were not in practice distinct positions. One could expect that the natives would become

extinct while also advocating efforts to preserve them. Buller, for instance, while expressing his "extreme satisfaction" at the "awakening to the fact that we have animal and vegetable forms of life indigenous to the country which ought to be protected and cherished" could also go on to assert that the imminent extinction of some of these same forms was "a matter of certainty, except in so far as a remnant may be preserved through the protective action of the Government".[138] Under this view of preservation or conservation, government action might assist the native species to "linger longer". Similarly, the Wellington Evening Post, commenting in 1913 on the Tuatara ("the earth's one living link with a dead past"), concluded that only isolation on an island well protected from predators could "prolong the survival" of the species.[139]

Some of the apparent ambivalence in this attitude toward preservation or conservation of native species can be attributed to the conflict with the colonists' expectation of displacement and extinction, but there are other, more general considerations as well. In European thought the idea that a species could become extinct and disappear entirely from the earth had a relatively short history, dating from the late eighteenth century. As noted in Chapter 2.1, it went against part of the older concept of nature as a "great chain of being" in which each species, from the lowest up to the highest, had its place.[140] Under this view the idea that a

species might be exterminated and leave a gap in the chain was rejected as being abhorrent to God and to nature. By the mid nineteenth century, however, it was accepted from fossil evidence that extinction of species had occurred. The possibility of extinction of human races was even more readily accepted. And under the view of competition in nature fundamental to both the Darwinian theory of evolution and later ecological theory, it followed that extinction of species must be regarded as normal, natural and, from a perspective of geological time, inevitable. Attitudes toward nature, however, were -and still are -much more complex and subjective than allowed for within Darwinian or ecological theory.[141]

The philosopher Eugene Hargrove argues that the foundations of Western wildlife protection attitudes lie in the "pre-evolutionary" view of nature under which species were seen as fixed and irreplaceable. Hence extinction continues to be seen as leaving a gap in nature and as a "moral wrong against God", and not as the "morally neutral natural event" of evolutionary or ecological theory.[142] The dichotomy here between "pre-evolutionary" and "evolutionary" conceptions of species and of nature is an oversimplified one. For instance, the viewpoint expressed by Buller -that although rare species could "linger longer" under preservation their ultimate extinction was certain -might be classed with the "evolutionary" concept that extinction of

any species should be regarded as normal, natural and inevitable. But, as shown in the discussion of Darwinism and colonial ideas in Chapter 4, Buller ascribed displacement and extinction of species to the operation of an "inscrutable law" rather than Darwinian evolutionary processes. The concept of inevitable extinction of native races and native species rested more upon ideas of European superiority than on the Darwinian evolutionary view of nature.

However, alongside the view that the extinction of native races and of native species was predictable and even preordained under inscrutable laws of nature, elements of the "pre-evolutionary" view of the "great chain of being" can certainly be identified in nineteenth century attitudes toward nature. It can be seen in the continuing fascination with "missing links" in the Darwinian evolutionary scheme. Of more relevance here, it can also be seen in the concern often expressed about extinction leaving "a gap in nature". For instance in the introductory essay to his Flora Novae-zelandiae (1853), J.D. Hooker described the extinction of species as leaving "a gap...which may never be botanically refilled". He wrote this in the context of the systematist's search for order in nature, and with some knowledge of Darwin's ideas of evolution of species,[143] but he retained the imagery of links in a chain of being, whose loss he deplored:

> not only are those links breaking by which [the scientist] connects the present flora with the past, but also those by which he binds the different members of the vegetable kingdom one to another.... The destruction of a species must hence create a hiatus in our systems.[144]

Later nineteenth century proponents of preservation also referred to extinction in terms of "leaving a gap in nature". In England, Alfred Newton (who, like Hooker, became a strong supporter of Darwinism) described the disappearing New Zealand birds as supplying "a link with the past that once lost can never be recovered".[145]

Newton's line was quoted by Buller in the second edition of his A History of the Birds of New Zealand (1888) and again in the Onslow memorandum (1892)[146] -in the latter to support the idea of preservation of species. It was quoted again in 1892 by the Wellington businessman Henry Wright, in a letter to the London Spectator as part of his campaign for the preservation of the native New Zealand flora and fauna. Wright concluded his appeal with a further quotation from an unnamed poet:

> Each moss,
> Each shell, each crawling insect, hold a rank
> Important in the plan of Him who framed
> This scale of beings; holds a rank, which, lost,
> Would break the chain, and leave behind a gap
> Which Nature's self would rue.[147]

Hargrove's argument that preservation ideas were based upon the concept of nature as a "great chain of being", and species as fixed and irreplaceable entities, is here exemplified rather well.

In the 1980s extinction continues to be seen as an outrage against nature, if not against God. The possible extinction of certain species, notably birds such as the Chatham Island Black Robin Petroica traversi or, in the United States, the California Condor Gymnogyps californicanus, has become a

matter of national concern and international interest. In New Zealand, the heroic effort which has, in the popular view, "saved" the Black Robin from extinction has even been recognised by an honour for the leader of the Wildlife Service team involved.[148] Even so, to the ecologist with a perspective of geological time the species may have been helped to linger longer but its eventual extinction must still be regarded as certain.

7.2.2 Conservation: Conflicts and Contradictions

(iv) with Colonisation and Progress

Aside from the philosophical complexities of Western attitudes toward nature and the extinction of species, the colonists' viewpoint on preserving or conserving native species was also fundamentally in conflict with their wider ideology of colonisation and development. As William Fox told the inaugural meeting of the New Zealand Institute in 1868, "we are here to lay the basis of a true civilisation, not only to subdue nature, and till the soil; but impelled by Anglo-Saxon ardor and energy, to develope all that was worthy of development".[149] This ideology of colonisation was not abandoned when the colonists began to express conservationist sentiments. The contradiction between the two have already been noted in James Drummond's suggestion that the tribulations of the native birds -"shamefully harried,

bullied, robbed of their heritage, and scourged with the besom of destruction" -had "endeared them to the hearts of New Zealanders".[150] The same contradiction can be seen, for instance, in Buller lamenting the disappearance of the native birds while approving the turning of the native forests in which they lived into "smiling farms";[151] or in Charles Robinson's report from Little Barrier Island, after being appointed as caretaker there pending completion of its purchase as a reserve for the preservation of native flora and fauna: that the lower slopes of the island would "make good grazing for sheep if cleared of bush".[152] Similarly, the Scenery Preservation Board (which in 1906 replaced the Scenery Preservation Commission) was at pains to reassure colonists that in carrying out its function of preserving "samples of the primeval scenery" no good agricultural or pastoral land would be locked up in unproductive reserves: "the needs of settlement are imperative".[153] The perspective of the colonist is apparent also in references to the "primeval scenery that existed in the country at the advent of European occupation": the history of New Zealand was seen as beginning with that advent.[154]

The New Zealand colonists of the 1890s felt both pride in the progress of colonisation -of settlement and development -and sentimental attachment to the native New Zealand being displaced by colonisation. The conflicting feelings were well expressed by W.P. Reeves in his much-quoted poem "The Passing

of the Forest", in which he mused on the changes the colonists had wrought:

> And he is mighty as he hews amain,
> Bronzed pioneer of nations, Ay, but scan
> The ruined wonder never wrought again,
> The ravaged beauty God alone could plan!
> Bitter the thought: "Is this the price we pay-
> The price for progress -beauty swept away?"[155]

There is a further irony in Reeves's patriotic poetry -much of it was written after he had gone "home" to England. There his sentiment of loss and nostalgia increased; during publication of "The Passing of the Forest" in 1898 he strengthened his final line from question to exclamation: "A bitter price to pay/Is this for progress -beauty swept away!"[156] But, as he wrote in the introduction to G.H. Scholefield's New Zealand in Evolution in 1909, "The main business of colonists is to colonize".[157]

7.2.2 Conservation: Conflicts and Contradictions

(v) Contradictions in Terms

The conflict between the ideology of colonisation -of progress, development, and displacement of native things -and the developing urge to protect and preserve those native things, is reflected also in the differing meanings placed upon the term "conservation". In the twentieth century it is used both for the management of resources (such as forests)

with a view to their efficient exploitation, and for the preservation of "heritage" (such as native bush scenery or native birds) with a view to its future enjoyment. Through the period of main interest in this study -from about 1860 to 1906 -the usual connotation of "conservation", as used in New Zealand and elsewhere, was nearer to the former. The association with forest management as practiced in India coloured its use in the United States and throughout the British Empire.[158] In the United States the word was popularised from 1907 by Theodore Roosevelt and Gifford Pinchot as a label for anti-monopoly Progressive policies of "wise use" of resources generally -"the use of the earth for the good of man".[159] In New Zealand the word was in vogue well before 1907; it gained currency in the forestry debates of the 1870s and continued to be used with connotations of management of resources as in state-controlled forestry. Those connotations persisted. In the 1970s the New Zealand Forest Service (which still used the title of "conservator" for its forest managers) promoted its definition of "conservation" as "management and husbandry" of forests or, more simply, in the title of a 1974 publicity booklet, Forestry Is Conservation.[160]

But in New Zealand even in the 1890s the term was being extended to the government policies for preservation of native flora and fauna. Buller, for instance, referred in the Onslow memorandum (1892) to "the importance of some steps

being taken for the conservation of New Zealand birds", which he hoped would "save some -if only a remnant -of these expiring forms for the student of the future".[161] The shifting meaning can be seen later in H. Guthrie-Smith's natural history writings. In 1925 he used "conservation" in reference to "maintenance of forests"[162] but by 1940 he advocated conservation of nature in a rather different sense: "be content to leave alone. Admire, conserve, let well alone". Looking back at his efforts at developing and farming his Hawke's Bay sheep-run "Tutira" he wondered "Have I then for sixty years desecrated God's earth and dubbed it improvement?"[163]

The ambivalency in "conservation" is still not fully resolved in New Zealand in the 1980s: attempts at the statutory definition of the "conservation of natural and historic resources" in the legislation establishing the new Department of Conservation in 1986 caused a fierce controversy. Contending ideological factions all claimed theirs was the correct meaning of conservation. The Bill as first tabled in 1986 gave a definition in terms of "management" of natural resources to "sustain their potential" to meet present and future needs; but in the Act finally passed in March 1987 this was radically altered to "preservation and protection" to maintain "intrinsic values" for public enjoyment.[164]

In New Zealand and elsewhere, scientists, philosophers and conservationists continue to argue over what conservation means, or should mean. The philosopher John Passmore distinguishes between conservation as "saving for" later use, and preservation as "saving from" destruction or extinction.[165] The British scientists O.H. Frankel and Michael Soulé comment that Passmore's usage is in accord with that of resource economists but that his "preservation" is what biologists and conservationists commonly understand as "conservation".[166] Many of the papers on the definition of the terms and the concepts involved have been written by Americans and accordingly, even when it has been recognised that the word usages and the associated ideas have changed over time, it has generally been the American history of conservation that has been invoked.[167] More generally, the American perspective has so dominated the historiography of conservation that even in New Zealand, the development of the local "conservation movement" is sometimes seen entirely in American terms. For instance, the New Zealand environmental scientist John Hayward commented in 1987 that "There is a widespread view that New Zealand concern for the environment began with Manapouri [in 1970]", and proceeded to correct that view by describing "the origins of our concern" in the ideas and philosophies of Henry David Thoreau, John Muir, Gifford Pinchot, Aldo Leopard, Rachel Carson and others -all American, and all but Thoreau and Muir of the twentieth century.[168]

The influence in New Zealand of certain American ideas and innovations have been noted by others, and again in this study -in particular the ideas of G.P. Marsh's Man and Nature (1864), and the precedent of Yellowstone National Park (1872).[169] Similarly, Buller referred to the American sentiment for the preservation of the disappearing "bison" or buffalo to support his case in the Onslow memorandum for the preservation of the disappearing New Zealand birds.[170]

But the American influence should be kept in perspective.* Buller, for instance referred in the Onslow memorandum more to the opinions of English authorities. And although many of the New Zealand concepts and policies of conservation or preservation of native species and natural scenery were drawn or modified from American or British ideas and precedents, they were adopted more readily in New Zealand by association with the developing national or patriotic sentiment among the colonists.

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* In this context it should be noted that the perception of America as the fountainhead of new ideas and new developments is largely a twentieth century one. In 1880 the American political economist Henry George wrote to Sir George Grey in New Zealand that "England is still the centre and radiating point of Anglo-Saxon thought, and in New Zealand as in California we are on the circumference of the world".[171]

In the same way, the differing ideas encapsulated in the term "conservation", of management for future consumption on the one hand and preservation for future enjoyment or on account of intrinsic worth on the other, which are frequently represented by the contrasting positions taken in the United States during the 1900s by John Muir and Gifford Pinchot,[172] were being advocated in New Zealand in the nineteenth century. In the New Zealand context the different views of "conservation" expressed by the 1890s reflected the wider conflict between the progress of colonisation -of settlement and development -and the attachment to the native New Zealand being displaced by colonisation, which was developing as part of a native New Zealand identity.

7.3 A Concluding Note: Colonists, Kiwis, and Godwits

Colonial attitudes on native species and their place in New Zealand are full of such unresolved contradictions. Some of those discussed here are vividly evoked in a passage in Iris Wilkinson's "autobiographical-novel" The Godwits Fly (1938).[173] Wilkinson was born in Cape Town in 1906 -the year of Buller's death -and grew up in Wellington. She describes an Arbor Day ceremony at a small primary school in the Wellington suburb of Berhampore, with a black-trousered parliamentarian bending to plant a "sad-coloured skinny little native tree" in the school playground, and then the

girls of Standard Six standing to sing:

> Bird of my na-tive land, beau-ti ful stranger,
> Perched in the kauri tree, free from all danger.

> Bird-of-my-native-land was supposed to be the tui, but none of the children had ever seen one, or a kauri tree either. Sparrows hopped everywhere.... It was a lie to say that bird-of-my-native-land and the thin trees stuck in holes in the playground were sacred and beautiful, half as sacred and beautiful as the thin, clear flame of the English trees.... Funny the bird and tree business. Sometimes the school journal called New Zealand "Maoriland" or "Ao-te-aroa". There, again, you hardly ever saw a Maori....[174]

The idealised imagery of "beautiful" native trees and native birds was being incorporated into the colonists' mythology about their new country, while at the same time their "Colonial England-hunger", as Wilkinson called it, drew them back, like Godwits. In 1905 W.P. Reeves (then New Zealand High Commissioner in London) described how "all my life I have been, as it were, looking across the sea. Without ceasing to be a New Zealander I have also become an Englishman".[175]

Buller, then also in London, might have said the same. At the same time, most colonists in New Zealand were becoming New Zealanders, without ceasing to be English. E.H. McCormick describes the colonial poetry of this period as the work of "spiritual exiles.... The swallow and the nightingale came to their minds almost as readily as the fantail and the tui -and the tui was sometimes no more than a nightingale in New

Zealand garb".[176] Not only poets thought this way. Thomas Mackenzie, who in the 1890s had promoted in parliament the images of beautiful native birds and native bush and urged that they should be protected,[177] in 1923 became the inaugural president of the New Zealand Native Bird Protection Society (now the Royal Forest and Bird Protection Society). In this capacity, shortly before his death in 1930, he wrote a preface for a new book of coloured illustrations of the native birds, reproduced from Buller's chromolithographs: "And could we ask for anything more beautiful than the New Zealand Birds -the cuckoo, the bell-bird, the tui, whose song rivals even that of the nightingale?"[178] Few of his New Zealand readers would ever have heard a nightingale, but the English bird still provided the standard. Given Iris Wilkinson's comments about "bird-of-my-native-land", probably few New Zealanders had ever heard a Tui either, or seen one except in books or trademarks. Its image, however, had become part of the national mythology, alongside the the Kauri tree, Mitre Peak, and the Kiwi.

As can be seen from the many-layered references in Wilkinson's "bird-of-my-native-land", or Mackenzie's Tui, colonial attitudes toward native things in New Zealand have many dimensions or contexts. This study, in examining changing colonial attitudes toward native things in New Zealand, has attempted to place the ideas and developments involved in a number of intersecting contexts: of the process

of colonisation with its displacement of native things, of colonial scientists such as Buller capturing them for European science; and of the development of a New Zealand national feeling as the colonists began to identify with their new home country and its native life, while still retaining their attachment to the old "Home". Ideas of nature conservation in New Zealand -of conservation of native species -are embedded in all of these.

Abbreviations used in the Notes

In the notes and bibliography the following abbreviations are used for some frequently cited publications:

AJHR: New Zealand Parliament. House of Representatives. Appendices to the Journals

NZPD: New Zealand Parliament. Parliamentary Debates

N.Z. Gazette: New Zealand Government Gazette

TNZI: Transactions and Proceedings of the New Zealand Institute

Square brackets [ ] are used to indicate uncertain or inferred details of author, date, or place of publication.

Notes for pages 1-8

CHAPTER 1. INTRODUCTION

1. For a vivid expression of the identification of a native-born New Zealander (of, in this case, Irish descent) with the English "Home" land, see Alan Mulgan Home; A New Zealander's Adventure (London, 1927), pp. 3-20.

2. [A.G. Bagnall] "Buller, Sir Walter Lawry" in An Encyclopaedia of New Zealand edited by A.H. McLintock (Wellington, 1966), I, 272-274 (p. 274).

3. See Bagnall (1966), p. 274; J.H.R. Andrews The Southern Ark; Zoological Discovery in New Zealand 1769-1900 (Auckland, 1986), p. 198. See also Mona Gordon The Children of Tane; Bird Life in New Zealand (London, 1938), pp. 49-51, 144-148; and Vintage; People & Things in Old New Zealand (Christchurch, 1948), pp. 40-44, 102-110;

4. George W. Stocking, Jnr. Victorian Anthropology (New York, 1987), p. xiii.

5. Alfred W. Crosby Ecological Imperialism; The Biological Expansion of Europe, 900-1900 (Cambridge, 1986).

6. "New Zealand was settled in 1840" -J.B. Condliffe New Zealand in the Making second edition (London, 1959), p. 11; for a more recent example see T.J. Hearn and R. P. Hargreaves, "The Growth and Development of a New Society", in Society and Environment in New Zealand edited by R.J. Johnston (Christchurch, 1974), pp. 64-87 (p. 64).

7. For a few recent examples see Beverley McCulloch Prehistoric New Zealand and its People (Christchurch, 1984), p. 3 (and the cover subtitle "The life and times of pre-European man in New Zealand..."); Janet M. Davidson "The Polynesian Foundation" in The Oxford History of New Zealand, edited by W.H. Oliver and B.R. Williams, (Wellington, 1981), pp. 3-27: "In 1769, prehistory was 'caught alive' in New Zealand" (p. 25); Janet M. Davidson The Prehistory of New Zealand (Auckland, 1984) p. 1 ("the end of the prehistoric period, which is generally fixed at A.D. 1769").

8. On the notions of "prehistory" and "history" generally see Peter Hulme Colonial Encounters; Europe and the native Caribbean, 1492-1797 (London, 1986), p. 56.

9. McCullock (1984), p. 3.

10. See for instance Donna Awatere Maori Sovereignty (Auckland, 1984); Tipene O'Regan "Who Owns the Past? Change in Maori Perceptions of the Past" in From the Beginning,

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edited by John Wilson, (Auckland, 1987), pp. 141-145; R.J. Walker "Maori Identity" in Culture and Identity in New Zealand edited by David Novitz and Bill Willmott, (Wellington, 1989), pp. 35-52.

11. Klaus E. Knorr British Colonial Theories 1570-1850 (Toronto, 1944), p. 310. See also A.G.L. Shaw "British Attitudes to the Colonies, ca. 1820-1850" Journal of British Studies 9 (1969), 71-95.

12. Archibald Alison (1839), and Samuel Laing (1844), quoted in Knorr, (1944), p. 315.

13. John Ward Information Relative to New Zealand, Compiled for the Use of Colonists second edition (London, 1840) pp. 138-143 -Archibald Alison's "finger of Providence" speech is at p. 140). The latter is described by Gerda Bell Ernest Dieffenbach; Rebel and Humanist (Palmerston North, 1976), p. 37 as "effusions on the Master Race".

14. Lord Durham's Report on the Affairs of British North America (1839) quoted in W.P. Morell British Colonial Policy in the Age of Peel and Russell (Oxford, 1930), p. 10.

15. Morning News (New York) 27 December 1845 quoted in Julius W. Pratt A History of United States Foreign Policy (Englewood Cliffs, 1955), p. 216. See also J.W. Pratt "The origin of "Manifest Destiny,"' American Historical Review 32 (1927), 795-798.

16. On the Oregon question, the respective governments, each having more pressing problems, compromised on their territorial claims and in 1846 agreed to a boundary at the 49th parallel -see Pratt, (1955) pp. 210-219.

17. Robert Torrens (1844) quoted by J.M. Ward Colonial Self-Government; The British Experience 1759-1856. (London, 1976), p. 234. On "Anglo-Saxonism" and "manifest destiny" see Reginald Horsman Race and Manifest Destiny; The Origins of American Racial Anglo-Saxonism (Cambridge, Massachusetts, 1981), pp. 219-225.

18. The line (from Genesis 1. 28) was often quoted in relation to emigration and colonisation: see for instance Quarterly Review 8 (1812), 355 (quoted in Shaw, 1969, p. 85), and, in a New Zealand context, TNZI 1 (1869), pp. 4, 14.

19. Buller's speech was reprinted as Appendix 1 to E.G. Wakefield A View of the Art of Colonization -see M.F. Lloyd Prichard The Collected Works of Edward Gibbon Wakefield (Auckland, 1969), pp. 995-1029 (p. 1009).

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20. This idea had a long history; on its expression in the 1820s see R.N. Ghosh "The Colonization Controversy: R.J. Wilmot-Horton and the Classical Economists" Economica 31 (1964), 385-400.

21. Charles Buller (1843), R.H. Inglis (1843), quoted in Knorr, (1944) pp. 269, 311.

22. New Zealand Company Twenty-Third Report of the Court of Directors of the New Zealand Company [London, 1847], p. 2.

23. Alfred W. Crosby Ecological Imperialism; The Biological Expansion of Europe, 900-1900 (Cambridge, 1986).

24. C.B. Brereton History of the Nelson Institute (Wellington, 1948), pp. 12-13, 17-18.

25. On the history of the Philosophical Societies and the later New Zealand Institute under which they federated, see C.A. Fleming Science Settlers and Scholars; The Centennial History of the Royal Society of New Zealand (Wellington, 1987).

26. As a result most of the "type" specimens on which New Zealand species were originally described and given scientific names are still held in museums in Europe, especially the British Museum (Natural History) -see the symposium on "The Present Status of Taxonomic Entomology in New Zealand" New Zealand Entomologist 4 (1970), 24-61.

27. Now regarded as a subspecies A. australis mantelli. See A.D. Bartlett "On the genus Apteryx" Proceedings of the Zoological Society of London 18 ("1850" =1852), 274-276.

28. See in particular I.Bernard Cohen, "The New World as a Source of Science for Europe", Actes du IX Congres International d'Histoire des Sciences (Madrid, 1960), 96-130; Donald Fleming, "Science in Australia, Canada and the United States: Some Comparative Remarks" Actes du dixième Congrès Internationale d'Histoire des Sciences, (Paris, 1964), I, 179-196; George Basalla, "The Spread of Western Science", Science, 156, (1967), 612-622; and papers on colonial science presented at conferences and congresses in Melbourne (1981) and Berkeley (1985), published respectively in Nathan Reingold and Marc Rothenberg Scientific Colonialism; A Cross-cultural Comparison (Washington, 1987), and Roy MacLeod and Philip F. Rehbock Nature in Its Greatest Extent (Honolulu, 1988).

29. MacLeod and Rehbock (1988), p. 6 note that "the absence of New Zealand material is sorely missed, for from

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trans-Tasman comparisons there is much to learn". See also the review by MacLeod, in Historical Records of Australian Science 6 (1986), 316-317, of M.E. Hoare and L.G. Bell (editors) In Search of New Zealand's Scientific Heritage (Wellington, 1984).

30. Neither Keith Sinclair A History of New Zealand (Harmondsworth, 1959) and later editions of 1969 and 1980, nor W.H. Oliver The Story of New Zealand (London, 1960) index "science" at all; W.H. Oliver and B.R. Williams The Oxford History of New Zealand (Wellington, 1981) give only passing references (see especially pp. 133, 307).

31. See for instance S.H. Jenkinson New Zealanders and science (Wellington, 1940); I.D. Dick "The History of Scientific Endeavour in New Zealand" New Zealand Science Review 9, (1951), 139-143, and "Historical Introduction to New Zealand Science" in Science in New Zealand edited by F.R. Callaghan (Wellington, 1957) pp. 11-19; S.N. Slater, "Science" in An Encyclopaedia of New Zealand edited by A.H. McLintock (Wellington, 1966), III, 179-190; C.A. Fleming Science, Settlers and Scholars; The Centennial History of the Royal Society of New Zealand (Wellington, 1987).

32. Michael E. Hoare Beyond the "Filial Piety": Science History in New Zealand; A Critical Review of the Art (Melbourne, 1977), pp. 14-28.

33. See for instance J.R.H. Andrews The Southern Ark; Zoological Discovery in New Zealand (Auckland, 1986), p. 154; similarly Fleming (1987) draws on Hoare's papers, and borrows his term "hegemony" for the Hector period (see pp. xi, 11).

34. Basalla (1967).

35. See in particular the papers in Reingold and Rothenberg (1987).

36. Hoare (1977), p. 17.

37. Basalla (1967) pp. 613-614.

38. On the AAAS see M.E. Hoare "The Intercolonial Science Movement in Australasia 1870-1890" Records of the Australian Academy of Sciences 3 (1976), 7-28.

39. Reingold and Rothenberg (1987), p. xi.

40. R.M. MacLeod "On Visiting the 'Moving Metropolis': Reflections on the Architecture of Imperial Science",

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Historical Records of Australian Science 5, (1982), 1-16. See also MacLeod "Imperial Reflections in the Southern Seas: The Funafuti Expeditions, 1896-1904" in MacLeod and Rehbock (1988), pp. 159-191. For rather different perspectives on centre-periphery relations in science see Richard A. Jarrell "Differential National Development and Science in the Nineteenth Century: The Problems of Quebec and Ireland" in Reingold and Rothenberg (1987) pp. 323-350, and, in the Australian context, Ian Inkster "Scientific Enterprise and the Colonial 'Model': Observations on Australian Experience in Historical Context" Social Studies of Science 15 (1985), 677-704).

41. On Murchison see Robert A. Stafford "The long arm of London: Sir Roderick Murchison and imperial science in Australia" in Australian Science in the Making edited by R.W. Home (Cambridge, 1988), pp. 69-101; on Owen see Ann Mozley Moyal "Sir Richard Owen and his influence on Australian Zoological and Palaeontological Science" Records of the Australian Academy of Sciences 3 (1976), 41-56; Jacob W. Gruber "The Moa and the professionalising of New Zealand science Turnbull Library Record 20 (1987), 61-100.

42. MacLeod, (1982), p. 4.

43. MacLeod (1982), p. 11. MacLeod goes on to describe later developments, but these are outside the period of interest here.

44. MacLeod (1982), p. 11.

45. [A.G. Bagnall] "Buller, Sir Walter Lawry" in An Encyclopaedia of New Zealand edited by A.H. McLintock (Wellington, 1966), I, pp. 272-274. Other listings in biographical dictionaries and encyclopedias (most of which simply borrow material, with all errors, from earlier versions) include: Alfred Cox Men of Mark of New Zealand (Christchurch, 1886), pp. 34-38; Thomas Wayth Gudgeon The Defenders of New Zealand... (Auckland, 1887), pp. 344-346; Philip Mennell The Dictionary of Australasian biography (London, 1892), pp. 67-68; Victor G. Plarr Men and women of the time... 14th edition, (London, 1895), pp. 125-126; The Cyclopedia of New Zealand (Wellington, 1897), I, pp. 434-435; Who's Who (London, 1904), pp. 208-209; The Dictionary of National Biography. Supplement. January 1901-December 1911 (London, 1912), I, p. 253; G.H. Scholefield A Dictionary of New Zealand Biography (Wellington, 1940), I, p. 119. Recent accounts of aspects of Buller's life and career include: Mona Gordon The Children of Tane; Bird Life in New Zealand [London, 1938], pp. 49-51, and Vintage; People & Things in Old New Zealand...

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(Christchurch, 1948), pp. 40-44, 102-110; E.G. Turbott, Buller's Birds of New Zealand (Christchurch, 1967), pp. xii-xvi; R.B. Sibson "Buller and his Birds", New Zealand's Heritage 3, (1972), 1154-1159; R.A. Galbreath "Sir Walter Buller; The history of the Birds of New Zealand", Forest and Bird 15, (1984) 7-8; J.H.R. Andrews The Southern Ark; Zoological Discovery in New Zealand 1769-1900 (Auckland, 1986), pp. 187-198.

46. Ross Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1989).

47. Maori social structure was (and largely still is) based on extended family groups or whanau which together made up the hapu or secondary tribe, -which in turn was part of a wider tribe or iwi.

48. Walter Lawry to Secretaries of the Wesleyan Missionary Society 15 March 1848, typescript at St John's College Library, Auckland.

49. "Seminary" was added evidently to indicate that a (separate) girls' school was included.

50. Lawry to Secretaries 15 March 1848.

51. On the resident magistrates, the "New Institutions" and the introduction of the British system of justice among the Maori people see Alan Ward, A Show of Justice; racial "amalgamation" in nineteenth century New Zealand (Auckland, 1973).

53. Under the quasi-federal system of colonial representative government established by the New Zealand Constitution Act of 1852 the colony was administered by six provincial governments (each with an elected Superintendent and Provincial Council), and a General Assembly consisting of a Governor appointed by the British Sovereign (and acting under the direction of the British Colonial Secretary), an upper house (the Legislative Council) appointed by the Governor, and an elected lower house (the House of Representatives). The provincial governments were abolished in 1876.

54. For much of the period studied here (especially between 1862-1892) the government retained the Pre-emptive Right of purchase of Maori land and prohibited direct purchases by private buyers.

55. The central government was domiciled in Auckland until 1865, when the capital was shifted to Wellington.

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56. Memorandum by Ihakara and others 17 September 1864 in file MA 13/69a, National Archives, Wellington.

57. T.S. Ralph is discussed further below -see footnote 65. Andrew Sinclair (1796-1861) was Colonial Secretary in New Zealand from 1844 until responsible government was established in 1856. He was a keen botanist and a correspondent of J.D. Hooker.
Walter B.D. Mantell (1820-1895), son of the English geologist Gideon Mantell, In 1851 he was instrumental in founding the New Zealand Society, forerunner of the Wellington Philosophical Society. He had a number of government appointments in New Zealand before being elected to parliament in 1861. In 1866 Mantell was appointed to the Legislative Council, where he remained to his death.
George Edward Grey (1812-1898) led an exploring expedition in Australia in 1837-1838 and was then sucessively appointed Governor of South Australia (1841-1845), New Zealand (1845-1853), Cape Colony (1854-1859) and New Zealand again (1861-1868). He was elected to the New Zealand parliament in 1875 and was Premier from 1877 to 1879. Among his many interests he was a patron of science in New Zealand. He was inaugural president of the New Zealand Society in 1851-1853.
James Hector (1834-1907), after gaining notice as surgeon and geologist on the Palliser Expedition in Canada (1857-1860) was appointed Otago provincial geologist in 1861 and then director of the Geological Survey established by the New Zealand government in 1865. From then almost until his retirement in 1903 Hector managed all government scientific institutions. He was made FRS in 1866, CMG in 1875 and KCMG in 1887.

58. Although such statements are made in biographical notes in Cox (1886) p. 35, Plarr (1895) p. 125, Dictionary of National Biography. Supplement. January 1901-December 1911 p. 253, and in many other obituaries and notes based on these, no evidence has been found in family journals or other contemporary records to confirm any more than the merest acquaintance between Buller and Swainson.

59. There is a burgeoning literature on Swainson. See in particular Sheila Natusch and Geoffrey Swainson William Swainson of Fern Grove... (Wellington, 1987); Phil Parkinson "William Swainson 1789-1855: Relics in the Antipodes" in In Search of New Zealand's Scientific Heritage edited by M.E. Hoare and L.G. Bell, (Wellington, 1984), pp. 49-63; D.M. Knight "William Swainson: naturalist, author and illustrator" Archives of Natural History 13 (1986), 275-290.

60. The paper was read at a meeting of the Society on 16 February 1860 (see Journal of the Proceedings of the Linnean

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Society of London 5 (1861), v), but not published in the Transactions or Journal of the Proceedings. Buller's manuscript, incorporated in a letter to the Society dated 1 November 1859 is in the Society's archives.

61. On the title page to the second (1888) edition of his A History of the Birds of New Zealand Buller listed: "K.C.M.G., D.Sc., F.R.S. F.L.S., F.G.S., F.R.G.S., F.R.C.I., Hon. F.S.Sc; 'Officier de l'Instruction Publique' de la France; Galileian Medallist of the Faculty of Natural Sciences, Royal University, Florence; Corresponding Member of the Zoological Society of London, of the American Ornithologists' Union, and of the Ornithological Society of Vienna; Member of the British Ornithologists' Union, of the Permanent International Committee on Ornithology, of the Anthropological Institute of Great Britain, and of the New Zealand Institute." In his Supplement to the "Birds of New Zealand" (1905) Buller omitted some of these while adding: Hon. Sc.D. (Cambridge), Knight Commander of the Crown of Italy; Officer of the Legion of Honour; Knight (First Class) of the Order of Francis Joseph of Austria, Frederick of Wurtemburg, and Philip the Magnanimous of Hesse-Darmstadt, New-Zealand -Exhibition Gold Medallist for "Literature and Science".

62. H.F. von Haast The Life and Times of Sir Julius von Haast (Wellington, 1948), pp. 773-775. On Mueller see A.M. Lucas "Baron von Mueller: Protégé turned patron" in Australian Science in the Making edited by R.W. Home (Cambridge, 1988), pp. 133-152.

63. "Sir Walter Buller" Ibis (series 8) 6 (1906) 733-735 (p. 734) -probably written by the editor, P.L. Sclater.

64. See for instance Lucas (1988), pp. 133-134.

65. Buller to Secretary of the Linnean Society, 29 April 1857, archives of the Linnean Society of London. Thomas Shearman Ralph (1813-1891), surgeon, "ardent microscopist and botanist" and Associate of the Linnean Society (a lesser category than Fellow) spent some years in Wellington between 1851 and 1857. See obituaries in The Australasian Medical Gazette Jan 1892 p. 117, and Victorian Naturalist 25 (1892) p. 111.

66. Buller's nomination proposal, dated 5 November 1857, archives of the Linnean Society of London.

67. Andreas Reischek in 1885 and his biographer in 1981 both took it that Reischek's FLS was "substantial acknowledgement of his professional accomplishments" (Michael King The

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Collector: A Biography of Andreas Reischek, 1981, pp. 122-123).

68. A.T. Gage A History of the Linnean Society of London (London, 1938) is also rather reticent on this point but notes (p. 140) that only "a small number of eminent Botanists and Zoologists who, in consideration of their services to Science.... were in a sense Honorary Fellows".

69. One notable exception was J.E. Gray of the British Museum, who was black-balled after publishing a book which failed to give proper credit to the founder of the Society. -see A.E. Gunther A Century of Zoology at the British Museum Through the Lives of Two Keepers 1815-1914 (Folkestone, 1975), pp. 43-45; William T. Stearn The Natural History Museum at South Kensington (London, 1981), pp. 164-165.

70. The ten original essayists (or rather those awarded medals at the exhibition) were: Buller,* William Colenso* (who wrote two essays), James Coutts Crawford,* Thomas Ridge Hacket, Julius Haast, James Hector, Alfred Ludlam,* David Monro,* Edward Shortland,* Richard Taylor. The publishing history of the essays is complex. Briefly, only those indicated by asterisks were published either separately or in the Transactions; the ten "essays" printed in the latter included an introductory note by Hector (newly prepared -although he was awarded a medal he had not submitted an essay during the exhibition), plus notes by John Buchanan and William T.L. Travers. See New Zealand Exhibition 1865 Reports and Awards of the Jurors... (Dunedin, 1866), pp. 507-513; TNZI 1 (1869) (the essays are separately paginated); correspondence from Alfred Eccles (exhibition secretary) to James Hector in box 51, archives of the National Museum, Wellington, and in files IA1 1867/1246 and 1867/2027, National Archives, Wellington.

71. AJHR 1869 D9, p. 3.

72. Buller Essay on the Ornithology of New Zealand (Dunedin, 1865), pp. 12, 8.

73. P.L. Sclater to Buller 1 July 1867, MS Papers 48, folder 27, Alexander Turnbull Library, Wellington.

74. Ibis (series 2) 3 (1867), 131-133; Record of Zoological Literature (better known under its later title of Zoological Record) 3 (1866) "Birds" p. 57.

75. Otto Finsch Die Papageien (Lieden, 1867-1868); Otto Finsch and G. Hartlaub, Beiträge zur Fauna Centralpolynesians. Ornithologie (Halle, 1867). The best

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biographical account of Finsch is in E. Stresemann Ornithology From Aristotle to the Present (Cambridge, Massachusetts, 1975), pp. 220-233.

76. Otto Finsch "Walther Buller's 'Versuch über die Ornithologie Neu-Seelands', übersetzt und mit kritischen Anmerkungen versehen von Otto Finsch in Bremen" Journal fur Ornithologie 15 (1867), 305-347.

77. Notably G.R. Gray "A list of the birds of New Zealand and the adjacent islands" Ibis 4 (1862), 214-252.

78. Buller "Notes on Herr Finsch's Review of Mr Walter Buller's Essay on New Zealand Ornithology" TNZI 1 (1869), 105-112. Finsch's critique, translated into English, was appended at pp. 112-125.

79. Buller "On some new species of New Zealand birds" Ibis (series 2) 5 (1869), 37-43; Finsch "Remarks on some species of birds from New Zealand" Ibis (series 2) 5 (1869), 378-381. Both papers were reprinted in TNZI 2 (1870), pp. 390-392, 389-390 respectively. See also Buller "Notes on the Ornithology of New Zealand" TNZI 2 (1870), 385-388, reprinted (slightly revised) as "Remarks on some disputed species of New Zealand birds" Ibis (series 2) 6 (1870), 455-460.

80. Hutton to James Hector 30 October 1869, MS 443B, Hocken Library, Dunedin. Frederick Wollaston Hutton (1836-1905) emigrated to New Zealand in 1865 and from 1871 was employed as a professional scientist, first under Hector in the Geological Survey. He was appointed Professor of Natural Science at Otago University in 1877 and in 1880 at Canterbury. In 1893 he became curator of the Canterbury Museum.

81. Finsch to Haast 16 March 1871, MS Papers 37, folder 10; Buller to Haast 18 October 1871, MS Papers 37, folder 38, Alexander Turnbull Library, Wellington. Buller was evidently hoping to use the provision of the Law Practitioners Amendment Act 1865 under which any graduate of a British or colonial university could be admitted as a barrister in New Zealand -although the university mentioned (Heidelberg) would not appear to qualify.

82. The arrangement is documented in AJHR 1871 G30 -see in particular Gisborne to Buller 8 April 1871, No. 2, printed at p. [3].

83. NZPD 11 (1871), 171-173; Evening Post (Wellington), 9 October 1871.

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84. Buller to Haast 16 November 1871, MS papers 37, folder 38, Alexander Turnbull Library, Wellington; to Hector same date, box 57, folder (ii), no. 446/72, archives of National Museum, Wellington.

85. The requirement in 1871 was that members kept twelve terms by dining in hall six times a term; examinations were not compulsory -it was a process of acceptance into the profession rather than training for it. See Michael Birks Gentlemen of the Law (London, 1960), pp. 5, 196; W.J. Reader Professional Men; The Rise of the Professional Classes in Nineteenth-Century England (London, 1966), pp. 21-23, 56-57. Buller's extension of his leave and the associated disputes are documented in AJHR 1873 H11, and file IA1 1875/2332, National Archives, Wellington.

86. Companion of the Order of St. Michael and St. George -an order reserved for honouring colonials.

87. "Certificate of a Candidate for Election...Walter Lawry Buller", dated 29 January 1873, Royal Society, London.

88. Buller to Gunther 22 July 1875, Gunther papers, British Museum (Natural History), London.

89. Evening Post (Wellington) undated cutting in Buller to Hooker 21 June 1879, New Zealand letters 1854-1900 volume 174 (35), Archives, Royal Botanic Gardens, Kew. If the Post meant its comparison to extend to all British colonies, it erred: Buller was perhaps the first FRS born in New Zealand or the Australian colonies, but R.C. Gunn of Tasmania (born in Cape Town) had been elected in 1854, and there had been earlier native-born colonial Fellows, for instance from Canada (J.W. Dawson, elected 1862), not to mention thirty or more from the American colonies before independence (R.P. Stearns "Colonial Fellows of the Royal Society of London, 1661-1788" Osiris 8 (1948), 73-121 lists 47 colonial fellows but does not clearly distinguish those born in the colonies).

90. Alan Ward A Show of Justice; Racial "Amalgamation" in Nineteenth Century New Zealand (Auckland, 1973), pp. 182-187; the quotation is from T.W. Lewis (AJHR 1891 Session II G1 p. 145, quoted by Ward, p. 182).

91. In the 1870s ten guineas (£10/10) a day was about thirty-five times a labourer's wage -see AJHR 1875 D1 p. 15.

92. For some examples of Buller's mode of operation see Galbreath Walter Buller; The Reluctant Conservationist

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(Wellington, 1989) pp. 130-134.

93. Buller to Gunther 21 December 1882 qMS 1877-92, Buller letterbooks, Alexander Turnbull Library, Wellington.

94. Prevailing wages are given in New Zealand Census and Statistics Department Report on the Statistics of New Zealand 1889 (Wellington, 1891), p. 99.

95. Buller was then forty-eight. His firm, Buller and Gully, amalgamated with that of F.H.D. Bell and C.B. Izard, thus forming the celebrated Wellington firm Bell, Gully.

96. See Galbreath (1989) pp. 154-158.

97. On Buller's involvement with the New Zealand Antimony Company (floated in London 1887, into liquidation 1892) and the Blue Spur and Gabriel's Gully Consolidated Gold Company (floated in London 1888) see Galbreath (1989), pp. 169-172 and Jean Jackson The Blue Spur Bubble [Dunedin, 1984].

98. Keepa Te Rangihiwinui (1823-1898) of Wanganui, had been a leader of kupapa ("neutral", or in colonial parlance "friendly native") forces in the wars of the 1860s and received the New Zealand Cross for his exploits. Helped by his standing with the colonial establishment he was also able to recover the Horowhenua lands from the Kingite tribe Ngati Raukawa for the Muaupoko (his father's tribe) and, until the 1890s, to resist pressures to sell any part of it. In the 1890s he became a leader in the Kotahitanga movement for Maori unity and a Maori parliament.

99. For further detail on the complex and protracted Horowhenua Case see Galbreath (1989), chapters 14, 16 and 17.

100. The mean annual male wage in 1897 was about £85 (New Zealand Official Year-book 1897, p. 285), and in 1988 nearly $29,000 (New Zealand Department of Labour Wages, Hours & Employment 1988, p. [7]); on this basis Keepa's debt is equivalent to about NZ$2 million in 1988 terms. Two thirds of the amount was made up by legal fees charged by Buller, and the rest for other costs he had paid on Keepa's behalf (see AJHR 1898 I1B pp. 28, 37-55.

101. Barry W. Butcher "Darwin's Australian Correspondents: Deference and Collaboration in Colonial Science" in MacLeod and Rehbock (1988) pp. 139-157. For other variants of the colonial scientist in New Zealand see A.G. Bagnall and G.C. Peterson William Colenso [Wellington, 1948]; Jacob W. Gruber "The Moa and the professionalising of New Zealand science" Turnbull Library Record 20 (1987), 61-100 (on

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Walter Mantell, James Hector and Julius von Haast); M.E. Hoare Reform in New Zealand Science (Melbourne, 1977) (on G.M. Thomson).

102. Undated cutting enclosed in Buller to Gunther 14 December 1876, Gunther papers, British Museum (Natural History), London.

103. Hector, however, edited out the critical passage from the report of the Wellington Philosophical Society meeting which he published in TNZI 9, (1877), pp. 631-632.

104. See F.W. Hutton's comment that "new species Must be referred to Europe before it is safe to name them", in Hutton to Hector, 30 October 1869, MS 443B, Hocken Library, Dunedin.

105. On the use of this system by another colonial scientist, F.J.H. Mueller of Melbourne, see A.M. Lucas "Baron von Mueller: Protégé turned patron" in Australian Science in the making edited by R.W. Home (Cambridge, 1988), pp. 133-152 (pp. 141-143).

106. Buller "Notes on the Tuatara Lizard (Sphenodon punctatum), with a description of a supposed new species" TNZI 9 (1877), 317-325 (p. 323).

107. Ocydromus greyi (the North Island Weka), Phalacrocorax colensoi (the Auckland Island Shag), P. huttoni (a synonym of Leucocarbo carunculatus chalconotus, the Stewart Island Shag), Eudyptes sclateri (the Erect-crested Penguin). By (mis)quoting the manuscript label of a specimen in the British Museum Buller also inadvertently published another new name: Aplonis mavornata -see S.L. Olson "An early account of some birds from Mauke, Cook Islands, and the origin of the 'Mysterious Starling' Aplonis mavornata Buller" Notornis 33 (1986), 197-208.

108. There were a number of rival codes with many common features; in Britain and the colonies the dominant one was the "Strickland Code", proposed at the 1842 meeting of the British Association for the Advancement of Science, readopted at the 1865 meeting, and revised in 1878. See David Heppell "The Evolution of the Code of Zoological Nomenclature", in History in the Service of Systematics edited by Alwyne Wheeler and James H. Price, (London, 1981), pp. 135-141.

109. R.B. Sharpe "On Apteryx bulleri" TNZI 21, (1889), 224, and report of meeting on p. 484.

110. Sharpe (1889), p. 224.

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111. Thomas Kirk -see report in Evening Post (Wellington) 14 June 1888.

112. See Buller A History of the Birds of New Zealand, second edition, (London, 1888), II, 308; the separate parts and their dates are listed in A.G. Bagnall New Zealand National Bibliography (Wellington, 1980), I, 134.

113. The Society did sometimes publish separate Proceedings -essentially reprints from the relevant reports in TNZI -but no copy of such a separate publication for 1888 or any record of one for that year has been traced. In any case it could hardly have been published in 1888 since the Society's "year" ran until the annual meeting in February 1889.

114. A. deB. Brandon "Inaugural Address" TNZI 22 (1890), 515-519 (p. 518).

115. See the papers listed in Catalogue of the Birds in the British Museum 27 (1895), 608.

116. Walter Rothschild "Notes on the Genus Apteryx" Bulletin of the British Ornithologists' Club 10 (1893), lix-lxii (p. lx).

117. Rothschild (1893), p. lxi. The Stewart Island Kiwi is now regarded as a subspecies of the Brown Kiwi: A. australis lawryi.

118. See Buller Supplement to the "Birds of New Zealand (London, 1905), I, 17-18.

119. Lyttelton Times (Christchurch) 26 September 1886 quoted by H.F. von Haast The Life and Times of Sir Julius von Haast (Wellington, 1948), p. 918; New Zealand Herald (Auckland) 13 November 1886.

120. Buller A History of the Birds of New Zealand second edition (London, 1888), I, 35.

121. Compare Buller's reference in the first edition (1873), p. 129, to the plain "old Mission Station".

122. [A.G. Bagnall] "Buller, Sir Walter Lawry" in An Encyclopaedia of New Zealand edited by A.H. McLintock (Wellington, 1966), I, 272-274 (p. 272). Bagnall's error is understandable; all the previous biographical notes and obituaries which mentioned Buller's birthplace locate it at the Bay of Islands. See in particular Alfred Cox Men of Mark of New Zealand (Christchurch, 1886), p. 34, on which most subsequent biographies are based: see Philip Mennell The

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Dictionary of Australasian Biography (London, 1892), p. 67; Victor G. Plarr Men and Women of the Time... 14th edition (London, 1895), p. 125; The Cyclopedia of New Zealand (Wellington, 1897), I, 434. Obituaries copied these biographies (see for instance Evening Post 20 July 1906, New Zealand Time 21 July 1906), as did biographical references published after Buller's death: The Dictionary of National Biography. Supplement January 1901-December 1911 (London, 1912, I, 253; G.H. Scholefield A Dictionary of National Biography (Wellington, 1940), I, 119. The first biographer to correct the error on Buller's birthplace was E.G. Turbott, Buller's Birds of New Zealand (Christchurch, 1967), p. xii.

123. See Plarr (1895), p. 125; Cyclopedia of New Zealand (1897), I, 434. Some obituary writers quite reasonably interpreted "Auckland College" as "Auckland Grammar School" (see New Zealand Times 21 July 1906).

124. Who's Who (London, 1904), p. 208.

125. In 1903 Laura Buller married Captain W.R.N. Madocks, grandson of Lord Napier of Magdala.

126. Buller A History of the Birds of New Zealand second edition (London, 1888), I, pp. 35, 29.

127. Buller Reviews and other notices of Sir Walter Buller's "Birds of New Zealand" (London, 1890).

128. Buller (1890), pp. 24, 58.

129. Buller "Notes on Herr Finsch's Review of Mr Walter Buller's Essay on New Zealand Ornithology" TNZI 1 (1869), 105-112; "Note on Mr Howard Saunders' Review of the Larinae, or Gulls" TNZI 11 (1879), 359-360; "Notes on the Ornithology of New Zealand; with an Exhibition of Rare Specimens", TNZI 27 (1895), 104-126 (pp. 106-107 -criticising Sir John Lubbock); "Notes on the Ornithology of New Zealand" TNZI 29,(1897), 179-207 (pp. 180-182 -fencing with A.R. Wallace).

130. See for instance Buller to Sharpe 30 December 1872, Bowdler Sharpe papers, Blacker-Wood Library of Zoology and Ornithology, McGill University, Quebec, Canada.

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CHAPTER 2. DISPLACEMENT OF THE NATIVES

1.The classic account of this idea is A.O. Lovejoy The Great Chain of Being; A study of the History of an Idea (Cambridge, Massachusetts, 1936). See also E.M.W. Tillyard The Elizabethan World Picture (Harmondsworth, 1963); W.F. Bynum "The Great Chain of Being after Forty Years" History of Science 13 (1975), 1-28.

2. Nancy Stepan The Idea of Race in Science: Great Britain 1800-1960 (Basingstoke, 1982), pp. 1-19.

3. Léon Poliakov The Aryan Myth; A History of Racist and Nationalist Ideas in Europe (London, 1971).

4. There is a large literature on this theme; see for instance Christine Bolt Victorian Attitudes to Race (London, 1971), Douglas A. Lorimer Colour, Class and the Victorians; English attitudes to the Negro in the Mid-Nineteenth Century (Leicester, 1978); Reginald Horsman Race and Manifest Destiny; The Origins of American Racial Anglo-Saxonism (Cambridge, Massachusetts, 1981), pp. 62-79.

5. Robert Knox The Races of Man: A Philosophical Enquiry into the Influence of Race over the Destinies of Nations second edition (London, 1862), quoted in Horsman (1981), pp. 71-73.

6. Thomas Jefferson Notes on Virginia (London, 1787) quoted from the text edited by William Peden (Chapel Hill, 1955), pp. 53-54.

7. Extinction and evolution were seen by Cuvier as alternatives; he rejected the latter. See M.J.S. Rudwick The Meaning of Fossils; Episodes in the History of Palaeontology (London, 1972), pp. 112-117.

8. Charles Lyell Principles of Geology (London, 1830-1833), II, 174-175.

9. Lyell (1830-1833), II, p. 156.

10. Joseph Dalton Hooker The Botany of the Antarctic Voyage of H.M. Discovery Ships Erebus and Terror in the Years 1839-1843.... Part III (London, 1860), I, ciii.

11. John Miller Early Victorian New Zealand; A Study of Racial Tension and Social Attitudes (London, 1958); Angela Ballara Proud to be White? A Survey of Pakeha Prejudice in New Zealand (Auckland, 1986). See also M.P.K. Sorrenson "How

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to Civilize Savages; Some 'Answers' from Nineteenth-Century New Zealand" New Zealand Journal of History 9 (1975), 97-110.

12. Busby to N.S.W. 16 June 1837, C.O. 209/2:333-52 (Public Record Office, London), quoted by P. Adams Fatal Necessity: British Intervention in New Zealand 1830-1847 (Auckland, 1977), p. 88. Similar predictions were made in missionary reports (Adams, pp. 40-45 refers to several) and in more scientific writings (see Ernest Dieffenbach Travels in New Zealand... (London, 1843), I, 14-16; II, 185).

13. In 1843 those members most interested in the scientific aspect split off as the Ethnological Society of London -see George W. Stocking, Jnr. Victorian Anthropology (New York, 1987), pp. 242-243.

14. On Prichard's BAAS paper see Stocking (1987), p. 243; on the influence of humanitarian concern on policy on New Zealand see Adams (1977) pp. 132-133, 146-150.

15. The quotations are from draft instructions (undated, but probably May 1839) by James Stephen, Permanent Undersecretary at the Colonial Office (Colonial Office 209/4 pp. 227, 242, quoted by Adams (1977), pp. 149, 150). On the evangelical humanitarian view see Adams (1977), p. 107.

16. Hobson to Liz [his wife] 25 August 1837, MS Papers 46, folder 1, Alexander Turnbull Library, Wellington -written after his first visit to New Zealand. See also the comment of Felton Mathew (one of Hobson's retinue at Waitangi), J. Rutherford The Founding of New Zealand; The Journals of Felton Mathew...1840-1847 (Dunedin, 1940), p. 39.

17. Quoted in Miller (1958), pp. 77, 149.

18. A number of instances are quoted by Miller (1958) p. 77-78 and Ballara (1986), p. 82.

19. Quoted in Brian Mackrell, Hariru Wikitoria! An illustrated history of the Maori tour of England, 1863, (Auckland, 1985), p. 50. See also pp. 43, 57, 70.

20. New-Zealander (Auckland) 30 September 1863.

21. Christine Bolt Victorian Attitudes to Race (London, 1971), pp. 75-108; Douglas A. Lorimer Colour, Class and the Victorians; English Attitudes to the Negro in the Mid-Nineteenth Century (Leicester, 1978), pp. 108-130.

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22. Hansard's Parliamentary Debates Third Series v. 165 (1862), 1448-9 (13 March 1862, Roebuck).

23. Popular Magazine of Anthropology 1, (1866), pp. 10-11, quoted by Bolt (1971), p. 20; compare Charles Dilke's "the Anglo-Saxon is the only extirpating race on earth" quoted in Roy Jenkins Sir Charles Dilke (London, 1958), p. 35.

24. Innumerable expressions of this or similar sentiments are found in nineteenth century literature; for a few New Zealand examples see A.K. Newman "A Study of the Causes leading to the Extinction of the Maori" TNZI 14 (1882), 459-477 (p. 464 -quoted above), also F.D. Fenton Observations on the State of the Aboriginal Inhabitants of New Zealand (Auckland, 1859), p. 32; W.T.L. Travers "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilized Races" TNZI 2 (1870), 299-330 (p. 308); J.E. Gorst The Maori King, Or, the Story of Our Quarrel with the Natives of New Zealand (London, 1864), p. 11.

25. James Buller Forty Years in New Zealand... (London, 1878), p. 164.

27. James Buller (1878), pp. 457-472 (p. 468).

28. New Zealand Spectator (Wellington) 1 Feb 1851.

29. Wellington Provincial Council. Journal of Proceedings 1855, p. 6.

30. "Decimating" is used deliberately: it has been estimated that mortality from measles alone in 1854 was "at least as high as 70 to 90 per 1,000" -see D.I. Pool The Maori Population of New Zealand 1769-1971 (Auckland, 1977), pp. 122-123.

31. Report of meeting at Otaki, 1 August 1863, AJHR 1863 E3A, p. 9.

32. Wellington Independent 24 Feb 1866.

33. Te Karere o Poneke (Wellington) ran to 58 issues between September 1857 and December 1858. For the background to its publication see Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1989), pp. 34-37. An almost complete run is held by the General Assembly Library, Wellington.

34. See Galbreath (1989), pp. 57-76 for Buller's involvement

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in 1864-1869 with Featherston's purchase of the Rangitikei-Manawatu block.

35. Hector to Haast 24 December 1865, MS Papers 37, Alexander Turnbull Library, Wellington.

36. William Mair, quoted in Alan Ward A Show of Justice; Racial "Amalgamation" in Nineteenth-Century New Zealand (Auckland, 1973), p. 258. On the use of the term "nigger" see also James Belich The New Zealand Wars and the Victorian Interpretation of Racial Conflict (Auckland, 1986), p. 376, footnote 43.

37. The sedge Carex secta is still commonly referred to as "Niggerhead" -even by Herbert W. Williams A Dictionary of the Maori Language, in all editions from the fifth (Wellington, 1917) (in the seventh edition of 1971, still current, it is at p. 313 under entry "Purei"), also the standard botanical text: A.J. Healey and E. Edgar Flora of New Zealand (Wellington, 1980), III, 163. For Buller's use of "Negro-head" see A History of the Birds of New Zealand first edition (London, 1873), p. 273; "The Story of Papaitonga, or, A Page of Maori History" TNZI 26 (1894), 572-584 (p. 573). For other uses see Johannes C. Andersen "Popular names of New Zealand plants", TNZI 56 (1926), 659-714 (p. 682, under Carex secta and C. virgata) and 57 (1927), 905-977 (p. 934).

38. Maori Messenger. Te Karere Maori (Auckland) 30 November 1860, pp. 1-3.

39. Buller's address was given a full report in New Zealand Times (Wellington) 16 February 1884 which was reprinted verbatim in New Zealand Journal of Science 2 (1884), pp. 55-59, and again in TNZI 17 (1885), pp. 443-445.

40. James Buller New Zealand: Past and Present (London, 1880), pp. 24-25: "I am not without hope that they [the Maori race] will...turn the corner. An amalgamation of the two races of Maories and Anglo-Saxons is much to be desired".

41. TNZI 17 (1885), 446.

42. TNZI 17 (1885), 444.

43. Buller A History of the Birds of New Zealand second edition (London, 1888), I, 55.

44. Buller (1888), I, 55.

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45. See for instance Buller (1888) I, 35, referring to his childhood at "the dear old Church mission" -suggesting a Church (of England) rather than a Wesleyan upbringing.

46. See Buller Essay on the Ornithology of New Zealand (Dunedin, 1865), p. 12, A History of the Birds of New Zealand first edition (London, 1873), p. 93, second edition (London, 1888), I, 55. See also Maori Messenger (Auckland), 30 November 1860, pp. 1-3. Similar metaphors were used by others -see T. Kirk "The Displacement of Species in New Zealand" TNZI 28 (1896), 1-27 (p. 2 -"An army of invading weeds").

47. Buller (1873), p. 93.

48. TNZI 8 (1876), 408.

49. TNZI 40, (1908), pp. 562, 567. The context of their joining is discussed in Chapter 7.1.

50. In the 1980s the exclusion is still being made, though perhaps a little more self-consciously, as when a national accountancy firm informed its clients that "The Government is silent on whether it intends to relinquish ownership of 'our' fishing rights" -see Clientele (Client Newsletter of Hogg Young Cathie) 28 July 1988.

51. Keith Sinclair A Destiny Apart; New Zealand's Search for National Identity (Wellington, 1986) p. 42.

52. Sidney J. Baker "Origins of the Words Pakeha and Maori" Journal of the Polynesian Society 54 (1945), 223-231 (p. 230) suggests (quoting from the diary of Edward Markham, 1834) that Maori as a noun in this sense "has always been an anglicised use". It is, however, included in Herbert W. Williams A Dictionary of the Maori Language seventh edition, (Wellington, 1971), p. 179 -where it is dated to "about 1850".

53. See for instance Buller "On the New Zealand Rat" TNZI 3 (1871), 1-4 (p. 1).

54. Buller's speech notes, MS Papers 48, folder 34, Alexander Turnbull Library, Wellington. The most prominent "Maori doctor" was Donald McLean. Buller later applied the term to himself: see Buller to Seddon, 31 October 1894, MS papers 48, folder 37, Alexander Turnbull Library, Wellington.

55. Sidney J. Baker New Zealand Slang (Christchurch, [1941]), 15-17, 44-45; G.W. Turner The English Language in Australia and New Zealand (London, 1966), p. 135.

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56. Baker (1941), p. 17.

57. Sinclair (1986), p. 31.

58. TNZI 17 (1885), 444 (italics in original).

59. Harry Orsman and Jan Moore Heinemann Dictionary of New Zealand Quotations (Auckland, 1988), p. 258.

60. See especially Tony Simpson Te Riri Pakeha: The White Man's Anger (Martinborough, 1979), pp. 83-84, where it is used to support the view that "Some thought that the Maoris were dying out and it would be a kindness to hurry the process".

61. The date of 1856 was first given by Te Rangihiroa "The Passing of the Maori", TNZI 55, (1924), 362-375 (p. 362) and has been quoted ever since. The "Wellington Philosophical Society" location is given by Hamish Keith and William Main New Zealand Yesterdays (Sydney, 1984), p. 40; the Society, however, did not take that name until April 1868, and its predecessor, the New Zealand Society, held no meetings between July 1853 and February 1858 -see R. Pharazyn Abstract of the History and Proceedings of the New Zealand Society (Wellington, 1867), and L. Bastings "History of the New Zealand Society, 1851-1868; A Wellington Scientific Centenary", Transactions of the Royal Society of N.Z. 80, (1953), 359-366.

62. Wellington Independent 24 February 1866. Checks of Featherston's speeches reported in NZPD and the Wellington Provincial Council Journal of Proceedings, and obituaries, theses and other secondary literature on him, has revealed no evidence that he used the line any earlier.

63. Quoted in James Cowan The Maori Yesterday and Today (Auckland, 1930), p. 1.

64. Vernon Smith minute on draft Royal Instructions 5 November 1840, C.O. 380/122:150-151 (Public Record Office, London, copy in Micro 400, National Archives, Wellington).

65. NZPD 1858-1860, p. 222 (7 August 1860).

66. NZPD 1858-1860, p. 330. (16 August 1860).

67. NZPD 1858-1860, p. 345 (16 August 1860).

68. Wellington Independent 27 Feb 1866.

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69. T.C. Williams The Manawatu Purchase Completed: or The Treaty of Waitangi Broken (Wellington, 1867), p. 5; Featherston (and Buller's) part in the complex and controversial Manawatu purchase is described in Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1989), chapter 4.

70. AJHR 1886 H31 p. 3.

71. Taranaki Herald 7 June 1879, quoted in Atkinson's denial in AJHR 1883 A4, p. 24. See also G.W. Rusden Aureretanga; Groans of the Maoris (London, 1888), p. 108.

72. Robert Stout (1844-1930), lawyer and politician, was out of parliament between 1879 and 1884. In the latter year he became Premier.

73. Quoted ("Robert Stout...wrote also to a newspaper, thus:-") by Rusden (1888), p. 108-109; the newspaper reference has not been traced.

74. J.F.H. Wohlers, "On the Conversion and Civilization of the Maoris in the South of New Zealand" TNZI 14 (1882), 123-134 (p. 134).

75. TNZI 17 (1885), 443.

76. TNZI 17 (1885), 444.

77. On Wolfe's ballad (written 1817) and its uses and parodies see H.A. Small The Field of His Fame; A Ramble in the Curious History of Charles Wolfe's Poem "The Burial of Sir John Moore" (Berkeley, 1953), and Michael R. Turner Parlour Poetry; A Hundred and One Improving Gems (London, 1967).

78. AJHR 1891 G1, p. xxix.

79. For one colonist's opinion that the Maori race was not "of necessity...doomed to extinction" see John Thornton "A present-day view of the Maori Race" Church Mission Intelligencer (1892), 201-206 (p. 204). Thornton was headmaster of Te Aute College (a school for Maori boys) and a strong influence on pupils such as Apirana Ngata and Te Rangihiroa (Peter Buck), who later formed the "Young Maori Party". They are discussed further in Chapter 7.1.

80. The displacement of the native rat is mentioned briefly by Keith Sinclair A History of New Zealand (Harmondsworth, 1959), p. 111, and by Raeburn T. Lange "The Revival of a Dying Race: A Study of Maori Health Reform, 1900-1918 and its

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Nineteenth Century Background" (unpublished M.A. dissertation, University of Auckland, 1972), p. 150; and more fully by Harrison M. Wright New Zealand, 1769-1840: Early Years of Western Contact (Cambridge, Massachusetts, 1959), pp. 66-67, and Alfred W. Crosby Ecological Imperialism: The Biological Expansion of Europe, 900-1900, (Cambridge, 1986), pp. 266-267.

81. The most comprehensive account is I.A.E. Atkinson "Spread of the Ship Rat (Rattus r. rattus L.) in New Zealand", Journal of the Royal Society of New Zealand, 3, (1973), 457-472. See also J.S. Watson "Rats in New Zealand: a problem of interspecific competition", Proceedings of the Ninth Pacific Science Congress 19, (1961), 15-16; R.H. Taylor "What limits kiore (Rattus exulans) distribution in New Zealand?", New Zealand Journal of Zoology 2, (1975), 473-477.

82. Under the Linnean form of scientific nomenclature, after the (italicised) generic and specific names of a species, the name of the person who originally published the species name is added as a suffix (in brackets if the species has since been assigned to a different genus). "L." indicates a species originally described by Linnaeus himself -other names are not abbreviated.

83. Richard A. Cruise Journal of a ten months' residence in New Zealand (London, 1823), p. 285; William Yate An Account of New Zealand..., second edition, (London, 1835), p. 70; J.S. Polack New Zealand: being a narrative of travels (London, 1838), I, 314.

84. L.M. Rogers The Early Journals of Henry Williams (Christchurch, 1961), p. 245.

85. Edward Markham New Zealand, Or Recollections of It (Wellington, 1963), p. 53.

86. Quoted (shorn of subsequent amendments) from Darwin's manuscript journal entry for 24 December 1835, published in facsimile in Darwin The Journal of a Voyage in H.M.S. Beagle (Guildford, 1979), p. 674.

87. The first published version was in [P.P. King] Narrative of the Surveying Voyages of His Majesty's Ships Adventure and Beagle... (London, 1839), III, 511; it was again reworded slightly in later editions, published variously as his Journal of Researches or A Naturalist's Voyage -see Darwin Journal of Researches...during the Voyage of H.M.S. Beagle, second edition (London, 1845), p. 428.

88. R.B. Freeman The Works of Charles Darwin; An Annotated Bibliographical Handlist second edition (Folkestone, Kent,

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1977), p. 31. Freeman lists 157 reprints or editions in English -10 by 1860 and 100 by 1906.

89. Gerda Bell Ernest Dieffenbach: Rebel and Humanist (Palmerston North, 1976), p. 65.

90. Ernest Dieffenbach Travels in New Zealand (London, 1843), II, 185.

91. Despite many versions in which colonists prefix it by "the Maori people themselves say..." or similar comments, no record has been found of the rat analogy in contemporary or modern collections of whakatauki or Maori proverbial sayings, or attributed to any particular speaker or occasion (except in Hamish Keith and William Main New Zealand Yesterdays: A Look at Our Recent Past (Sydney, 1984), p. 40, where it is attributed, on no discernible evidence, to Te Heu Heu in 1859). Elsdon Best Forest Lore of the Maori (Wellington, 1942) pp. 416-460, in a lengthy discussion of traditions and sayings connected with the Kiore makes no mention of the analogy with the extinction of the Maori people but does quote Hori Ropiha of Ngati Kahungungu stating in the 1890s that the Kiore "is now extinct; it has been exterminated by the European rat...just as the birds of New Zealand have been lost through the introduction of European birds" (p. 428; Maori original at p. 482).

92. Julius Haast Report of a topographical and geological Exploration of the western districts of the Nelson Province... (Nelson, 1861), p. 135; J.D. Hooker "On the struggle for existence among plants" Popular Science Review 6 (1867), 131-139 (p. 137).

93. Buller On the Ornithology of New Zealand (Dunedin, 1865), pp. 2, 5, 6.

94. Buller "On the New Zealand Rat" TNZI 3 (1871), 1-4 (p. 3); compare Dieffenbach (1843), II, 185.

95. Alfred Cox Men of Mark in New Zealand, (Christchurch, 1886), p. 35.

96. Buller (1871), p. 1.

97. TNZI 17 (1885), 443.

98. Buller A History of the Birds of New Zealand second edition (London, 1888), II, 35; Pitoitoi = the North Island Robin Petroica australis longipes.

99. Buller "On the Ornithology of New Zealand" TNZI 31

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(1899), 1-37 (p. 12).

100. Richard Taylor Te Ika a Maui, (London, 1855), p. 132; A.E. Brougham and A.W. Reed Maori Proverbs, revised (second) edition, (Auckland, 1987), p. 32.

101. Te Whatanui Tiwaewae and others to McLean 13 May 1873, file MA 75/14, National Archives, Wellington.

102. On this confusion see I.A.E. Atkinson "Spread of the Ship Rat (Rattus r. rattus L.) in New Zealand", Journal of the Royal Society of New Zealand, 3 (1973), 457-472.

103. S.W. Silver & Co.'s Handbook for Australia and New Zealand, third edition, (London, 1880), p. 382; see also pp. 364-365 and the acknowledgement to Buller on p. viii (dated September 1874; Buller was in London from October 1871-July 1874). The extinction of the Kiore, but not the proverbial saying, are mentioned also in, for instance, E.J. Wakefield The Hand-Book for New Zealand (London, 1848), p. 167, and Charles Hursthouse New Zealand, Or, Zealandia, the Britain of the South (London, 1957), I, 117.

104. For a graphic illustration of this image see "A modern Canute and the tide of settlement", cartoon by Trevor Lloyd, New Zealand Herald 1909, reproduced in Ian F. Grant The Unauthorized Version; A Cartoon History of New Zealand (Auckland, 1980), p. 107.

105. F. von Hochstetter New Zealand; Its Physical Geography, Geology and Natural History (Stuttgart, 1867), p. 222; J.D. Hooker "Note on the Replacement of Species in the Colonies and Elsewhere", Popular Science Review 6 (1867), 131-139 (p. 137); Charles Darwin The Descent of Man..., (London, 1871), I, 239-240; A.R. Wallace Island Life (London, 1880), p. 445, Darwinism (London, 1889), p. 34; G.J. Romanes Darwin, and After Darwin (London, 1892) I, 286.

106. W.T.L. Travers "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilized Races" TNZI 2 (1870), 299-330 (p. 323).

107. Taylor White "Remarks on the Rats of New Zealand", TNZI 27, (1895), 240-261, (pp. 245-246); H. Guthrie-Smith Tutira (Edinburgh, 1921), p. 205.

108. Atkinson (1973), pp. 457-472; R.H. Taylor "What limits kiore (Rattus exulans) distribution in New Zealand?", New Zealand Journal of Zoology, 2 (1975), pp. 473-477.

109. Charles Darwin The Origin of Species By Means of

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Natural Selection (London, 1859), p. 76.

110. Atkinson (1973), p. 459; Lynn Barber The Heyday of Natural History 1820-1870 (London, Jonathon Cape, 1980), p. 105.

111. Buller A History of the Birds of New Zealand second edition (London, 1888), I, 55.

112. See for instance Carl G. Hempel Aspects of Scientific Explanation And Other Essays in the Philosophy of Science (New York, 1965), pp. 231-243 ("The Function of Natural Laws in History"); J. Hospers "Law", in Introductory Readings in the Philosophy of Science, edited by E.D. Klemke, Robert Hollinger and A.David Kline (Buffalo, New York, 1980), pp. 104-111.

113. William Whewell Astronomy and General Physics Considered with Reference to Natural Theology (London, 1833), pp 295-296, quoted by Michael Ruse The Darwinian Revolution (Chicago, 1979), p. 72.

114. Mill, quoted by Ruse (1979), p. 145.

115. Alvar Ellegard "The Darwinian Theory and Nineteenth-Century Philosophies of Science" Journal of the History of Ideas 18 (1957), 362-393 (pp. 388-390). Buller attended the 1872 B.A.A.S. meeting -but was more interested in "the hero of the hour", Henry Stanley, just returned from finding Livingstone (Buller to Hector 18 August 1872 box 58 folder iii, no. 870/72, archives of National Museum, Wellington).

116. Darwin The Origin of Species by Means of Natural Selection (London, 1859), chapter V, "Laws of Variation".

117. See the discussion on "The Extinction of Races" Journal of the Anthropological Society (London) 2 (1864), xcv-cxiii. On the "extinction" of the Tasmanians see George W. Stocking Jnr. Victorian Anthropology (New York, 1987), pp. 274-283. Stocking notes that despite the recorded "event" of the extinction of the Tasmanians there are now several thousand people of Tasmanian descent. In the same way despite the "extinction" of the Moriori of the Chatham Islands their descendents still survive to memorialise them.

118. Ernest Dieffenbach Travels in New Zealand (London, 1843), I, pp. 15, 136.

119. Gerda Bell Ernest Dieffenbach: Rebel and Humanist (Palmerston North, 1976), pp. 36-39.

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120. Dieffenbach (1843) I, pp. 137-138, 14-15.

121. F.D. Fenton Observations on the State of the Aboriginal Inhabitants of New Zealand (Auckland, 1859), pp. 32, 39-41.

122. Fenton (1859), p. 31.

123. W.T.L. Travers "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilized Races" TNZI 2, (1870), 299-330 (p. 312, see also p. 323).

124. J.G. Myers "Our Native Birds" The Forest Magazine (New Zealand Out-Of-Doors) 1 July 1922, p. 116.

125. The two are sometimes needlessly confounded: see for instance Felix M. Keesing The Changing Maori (New Plymouth, 1928), pp. 48, 56; Angela Ballara Proud to be White? A Survey of Pakeha Prejudice in New Zealand (Auckland, 1986), pp. 75, 84-85.

126. George W. Stocking Jnr. Victorian Anthropology (New York, 1987), p. 26; D.A. Lorimer Colour, Class and the Victorians (Leicester, 1978), p. 132.

127. Ballara (1986), pp. 8-10; M.P.K. Sorrenson Maori Origins and Migrations; The Genesis of Some Pakeha Myths and Legends, (Auckland, 1979), pp. 13-16.

128. Duncan McGregor (1843-1906), was appointed first professor of mental science and political economy at Otago University (1871), and Inspector-General of Asylums and administrator of the Hospital and Charitable Aid Act (1886).

129. AJHR 1898 H22, p. 4. A brief analysis of these ideas as expressed in New Zealand is given by W.H. Oliver "The Origins and Growth of the Welfare State", in Social Welfare and New Zealand Society, edited by A.D. Trlin, (Wellington, 1977), 1-28 (pp. 6-10).

130. NZPD 55 (1886) 285 (W.R. Russell).

131. Fenton (1859), p. 31.

132. The term "New Zealander" was not used by Fenton; he referred to Maori, "aboriginal", or "colored" inhabitants on the one hand, and "European" or "white" settlers or colonists on the other.

133. R.P. Hargreaves, T.J. Hearn The Maori Population (Dunedin, 1977), p. [7].

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134. A.K. Newman "A Study of the Causes leading to the Extinction of the Maori" TNZI 14 (1882), 459-477 (p. 470).

135. Newman (1882), pp. 476-477.

136. TNZI, 14, (1882), 539-540.

137. M.E. Hoare Reform in New Zealand Science 1880-1926 (Melbourne, 1977), pp. 4-5.

138. See footnote 39 above.

139. TNZI 17 (1885), p. 444.

140. TNZI 17 (1885), p. 444.

141. New Zealand Times (Wellington) 16 February 1884.

142. TNZI 17 (1885), pp. 445-446.

143. Newman (1882) p. 464.

144. E.F. Hawthorne "Proposed Introduction of Animals and Plants", New Zealand Journal of Science and Technology 1, (1918), 318-319 (p. 319). For another expression of the "harder school" idea see James Drummond Our Feathered Immigrants... (Wellington, 1907) pp. 1-2.

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CHAPTER 3. ACCLIMATISATION

1. Buller On the Ornithology of New Zealand (Dunedin, 1865), p. 14.

2. James Buller New Zealand: Past and Present (London, 1880), p. 136.

3. David N. Livingstone "Human acclimatization: perspectives on a contested field of inquiry in science, medicine and geography" History of Science 25 (1987), 359-394.

4. Livingstone (1987) pp. 366-381; Nancy Stepan The Idea of Race in Science: Great Britain 1800-1960 (Basingstoke, 1982) pp. 36-46; George W. Stocking Jnr. Victorian Anthropology (New York, 1987), pp. 48-52, 64-65.

5. Thomas Jefferson Notes on the State of Virginia (London, 1787) -see the text edited by William Peden (Chapel Hill, 1955), pp. 47-72.

6. Gilbert Chinard "Eighteenth century theories on America as a human habitat", Proceedings of the American Philosophical Society 91 (1947), 27-57 (p. 41). See also A. Gerbi The Dispute of the New World; The History of a Polemic, 1750-1900 (Pittsburgh, 1973) p. 242.

7. W.L. Lindsay The Place and Power of Natural History in Colonization (Dunedin, 1862), p. 25; Alfred K. Newman "Speculations on the Physiological Changes Obtaining in the English Race when Transplanted to New Zealand" TNZI 9 (1877), 37-44 (p. 44).

8. Newman (1877), p. 44.

9. TNZI 9 (1877), 617-620.

10. TNZI 9 (1877), 617-620.

11. On Gilbert Mair (1843-1923) see J.C. Andersen and G.C. Petersen The Mair Family (Wellington, 1956).

12. Ernest Dieffenbach Travels in New Zealand (London, 1843), I, pp. 3, 183.

13. New Zealand Company Twenty-third Report of the Court of Directors of the New Zealand Company [London, 1847], p. 2.

14. J.O.C. Phillips "Fear and loathing in the New Zealand landscape", in New Zealand Where Are You? Proceedings of the

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New Zealand Institute of Landscape Architects' 1981 Conference (Wellington, 1981), 11-17 (p. 14).

15. James Buller Forty Years in New Zealand (London, 1878), p. 63.

16. Buller A History of the Birds of New Zealand second edition, (London, 1888), II, 29.

17. The awkward but accurately descriptive term is Keith Sinclair's, from A Destiny Apart; New Zealand's Search for National Identity (Wellington, 1986), p. 31.

18. M.H. Holcroft The Deepening Stream; Cultural Influences in New Zealand (Christchurch, 1940), p. 22.

19. The classic work is George M. Thomson, The Naturalisation of Animals & Plants in New Zealand (Cambridge, 1922). For other general accounts see Andrew Hill Clark The Invasion of New Zealand by People, Plants and Animals (New Brunswick, 1949); K.A. Wodzicki Introduced Mammals of New Zealand; an Ecological and Economic Survey [Wellington, 1950]; Nigel Pears "Familiar Aliens: the Acclimatisation Societies' Role in New Zealand's Biogeography", Scottish Geographical Magazine 98, (1982), 23-34; Joan Druett Exotic Intruders; The Introduction of Plants and Animals into New Zealand (Auckland, 1983); Carolyn King Immigrant Killers; Introduced Predators and the Conservation of Birds in New Zealand (Auckland, 1984); and K.E. Westerskov, "Noah's Ark on a Collision Course: The history and consequences of New Zealand animal introductions" Proceedings of the Conference of the New Zealand Society of Genealogists (1987), 59-88. There are also many histories of individual societies; see especially Janet Fay Swann, "A Short History of the Acclimatisation Society of Otago", (unpublished M.A. dissertation, University of Otago, 1962); R.C. Lamb Birds, Beasts & Fishes; The first Hundred Years of the North Canterbury Acclimatisation Society (Christchurch, 1964); Clifton R. Ashby The Centenary History of the Auckland Acclimatisation Society 1867-1967 [Auckland, 1967]; W.C.R. Sowman Meadow, Mountain, Forest and Stream; The Provincial History of the Nelson Acclimatisation Society 1863-1968 (Nelson, 1981).

20. See in particular Thomson (1922) pp. 21-22, which is quoted or paraphrased by most subsequent writers -compare for instance Clark (1949) p. 266; Wodzicki (1950) pp. 5-6; Swann (1962) p. 3; King (1984) pp. 64-65; Westerskov (1987) p. 62.

21. Linden Gillbank "The Origins of the Acclimatisation Society of Victoria: Practical Science in the Wake of the

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Goldrush" Historical Records of Australian Science 6 (1986), 359-374 (pp. 361-362).

22. Ernst Mayr, The Growth of Biological Thought; Diversity, Evolution, and Inheritance (Cambridge, Massachusetts, 1982), 362; Douglas R. Weiner "The Roots of 'Michurinism': Transformist Biology and Acclimatization as Currents in the Russian Life Sciences" Annals of Science 42 (1985), 243-260 (246-249).

23. Dates from the published reports of the respective societies. Weiner (1985), p. 249 also mentions a similar society in Holland which I have not traced further.

24. These variants on the theme of "acclimatisation" can be traced through the Oxford English Dictionary.

25. See for instance H.W. Fowler A Dictionary of Modern English Usage second edition (Oxford, 1983), p. 314.

26. Annual Report of the Society for the Acclimatisation of Animals...within the United Kingdom 1 (1861) to 5 (1865); Lynn Barber The Heyday of Natural History 1820-1870 (London, 1980), pp. 147-148.

27. J.E. Fitzgerald of Christchurch also attended meetings of the society before his return to New Zealand in 1860, but had less immediate influence on acclimatisation there than Wilson. J.B. Acland is also listed as a Corresponding Member in New Zealand -see Annual Report of the Society for the Acclimatisation of Animals... 1 (1861), pp. 5-6, 15).

28. Edward Wilson, "On the Introduction of the British Song Bird" Transactions of the Philosophical Institute of Victoria 2 (1857), 77-88.

29. Linden Gillbank "The Acclimatisation Society of Victoria" Victorian Historical Journal 51 (1980), 255-270 (pp. 261, 267).

30. Gillbank (1980), p. 267.

31. Annual Report of the Society for the Acclimatisation of Animals...within the United Kingdom 1 (1861), 4.

32. Acclimatisation Society of Victoria, Annual Report 1 (1862), 19, quoted in Gillbank (1986), p. 371.

33. Rules and Objects of the Acclimatization Society of Nelson (Nelson, 1863), omitted clauses 3 and 5 of the Victorian version. The statement of objects of the Otago

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Society as stated at its inaugural meeting in March 1864 (quoted by Swann, 1962, pp. 5-6) includes all the clauses of the Victorian version, with minor additions and deletions. The Canterbury Society began in 1864 with a brief statement of objects -see Canterbury Acclimatization Society The Rules and Objects of the Canterbury Acclimatisation Society (Christchurch, 1864). It adopted the full Victorian version in 1868: see its Annual Report 4 (1868), p. 19 -without Otago's variations.

34. Naturalization Act 1860, clause 2; the terms were altered by the Naturalization Act 1870 passed by the British Parliament, after which naturalised colonists were given the status of "Natural born subject of the United Kingdom".

35. Gillbank (1986), pp. 362-364).

36. James Drummond Our Feathered Immigrants (Wellington, 1907), p. 4 (writing of the early colonists of Canterbury in particular).

37. Edward Wilson "On the Introduction of the British Song Bird" Transactions of the Philosophical Institute of Victoria 2 (1857) 77-88 (p. 86); George M. Thomson The Naturalisation of Animals and Plants in New Zealand (Cambridge, 1922).

38. Sowman (1981) pp. 29-30 -quoting David Monro (1861); H.F. von Haast The Life and Times of Sir Julius von Haast (Wellington, 1948), p. 224.

39. Buller A History of the Birds of New Zealand, second edition (London, 1888) I xliii.

40. Miles Fairburn The Ideal Society and Its Enemies (Auckland, 1989), pp. 29-40.

41. James Buller New Zealand: Past and Present (London, 1880), pp. 18-20. Compare W.P. Reeves's image of the colonist's daughter: "could I rear in England's air/A sweeter English rose?" -an image made more ironic by the fact that Reeves wrote the poem ("A Colonist in his Garden") after settling in England.

42. James Allan Thomson (1881-1928), son of George Malcolm Thomson (author of The Naturalisation of Animals and Plants in New Zealand) went to Oxford as New Zealand's first Rhodes Scholar. He returned to New Zealand in 1911 and became Director of the Dominion Museum in 1914.

43. J.A. Thomson, editorial comment in New Zealand Journal of

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Science and Technology 1, (1918), 134.

44. Alan Mulgan Home; A New Zealander's Adventure (London, 1927), reprinted in 1934 (for English readers?) under the altered title Home; a Colonial's Adventure. See E.H. McCormick Letters and Art in New Zealand (Wellington, 1940), p. 131, and Keith Sinclair A Destiny Apart; New Zealand's Search for National Identity (Wellington, 1986), pp. 94-95.

45. In Australia several of the societies dropped "Acclimatisation" from their names as they became more involved in running zoos; others were wound up when quarantine regulations made acclimatisation activities impossible -see C.F.H. Jenkins The Noah's Ark Syndrome [Perth, 1977].

46. R.L. Kitching "Exotics in Australia and elsewhere", in The Ecology of Exotic Animals and Plants; Some Australian Case Histories, edited by R.L. Kitching (Brisbane, 1986), p. 3, compares the numbers and proportions of "exotic" species in Australia, New Zealand, Britain, and the United States. For instance, in New Zealand 92% of the terrestrial species of mammals and 35% of the birds are exotic -the corresponding figures for Australia are 8% and 4%, for the United States 2% and 5% and for Britain 22% and 14%.

47. According to Lamb (1964), p. 17, at the end of its first year the Canterbury society had 86 members; according to Swann (1962), p. 5, the Otago society had 108.

48. Grey's interest in acclimatisation was well known; Bowen, in a previous governorship had helped found the Queensland society. Weld, Stafford and Waterhouse were among the founders of the Canterbury, Nelson and South Australian societies respectively.

49. In 1866 the London society amalgamated with the Ornithological Society -see Gillbank (1986), p. 363.

50. James A. Youl (1811-1904) was born in New South Wales. He was Agent for Tasmania in London from 1861 to 1863 and was among the founders of the Royal Colonial Institute in 1868. In 1864 he successfully shipped ova of Brown trout to Tasmania, from where ova were subsequently distributed elsewhere in Australia and New Zealand. He received the honours of CMG in 1874 and KCMG in 1891.

51. Buller A History of the Birds of New Zealand second edition (London, 1888), I, xliv.

52. Carolyn King Immigrant Killers; Introduced predators and the Conservation of Birds in New Zealand (Auckland, 1984);

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K.E. Westerskov "Noah's Ark on a Collision Course: The History and Consequences of New Zealand Animal Introductions" Proceedings of the Conference of the New Zealand Society of Genealogists (1987), 59-88.

53. George M. Thomson The Naturalisation of Animals and Plants in New Zealand (Cambridge, 1922) pp. 85-88.

54. See Land and Water (London) 8 July 1876, p. 10.

55. Newton to Buller 23 July 1876 quoted in Buller "Notes on New Zealand Ornithology, with an Exhibition of Specimens" TNZI, 28 (1896), 326-358 (p. 329).

56. Land and Water 15 July 1876 p. 22; Newton to Hector, 24 July 1876, box 62 folder (iii) no. 2652/76, and 4 January 1877, box 63 folder (ii) no. 2821/77, National Museum archives, Wellington; to Buller 23 July 1876, quoted in TNZI 9 (1877), 634-635 and (more fully) TNZI 28 (1896), 328-329.

57. Otago Witness 9 Dec 1876.

58. Newton to Hector 24 July 1876, MS Papers 83, folder 355, Alexander Turnbull Library, Wellington.

59. NZPD 23 (1876), 273.

60. NZPD 23 (1876), 609-614 (p. 612).

61. TNZI 9 (1877), 634-635.

62. Memorial from runholders of the Upper Waitaki district to the Colonial Secretary, 18 February 1887, file MAF 516/17k, National Archives, Wellington.

63. Carolyn King Immigrant Killers; Introduced Predators and the Conservation of Birds in New Zealand (Auckland, 1984), pp. 83-90.

64. Buller "Some Curiosities of Bird-life" TNZI 27 (1895), 134-142 (p. 137).

65. There is no further mention of the issue of the introduction of mustelids in Buller's published papers until a passing reference in A History of the Birds of New Zealand second edition (London, 1888), I, 163. Stronger comment appears from 1892: TNZI 25 (1893), pp. 59, 71; 27 (1895), pp. 96, 137-141; 28 (1896), pp. 327-329; 29 (1897), p. 203; 31 (1899), pp. 26-27.

66. See the comments on Newton (referred to as "Newman") in NZPD 23 (1876), pp. 612; also Edward Wilson "On the

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Introduction of the British Song Bird" Transactions of the Philosophical Institute of Victoria 2 (1857), 77-88 (pp. 80-82).

67. A. Bathgate "Notes on Acclimatisation in New Zealand" TNZI, 30, (1898), 266-279 (p. 266).

68. Bathgate (1898) p. 267.

69. Albinos were considered to be more common among introduced birds in New Zealand than in the same species in England -see Buller, quoted in George M. Thomson The Naturalisation of Animals and Plants in New Zealand (Cambridge, 1922), p. 513.

70. George M. Thomson "On Some Aspects of Acclimatisation in New Zealand Report of the Meeting of the Australasian Association for the Advancement of Science 3 (1891), 194-213 (p. 204).

71. E.F. Hawthorne "Proposed Introduction of Animals and Plants" New Zealand Journal of Science and Technology 1 (1918), 318-319 (p. 319).

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CHAPTER 4. DARWINISM AND COLONIAL IDEAS ON THE STRUGGLE FOR SURVIVAL

1. Herbert Spencer Principles of Biology (London, 1864-1867), II, 53.

2. Thomas Hobbes, Leviathan, Or the Matter Forme & Power of a Common-wealth Ecclestiasticall and Civill (London, 1651); Adam Smith An Inquiry into the Nature and Causes of the Wealth of Nations (London, 1776); Thomas Malthus An Essay on the Principal of Population (London, 1798).

3. Alphonse L.P.P. de Candolle Géographie botanique raisonnée... (Paris, 1855); Charles Lyell Principles of Geology (London, 1830-1833). The phrase "struggle for existence" was used by Malthus (1798, p. 48) and Lyall (1830-1833, II, 56).

4. [Philip Parker King] Narrative of the Surveying Voyages of His Majesty's Ships Adventure and Beagle, Between the Years 1826 and 1836... (London, 1839), III, 514.

5. M.M. Roche "The View of the Traveller: Charles Darwin at the Bay of Islands, New Zealand, in 1835" New Zealand Geographer 41 (1985), 25-29.

6. The idea of displacement of native species in New Zealand does not have a prominent place in Darwin's Journal of Researches (London, 1839); is not mentioned in his "Notebooks on Transmutation of Species" of 1837-1839 (G. de Beer "Darwin's Notebooks on Transmutation of Species", Parts I to VI and addenda, Bulletin of the British Museum (Natural History) Historical Series 2 (1960-1961), 23-200; 3 (1967), 126-176); or his "Sketch" of 1842 (published in Charles Darwin and Alfred Russel Wallace Evolution and Natural Selection, Cambridge, 1958). The case of the rats is briefly mentioned in Darwin's "Essay" of 1844 (Darwin and Wallace 1958, p. 171), and in his "big book", the Natural Selection manuscript of 1856-58 -with a space for a reference that he never supplied (R.C. Stauffer (editor) Charles Darwin's Natural Selection (London, 1975) p. 200). On the other hand Darwin made many references to New Zealand in the context of the geographical distribution of plants and animals and especially the "glorious fact of absence of quadrupeds" in New Zealand (entry in First Notebook of 1837-1838, de Beer Part I, p. 67). For most of his botanical information Darwin referred to J.D. Hooker (see Stauffer (1975), pp. 554, 557, 563-564, 577-580).

7. On the connotations of the term "Scandinavian" see Chapter 2.1.

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8. Charles Darwin The Origin of Species By Means of Natural Selection (London, 1859), pp. 201-202, 337.

9. Darwin to Haast 22 January [1863], Francis Darwin The Life and Letters of Charles Darwin (London, 1888), III, 6-7. Emphasis in original.

10. J.D. Hooker Handbook of the New Zealand Flora (London, 1867), II, p. 757. See also his "Note on the Replacement of Species in the Colonies and Elsewhere", Natural History Review 4 (1864), pp. 123-7; "On the Struggle for Existence Amongst Plants" Popular Science Review 6 (1867), 131-9 (pp. 136-137).

11. Alfred Russel Wallace Island Life (London, 1880), p. 479; Darwinism (London, 1889), p. 34.

12. W.T.L. Travers "On the Changes effected in the Natural Features of a new Country by the Introduction of Civilized Races" TNZI 2 (1870), 229-330; 3 (1871), 326-336 -quotation from 2 (1870), p. 229.

13. Travers (1870), p. 312.

14. Travers (1870) p. 313.

15. J.G.S. Grant Evolution the Blackest Form of Materialism (1881) pp. 1-3, quoted by John Stenhouse "'The Wretched Gorilla Damnification of Humanity': the 'Battle' between Science and Religion over Evolution in Nineteenth-Century New Zealand New Zealand Journal of History 18, (1984), 143-162 (p. 143).

16. "Darwinistic" is used here in a similar sense to that of Morse Peckham, "Darwinism and Darwinisticism" Victorian Studies, 3, (1959), 19-40 (p. 21) to refer to ideas or propositions only vaguely associated with or influenced by Darwinism, as opposed to Darwinian ideas "which may be properly ascribed to a source in the Origin".

17. Stenhouse (1984) p. 162.

18. Compare Frederick H. Burkhardt "England and Scotland: the learned societies" in The Comparative Reception of Darwinism edited by Thomas F. Glick (Austin, 1974), pp. 32-74; Ann Mozley "Evolution and the climate of opinion in Australia, 1840-76" Victorian Studies 10 (1967), 411-430; Carl Berger Science, God, and Nature in Victorian Canada (Toronto, 1983), pp. 69-72.

19. TNZI 4 (1872), p. 404. Such papers were certainly published

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by other serious journals in New Zealand -see especially the New Zealand Magazine of 1876-1877.

20. TNZI 1, (1869), p. 17.

21. G. Tee "Charles Darwin's Correspondents in New Zealand" Proceedings of the Australasian Association for the History, Philosophy, and Social Studies of Science 12, (1981), 367-379 (p. 368).

22. W.M. Maskell Christianity Modern "Science" and Evolution... (Christchurch, 1881).

23. Mozley (1967), p. 422.

24. Barry W. Butcher "Darwin's Australian Correspondents: Deference and Collaboration in Colonial Science" in Nature in Its Greatest Extent; Western Science in the Pacific edited by Roy MacLeod and Philip F. Rehbock (Honolulu, 1988), 139-157 (p. 141).

25. Compare Louis Hartz The Founding of New Societies; Studies in the History of the United States, Latin America, South Africa, Canada, and Australia (New York, 1964).

26. H.F. von Haast The Life and Times of Sir Julius von Haast (Wellington, 1948), pp. 250, 253; James Hector "Inaugural address", Report of the Meeting of the Australasian Association for the Advancement of Science 3 (1891), 1-21 (p. 15). On Murchison see Robert A. Stafford "The long arm of London: Sir Roderick Murchison and imperial science in Australia" in Australian Science in the Making, edited by R.W. Home (Cambridge, 1988), pp. 69-101.

27. Buller On the Ornithology of New Zealand (Dunedin, 1865), p. 5.

28. Buller (1865), p. 12.

29. Now H. acutirostris; the paper is in TNZI 3, (1871), 24-29.

30. Buller is quoting from P.L.S. [=Philip Lutley Sclater] "Recent Additions to the Zoological Society's Gardens" Nature (London) 23 June 1870, pp. 146-148 (p. 147).

31. Buller (1871), p. 26.

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32. Buller A History of the Birds of New Zealand (London, 1873), p. 29.

33. Buller (1873), p. 219, quoting from Potts "On the Birds of New Zealand" TNZI 3 (1871), 59-109 (p. 96).

34. Buller (1873), p. 219.

35. Buller (1873), p. 220.

36. William Paley Natural Theology: or, Evidences of the Existence and Attributes of the Deity, Collected from the Appearances of Nature (London, 1802); the analogy of the watch and the watchmaker is in chapter 1.

37. On the background to the issue of Darwinism and the design argument see Alvar Ellgard "The Darwinian theory and the argument from design" Lynchos (1965), 173-192; James R. Moore The Post-Darwinian Controversies; A Study of the Protestant Struggle to come to Terms with Darwin... (New York, 1979); Neal C. Gillespie Charles Darwin and the problem of Creation [Chicago, 1979], chapters 5 and 6; J.F. Cornell "From Creation to to Evolution: Sir William Dawson and The Idea of Design in the Nineteenth Century" Journal of the History of Biology 16 (1983), 137-170.

38. Buller (1873), p. 29.

39. Zoologist, quoted in Buller Reviews and Other Notices of Sir Walter Buller's "Birds of New Zealand" (London, 1890), p. 14.

40. Buller to Haast 1 March [? =November] 1872, MS papers 37, folder 38, Alexander Turnbull Library, Wellington; "Certificate of a Candidate for Election...Walter Lawry Buller", dated 29 January 1873, Royal Society, London.

41. Darwin The Descent of Man second edition (London, 1874) p. 321.

42. Buller "Notes on the Ornithology of New Zealand" TNZI 27 (1895), 104-126 (pp. 106-107); J. Lubbock The Beauties of Nature and the Wonders of the World We Live In (London, 1892) -in the second edition of 1900 the Huia anecdote is at p. 49. Buller also quoted other, lesser figures who borrowed his Huia anecdote -see his Supplement to the "Birds of New Zealand" (London, 1905), II, 158-159.

43. Buller A History of the Birds of New Zealand second edition (London, 1888), I, pp. xxxviii.

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44. R.M. MacLeod "On Visiting the 'Moving Metropolis': Reflections on the Architecture of Imperial Science" Historical Records of Australian Science 5 (1982), 1-16 (p. 10).

45. R.M. MacLeod "Evolutionism and Richard Owen, 1830-1868: An Episode in Darwin's Century", Isis 56, (1965), 259-280.

46. MacLeod (1965), pp. 277-278; Owen made his claim on the basis of a passing reference to "the contest which...the individual of such species has to maintain..." -see Owen "On Dinornis Part IV: containing the restoration of the feet of that genus and of Palapteryx, with a description of the sternum in Palapteryx and Aptornis" Transactions of the Zoological Society of London 4 (1850), 1-20 (p. 18).

47. Along with Darwinists J.D. Hooker of Kew and W.H. Flower (Conservator of the Museum of the Royal College of Surgeons), anti-Darwinists J.L.R. Agassiz of Harvard and F. von Mueller of Melbourne, the hydrographers Rear-Admirals Byron Drury and G.H. Richards, Otto Finsch of Bremen and F. von Hochstetter of Vienna; Darwin was elected in 1871, Huxley in 1872.

48. Owen and J.D. Hooker, plus two New Zealand colonial scientists -see New Zealand Journal of Science 1 (1884-1885), 112-116 (on Haast), 301-306 (on Hutton), 425-430 (on Hooker), 553-556 (on Owen).

49. Buller A History of the Birds of New Zealand second edition (London, 1888), I, xvii.

50. Owen to Buller 22 March 1888, quoted in Buller (1888), I, xxxii. See also Buller to Owen 21 March 1888, Owen papers, British Museum (Natural History), London.

51. Quoted in Buller (1890), p. 58; see also Owen to "My dear B": notes for reply with Buller to Owen 15 April 1889, Owen papers, British Museum (Natural History), London.

52. Buller (1888), I, xxvi.

53. See the series of papers in Proceedings of the Zoological Society of London (1885): F.E. Beddard "On the Heart of Apteryx", pp. 188-189; E. Ray Lankester "On the Heart described by Professor Owen in 1841 as that of Apteryx", pp. 239-240; "On the Structure of the Heart in Ornithorhynchus and Apteryx", pp. 328-329; E. Ray Lankester "On the Right Cardiac Valve of the Specimens of Apteryx dissected by Sir Richard Owen in 1841", pp. 477-482.

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54. Buller A History of the Birds of New Zealand second edition (London, 1888) II, 308-332, especially pp. 325-326.

55. The "Biographical Notice" on Owen by "R.G" (=Robert Gillies?) in the New Zealand Journal of Science, 2 (November 1885), 553-556, mentioned Owen's paper in the Zoological Society refuting Lankester's claim, but only by way of an admiring reference to Owen's continued "invaluable contributions" to science; T.J. Parker, Professor of biology at Otago University, who subsequently published detailed studies of the anatomy and development of the Kiwi (published in 1888-1893 in the Proceedings and the Philosophical Journal of the Royal Society of London, and summarised in "On the History of the Kiwi" New Zealand Journal of Science new series 1 (1891), 2-9, 66-68), also refrained from mentioning the matter.

56. John Stenhouse, "'The Wretched Gorilla Damnification of Humanity': The 'Battle' between Science and Religion over Evolution in Nineteenth-Century New Zealand" New Zealand Journal of History 18 (1984), 143-162 (p. 149).

57. TNZI 26 (1894), p. 649; see also TNZI 23 (1891), 597-599.

58. Coleman Phillips "On a Common Vital Force" TNZI 26 (1894), 604-19.

59. TNZI 27 (1895), 646.

60. Buller "Illustrations of Darwinism; or the Avifauna of New Zealand considered in relation to the Fundamental Law of Descent with Modification" TNZI 27 (1895), 75-104 (p. 78).

61. Buller (1895), p. 79.

62. Buller (1895), p. 92.

63. Buller (1895), p. 104.

64. Buller (1895), p. 96.

65. [Philip Parker King] Narrative of the Surveying Voyages of His Majesty's Ships Adventure and Beagle... (London, 1839), III, 520.

66. Darwin to G.A. Gaskell 15 Nov 1878, quoted in Francis Darwin and A.C. Seward More Letters of Charles Darwin (London, 1903), II, 50.

67. M.P.K. Sorrenson Maori Origins and Migrations

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(Auckland, 1979), p. 17.

68. Charles Darwin The Descent of Man; and Selection in Relation to Sex (London, 1871), p. 238; second edition (London, 1874) p. 283.

69. Darwin (1874), p. 286.

70. See Darwin (1874), pp. 286-288.

71. Darwin (1874), pp. 296-297. See also Darwin's mention of the rat analogy in his marginal annotations, quoted by John C. Greene "Darwin as a Social Evolutionist" Journal of the History of Biology 10 (1977), 1-27 (p. 8).

72. Darwin to Lyell Jan 1860 quoted in Francis Darwin The Life and Letters of Charles Darwin (London, 1888), II, 56-7.

73. Quoted in Richard Hofstadter Social Darwinism in American Thought revised edition (Boston, 1955), p. 45.

74. R.J. Halliday "Social Darwinism: a definition" Victorian Studies 14 (1971), 389-405. See also Robert M. Young "Darwinism Is Social", and Antonello La Vergata "Images of Darwin: A Historiographic Overview", in The Darwinian Heritage, edited by David Kohn, (Princeton, 1985), pp. 609-638, 901-972 respectively, especially pp. 620-621, 958.

75. K.R. Howe Race Relations Australia and New Zealand: A Comparative Survey 1770's-1970's p. 44 quoting Southern Monthly Magazine v. 1, no. 10, p. 549 (1863).

76. See also Howe Where the Waves Fall (Sydney, 1984), p. 350.

77. George John Romanes Darwin, and After Darwin (London, 1892-1897), II, 7-13; see also Ernst Mayr The Growth of Biological Thought (Cambridge, Massachusetts, 1982), pp. 537-539, 698.

78. Ernest Dieffenbach Travels in New Zealand (London, 1843), II, 14-16.

79. Herbert Spencer Social Statics: Or, the Conditions Essential to Human Happiness Specified, and the First of Them Developed (London, 1851), p. 414.

80. Dieffenbach (1843), II, pp. 15-16.

81. TNZI 17, (1885), 444.

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82. See for instance E.A. Mackechnie "The Curse of Charity", abstracted in TNZI 17, (1885), 453-454.

83. M.P.K. Sorrenson, "Maori and Pakeha", in The Oxford History of New Zealand, edited by W.H. Oliver and B.R. Williams, (Wellington, 1981), pp. 168-193 (p.189).

84. M.P.K. Sorrenson Maori Origins and Migrations (Auckland, 1979), pp. 73-5. James Belich, The New Zealand Wars and the Victorian Interpretation of Racial Conflict (Auckland, 1986), p. 299, avoids the difficulty by referring to "the imported compound of ideas conveniently known as Social Darwinism".

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CHAPTER 5: THE EMERGENCE OF CONSERVATION

1. O.S. Owen Natural Resource Conservation: an Ecological Approach (New York, 1971), p. 9.

2. See also Eric Partridge Origins; A Short Etymological Dictionary of Modern English second edition (London, 1959) p. 116; and the brief discussion by Ian Gordon, Listener (New Zealand) 9 July 1988 p. 61.

3. J.R.H. Andrews The Southern Ark; Zoological Discovery in New Zealand (Auckland, 1986), p. 27, referring to Anders Sparrman's comment that "it seems a terrible thing that the European visits to these parts should be the cause of spreading the disagreeable and noxious breed of rats" -see Sparrman A Voyage around the World... (London, 1953), p. 42.

4. Maori Messenger (Auckland) 16 December 1861.

5. TNZI 6 (1874), 415-416.

6. Cyclopedia of New Zealand [Christchurch, 1903], III, 376. Fortunatus Evelyn Wright (born 1829) also took pride in being descended from the famous John Evelyn, whose Sylva; or a Discourse of Forest Trees (1664) promoted the planting of trees in England.

7. NZPD 1 (1867), pp. 1229-1230.

8. Buller's list is in the schedule printed in Journals of the Legislative Council 1867, p. 106; this schedule and the protective clause 13 were deleted and a weaker clause 13 substituted in the House (Journals of the House of Representatives 1867, pp. 313, 315). The latter was omitted from later Acts but restored in the Animals Protection Amendment Act 1886.

9. Rollo D. Arnold "The Opening of the Great Bush, 1869-1881; A Social History of the Bush Settlements of Taranaki, Hawke's Bay and Wellington" (unpublished Ph.D. dissertation, Victoria University of Wellington, 1971), pp. 406-409, 415-416.

10. See the sale Catalogue of the well known and very valuable library of T.H. Potts, Esq. (Christchurch, 1888); T.H. Potts "Notes on an Egg of Alca impennis, Linn., in the collection of the writer" TNZI 3 (1871) 109-110; "Thomas Henry Potts" History and Bibliography 2, (1948), 160-172.

11. Potts published many papers in journals in New Zealand (TNZI, New Zealand Country Journal) and England (The

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Field, The Zoologist, Ibis) and reprinted a number of them in his best-known publication, Out in the Open; A Budget of Scraps of Natural History, Gathered in New Zealand (Christchurch, 1882).

12. Buller to Hector 14 April 1871, 29 April 1872, in boxes 56, 57 respectively, archives of National Museum, Wellington; Buller to Haast 9 August 1872, MS Papers 37, folder 38, Alexander Turnbull Library, Wellington; Buller "Notes on an alleged new Species of Tern (Sterna alba, Potts)" TNZI 7 (1875), 214-215.

13. On the American case see John F. Reiger American Sportsmen and the Origins of Conservation (New York, 1975).

14. Potts (1882), p. 207.

15. Potts "On the Birds of New Zealand" TNZI 2 (1870), 40-78 (p. 67).

16. Potts (1870) p. 43.

17. Potts (1870) p. 43; in making this argument he referred specifically to precedents in the Paris acclimatisation society.

18. NZPD 4 (1868), p. 188. The term "conservation" had been used earlier in New Zealand in relation to forests and bush reserves by the visiting botanist W. Lauder Lindsay in his lecture The Place and Power of Natural History in Colonisation... (Dunedin, 1862), pp. 26, 28; see also the motion by William Mosley in the Otago Provincial Council, 1867, for a Bush Reserves Bill (Otago Provincial Council. Votes and Proceedings Session 23, (1867), p. 11.

19. Graeme Wynn "Conservation and Society in Late Nineteenth Century New Zealand New Zealand Journal of History 11 (1977), 124-136, and "Pioneers, Politicians and the Conservation of Forests in early New Zealand" Journal of Historical Geography 5 (1979), 1-18; M.M. Roche Forest Policy in New Zealand; An Historical Geography 1840-1919 (Palmerston North, 1987).

20. Raewyn Dalziel Julius Vogel; Business Politician (Auckland, 1986), pp. 171-177.

21. This point is discussed further in Chapter 7.2.4.

22. N.D.G. James A History of English Forestry (Oxford, 1981)

23. E.P. Stebbing The Forests of India (London, 1922);

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Robert K. Winters "Forestry Beginnings in India" Journal of Forest History 19 (1975), 83-90.

24. I. Campbell Walker in New Zealand in 1876, F.d'A. Vincent and R. Ribbentrop in Victoria in 1887 and 1895 respectively, D.E. Hutchins in South Africa, Kenya, Cyprus, Australia (1915) and New Zealand (1916). Sir William Schlich also reported on New Zealand forestry in 1918 -see Roche (1987), pp. 80-86, 104-109; L.T. Carron A History of Forestry in Australia (Canberra, 1985) pp. 64, 180-181; Winters (1975), p. 90. Similarly, in the United States the development of forestry was strongly influenced by German and French ideas as practiced in India -see Andrew Denny Rodgers III Bernhard Eduard Fernow; A Story of North American Forestry (Princeton, 1951).

25. Dalziel (1986), p. 171.

26. See Wynn (1977); Wynn (1979); Roche (1987), chapter 4.

27. NZPD 16 (1874), 351.

28. Potts "On the Birds of New Zealand" TNZI 2 (1870), 40-78 (p. 49).

29. Potts's 1872 address is reprinted in Out in the Open pp. 221-236 (see p. 233).

30. See Potts's account of accompanying Sir George Grey and John Sheehan in 1878 to meet Tawhiao, the Maori King -reprinted in Out in the Open pp. 9-29. For a rather less optimistic view by Potts see his comments on the "Moriori" of the Chatham Islands in Out in the Open pp. 160-161.

31. G.P. Marsh Man and Nature; Or, Physical Geography as Modified by Human Action (New York, 1864), quoted from the text edited by David Lowenthal (Cambridge, Massachusetts, 1965), pp. 91-92. On the influence of Marsh's ideas in the New Zealand debate on forest conservation see Wynn (1979).

32. Marsh (1965) p. 49 -see footnote 49. I have not been able to trace Marsh's source for this comment, nor found any New Zealand correspondence among his papers in the University of Vermont or any from him in New Zealand repositories.

33. W.T.L. Travers "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilized Races (Part III)" TNZI 3 (1871), 326-336.

34. Darwin The Origin of Species by Means of Natural Selection sixth edition (London, 1872), p. 291. Darwin

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strengthened this line in the sixth edition; compare his earlier version ("the productions of Great Britain may be said to be higher than those of New Zealand") in the first edition (1859), p. 337.

35. TNZI 3 (1871), 18.

36. I. Campbell Walker "The Climatic and Financial Aspect of Forest Conservancy as applicable to New Zealand" TNZI 9 (1877), xxvii-xlix.

37. Roche (1987), chapter 4.

38. Potts's address "On recent changes in the fauna of New Zealand" was read to the Philosophical Institute of Canterbury on 12 December 1872 but not printed in TNZI. Potts published it (a) in the English journal The Field (this reference has not been traced) (b) as a separate pamphlet (Christchurch, 1874); (c) in The Zoologist series 2, 9, (1874), 4135-4153; and (d) in Out in the Open (Christchurch, 1882), pp. 221-236. He also lobbied privately on the issue; see Potts to Hector 11 July 1872, box 58 folder (iii), no. 699/72, archives of National Museum, Wellington; to Mantell 22 August 1872, MS Papers 83, folder 361, Alexander Turnbull Library, Wellington.

39. Potts Out in the Open p. 235.

40. Keith Sinclair A Destiny Apart; New Zealand's Search for National Identity (Wellington, 1986), pp. 19-24.

41. Quoted by Sinclair (1986), p. 24.

42. NZPD 13 (1872), p. 204.

43. Quoted in A.F.R. Wollaston Life of Alfred Newton (London, 1921), pp. 138-139.

44. "Report from Select Committee of the House of Commons on Wild Bird Protection" Great Britain. Parliamentary Papers 1873 [338] p. 138.

45. The S.P.C.A. was founded in 1824 and received Royal patronage in 1840.

46. "Report...on Wild Bird Protection" pp. 153-154.

47. "Report...on Wild Bird Protection" p. 36.

48. Potts "Help us to save our birds" Nature (London) 2 May 1872, pp. 5-6.

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49. See footnote 38 above.

50. NZPD 23 (1876), pp. 609, 612-613. The stating of the choice so explicitly between birds and sheep (rather than between saving the birds and ridding the country of rabbits) may be a reflection of the contemporary concern about the reputed sheep-killing activities of a native parrot, the Kea Nestor notabilis -see T.H. Potts "The Kea (Nestor notabilis) -progress of development Nature (London) 4 (1871), 489; Buller A History of the Birds of New Zealand second edition (London, 1888), I, 169-175.

51. Nature 2 May 1872 pp. 5-6.

52. Thomas Kirk later claimed that he and F.W. Hutton had made the same suggestion about Little Barrier Island in 1868, apparently at the Auckland Institute (T. Kirk "The Displacement of Species in New Zealand" TNZI 28 (1896), 1-27 -see p. 26), but I have been unable to find any contemporary record of this either in newspaper reports of the Institute proceedings or in TNZI.

53. On tapu and rahui see Elsdon Best "Notes on the custom of rahui", Journal of the Polynesian Society 13 (1904), 83-88, Forest Lore of the Maori (Wellington, 1942) pp. 162-174. Potts's usage of tapu to describe the protection of native birds was later followed by James Cowan in particular: see his New Zealand, or Ao-Tea-Roa... (Wellington, 1907), p. 56; The Tongariro National Park, New Zealand (Wellington, 1927), p. 112.

54. J.D. Enys "An account of the Maori manner of preserving the Skin of the Huia, Heteralocha acutirostris, Buller" TNZI 8, (1876), 204-205 (p. 205). The Huia was highly valued for its feathers, which were worn as a mark of prestige.

55. New Zealand Herald (Auckland) 8 March 1886, p. 5. An earlier (5 March) report also commented of the deputation that "The natives were all good specimens of the Maori race".

56. Potts "National Domains" New Zealand Country Journal 2 (1878), 227-233, here quoted from the reprinted version in Potts Out in the Open (Christchurch, 1882) pp. 30-36 (p. 30).

57. AJHR 1874 H26.

58. Potts Out in the Open pp. 30, 35.

59. H.B. Martin "Objections to the Introduction of Beasts of

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Prey to destroy the Rabbit" TNZI 17 (1885), 179-82, and "The Protection of Native Birds" TNZI 18 (1886), 112-7.

60. Carolyn King Immigrant Killers; Introduced Predators and the Conservation of Birds in New Zealand (Auckland, 1984), pp. 106-108.

61. R.V. Fulton "The Disappearance of the New Zealand birds" TNZI 40, (1908), 485-500 (pp. 485, 488).

62. Evening Star, and New Zealand Herald (Auckland) 19 October 1886. See also A. Reischek "Notes on Ornithology" TNZI 19 (1887), 184-188.

63. Cheeseman to Premier 16 Dec 1886, file MA 13/45, National Archives, Wellington.

64. A. Reischek "Description of the Little Barrier or Hauturu Island, the Birds which inhabit it, and the Locality as a protection to them" TNZI 19 (1887), 181-184 (p. 184); Michael King The Collector; A Biography of Andreas Reischek (Auckland, 1981), p. 121.

65. Parker to Hector 10 June 1885 and Hector's minute for reply, box 76, folder (ii), no. 293/85, archives, National Museum, Wellington.

66. Minutes on Cheeseman to Premier (Stout) 16 December 1886, file MA 13/45, National Archives, Wellington.

67. Cheeseman's reference is somewhat puzzling; the first federal Canadian reserve for the protection of birds was on the islands and shoreline of Last Mountain Lake in Saskatchewan, not established until June 1887. Moreover, just as in the case of the first New Zealand reserve for the protection of birds -Resolution Island, gazetted in 1891 -the Canadian reserve, once reserved, received little attention and was neglected and forgotten. See Janet Foster Working for Wildlife; The Beginning of Preservation in Canada p. 179-80.

68. New Zealand Herald (Auckland) 16 November 1886.

69. Kerry-Nicholls first made the suggestion in a letter to Sir George Grey, 30 May 1883 (Grey MS K10(3), Auckland Public Library) and again in his travelogue which was first printed in instalments in the New Zealand Herald 2 June to 22 September 1883 and then published as The King Country; or, Exploration in New Zealand (London, 1884), which went through two further editions in 1884. The "finest park" idea is here quoted from the first edition, p. 302. On

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Kerry-Nicholls and his travels in New Zealand see A.G. Bagnall "Alexander Turnbull's first book" Turnbull Library Record 11 (1978), 73-90.

70. David Thom Heritage; The Parks of the People (Auckland, 1987) pp. 94-102; Craig Potton Tongariro: A Sacred Gift (Auckland, 1987), pp. 130-134.

71. Buller A History of the Birds of New Zealand (London, 1873), p. 93.

72. Buller (1873), p. 145.

73. Buller to Robert Mair 4 September 1873, private collection (Mrs K.M. Alison, Auckland).

74. Nor, as far as I can discover, in his private correspondence.

75. Buller to Haast 15 April 1885, MS Papers 37, folder 40, Alexander Turnbull Library, Wellington.

76. TNZI 17 (1885), 444.

77. Buller A History of the Birds of New Zealand (London, 1888), I, 55.

78. Alfred Newton "Presidential Address. Section D -Biology" Report of the Meeting of the British Association for the Advancement of Science 57 (1888), p. 732.

79. Buller (1888), I, x; Reviews and Other Notices of Sir Walter Buller's "Birds of New Zealand" (London, 1890), pp. 7-8.

80. Buller (1888), I, 55.

81. The Owhaoko Case -see Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1989), pp. 133-135.

82. Buller (1888), I, 35.

83. Miriam Rothschild Dear Lord Rothschild (Philadelphia, 1983), pp. 70, 206.

84. Rothschild (1983), p. 107.

85. Buller to Newton 26 February 1889, Alfred Newton papers, Balfour Library, Cambridge University.

86. Quoted in Buller to Hartert 25 May 1895, Rothschild

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papers, British Museum (Natural History), London.

87. Buller to Hector, 1 June 1872, box 58, folder (iii), no. 744/72; Buller to Newton 28 January 1889, Alfred Newton papers, Balfour Library, Cambridge University.

88. Buller to Rothschild 12 September 1895, Rothschild Papers, British Museum (Natural History), London.

89. But see G.H. Scholefield A Dictionary of New Zealand Biography (Wellington, 1940), II, 135-136 ("He took a great interest in acclimatisation,and used his influence to get reserves set aside as bird sanctuaries").

90. B.J. Dalton "The Governors of New Zealand 1868-1892; A Constitutional Study" (Unpublished dissertation, University of Canterbury, 1951), 137-149; Timothy McIvor The Rainmaker; A Biography of John Ballance, Journalist and Politician 1839-1893 (Auckland, 1989), pp. 179-180.

91. Muriel Onslow Huia Onslow, A Memoir (London, 1924), p. 5.

92. Onslow to Buller 19 January [1891] MS papers 48, folder 36, Alexander Turnbull Library; Star (Christchurch) 23 March 1891.

93. Onslow (1924) pp. 5-7.

94. M.E. Hoare "The intercolonial science movement in Australasia 1870-1890" Records of the Australian Academy of Sciences 3, (1976), 7-28.

95. Report of the meeting of the Australasian Association for the Advancement of Science 3 (1891), pp. xiii, xv.

96. The deliberations are discussed by Dalton (1951), pp. 137-149; Judith Bassett Sir Harry Atkinson 1831-1892 (Auckland, 1975), pp. 164-165; McIvor (1989) 179-180.

97. Report of the Meeting of the Australasian Association 3 (1891), p. xxiii; see also "Notes of the Meeting" New Zealand Journal of Science new series 1 (1891), 93.

98. See M.E. Hoare Reform in New Zealand Science 1880-1926 (Melbourne, 1977).

99. The resolutions were: 1. "That, in the interests of science, it is most desirable that some steps should be taken to establish one or more reserves, where the native flora and fauna of New Zealand may be preserved from destruction"; 2.

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"That the Little Barrier Island and Resolution Island, Dusky Sound appear to be the most suitable localities for such reserves"; 3. "That a copy of the above resolutions be forwarded to the Hon. the Minister of Lands for New Zealand". See Report of the Meeting of the Australasian Association 3 (1891), xxiii.

100. It had been forgotten that in 1875 Resolution Island had been gazetted as "a station to be used for the restraint and safe keeping of male offenders under sentence of penal servitude" -see N.Z. Gazette (1875) pp. 249-250. The decision to make it a reserve is documented in Liversidge to Minister of Lands, 16 March 1891, and attached minutes, file 4/300/4 -which in 1986 was held in Head Office, Department of Lands and Survey, Wellington; N.Z. Gazette 1891, pp. 591, 892.

101. Thomson to Cheeseman 6 April 1893, MS 58, Auckland Institute and Museum.

102. Onslow to Buller 19 January [1891], MS Papers 48, folder 36, Alexander Turnbull Library, Wellington.

103. Richardson's paper is mentioned by title only in TNZI 24 (1892), 713, and reported more fully in New ZealandK Journal of Science new series 1 (1891), 232-235. See p. 233, quoting from Potts "National Domains" -first published in New Zealand Country Journal 2 (1878), 227-233, reprinted in Out in the Open (Christchurch, 1882), 30-36 (p. 35). This appears to be the earliest reference to Potts's proposals recorded in the proceedings of any of the philosophical societies.

104. New Zealand Journal of Science new series 1 (1891), p. 235; see also TNZI 24 (1892), 713.

105. Buller to Thomas 8 September 1891, qMS 1877-1892 Buller Letterbooks, Alexander Turnbull Library, Wellington.

106. New Zealand Mail (i.e. the weekly edition of the Wellington New Zealand Times) 18 September 1891, p. 31.

107. New Zealand Mail 13 September 1891, p. 31. The speaker is not identified; the report (evidently written by Buller) gave only the "substance, taken together" of the speeches of Kereopa Tukumaru, Wi Parata, Tamihana Te Hoia, Hoani Taipua, Ropata Te Ao and Maraku. Parata was of Ngati Awa and had been Member of the House of Representatives for the Western Maori electorate in 1871-1876; Taipua and Te Ao, both of Ngati Raukawa, held the same seat from 1886-1893 and 1893-1896 respectively.

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108. Onslow's reference to the "Huia" quotation is reported in New Zealand Mail 13 September 1891, p. 31. He referred to it as being taken from "Dr Shortland" -see Edward Shortland Traditions and Superstitions of the New Zealanders second edition (London, 1856), p. 170.

109. Daily Telegraph (London) 13 November 1891, cutting in qMS BUL 1866-1898 Buller scrapbooks, Alexander Turnbull Library, Wellington; Buller's cuttings also include one from Strand Magazine 5 (1892?) 664-675: "Lord Onslow in New Zealand", written by Constance Eaglestone.

110. Buller "Further Notes and Observations on Certain Species of New Zealand Birds (with Exhibits)" TNZI 24 (1892), 75-91 (pp. 90-91).

111. Nature (London) 2 May 1872 pp. 5-6; New Zealand Country Journal 2 (1878), 227-233.

112. Buller (1892), p. 90.

113. Cadman to Edgar (Telegram) 3 October 1891, Cadman to Tole 13 November 1891, file MA 13/45, National Archives, Wellington.

114. AJHR 1892 A1, p. 13, No. 20 -dated 7 October 1891. Onslow cited "urgent and pressing affairs of a somewhat complicated nature connected with my property in England".

115. Onslow to Buller, 19 January [1891], MS Papers 48, folder 36, Alexander Turnbull Library, Wellington.

116. On Buller's kiwi Apteryx bulleri and its naming see Chapter 1.4.

117. The draft memorandum is in Onslow papers 173/6/3, Surrey Record Office, Guildford Muniment Room, Surrey, England.

118. AJHR 1892 H6.

119. AJHR 1892 H6, p. 1.

120. AJHR 1892 H6 pp. 1-2; compare Report of the Meeting of the British Asociation for the Advancement of Science 57, (1888), p. 732.

121. AJHR 1892 H6 p. 2.

122. See in particular Buller "On the Disappearance of the Korimako (Anthornis melanura) from the North Island" TNZI 10 (1878), 209-211 (p. 211), quoted also in his A History of

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the Birds of New Zealand second edition (London, 1888), I, 87.

123. AJHR 1892 H6 p. 3.

124. AJHR 1892 H6, p. 3.

125. Onslow to Buller (telegram) 15 Jan 1892, copy in qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

126. Buller to Ballance 19 January 1892, MS Papers 25, folder 14, letter 460; G. Mair to W.G. Mair 9 March 1892, MS Papers 148, folder 73; W.G. Mair to G. Mair 16 March 1892, MS Papers 93, folder 13 -all Alexander Turnbull Library, Wellington. When the list of nominations to the Legislative Council was made public in October 1892 Buller's name was not on it (AJHR 1893 A7A, p. 24).

127. Proclamation "Huia protected under Animals Protection Acts", dated 23 February 1892, file IA1 1892/483, National Archives, Wellington. Compare N.Z. Gazette 1892, p. 402 (omitting Huia's mark). Huia Onslow revisited New Zealand as a fourteen-year-old in 1904 and was received again onto the Ngati Huia marae at Otaki. After a diving accident in 1911 he was confined to a wheelchair, and died in 1922. See Muriel Onslow Huia Onslow: A Memoir (London, 1924).

128. New Zealand Times (Wellington) 25 February 1892.

129. The tallies of "species" given are based on the nomenclature used in the memorandum, rather than the currently accepted nomenclature used here for species names. Along with the Bellbird Anthornis melanura and Tuatara the following birds were gazetted as protected species in 1896: Kiwi (Apteryx species) Kokako (Callaeas cinerea), Kakapo (Strigops habroptilus), Saddleback (Philesturnus carunculatus), Stitchbird (Notiomystis cincta) -see N.Z. Gazette 1896 p. 475. The other species mentioned in the memorandum -Piopio (Turnagra capensis), Robin (Petroica australis) Whitehead (Mohoua albicilla) and Takahe (Notornis mantelli) -were included among an extensive "schedule" of 138 native birds gazetted as protected species in 1906 (N.Z. Gazette 1906 p. 1191; from the nomenclature used, the list was evidently drawn not from any of Buller's publications but from F.W. Hutton and J. Drummond The Animals of New Zealand, Christchurch, 1904). However, when the Animals Protection Act was consolidated in 1907 the schedule of "Birds, Animals, and Reptiles to be protected" included only 30 named species, genera or families, omitting many of those on the 1906 schedule -including Whitehead and

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Takahe. No reason for the disparity between the 1906 and 1907 schedules has been ascertained.

130. Southern Cross 4 May 1844, quoted in Angela Ballara Proud to be White? A Survey of Pakeha Prejudice in New Zealand (Auckland, 1986), p. 17.

131. Alan Ward A Show of Justice: Racial "Amalgamation" in Nineteenth Century New Zealand (Auckland, 1973), p. 308.

132. John M. McKenzie Propaganda and Empire; The manipulation of British public opinion, 1880-1960, (Manchester, 1984), chapter 6, gives an overview of these "imperial propaganda societies".

133. B.L. Blackeley The Colonial Office 1868-1892 (Durham, North Carolina, 1972), pp. 32-41, 131-3.

134. Buller to R.B. Sharpe 6 April 1891, Bowdler Sharpe Letters, Blacker-Wood Library of Zoology and Ornithology, McGill University, Quebec, Canada.

135. Keith Sinclair Imperial Federation: A Study of New Zealand Policy and Opinion, 1880-1914 (London, 1955), pp. 31-33, A Destiny Apart: New Zealand's Search for National Identity (Wellington, 1986), pp. 96-101.

136. Angus Ross New Zealand Aspirations in the Pacific in the Nineteenth Century (Oxford, 1964); D.K. Fieldhouse "New Zealand, Fiji and the Colonial Office, 1900-1902" Historical Studies Australia and New Zealand 8 (1958), 113-130.

137. M.I. Finucane "The islands and people of Fiji" Proceedings of the Royal Colonial Institute 32 (1901), 32-52.

138. Buller "The development of the South Pacific" British Empire Review 2 (1901), 140-143, republished by Buller as a 15 pp. pamphlet, The Development of the South Pacific [London, 1901], from which all quotations are taken.

139. Finucane (1901), p. 45.

140. Buller (1901), p. 8.

141. For a summary of the Ngai Tahu case (which in 1989 still continues) see Harry C. Evison Ngai Tahu Land Rights third edition (Christchurch, 1987); Tipene O'Regan "The Ngai Tahu Claim" in Waitangi: Maori and Pakeha Perspectives of the Treaty of Waitangi edited by I.H. Kawharu (Auckland, 1989), pp. 234-262.

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142. The Times 14 December 1900, p. 5, and cuttings from other newspapers in file Seddon 1/58 No. 25, National Archives, Wellington. For another similar instance note the "Maori Rights Conservation Association" -a 1906 New Zealand equivalent of the English "Aborigines Protection Society".

143. Buller "On the Ornithology of New Zealand" TNZI 31 (1899), 1-37 (p. 8).

144. It can not have been widely read in New Zealand; there appear to be no copies of the British Empire Review issue held in local repositories, and few of the pamphlet which Buller had reprinted for private distribution.

145. Fieldhouse (1958), p. 126.

146. Buller (1901), p. 11.

147. AJHR 1901 H26B, pp. 1-2; the continuing colonial attachment to the idea of the "dying Maori" is discussed further in Chapter 7.1.

148. Buller Supplement to the "Birds of New Zealand" (London, 1906), I, xxxiii.

149. Buller (1906), II, 161-161, reprinted from "On the Ornithology of New Zealand" TNZI 31 (1899), 1-37 (p. 12).

150. W.M. Hamilton "Little Barrier Island (Hauturu)" Department of Scientific and Industrial Research Bulletin 137 (1961), 18-30.

151. AJHR 1892 B7 p. 15: class II vote 14 items 22, 23.

152. See Chapter 2.2.

153. On Wright see J. Sullivan "The Henry Wright Collection of photographic negatives" Turnbull Library Record 12 (1979), 37-44.

154. Weekly Press 12 November 1892; New Zealand Graphic (Auckland) 24 December 1892 pp. 1259-1260; Spectator (London) 24 September 1892 p. 416.

155. Onslow to Sclater 23 January 1893, archives of Zoological Society of London; Nature (London) 46 (22 September 1892), pp. 502-503; Ibis series 6, vol. 5, (1893), pp. 283-284.

156. Canterbury Times (Christchurch) 6 October 1892, p. 36; Evening Post (Wellington) 10 November 1892 -apparently

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quoting Standard (London) [26 September 1892?].

157. Buller to Ballance 7 September 1892, MS papers 25, folder 19 letter 661, Alexander Turnbull Library, Wellington.

158. Onslow "State Socialism and Labour Government in Antipodean Britain" Proceedings of the Royal Colonial Institute 25 (1894), 2-28 (p. 3). The "New Zealand statesman" mentioned has not been identified.

159. Some of these points are discussed by Douglas G. Pearce and Gerard Richez "Antipodean Contrasts: National Parks in new Zealand and Europe" New Zealand Geographer 43 (1987), 53-59. On the British commons see W.G. Hoskins and L.D. Stamp The Common Lands of England and Wales (London, 1963), especially pp. 4, 69-82.

160. The establishment of Tongariro National Park (then in progress, but not legally completed until 1894) was in this sense a less radical move since the land on which the park was initially based was deeded to the Crown as a gift.

161. John Sheail Nature in Trust; The History of Nature Conservation in Britain (Glasgow, 1976); John Ranlett "'Checking nature's desecration': late-Victorian environmental organization", Victorian Studies 26 (1983), 197-222. After the National Trust, another important body acquiring and protecting reserves in England was the Society for the promotion of Nature Reserves (founded 1913), in which the dominant figure was N.C. Rothschild -Walter Rothschild's brother. The latter (as Lord Rothschild) became president in 1931, succeeded by Lord Onslow (the fifth Earl, son of the New Zealand governor).

162. In the legal lexicon "extinguishment" refers to "the annihilation of a collateral interest, or the supersedure of one interest by another and greater interest". The policy in New Zealand that land for the purposes of colonisation was obtained by purchase from the native people rather than by occupation or forcible displacement has a complex background which has been discussed in part by numerous historians; see for instance Peter Adams Fatal Necessity; British Intervention in New Zealand 1830-1847 (Auckland, 1977), pp. 56-57; Fredericka Hackshaw "Nineteenth Century Notions of Aboriginal Title and their Influence on the Interpretation of the treaty of Waitangi", in Waitangi; Maori and Pakeha Perspectives of the Treaty of Waitangi edited by I.H. Kawharu (Auckland, 1989), pp. 92-120.

163. On these ideas and the power of "compulsory expropriation" of freehold land see G.R. Hawke The Making of

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New Zealand: An Economic History (Cambridge, 1985), pp. 105-106; David Hamer The New Zealand Liberals; The Years of Power, 1891-1912 (Auckland, 1988), pp. 92-94, 142-143.

164. J.S. Duncan "The Land for the people: Land Settlement and Rural Population Movements, 1886-1906" in Land and Livelihood; Geographical Essays in Honour of George Jobberns edited by Murray McCaskill (Christchurch, 1962), pp. 170-190 (pp. 187-189).

165. Henry Wright New Zealand native birds. Report...upon Hauturu Island (Wellington, 1892).

166. Ballance to Buller 8 November 1892, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

167. Auckland Weekly News 7 January 1893 p. 35.

168. H.F. Edgar to [Native Minister?] 14 December 1892, file MA 13/45, National Archives, Wellington. Tenetahi's concern about protecting the birds had been noted from the time the reserve idea was first mooted in 1886 -see A. Reischek "Description of the Little Barrier or Hauturu Island, and the Birds which inhabit it, and the Locality as a Protection to them", TNZI 19, (1887), 181-184, (p. 184).

169. New Zealand Herald (Auckland) 2 August 1894.

170. Boscawen to Mueller 28 July 1893, C. Robinson report dated 31 March 1894, file To1 1901/197, National Archives, Wellington.

171. Cheeseman to Seddon 7 March 1894, file To1 1901/197, National Archives, Wellington.

172. Tole to Seddon 27 July 1894 and minute thereon, file To1 1901/197, National Archives, Wellington.

173. NZPD 86 (1894), pp. 936-937.

174. W.M. Hamilton "Little Barrier Island (Hauturu)" Department of Scientific and Industrial Research Bulletin 137 (1961), p. 28.

175. The Little Barrier Island Purchase Act was passed on 14 October 1894 and the island gazetted as a reserve on 27 June 1895 (N.Z. Gazette 1895 pp. 999, 1535).

176. Cutting dated 12 December 1900 in file Seddon 1/58 No. 25, National Archives, Wellington.

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177. John A. Williams Politics of the New Zealand Maori: Protest and Cooperation, 1891-1909 (Seattle, 1969), p. 158.

178. New Zealand Herald (Auckland) 20 November 1895.

179. See petition of T. Taingakawa and others, October 1909, file MA 24/8 No. 2, National Archives, Wellington.

180. New Zealand Times (Wellington) 9 September 1895; Seddon to Tuhoe delegation 25 September 1895, printed as second schedule to Urewera District Native Reserve Act 1896.

181. New Zealand Times 9 September 1895.

182. NZPD 96 (1896), 159.

183. NZPD 96 (1896), p. 163.

184. NZPD 96 (1896), p. 171. Thomas Mackenzie (1854-1930) was born in Edinburgh but grew up in New Zealand. On his explorations in Fiordland and his enthusiasm for preserving New Zealand scenery and native birds, see David Thom Heritage; The Parks of the People (Auckland, 1987), p. 103; Susanne Hill and John Hill Richard Henry of Resolution Island (Dunedin, 1987), pp. 168, 181-188. 185. Williams (1969), pp. 94-98.

186. Kapiti Island Public Reserve Act 1897, preamble.

187. AJHR 1897 I3C, p. 3.

188. TNZI 17 (1885), 444.

189. A.G. Bagnall "Buller, Sir Walter Lawry" in An Encyclopaedia of New Zealand edited by A.H. McLintock (Wellington, 1966), pp. 272-274 (p. 274).

190. See in particular Mona Gordon Vintage; People and Things in Old New Zealand (Christchurch, 1948), pp. 33-34, 44.

191. A.C.G. Heath "Collect or Conserve -the entomologist's dilemma" New Zealand Entomologist 9 (1987), 4-10.

192. Rollo D. Arnold "The Opening of the Great Bush, 1869-1881; A Social History of the Bush Settlements of Taranaki, Hawke's Bay and Wellington" (unpublished Ph.D. dissertation, Victoria University of Wellington, 1971), pp. 406-409, 415-416.

193. Buller to Grey 20 September 1895 GNZ MSS 145(3) Auckland

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Public Library.

194. Taxidermists and dealers in bird skins referred to in Buller's papers and further identified from listings in contemporary business directories.

195. Alfred W. Crosby Ecological Imperialism; The Biological Expansion of Europe, 900-1900 (Cambridge, 1986), p. 277.

196. These issues are discussed in Carolyn King Immigrant Killers; Introduced Predators and the Conservation of Birds in New Zealand (Auckland, 1984), pp. 76-81, 188.

197. On Docherty and Wheeler see H.F. Von Haast The Life and Times of Sir Julius von Haast (Wellington, 1948) pp. 548-557; on Seymour see J. Hall-Jones Doubtful Harbour (Invercargill, 1984), pp. 44-48. Prices for bird-skins quoted by the dealer William Smyth of Caversham, Dunedin, in 1889 ranged from 2/- for Bellbirds, 2/6 for Tuis to 20/- for male Kakapo and 25/- to 30/- for Kiwis -see M.J. O'Sullivan "Life of Professor Sir Algernon Phillips Withiel Thomas" typescript in MS 304, box 1, Auckland Institute and Museum.

198. See letters from Robson and Smith to Buller in MS Papers 48, folder 27, Buller to Brough in qMS 1877-1892 Buller letterbooks, Alexander Turnbull Library, Wellington.

199. A.H. Jamrach to Denton 18 August 1880, box 68, folder (i), archives of National Museum, Wellington. The numbers of skins mentioned may be compared with the total surviving populations of these species, which were estimated in 1981 at fewer than 200 Kakapo, and 500-600 Little Spotted Kiwi -see Gordon R. Williams and David R. Given The Red Data Book of New Zealand; Rare and Endangered Species of Endemic Terrestrial Vertebrates and Vascular Plants (Wellington, 1981), pp. 24, 38.

200. Sharpe in The Colonies and India (London) 16 May 1888, quoted in Buller Reviews and other Notices of Sir Walter Buller's "Birds of New Zealand" (London, 1890), p. 40.

201. Newton to Hector 28 October 1882, box 71, folder (ii), no. 5858/82, archives of National Museum, Wellington; Buller Supplement to the "Birds of New Zealand" (London, 1905), I, 69.

202. New Zealand Official Yearbook 1897, p. 285.

203. Buller A History of the Birds of New Zealand second edition (London, 1888), II, 315.

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204. Keith Thomas Man and the Natural World; Changing Attitudes in England 1500-1800 (London, 1983), pp. 279-281; B. Harrison "Animals and the State in nineteenth-century England" English Historical Review 88 (1973), 786-820.

205. David Elliston Allen The Naturalist in Britain; A Social History (London, 1976), pp. 229-233.

206. Buller to Owen 4 March 1859 Owen collection British Museum (Natural History).

207. See Buller (1888), II, pp. 48, 50, 135. See also TNZI 26 (1894), 638; and Allen (1976), pp. 230-231.

208. Buller (1888), I, 14; see also p. 12.

209. Buller to Rothschild 2 March 1892, qMS 1877-1892 Buller letterbooks, Alexander Turnbull Library, Wellington.

210. See copies of telegrams from Buller to various acclimatisation societies, dated 26 September 1892, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

211. Buller to Ballance 19 January 1892, MS Papers 25, folder 14, letter 460, Alexander Turnbull Library, Wellington.

212. Gilbert Mair to W.G. Mair 9 March 1892 MS Papers 148, folder 73, W.G. Mair to Gilbert Mair 16 March 1892 MS papers 93, folder 13, Alexander Turnbull Library, Wellington.

213. On the Imperial Institute see J.L. Lant Insubstantial Pageant; Ceremony and Confusion at Queen Victoria's Court (London, 1979), pp. 124-134, 140-146; J. M. MacKenzie Propaganda and Empire; The Manipulation of British Public Opinion, 1880-1960 (Manchester, 1984), chapter 5. On Buller's involvement see Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1898), pp. 154-159, 186, 193.

214. N.Z. Gazette 1892 p. 627.

215. Animals Protection Amendment Act 1895. Conflicting accounts of the position of the Canterbury Acclimatisation Society are given by A. Bathgate, "Notes on Acclimatisation in New Zealand" TNZI 30 (1898), 266-279 (p. 272) and R.C. Lamb Birds,Beasts & Fishes; The First Hundred Years of the North Canterbury Acclimatisation Society, (Christchurch, 1964), pp. 109-110, but both agree that government control was sought by one or other of the societies.

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216. Buller to Premier [Ballance] 2 June 1892, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

217. Buller to C.M. Smith 20 October 1892, Buller to Secretary, Oamaru Acclimatisation Society 10 November 1892, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

218. Buller to Cooper 17 January 1891, file IA1 1891/139, also file 92/2459 in IA1 1892/3467, National Archives, Wellington; Buller to Ballance 14 November 1892, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington. Charles Robinson's son Charles Walter was born on 28 March 1892.

219. Buller "Notes on New Zealand Birds" TNZI 25 (1893), 53-63 (p. 55); Buller to Ballance 5 October 1892, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

220. Buller to Ballance 14 November 1892, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

221. C.M. Smith to Buller 10 January 1893, qMS BUL 1892-1894 Buller letterbook, Alexander Turnbull Library, Wellington.

222. Permit to collect Huia dated 14 January 1893, file IA1 1893/127, National Achives, Wellington.

223. Buller to Ballance 17 January 1893, MS Papers 25, folder 20a, letter 683, Alexander Turnbull Library, Wellington.

224. C.M. Smith to Robinson 27 March 1893, qMS Ballance letterbook, p. 487, Alexander Turnbull Library, Wellington. Robinson's travelling expenses (including those for the Huia hunt?) of £6/17/8 and his passage to Manakau, Auckland (£3) were approved and paid out of the funds voted for a curator at Resolution Island -see minute dated 25 March 1893, file IA1 1893/127, National Archives, Wellington.

225. Buller to Rothschild 3 February 1893, Rothschild papers, British Museum (Natural History), London.

226. No evidence has been found to indicate whether Buller actually shipped the birds, or whether Rothschild received them. Most of Rothschild's records of his museum and menagerie have been destroyed and none of the 29 Huia specimens from his collections still extant in the American Museum of Natural History and the British Museum (Natural

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History) can be definitely identified as having been obtained by Robinson.

227. New Zealand Graphic (Auckland) 12 August 1893, p. 80.

228. Unsourced cutting dated 28 November 1893 in qMS BUL 1866-1898 Buller Scrapbooks, Alexander Turnbull Library, Wellington.

229. Boscawen to Mueller 28 July 1893, file To1 1901/197, National Archives, Wellington.

230. S.P. Smith to Commissioner of Crown Lands Auckland 6 November 1894 and attached telegrams, file To1 1901/197, National Archives, Wellington.

231. Memorandum by G. Mueller 1 July 1895, file To1 1901/197, National Archives, Wellington.

232. NZPD 87 (1895), p. 387.

233. Buller "Notes on New Zealand Ornithology, with an Exhibition of Specimens" TNZI 28 (1896), 326-358 (p. 333).

234. Cutting of letter signed "Nature" enclosed in Travers to Hartert, 24 December 1895, Rothschild papers, British Museum (Natural History), London; see also Otago Daily Times 5 December 1895.

235. Buller to Rothschild 12 September 1895 and attached list, Rothschild papers, Box 7, British Museum (Natural History), London.

236. NZPD 91 (1895), 294.

237. Buller to McKenzie 17 October 1895, file To1 1901/197, National Archives, Wellington.

238. The case is described at length in Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1989), chapters 14, 16 and 17.

239. Buller to McKenzie 17 October 1895, and McKenzie's minute thereon; Smith to Commissioner of Crown Lands, Auckland 18 October 1895, file To1 1901/197 National Archives, Wellington.

240. Memo to Commissioner of Crown Lands, Auckland 30 December 1895, file To1 1901/197, National Archives, Wellington.

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241. Robinson to Seddon 8 June 1896, to Colonial Secretary 6 August 1896, file IA1 1896/2242; see also file IA1 1900/3276, National Archives, Wellington.

242. S.P. Smith to Carroll 8 July 1899, file To1 1901/197, same 4 September 1899, file IA1 1899/3597, National Archives, Wellington.

243. £100 was voted for the pupose each year from 1903-1904 and 1907-1913 and a total of at least £160 expended; see items "collection &c of native birds for acclimatisation purposes" and "cost of transferring huia birds" under Colonial Secretary's or Internal Affairs vote for Miscellaneous services, AJHR B1, B7 for above years. See also W.J. Phillipps The Book of the Huia (Christchurch, 1963), pp. 39, 66-78.

244. See the anecdote recorded in C.A. Fleming George Edward Lodge; The Unpublished New Zealand Bird Paintings (Wellington, 1982), p. 377.

245. Travers to Hartert 13 May 1896, Rothschild letters, British Museum (Natural History), London.

246. R.A. Loughnan Royalty in New Zealand: The Visit of Their Royal Highnesses the Duke of Cornwall and York to New Zealand... (Wellington, 1902), p. 124 and photograph facing p. 96; see also photograph in Auckland Weekly News Supplement, 21 June 1901, and Phillipps (1963), p. 39.

247. The record of the "last" sighting of Huia -of three birds said to have been seen by W.W. Smith on 28 December 1907 -was first published in J.G. Myers "The present status of the endemic birds of New Zealand" New Zealand Journal of Science and Technology 6 (1923), 65-99 (p. 96), repeated (unsourced) in W.R.B. Oliver New Zealand Birds (Wellington, 1930), p. 495, and subsequently in almost every publication mentioning the species. No record of the 1907 sighting was found among W.W. Smith's own publications or his papers in the Taranaki Museum.

248. After selling his then collection to Rothschild for £1,000 in 1889, Buller sent further shipments of specimens and live birds in 1890-1896 for which he charged at least £750 more.

249. Buller "Notes On New Zealand Ornithology, with an Exhibition of Specimens" TNZI 28 (1896), 326-358 (p. 326).

250. Buller had unsuccessfully offered himself as President of the Bank of New Zealand; was beginning a quiet campaign

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for the New Zealand Cross for his reputed exploits at the taking of Weraroa pa in 1865; and was even mentioned as a possible Agent-General in London (W.B. Perceval's appointment was to expire in January 1896). See Buller to Seddon 28 September 1894, MS Papers 48, folder 37; W.G. Mair to R. Mair 13 February 1895, to Gilbert Mair 26 June 1895, MS Papers 93, folder 15, Alexander Turnbull Library, Wellington.

251. Buller (1896), p. 327.

252. Buller "On the Ornithology of New Zealand" TNZI 31 (1899), 1-37 (p. 6). See also TNZI 27 (1895), 105; 28 (1896), 327; 29 (1897), 204; 31 (1899), 8.

253. Buller Supplement to the "Birds of New Zealand" (London, 1906), II, p. 155-156.

254. Buller (1906), II, 137. See also Volume I, xxxii, xxxviii (reprinting TNZI 27, 1895, 105), xliii; Volume II, 155 (reprinting TNZI 31, 1899, 8).

255. Buller (1896), 334.

256. Buller "On the Notornis" TNZI 14 (1882), 238-244 (p. 240).

257. Buller to Hartert (Rothschild's museum curator), 21 February 1895, Rothschild papers, British Museum (Natural History), London.

258. J.E. Sandys Orationes et Epistolae Cantabrigiensis (1876-1909) (London, 1910), p. 156; translation from the Latin by R.B. Sibson.

259. Some indication of the scale of Buller's trade in specimens is provided by records of some of the larger collections he accumulated and sold in succession:

1: 265 specimens presented to the Colonial Museum, Wellington, in 1871 for £300 plus return passage to London -still held by the National Museum, Wellington.

2: 252 specimens sold to the English businessman S.W. Silver about 1885-1889 -now held by the Oxford University Museum.

3: about 475 specimens sold to Walter Rothschild in 1889 for £1000; plus further shipments of at least 560 specimens and 60 live birds for £750 -most now held by the American Museum of Natural History, New York.

4: 58 specimens sold to the Liverpool Museum in 1901 -still held by the Mersyside County Museum.

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5: 588 specimens sold to the Carnegie Museum, Pittsburgh, in 1904 for £1000 -still held by the Carnegie Museum.

6: At least 285 specimens (nominally his son's collection) retained at his death -now held by the Canterbury Museum, Christchurch.

He sold or presented many more specimens to other collectors and institutions. Of those listed above (totalling 2,543 birds sold for well over £3,000), Buller's labels and correspondence indicate that the majority (at least 1291 specimens) were collected after 1890, with particularly high numbers in 1892 (542 specimens traced), 1894 (202) and 1895 (236).

260. Buller mentions this expedition (without specifying the year) in his papers "Further Notes and Observations on Certain Species of New Zealand Birds (with Exhibits)" TNZI 24 (1892), 75-91 (p. 76), and "Further Notes on the Birds of New Zealand" TNZI 25 (1893), 63-88 (p. 69); the date (as indicated by the label to Huia specimen 24775, Carnegie Museum, Pittsburgh) was 15 February 1892.

261. Buller to Rothschild 2 March 1892, qMS 1877-1892 Buller letterbooks, Alexander Turnbull Library, Wellington.

262. Buller refers to the Puketoi expedition (again without specifying the year) in Buller (1893) pp. 65-70, 69; and two Huia, labelled in his hand "Puketoi 28.11.92" are in his collections preserved in the Carnegie Museum, Pittsburgh (specimen 24772) and the Canterbury Museum, Christchurch (specimen AV 1079). There are a further 10 specimens in the Carnegie and Canterbury Museums, of which 2 are dated 1891 and 8 are dated 1892.

263. Buller "On the Ornithology of New Zealand" TNZI 31 (1899), 1-37 (p. 8).

264. New Zealand Times 9 September 1895, NZPD 96 (1896) pp. 167, 171. The adjective "noble" had sometimes been applied to the Maori race in the early years of the colony, especially by missionaries (see for instance Richard Taylor Te Ika A Maui, Or New Zealand and its Inhabitants (London, 1855), p. 11) but became used again from about the end of the century -see the discussion of the image of the "old-time" Maori in Chapter 7.2.3.

265. Buller "Notes on the Ornithology of New Zealand; with an Exhibition of Rare Specimens" TNZI 27 (1895), 104-126 (pp. 105).

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266. TNZI 27 (1895), 650.

267. Buller to Rothschild 2 July 1894, Rothschild papers, British Museum (Natural History), London.

268. Buller to Rothschild 10 February 1895, Rothschild papers, British Museum (Natural History), London.

269. Buller "Notes on New Zealand Ornithology, with an Exhibition of Specimens" TNZI 28 (1896), 326-358 (p. 340).

270. Buller to Rothschild 10 February 1895, Rothschild papers, British Museum (Natural History), London.

271. Travers to Rothschild 9 October 1894, Rothschild papers, British Museum (Natural History), London.

272. "The Hon. Walter Rothschild communicated the following description of a new genus and species of bird from New Zealand..." Bulletin of the British Ornithologists' Club no. 22 (29 December 1894), p. x; Buller "On a new Species of Xenicus from an Island of the Coast of New Zealand" Ibis series 7, 1 (1895), 236-237.

273. Buller Supplement to the "Birds of New Zealand" (London, 1905), II, 110.

274. For a few recent versions see Sherwin Carlquist Island Life (New York, 1965), p. 348; O.H. Frankel and Michael E. Soulé Conservation and Evolution (Cambridge, 1981), p. 20; Errol Fuller Extinct Birds (London, 1987), p. 192.

275. An anecdotal account of the inadvertent introduction of cats to Stephens Island is given (under entry Turnagra crassirostris) in Henry Travers "List of native birds and prices", dated 27 December 1898, file IA1 1898/2511, National Archives, Wellington. From about 1899 the lighthouse keepers were encouraged to shoot the cats; eventually, after the bounty on them was raised from 1/- to 5/- they were exterminated in about 1922. See files IA 14/18/4 part 2, IA 25/33, and Stephens Island letterbook, ML Stephens Island, National Archives, Wellington.

276. Letter signed "The Collector", Evening Post (Wellington) 11 June 1913, cutting in file IA 46/18/4 pt 1, National Archives, Wellington. The establishment of the Stephens Island lighthouse is described by J. O'C. Ross The Lighthouses of New Zealand (Palmerston North, 1975), pp. 100-102.

277. Buller "Further Notes on the Birds of New Zealand"

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TNZI 25 (1893), 63-88 (p. 67).

278. Lyall to Buller [February 1895?] quoted in Buller Supplement to the "Birds of New Zealand" (London, 1905), I, 43; dated by reference in Buller to Rothschild 10 February 1895, Rothschild papers, British Museum (Natural History), London.

279. Press (Christchurch) 16 March 1895, quoted in Buller "Notes on New Zealand Ornithology, with an Exhibition of Specimens" TNZI 28 (1896), 326-358 (p. 342).

280. Buller (1896), p. 343; see also Buller "Notes on the Ornithology of New Zealand" TNZI 29 (1897), 179-207 (p. 188).

281. Quoted in Buller (1896), p. 343.

282. Albert Gunther "Contributions to the anatomy of Hatteria (Rhyncocephalus, Owen)" Philosophical Transactions of the Royal Society of London 157 (1867), 595-630.

283. Huxley (1869), quoted in J.R.H. Andrews The Southern Ark: Zoological Discovery in New Zealand 1769-1900 (Auckland, 1986), p. 159. "Poikilitic" was a short-lived geological term referring to the Triassic and Permian periods.

284. Quoted in Buller "Notes on the Tuatara Lizard (Sphenodon punctatum), with a description of a supposed new species" TNZI 9, (1877), 317-325 (p. 325).

285. Report of the Meeting of the Australasian Association for the Advancement of Science 6 (1895), p. ix; who raised the idea is not recorded but it may have again been G.M. Thomson of Otago -see Thomson to Cheeseman 28 April 1893, MS 58, Auckland Institute and Museum.

286. See file IA1 1895/359, National Archives, Wellington; N.Z. Gazette 1895, p. 620.

287. N.Z. Gazette 1898 p. 1435; Principal Keeper, Stephens Island to Secretary, Marine Department, 31 December 1896, 31 October 1898, 1 December 1899, file ML Stephens Island 3/1, National Archives, Wellington.

288. Buller (1896) p. 336. These comments were made in August 1895 -after the initial gazetting of the protection of the Tuatara.

289. Quoted in Buller (1896), p. 343.

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290. Cutting of letter signed "Nature" enclosed in Travers to Hartert, 24 December 1895, Rothschild papers, British Museum (Natural History), London.

291. E.S. Turner All Heaven in a Rage (London, 1964).

292. Robin W. Doughty Feather Fashions and Bird Preservation: A Study in Nature Protection (Berkeley, 1975); B. Harrison "Animals and the State in nineteenth-century England" English Historical Review 88 (1973), 786-820.

293. John Ranlett "'Checking Nature's desecration': late-Victorian environmental organisation" Victorian Studies 26 (1983), 197-222 (pp. 205-206).

294. Ranlett (1983), pp. 205, 207; Phyllis Barclay-Smith "The British contribution to bird protection" Ibis 101 (1959), 115-122 (p. 117.

295. New Zealand Industrial Exhibition, 1885 The Official Record (Wellington, 1886), pp. 40-41. See also F.W. Hutton's detachment on recording a species new to New Zealand from "fragments in a lady's hat" -F.W. Hutton "Notes on some of the Birds brought by Mr Henry Travers from the Chatham Islands, with descriptions of the New Species", TNZI 5, (1873), 222-224 (p. 224). The plume trade drew much more criticism in Australia -see A.J. Marshall "Of the Plume Trade, and Emu Oil" in The Great Extermination; A guide to Anglo-Australian Cupidity Wickedness & Waste edited by A.J. Marshall (Melbourne, 1966), pp. 43-74.

296. The Cruelty to Animals Acts of 1878 and 1880 were passed through all their stages without any debate. In 1884 their provisions were brought within the Police Offences Act. According to an unpublished paper by Neil Wells ("Reform of Animal Protection Law", RNZSPCA, p. 23), the Otago SPCA was founded in 1882. Biographical notes on George Fenwick (1847-1929) date it to 1885 (A.H. McLintock An Encyclopaedia of New Zealand (Wellington, 1966), I, 641.

297. On hare coursing see R.C. Lamb Birds Beasts and Fishes; The First Hundred Years of the North Canterbury Acclimatisation Society 1867-1967 (Christchurch, 1964), pp. 52-57. By 1907 there was some criticism of the sport -see NZPD 141 (1907), pp. 227, 618, but it was not formally prohibited until 1960. On live-bird trapshooting see entry on "Gun Clubs" in McLintock (1966), I, 886-888. The practice was prohibited in Britain in 1921 -see Turner (1964), pp. 299-300.

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298. J.L. Bates "Fulfilling American Democracy: The Conservation Movement, 1907 to 1921" Mississippi Valley Historical Review 44 (1957), 29-57 (p. 30); Frank R. Smith The Politics of Conservation (New York, 1966), p. 88; Stephen Fox John Muir and His Legacy: The American Conservation Movement (Boston, 1981) p. 352.

299. For various views on George's influence in New Zealand see Frank Rogers "The Influence of Political Theories in the Liberal Period, 1890-1912: Henry George and John Stuart Mill" in Studies of a Small Democracy; Essays in Honour of Willis Airey edited by Robert Chapman and Keith Sinclair (Auckland, 1963) pp. 153-174; Peter J. Coleman Progressivism and the World of Reform; New Zealand and the Origins of the American Welfare State (Lawrence, 1987), pp. 24-25, 89; E. Olssen "American Influences on the New Zealand Labour Movement, 1885-1920" in The American Connection, edited by Malcolm McKinnon (Wellington, 1988), pp. 25-37 (p. 28); David Hamer The New Zealand Liberals; The Years of Power, 1891-1912 (Auckland, 1988), pp. 38-39, 72-73.

300. For such expressions on the social developments by "experimental law-making" see for instance William Pember Reeves, The Long White Cloud -Ao Tea Roa (London, 1898), and State Experiments in Australia & New Zealand (London, 1902).

301. Buller Supplement to the "Birds of New Zealand" (London, 1905), I, xxxvii.

302. Buller The Development of the South Pacific [London, 1901], p. 9.

303. NZPD 94 (1896) p. 171.

304. Buller "Notes on New Zealand Ornithology, with an Exhibition of Specimens" TNZI 28 (1896), 326-358 (p. 327).

305. The court avoided the issue of whether scenic bush was of monetary value; the action was rejected on the more traditional legal ground that it had not been proven that the fire that damaged Buller's Papaitonga property was the responsibility of the defendant -see New Zealand Times (Wellington) 26 March 1895.

306. Evening Post (Wellington) 23 May 1895.

307. For a further discussion of this issue see Raymond Williams "Ideas of Nature" in Ecology, the Shaping Enquiry, edited by Jonathan Benthall, (London, 1972), pp. 146-164 (pp. 159-160).

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308. Buller "Further Notes on the Birds of New Zealand" TNZI 25 (1893

309. Buller Supplement to the "Birds of New Zealand" (London, 1905), II, 157.

310. New Zealand Herald 12 September 1894, quoted by Keith Sinclair A Destiny Apart; New Zealand's Search for National Identity, (Wellington, 1986), p. 37.

311. Similar adoptions of negative labels occurred in other colonial societies -see for instance A. Pagden "Identity Formation in Spanish America", in Colonial Identity in the Atlantic World, 1500-1800, edited by N. Canny and A. Pagden, (Princeton, New Jersey, 1987), pp. 51-93 (p. 79).

312. Sinclair (1986), p. 42.

313. Similar expressions were used for a range of patriotic or reformist movements or tendencies in Europe (Das Junge Deutschland, Giovine Italia) in the 1830s, Ireland ("Young Ireland") and the United States ("Young America") in the 1840s. The "Young Maori Party" of the early twentieth century is discussed in Chapter 7.1.

314. See for instance F.E. Maning Old New Zealand; A Tale of the Good Old Times (Auckland, 1863), 229; Alexander Bathgate Colonial Experiences; or Sketches of People and Places in the Province of Otago, New Zealand, (Glasgow, 1874), chapter XIV: "Young New Zealand and His Education".

315. Sinclair William Pember Reeves; New Zealand Fabian (London, 1965), p. 81; Sinclair (1986), p. 32.

316. The "Young New Zealand Party" of 1879 included R.J. Seddon, but apparently only one New Zealand-born member, E. Hamlin -see G.H. Scholefield A Dictionary of New Zealand Biography (Wellington, 1940), I, pp. 200, 330.

317. Buller's speech notes for his 1881 and 1891 elections campaigns, in MS Papers 48, folders 34 and 35 respectively, Alexander Turnbull Library, Wellington.

318. New Zealand Times (Wellington) 11 July 1895. The Ward reception was in honour of the Colonial treasurer, J.G. Ward, on his return from London where he had managed to raise a loan at low interest. The term "Young New Zealander" evidently still had some force in 1925, when it was used of Gordon Coates in the successful national election campaign organised by A.E. Davy.

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319. The vicissitudes of the New Zealand Antimony Company and the Blue Spur and Gabriel's Gully Consolidated Gold Company, and Buller's acquisition of the Papaitonga estate in the Horowhenua area and his consequent involvement in the complex Horowhenua Case are described in Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1989), pp. 169-172, 193-206, 216-244.

320. Buller (1905), I, xxxiv. Kipling visited New Zealand briefly in October-November 1891; the line is from his "A Song of the English" (1893), in the stanza describing Auckland.

321. Quoted in A.B. Croker History of Grand Lodge of Antient, Free and Accepted Masons of New Zealand 1890-1940 (Christchurch, 1940), p. 59.

322. For instance at least 14 of the 18 nineteenth century presidents of the Wellington Philosophical Society remained in New Zealand to their deaths. By comparison, at a higher social level, of the nineteenth century premiers of New Zealand, 7 of 15 (not counting the 2 who died in office) retired to England and died there.

323. Who's Who (London, 1904), pp. 208-209.

324. Proceedings of the International Ornithological Congress 4 (1905), p. 11.

325. See Galbreath Walter Buller; The Reluctant Conservationist (Wellington, 1989), pp. 232, 240, 242.

326. Buller (1905), I, xliii-xlvii.

327. Buller (1905), I, xxxiii; for an earlier use by Buller of "foreign" in a similar context see his "Illustrations of Darwinism..." TNZI 27 (1895), 75-104 (p. 96).

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CHAPTER 6. THE ICONOGRAPHY OF NATIVE NEW ZEALAND BIRDS: FROM SCIENTIFIC AND AESTHETIC IMAGES TO NATIONAL EMBLEMS

1. Dates of election provided by the respective societies.

2. For a more extensive listing of Buller's fellowships, titles and honours see Chapter 1.3, footnote 61.

3. The authors of the series of definitive monographs on the Fauna of New Zealand (Auckland, 1982-) have to date (August 1989) included 8 scientists from New Zealand, 4 from Britain and 2 from other countries.

4. J.D. Hooker Handbook of the New Zealand Flora (London, 1864) -commissioned by the New Zealand Government.

5. G. Bentham Flora Australiensis (London, 1863-78); the following are all by John Gould: A Monograph of the Macropodidae or Family of Kangaroos (London, 1841-42); The Mammals of Australia (London, 1845-63), The Birds of Australia (London, 1840-48), The Birds of Australia, Supplement (London 1851-69). In Australia Gould's name became so associated with the native birds that in 1909 one of the first groups dedicated to their conservation styled itself the Gould League of Bird Lovers.

6. Keith Thomas Man and the Natural World; Changing Attitudes in England 1500-1800 (London, 1983), 282-284; David Elliston Allen The Naturalist In Britain; A Social History (London, 1976).

7. Quoted from undated Prospectus for Gould's A Synopsis of the Birds of Australia and the Adjacent Islands (London, 1837-1838), reproduced in Gordon C. Sauer John Gould the Bird Man; A Chronology and Bibliography (Melbourne, 1982), p. 33.

8. Finsch to Sharpe 21 March 1875, Bowdler Sharpe papers, Blacker-Wood Library of Zoology and Ornithology, McGill University, Quebec, Canada.

9. Finsch Die Papageien (Lieden, 1867-1868); O. Finsch and G. Hartlaub, Beitrage zur Fauna Centralpolynesians. Ornithologie (Halle, 1867).

10. Otto Finsch "Walther Buller's 'Versuch uber die Ornithologie Neu-Seelands,' ubersetzt und mit kritischen Anmerkungen versehen von Otto Finsch in Bremen" Journal fur Ornithologie 15 (1867), 305-347.

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11. A.G. Bagnall "Buller, Sir Walter Lawry" in An Encyclopaedia of New Zealand, edited by A.H. McLintock (Wellington, 1966), I, 272-274 (p. 273).

12. Notably G.R. Gray "A list of the birds of New Zealand and the adjacent islands" Ibis 4 (1862), 214-252. G.R. Gray was assistant Keeper and his brother J.E. Gray Keeper of the Zoology department of the British Museum. G.R. died in 1872; J.E. retired just before his death in 1875 and was succeeded as Keeper by Albert Gunther.

13. Finsch to Haast [9 August 1869?] MS Papers 37, folder 169, Alexander Turnbull Library, Wellington.

14. Finsch "Remarks on some species of birds from New Zealand" Ibis (series 2), 5 (1869), 378-381.

15. Hutton to Hector 30 October 1869, MS 443B, Hocken Library, Dunedin.

16. Buller to Haast 15 June 1864, MS Papers 37, folder 37, Alexander Turnbull Library, Wellington.

17. Hector to Buller [16] March 1870, Museum letterbook 1870-1873, archives of National Museum, Wellington.

18. Sclater to Buller 1 July 1867, MS Papers 48, folder 27, Alexander Turnbull Library, Wellington; see also AJHR 1867 D7, p. 3. Sclater and Newton were the founders of the British Ornithologists' Union and editors of its journal, Ibis.

19. This appointment appears to have been little more than nominal; certainly Featherston did not demand much of Buller's time -see [Charles Rooking Carter] Life and Recollections of a New Zealand Colonist (London, 1875), III, 233.

20. NZPD 11 (1871), pp. 171-173; see also Evening Post (Wellington) 9 October 1871.

21. The list of subscribers printed in the book shows 224 copies for New Zealand subscribers and 207 to other subscribers, but Buller claimed to have sold all his remainder of 44 copies before he left London -evidently to buyers there. Twenty-five copies were supplied free to the New Zealand government under the terms of Buller's agreement.

22. Prospectus dated May 1888, reprinted in Buller Reviews and other Notices of Sir Walter Buller's "Birds of New Zealand", (London, 1890), p. 6.

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23. Annotation in Alexander Turnbull Library copy of Catalogue of the...Library of T.H. Potts [Christchurch, 1888], p. 6 -however, New Zealand was in economic depression at the time.

24. Buller published his collected reviews in Buller (1890); the Home News review is at p. 19.

25. Buller (1890), pp. 20, 37. John James Audubon (1785-1851) published his famous "double elephant folio" (i.e. 100 x 75 cm page size) Birds of America in Edinburgh and London between 1827 and 1838. It was extremely expensive (£182/14/- compared to Buller's £3/3/-) and no commercial success at the time (only 150 subscribers stayed the course) but it soon became the most highly valued of all natural history books. It consisted of plates only; Audubon published the associated text quite separately.

26. Quoted in Buller (1890), p. 24.

27. Hutton Catalogue of the Birds of New Zealand (Wellington, 1871), p. v; Buller to Hector 1 June 1872, box 58, folder (iii), no. 744/72, archives of National Museum, Wellington.

28. New Zealand Magazine No. 1 (January 1876) pp. 94-100.

29. Evening Post 12 March 1875. The reference is to the character in "The Heir-at-Law" (1797) by George Colman the younger, rather than to Voltaire's eternally optimistic Dr Pangloss in "Candide" (1759) who is now more often remembered.

30. New Zealand Herald (Auckland) 12 November 1886.

31. Of the 1000 copies, the subscription list printed in vol. II shows 556 to subscribers in New Zealand, 388 in Britain (including at least 204 to booksellers) and 56 in other countries.

32. Spectator 23 June 1888, quoted in Buller (1890), pp. 38-39.

33. Quoted in Buller (1890), p. 36.

34. Quoted in Buller (1890), pp. 47, 53. Thomas Jeffery Parker (1850-1897), son of the London zoologist W.K. Parker was appointed professor of biology at Otago University in 1880. He acted as one of Buller's agents in signing up subscribers for the second edition in return was provided with a free copy.

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35. Report of the meeting of the Australasian Association for the Advancement of Science 3 (1891) p. 16.

36. Quoted in Buller (1890), p. 50.

37. On J.G. Keulemans (1842-1912) see C.E. Jackson Bird Illustrators; Some Artists in Early Lithography (London, 1975) pp. 84-92; Tony Keulemans and Jan Coldewey Feathers to Brush; The Victorian Bird Artist John Gerrard Keulemans 1842-1912 (Epse, 1982).

38. Some details of the process are given by Jackson (1975), pp. 17-19, and the costs, including the rates paid to the artist and colourists, by Keulemans and Coldewey (1982), pp. 78-79.

39. See Buller's comments about his "fastitiousness" in Buller to Haast 17 September 1872, MS Papers 37, folder 38, Alexander Turnbull Library, Wellington.

40. The processes used are fully described in AJHR 1876 H22, pp. 3-5.

41. H. Martin "The Protection of Native Birds" TNZI 18 (1885), 112-117. In his lists Martin gave the species the numbers used by Buller in the Manual.

42. The number of colour impressions is shown by three proof plates in the Auckland Institute and Museum (from the collection of Johannes Andersen) with printer's registration marks and colour blocks indicating five, six and six colours respectively.

43. Buller to Cheeseman 26 July 1888, MS 58, Auckland Institute and Museum.

44. Buller A History of the Birds of New Zealand second edition (London, 1888), I, pp. 16, 20.

45. The Supplement, completed in a race against time as Buller's health failed, has never been accorded as high a place in New Zealand or ornithological literature as the 1873 or 1888 editions. Certainly Keulemans's plates in the Supplement fall below the earlier standard and Buller's text contains more sentimental nostalgia for New Zealand and less of scientific importance.

46. See for instance T.J. Parker's judgement quoted in Buller Reviews and other Notices of Sir Walter Buller's "Birds of New Zealand" (London, 1890), pp. 50-51.

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47. See in particular J. Richardson and J.E. Gray The Zoology of the Voyage of H.M.S. Erebus & Terror... (London, 1844-1875). Many of the earlier illustrations are reproduced by J.R.H. Andrews The Southern Ark; Zoological Discovery in New Zealand 1769-1900 (Auckland, 1986).

48. AJHR 1895 F1, p. v.

49. The Kea/Kaka design was identified at the time as a pair of Kaka -repeating the error in the caption of the plate in the Manual. Both the Huia and Kea/Kaka designs were submitted by the well-known Wellington engraver and designer William R. Bock.

50. J.C. Andersen Bird-Song and New Zealand Song Birds (Auckland, 1926), p. 96.

51. P.M. Duncan Cassell's Natural History (London, 1877-1882) -in the section on birds, compiled by R.B. Sharpe.

52. Alfred Newton A Dictionary of Birds (London, 1893-1896).

53. Frank Parsons The Story of New Zealand (Philadelphia, 1904).

54. D.V. Lucas The Maoris of New Zealand (Toronto, 1910).

55. Buller to Drummond 27 Oct 1904, box 1, Drummond collection, Canterbury Museum, Christchurch.

56. See notes to D649, H1582-H1585 in A.G. Bagnall New Zealand National Bibliography to the year 1960 (Wellington, 1969) II, pp. 356, 601.

57. NZPD 129 (1904) p. 699.

58. Buller Supplement to the "Birds of New Zealand" (London, 1905) II, 138.

59. N.Z. Gazette 1905, p. 1242. Prints on various topics were issued by the Education Department in 1907-1909, including some on "New Zealand flora" but apparently none on birds (John L. Ewing Development of the New Zealand Primary School Curriculum 1877-1970 (Wellington, 1970), p. 124).

60. See for instance E.K. Mulgan The New Zealand Nature-Study Book [Christchurch, 1905]; M.H. Dixon Nature Study Notes (Auckland, 1935).

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61. James Cowan New Zealand, or, Ao-tea-roa... (Wellington, 1907).

62. Whitcombe and Tombs published all the school texts mentioned above, and also used the Buller illustrations in other books such as Edith Howes Where Bell-birds Chime [Christchurch, 1912], Johannes C. Andersen Maori Life in Ao-tea [Christchurch, 1907].

63. The "Three Castles" book of New Zealand birds [Dunedin, 1930]; N.Z. Government Department of Tourist and Publicity Some better known New Zealand wild flowers and birds (Dunedin, 1939) (reprinted 1950, revised edition 1955).

64. See for instance Norman Cameron Nature's Melody; Poems on Nature (Dunedin, 1935); Mary Mouat Whero in the Land of Maui [Dunedin, 1947].

65. See the comments by R.A. Falla in the preface to Royal Forest and Bird Protection Society An Album of New Zealand Birds (Wellington, 1974), [p. 7].

66. The series of paintings by Daff commissioned by the New Zealand Native Bird Protection Society were used as cover illustrations for the Society's journal Birds from August 1933 and also in a series of albums published by the Society: New Zealand Birds: 24 Coloured Illustrations of Forest-inhabiting Birds [Wellington, 1933] (printed by Coulls, Somerville, Wilkie), with later editions in 1948 and 1959, and New Zealand Birds; Twenty-four Coloured Illustrations of Birds of Coast and Ocean [Wellington, 1940], and second edition 1953; both reprinted in a combined An Album of New Zealand Birds (Wellington, 1974).

67. Perrine Moncrieff New Zealand birds and How to Identify Them second edition [Auckland, 1936] and subsequent editions of 1948, 1952, 1957, 1961; Mona Gordon The children of Tane; bird life in New Zealand [London and Christchurch, 1938]; Olga Burton Stories of Bird and Bush [Auckland, 1943]; Lily Daff also did other colour and monochrome illustrations of birds, for instance for W.R.B. Oliver New Zealand Birds (Wellington, 1930).

68. The edition was, however, rather limited -250 copies -compared with Buller's first edition in 1873 (500) or second edition in 1888 (1000).

69. Richard Wolfe Well Made New Zealand; A Century of Trademarks (Auckland, 1987), pp. 25, 32-37, 102.

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70. Of the species illustrated by Wolfe (apart from Moa and Kiwi) the following are from Keulemans's designs (listed by Wolfe's page number and figure letter):

(a) from the first edition designs (or the 1882 Manual): Huia 37D (from 1888?), 102G (1893), 37B (1901); Kakapo 36L (1922); Kea 67B (1897); Morepork Owl 37E (1894 -actually drawn from Laughing Owl); Takahe 36J (1934); Tui 35B (1927). Weka 37K (1918 -actually drawn from Banded Rail).

(b) from the second edition designs: Fantail 36M (1894); Huia 37I (1892), 37A (1901), 37N (1923), 37G (1926), 37J (1935); Kaka 36C (1913?, 1926); Kea 36K? (1895), 36G (1904), Pukeko 36H (1926); Tui 35E? (1894), 35F (1902), 35H (1905), 25C (1910), 35K (1915).

These constitute 24/40 = 60% of Wolfe's sample of designs of these species.

71. The idea that the unit of currency be styled the "Kiwi" was proposed in 1947 but was not officially accepted -see J.R. Tye The Image Maker; The Art of James Berry (Auckland, 1984), p. 47, 145. In the 1980s the New Zealand dollar has become informally known as the "Kiwi dollar" or simply the "Kiwi" -at least to foreign exchange dealers.

72. Keith Sinclair A Destiny Apart; New Zealand's Search for National Identity (Wellington, 1986), p. 188.

73. J.R.H. Andrews The Southern Ark; Zoological Discovery in New Zealand 1769-1900 (Auckland, 1986), pp. 58-60.

74. J.S. Polack New Zealand: Being a Narrative of Travels and Adventures... (London, 1838), I, pp. 296, 301; William Yate An Account of New Zealand (London, 1835) pp. 52, 58. See also Charles Hursthouse New Zealand, Or Zealandia, the Britain of the South (London, 1857), I, 118, 120; Richard Taylor Te Ika A Maui, Or New Zealand and its Inhabitants first edition (London, 1855), p. 396, second edition (London, 1870) p. 609 (drawn largely from Yate). The pattern continued into the twentieth century: see E.K. Mulgan The New Zealand Nature-study Book [Christchurch, 1905] pp. 182, 199.

75. NZPD 13, (1872), p. 204.

76. For the Tui see Journals of the House of Representatives 1873 p. 128 (and the subsequent Animals Protection Amendment Act 1873); for the Kiwi see N.Z. Gazette 1896, p. 475.

77. C. Hulke, reported in TNZI 27 (1895), p. 650; R.V. Fulton "The Disappearance of the New Zealand Birds" TNZI 40

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(1908), 485-500 (p. 488).

78. Mrs R. Wilson [=M. Wilson] In the Land of the Tui (London, 1894); A.P. Douglas The Dominion of New Zealand (London, 1909) pp. 134, 132.

79. F. von Hochstetter Neu-Seeland (Stuttgart, 1863), opposite p. 438 and in the English edition New Zealand (Stuttgart, 1867), opposite p. 176.

80. Buller A History of the Birds of New Zealand (London, 1888) I, p. xxi; see also James Drummond Nature in New Zealand [Christchurch, 1902], p. 10; James Drummond The Romance of the Moa [Christchurch, 1908], p. 5.

81. See Richard Wolfe Well Made New Zealand; A Century of Trademarks (Auckland, 1987), p. 33 designs B (1892), D (1927), G (1901), I (1891); p. 34 designs A (1880?), H. (1899); p. 40 design H (1894).

82. According to J.B. Condliffe Te Rangi Hiroa; The Life of Sir Peter Buck (Christchurch, 1971), p. 75, the "moa hunters" were Te Rangihiroa (Peter Buck), Wi Repa and Koroneho Hemi Papakakura. The photograph (see Condliffe plate 17 facing p. 112) has been widely reproduced. The "moa reconstruction was also shown at the New Zealand International Exhibition held at Christchurch in 1906-1907 and illustrated in James Cowan Official Record of the New Zealand International Exhibition... (Wellington, 1910), p. 160. For trademarks based on it see Wolfe (1987), p. 34 designs C (1908) and K? (1931).

83. G. Shaw and E. Nodder The Naturalist's Miscellany 24 (1813) plate 1057; copied in P. Lesson Voyage autour du Monde... (Paris, 1838), p. 348.

84. William Yarrell "Description, with some additional Particulars, of the Apteryx Australis of Shaw" Transactions of the Zoological Society of London 1, (1833), 71-76, -see plate 10, p. 76.

85. John Gould The Birds of Australia and Adjacent Islands (London, 1838) part 2, plate 9; The Birds of Australia (London, 1848), vol 6, plates 2 and 3).

86. See for instance Saturday Magazine 12, (7 April 1838), p. 129; E. Dieffenbach Travels in New Zealand (London, 1843), II, titlepage vignette; G.R. Gray The Genera of Birds (London, 1844-1849), III, plate 139 (1846); Gideon Algernon Mantell, Petrifactions and their teachings... (London, 1851), p. 107).

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87. The Kiwi design for the 1898 stamp was drawn by E. Howard of Melbourne, for whom Gould's The Birds of Australia or its derivatives may well have been the most readily available image to work from. However, the design was obviously acceptable to the New Zealand judges in the design competition.

88. Older New Zealand readers will recognise it as the Kiwi of the Kiwi Bacon Company or Kiwi boot polish, or from the reverse of the New Zealand florin coin (1933-1967). The Kiwi on the 20 cent coin from 1967 (designed by James Berry) is a rather less static design, more in the Keulemans pattern.

89. [J.S.C. Dumont d'Urville] Voyage au Pole Sud...Atlas de Zoologie (Paris, 1842-1853), plate 24. I have been unable to determine the publication date for this particular plate -a coloured engraving based on a bird obtained by Dumont D'Urville at Paihia in 1840. The bird was apparently living when he received it (his text is not entirely clear on the point) but was certainly a dead specimen when the artist drew it three years later. See Dumont D'Urville Voyage au Pole Sud...Histoire du Voyage (Paris, 1841-1846), IX, 183-184 -translated in Olive Wright The Voyage of the Astrolabe -1840 (Wellington, 1955), pp. 74-75 (see also p. 120); J.R.H. Andrews The Southern Ark; Zoological Discovery in New Zealand 1769-1900 (Auckland, 1986), pp. 72-73.

90. Zoological Society of London List of the Vertebrated Animals Now or Lately Living in the Gardens of the Zoological Society of London sixth edition (London, 1877), p. 425.

91. E. Cecil Curwen (editor) The Journal of Gideon Mantell Surgeon and Geologist Covering the Years 1818-1852 (London, 1940), pp. 278, 288. Mantell, however, considered that "The appearance of the bird was what my stuffed specimens and drawings had led me to expect" (p. 278). He was father of W.B.D. Mantell, the New Zealand scientist and politician.

92. Illustrated London News 27 December 1851, p. 765. This illustration was copied in Europe -see cutting "Der neuseelanische Kiwi in den Garten der zoologischen Gesellschaft (Regentspark) in London" [1852?], print 112994 1/2, Alexander Turnbull Library, Wellington. Another publication which may have been influenced by the Zoo kiwi was Charles Knight Knight's Museum of Animated Nature (London, 1856-1858), although I have been unable to sight a copy in New Zealand. Knight's popular compendium was cited by the colonial poet Alfred Domett as a source for his information on the Kiwi (Ranolf and Amohia (London, 1872) p. 510).

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93. The Kiwi is in Plate 6 -a hand-coloured lithograph by J. Erxelben from Taylor's sketch (see p. vii).

94. Alfred Eccles The First New Zealand Exhibition and Dunedin in 1865 [Dunedin, 1925], p. 13.

95. AJHR 1895 F1 p. v. The design, by F.W. Sears, included four scenic views and a vignette of a pair of Kiwi -see R.M. Startup Postal Stationery of New Zealand (Auckland, 1966), pp. 11-12.

96. The exhibition labels are described and illustrated in A. de Kort The great Exhibition (Christchurch, 1985).

97. Leon G. Morel, A Catalogue of Medals Medalets Medallions of New Zealand 1865-1940 [Christchurch, 1976] -Kiwi are depicted on a few medallions from 1865-1873 (Morel's nos. 1, 3, 4) but are then absent until 1904 (see nos. 145, 166, 182, 183, 202, 228, 251, 254). Apart from a Moa (no. 3) no other birds appear to be depicted, although many other New Zealand motifs are used -Maori figures, ferns, stars etc.

98. The New Zealand Insurance Company Limited Bold Century; The New Zealand Insurance Company Limited 1859-1959 [Auckland, 1959], p. 32.

99. R.H. Griffin Bank of New Zealand Banknotes 1861-1934 (Wellington, 1987).

100. Quoted by John Pascoe Mr Explorer Douglas (Wellington, 1957), pp. 225, 229, 232.

101. The originals of the entries are in file IA 9/30, National Archives, Wellington.

102. A.S. Thomson The Story of New Zealand (London, 1859), I, 27.

103. William Yarrell "Description, with some additional Particulars, of the Apteryx Australis of Shaw" Transactions of the Zoological Society of London 1, (1833), pp. 71-76 (p. 71).

104. See for instance Saturday Magazine (London) 7 April 1838 (vol. 12 no. 370) pp. 129-130.

105. NZPD 23 (1876), p. 612.

106. T.J. Parker "On the History of the Kiwi" New Zealand Journal of Science new series 1 (1891), 3-9, 66-68 (p. 3).

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107. F.W. Hutton and James Drummond The Animals of New Zealand (Christchurch, 1904), p. 322; compare also James Drummond Nature in New Zealand [Christchurch, 1902], p. 16.

108. E.K. Mulgan The New Zealand Nature-Study Book [Christchurch, 1905], p. 199.

109. Keith Sinclair gives the other side to this argument: that the features of interest to scientists -the degenerate wings, enormous egg and association with the most primitive of birds -made the Kiwi unattractive as a national emblem: Sinclair, "The Origin of the Species" in The Summer Book 2, compiled by Bridget Williams, Roy Parsons and Lindsay Missen, (Wellington, 1983), pp. 27-32 (p. 30).

110. Sinclair (1983), p. 29; see also his A Destiny Apart; New Zealand's Search for National Identity (Wellington, 1986), p. 188.

111. Auckland Weekly News 13 August 1908 Special Supplement p. 9. Other cartoonists soon followed Lloyd; see for instance the recurring Kiwi motif in Shell-Shocks [London, 1916].

112. K.McC. Clark A Southern Cross Fairy Tale (London, 1891) p. 13.

113. File IA 9/30, National Archives, Wellington quoted by Sinclair (1986), p. 191.

114. Johannes Andersen "Maori words incorporated into the English language" Journal of the Polynesian Society 55 (1946), 141-162, commented (p. 148) that "Kiwi is now a common name of the footballing Newzealander". The comment reflects the success of the New Zealand Army rugby team -the "Kiwis" -but equally it is evident that the term "Kiwi" had not yet become customary for New Zealanders in general.

115. Sinclair (1986), pp. 189-190.

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CHAPTER 7. CONCLUSION: CONSERVATION IN CONTEXT

1. W.T.L. Travers "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilized Races" TNZI 2 (1870), 299-330 (p. 313).

2. The New Zealand Graphic Reader; Sixth Book [Auckland, 1905?] p. 256. The date is given in C.M. McGeorge "The Use of School-Books as a Source for the History of Education 1878-1914" New Zealand Journal of Educational Studies 14 (1979), 138-151 (p. 145).

3. J. Cowan Official Record of the New Zealand International Exhibition...1906-7 (Wellington, 1910), p. 83.

4. P. Walsh, "The Effect of Deer on the New Zealand Bush: A Plea for the Protection of our Forest Reserves" TNZI 25 (1893), 435-439 (see p. 438); "Public Ferneries: A Suggestion" TNZI 26 (1894), 619-623; "On the Disappearance of the New Zealand Bush" TNZI 29 (1897), 490-496 (see p. 493); "On the Future of the New Zealand Bush" TNZI 31 (1899), 471-482; "The Effects of the Disappearance of the New Zealand Bush TNZI 43 (1911), 436-447.

5. The New Zealand Graphic Reader; Sixth Book p. 256.

6. R.F. Irvine and O.T.J. Alpers The Progress of New Zealand in the Century (Toronto, 1902), p. 399. The Maori "student of the Maori problem" Alpers quoted is not identified but may have been Apirana Ngata -see [Ngata] The Past and Future of the Maori (Christchurch, 1893).

7. Irvine and Alpers, (1902), p. 406.

8. H. Hill "The Maoris To-day and To-morrow. (No. 2.)" TNZI 35, (1903), 169-186 (p. 169).

9. James Cowan, The Maoris of New Zealand, (Christchurch, 1910), p. 22.

10. Cowan (1910), p. [vii]. Both Hight and Cowan were native-born New Zealanders.

11. P. Walsh "The Passing of the Maori: An Inquiry into the Principal Causes of the Decay of the Race" TNZI 40, (1908), 154-175 (p. 156).

12. Walsh (1908), p. 173.

13. Walsh (1908), pp. 174-175.

14. AJHR 1911 H14A p. 10.

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15. The exchanges are briefly reported in TNZI 40 (1908), 566-567.

16. Walsh gave his address on 8 July 1907; Te Rangihiroa was admitted as a new member of the Wellington Philosophical Society at its next monthly meeting on 5 August and Pomare at the next meeting of the Auckland Institute on 7 August -see TNZI 40, (1908), pp. 567, 562. Another learned society, the Polynesian Society, had included Maori members from its inception in January 1892 -see Journal of the Polynesian Society 1 (1892), 6. 12 17. The Association for the Amelioration of the Condition of the Maori Race, formed at Te Aute in 1891, was succeeded by the Te Aute Students' Association (1896) and in turn by the group which became known as the Young Maori Party (about 1902?). See O.T.J. Alpers "The Young Maori Party" in Maori and Education; Or the Education of Natives in New Zealand and its Dependencies edited by Patrick M. Jackson (Wellington, 1931), pp. 144-151.

18. J.B. Condliffe Te Rangi Hiroa; The Life of Sir Peter Buck (Christchurch, 1971); M.P.K. Sorrenson Na To Hoa Aroha; From Your Dear Friend: The Correspondence between Sir Apirana Ngata and Sir Peter Buck 1925-50 (Auckland, 1986-1988), I, 12-35.

19. Te Rangihiroa "The Passing of the Maori", TNZI 55, (1924), 362-375 (p. 362 -quoting Walsh, 1908, p. 174). Walsh did not live to hear Te Rangihiroa's demolition of his arguments -he died in 1914.

20. New Zealand Herald (Auckland) 17 October 1922 p. 9.

21. Te Rangihiroa, (1924), pp. 363-364, 368.

22. The references Te Rangihiroa made to the rat analogy in his 1922 paper do not make clear whether he recognised it from Maori sources, or simply from his reading of Walsh and other Pakeha sources. His further comments in 1940 suggest the latter. See Te Rangihiroa (1924) pp. 363, 368; and his preface to I.L.G. Sutherland The Maori People Today; A General Survey [Wellington, 1940], p. 14.

23. Te Rangihiroa (1924), p. 363.

24. For one example see J.T. Pinfold Fifty Years in Maoriland [London 1930], quoted by Angela Ballara Proud to be White? A Survey of Pakeha Prejudice in New Zealand (Auckland, 1986), p. 86. There were many other assertions of the disappearance of the race in the restricted sense of "pure-blooded" Maori.

25. Raymond Firth Primitive Economics of the New Zealand Maori (London, 1929), p. 467 gave "the oft-quoted saying" to indicate "the burden of their thought". For some later

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references by historians see Chapter 2.6 footnote 80.

26. Rod McDonald Te Hekenga; Early Days in Horowhenua [Palmerston North, 1929] p. 191; Alexander McDonald (unrelated to Rod McDonald) "Reminiscences", typescript in Alexander Turnbull Library, Wellington (see pp. 48, 80) -quoted in turn by John Miller Early Victorian New Zealand; A Study of Racial Tension and Social Attitudes 1839-1852 (London, 1958), p. 104, and Harry Orsman and Jan Moore Heinemann Dictionary of New Zealand Quotations (Auckland, 1988), p. 258.

27. Te Rangihiroa also made the calculation from Buller's 1884 reference to "Dr Featherston...just twenty-eight years ago" and gave the date of 1856 which has been followed ever since.

28. I.L.G. Sutherland The Maori Situation (Wellington, 1935), p. 40; The Maori People Today; a general survey [Wellington, 1940], pp. 27-28.

29. Their name is legion. For a few of the more notable examples see Keith Sinclair "The aborigines protection society and New Zealand" (unpublished M.A. dissertation, Auckland University, 1946) p. 114 (citing Sutherland, 1940) and The origins of the Maori Wars (Wellington, 1957) p. 11 (citing Te Rangihiroa); D.I. Pool The Maori Population of New Zealand 1769-1971 (Auckland, 1977), p. 191 (citing Buller); Angela Ballara Proud to be White? A Survey of Pakeha Prejudice in New Zealand (Auckland, 1986), p. 83 (citing Sutherland, 1940).

30. See A.G. Price White Settlers and Native Peoples (Melbourne, 1950), p. 165 (citing Sutherland, 1940); M. Banton Race Relations (London, 1967), p. 89 (citing Price).

31. Alfred Domett Ranolf and Amohia; A South-Sea Day Dream (London, 1872) canto XV (V) (pp. 239-240). Domett's image of the native bird is coloured more by imagination than observation; the native robin Petroica australis is white-breasted, not red. He altered the description to a more accurate "grey-coated" in his second edition (1883, II, 21).

32. James Drummond Our Feathered Immigrants (Wellington, 1907), pp. 1-2.

33. On Drummond, see C.A. Fleming George Edward Lodge; The Unpublished New Zealand Bird Paintings (Wellington, 1982), pp. 3-8.

34. Buller A History of the Birds of New Zealand first edition, (London, 1873), p. 93. See the discussion of such imagery in Chapter 2.4.

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35. Deuteronomy 8. 8-9, quoted on the frontispiece of one of the Department's first publications: James Cowan New Zealand, or, Ao-tea-roa (the long bright world: its wealth and resources, scenery travel routes, spas, and sport (Wellington, 1907). On the "Arcadian" image of New Zealand see Miles Fairburn The Ideal Society and Its Enemies; The Foundations of Modern New Zealand Society 1850-1900 (Auckland, 1989), pp. 19-40.

36. See for instance Carol Lansbury Arcady in Australia; The Evocation of Australia in Nineteenth Century English Literature (Melbourne, 1970).

37. AJHR 1907 H2, p. 7; AJHR 1906 H2, p. 4.

38. AJHR 1901 H15, p. 2.

39. John Cullen (1851-1939) was born in Ireland; in New Zealand he rose through the ranks of the police from constable to Commissioner. He is most remembered for his heavy-handed approach in confrontations with striking mineworkers in Waihi in 1912 and Rua Kenana and his community at Maungapohatu in 1916 (in which a striker and two Maori were killed). See Stanley Roche The Red and the Gold; an Informal Account of the Waihi Strike, 1912 (Auckland, 1982); Judith Binney, Gillian Chaplin and Craig Wallace Mihaia: The Prophet Rua Kenana and His Community at Maungapohatu (Wellington, 1979).

40. A.G. Bagnall "Heather at Tongariro; A study of a weed introduction", Tussock Grasslands and Mountain Lands Institute. Review 41 (1982), 17-21. The quotations are from Cullen's reports and correspondence; Bagnall gave no detailed references in this "summary" article, intending to publish a full version in his work on Tongariro but died before this was completed. Cullen's grouse did not survive but the 3000 acres (1200 ha) of heather planted by his police and prison labour is still flourishing.

41. Bagnall (1982), pp. 19-21.

42 AJHR 1906 H2, p. 5.

43. James Drummond Our Feathered Immigrants; Evidence For and Against Introduced Birds in New Zealand (Wellington, 1907).

44. Drummond (1907), p. 17.

45. Keith Sinclair A Destiny Apart; New Zealand's Search for a National Identity (Wellington, 1986), pp. 104-107.

46. Drummond (1907), pp. 24-25.

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47. W.T.L. Travers "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilized Races. Part III" TNZI 3 (1871), pp. 326-336.

48. Petrie's comments were published as an appendix to G.M. Thomson "Plant-acclimatisation in New Zealand," TNZI 33 (1901), 313-323 (see p. 322). Hooker's 1860 argument is referred to in Chapter 2.2 above. See also Alfred Russel Wallace Island Life: or, the Phenomenon and Causes of Insular Faunas and Floras... (London, 1880), pp. 478-479.

49. L. Cockayne "Observations concerning Evolution, derived from Ecological Studies in New Zealand", TNZI, 44, (1912), 1-50 (pp. 32-34); see also his New Zealand Plants and Their Story 2nd edition, [Wellington, 1919], pp. 146-147. On Cockayne see A.D. Thomson The Life and Correspondence of Leonard Cockayne (Christchurch, 1983).

50. See, for instance, the repetition of the old idea that "in New Zealand the old established vegetation has been expelled by invaders that have come in with the white man" in E. Rubel "The replaceability of ecological factors and the law of the minimum" Ecology 16 (1935), 336-341, and its rejection by the New Zealand scientist H.H. Allan in his "Indigene Versus Alien in the New Zealand Plant World Ecology 17 (1936), 187-193.

51. For a clear analysis of the process and its costs in terms of human labour and animal suffering see J.D. Gould The Grass Roots of New Zealand History; Pasture Formation and Improvement, 1871-1911 (Palmerston North, 1974). See also Rollo D. Arnold, "The Opening of the Great Bush, 1869-1881; A Social History of the Bush Settlements of Taranaki, Hawke's Bay and Wellington" (unpublished Ph.D. dissertation, Victoria University of Wellington, 1971).

52. George M. Thomson The Naturalisation of Animals & Plants in New Zealand (Cambridge, 1922), pp. 379, 441, 528.

53. The Auckland Acclimatisation Society, for instance, offered 6d per head from its first year (1867), when it paid out on 659; fifty years later (at 3d a head) the annual tally exceeded 20,000 -see Clifton R. Ashby The Centenary History of the Auckland Acclimatisation Society [Auckland, 1967], pp. 94-103.

54. Thomson (1922) gives an extensive list of both the successful and the unsuccessful introductions.

55. D.I. Pool The Maori Population of New Zealand 1769-1971 (Auckland, 1977) pp. 119-26, 140-3, 209.

56. Buller "Notes on Mus maorium (Hutton), with Exhibition of Specimen" TNZI 25 (1893), 49-50; Taylor White "Remarks

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on the Rats of New Zealand" TNZI 27 (1895), 240-261 (pp. 245-246).

57. Elsdon Best, "Maori Forest Lore: Being some Account of Native Forest Lore and Woodcraft, as also of many Myths, Rites, Customs, and Superstitions connected with the Flora and Fauna of the Tuhoe or Urewera District. -Part II" TNZI 41 (1909), 231-285 (p. 242).

58. I.A.E. Atkinson, "Spread of the Ship Rat (Rattus r. rattus L.) in New Zealand" Journal of the Royal Society of New Zealand, 3, (1973), 457-472; R.H. Taylor "What limits kiore (Rattus exulans) distribution in New Zealand?" New Zealand Journal of Zoology 2, (1975), 573-477.

59. Such instances have received comparatively little attention and are not well documented. Possible zoological examples include the establishment of the weka Gallirallus australis on Macquarie Island, the crab Cancer novaezelandiae in Australia, the barnacle Elminius modestus on the Atlantic coast of Europe, and the thrips Nesothrips propinquus and Hoplothrips semicaecus which are widely distributed in Europe and along the Old World sea-trading routes. In some of these instances doubts have been expressed whether the species involved was truly a New Zealand native or a more cosmopolitan species which happened to be first described from New Zealand. On the Weka see R.A. Falla "Birds" in B.A.N.Z. Antarctic Research Expedition 1929-1931. Reports (Adelaide, 1937) Series B, II, 1-288 (19-23); J.S. Cumpston Macquarie Island (Melbourne, 1968), pp. 82, 205; on the crab and barnacle see Geerat J. Vermeij Biogeography and Adaptation; Patterns of Marine Life (Cambridge, Massachusetts, 1978), pp. 226-227; on the thrips see Laurence A. Mound "Natural and disrupted patterns of geographical distribution in Thysanoptera (Insecta)" Journal of Biogeography 10 (1983), 119-133, and Laurence A. Mound and Annette K. Walker "Tubiliferae (Insecta: Thysanoptera)" Fauna of New Zealand 10 (1986), pp. 32-33, 64-65.

60. New Zealand Company Twenty-third Report of the Court of Directors of the New Zealand Company [London, 1847], p. 2.

61. A.J. Harrop New Zealand and England from Tasman to the Taranaki War... [London, 1926], p. xv.

62. W.T.L.Travers "On the Changes effected in the Natural Features of a New Country by the Introduction of Civilised Races" TNZI 2, (1869), 299-330 (p. 313).

63. Both the "importance to science" and the "reproach of posterity" arguments were used by Buller in the Onslow memorandum (AJHR 1892 H6).

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64. See James Drummond Feathered Friends of the Bush [Christchurch, 1907].

65. Keith Sinclair Imperial Federation; A Study of New Zealand Policy and Opinion 1880-1914 (London, 1955); A History of New Zealand (Harmondsworth, 1959), pp. 191-196, 208-227, 295-301; "The Origin of the Species", in The Summer Book 2, compiled by Bridget Williams, Roy Parsons and Lindsay Missen, (Wellington, 1983), pp. 27-32; The Native Born; The Origins of New Zealand Nationalism (Palmerston North, 1986); A Destiny Apart; New Zealand's Search for National Identity (Wellington, 1986); "The beginnings of a colonial nationalism: Richard Jebb in New Zealand, 1899" in The Rise of Colonial Nationalism edited by John Eddy and Deryck Schreuder (Sydney, 1988), pp. 111-130. See also P.J. Gibbons "A Note on Writing, Identity, and Colonisation in Aotearoa" Sites 13 (1986), 32-38; David Novitz and Bill Willmott Culture and Identity in New Zealand (Wellington, 1989); J.O.C. Phillips A Man's Country? The Image of the Pakeha Male -A History (Auckland, 1987).

66. Sinclair, A Destiny Apart p. 42.

67. Douglas Cole "The Problem of 'Nationalism' and 'Imperialism' in British Settlement Colonies" Journal of British History 10 (1971), 160-182.

68. See Cole (1971), pp. 178-179; Yi-Fu Tuan Topophilia; A Study of Environmental Perception, Attitudes, and Values (Englewood Cliffs, New Jersey, 1974), pp. 100-102.

69. Sinclair (1955) refers in this context to "local" or "national", and "imperial" or "British" patriotisms.

70. Ernest Dieffenbach Travels in New Zealand (London, 1843), II, 174-175.

71. Quoted by Sinclair A Destiny Apart p. 6.

72. M.H. Holcroft The Deepening Stream; Cultural Influences in New Zealand (Christchurch, 1940), p. 23.

73. Brian Harrison "Animals and the State in nineteenth-century England" English Historical Review 88 (1973), 786-820; John Passmore "The Treatment of Animals," Journal of the History of Ideas 36 (1975), 195-218; Eugene C. Hargrove "Foundations of Wildlife Protection Attitudes", Inquiry, 30 (1986), 3-31.

74. After Yellowstone National Park was established by the United States in 1872, similar parks were established in New South Wales (1879), Canada (1885), South Australia (1891), New Zealand (1894), South Africa (1897), Sweden (1909), Switzerland (1914), Spain (1918). In the United States

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Yellowstone National Park was closed to hunting in 1894. Official nature reserves or game reserves were established also in Canada (1887), Victoria (1887), New Zealand (1891), Transvaal (1892), Kenya (1899), Russia (1916). In Britain reserves were established from 1895 by the (private) "National Trust for Historic Sites and Natural Scenery". See J. Harroy "The Development of the National Park Movement" in The Canadian National Parks: Today and Tomorrow edited by J.G. Nelson and R.C. Stace (Calgary, 1969), pp. 17-34; J.G. Moseley "Towards a History of Conservation in Australia" in Australia as Human Setting edited by A. Rapoport (Sydney, 1972), pp. 136-154; Eric Duffey Nature Reserves and Wildlife (London, 1974); Richard Fitter and Peter Scott The Penitent Butchers: The Fauna Preservation Society 1903-1978 (London, 1978); Janet Foster Working for Wildlife: The Beginning of Preservation in Canada (Toronto, 1978); Derek Whitelock Conquest to Conservation: History of Human Impact on the South Australian Environment (Adelaide, 1985); Douglas G. Pearce and Gerard Richez "Antipodean Contrasts: National Parks in New Zealand and Europe" New Zealand Journal of Geography 43 (1987), 53-59.

75. Roderick Nash Wilderness and the American Mind (New Haven, 1967), pp. 67-83.

76. James Drummond Feathered Friends of the Bush [Christchurch, 1907], p. 3.

77. Drummond (1907), p. 18.

78. Thomas Mackenzie, NZPD 96 (1896), p. 167.

79. Buller A History of the Birds of New Zealand second edition (London, 1888), I, p. x -reporting his own comment to Alfred Newton.

80. William Yate An Account of New Zealand... (London, 1835), pp. 62, 63. See also the similar sentiments in Richard Hodgskin A Narrative of Eight Months' Sojourn in New Zealand (Coleraine, 1841), p. 28.

81. See, for instance, Richard Taylor Te Ika A Maui, Or New Zealand and its Inhabitants (London, 1855), pp. 400, 401, 404; Buller A History of the Birds of New Zealand first edition (London, 1873), p. 67, second edition (1889), I, pp. 13, 103. It is perhaps a reflection of fashion in aesthetic taste that the birds described as "beautiful" were almost all larger species with a plumage mainly of glossy black with contrasting white or other colour.

82. Buller (1873), p. 159 -repeated in Buller (1888), I, 231.

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83. For instance, Seddon's comment about preserving "the beautiful birds of the country" (New Zealand Times 9 September 1895), discussed in Chapter 5.10 above.

84. W. Tyrone Power Sketches in New Zealand, with Pen and Pencil (London, 1849), p. 73.

85. Charles Hursthouse New Zealand, Or Zealandia, the Britain of the South (London, 1857), I, 120. See also Alfred Domett Ranolf and Amohia: A South-Sea Day-dream (London, 1872) p. 232: "The kiwi -strange brown-speckled would-be beast".

86. Drummond (1907), p.4.

87. Auckland Weekly News 20 December 1905, reproduced in Keith Sinclair "The Origin of the Species" in The Summer Book 2 compiled by Bridget Williams, Roy Parsons and Lindsay Missen (Wellington, 1983), 27-32 (p. 29). On the influence of the 1905 rugby team on the New Zealand image see J.O.C. Phillips "Rugby, War and the Mythology of the New Zealand Male" New Zealand Journal of History 18 (1984), 83-103.

88. See also Sinclair (1983), p. 30.

89. New Zealand Centennial News no. 6 (25 February 1939), p. 7.

90. R.M. Startup Postal Stationery of New Zealand (Auckland, 1966), pp. 11-12.

91. The following Scenery Preservation Societies have been traced through their publications and their entries in The Cyclopedia of New Zealand (Wellington and Christchurch, 1897-1908): Dunedin and Suburban Reserves Conservation Society (founded by Alexander Bathgate, 1888); Scenery Preservation Societies in Taranaki (1891) Wellington (1895), Nelson (1895), Auckland (1899); Christchurch Beautifying Association (founded by Leonard Cockayne, 1897).

92. For one example of the latter see P.J. Gibbons Astride the River; A History of Hamilton (Hamilton, 1977), pp. 177-179, 212-214.

93. Quotations from the objects of the Wellington and Taranaki Scenery Preservation Societies respectively (The Cyclopedia of New Zealand I, 436; VI, 76).

94. An "old Taranaki saying" quoted by J.O.C. Phillips "Fear and Loathing in the New Zealand Landscape", in New Zealand Where Are You? Proceedings of the New Zealand Institute of Landscape Architects' 1981 Conference (Wellington, 1981), pp. 11-16 (p. 13).

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95. National Water and Soil Conservation Authority Arbor Day (Wellington, 1984); Alexander Bathgate A Plea for the Establishment of Arbor Day [Dunedin, 1891]; N.Z. Gazette 1892, p. 951.

96. Bathgate, quoted in National Soil and Water Conservation Authority, (1984), p. [4].

97. T.S. Palmer Legislation for the Protection of Birds (Washington, 1902), pp. 67-68.

98. But note the promotion of a "Bird Month" by the New Zealand Native Bird Protection Society in the 1930s (Johannes C. Andersen "A Bird Month" Birds July 1931, pp. 9-10).

99. See Lenore Oakley Harry Ell and His Summit Road, A Biography of Henry George Ell (Christchurch, 1960) pp. 29-32; Paul R. Dingwall "Harry Ell's vision in nature conservation" Landscape 10 (1981), 23-27.

100. Quoted from the long title of the Act. Its passing is discussed by David Thom Heritage; The Parks of the People (Auckland, 1987), pp. 119-121; See also M.M. Roche "Securing Representative Areas of New Zealand's Environment: Some Historical and Design Perspectives" New Zealand Geographer 37 (1981), 73-77, and "Scenery Preservation and flora and fauna reserves in late nineteenth century New Zealand" New Zealand Environment 47 (1985), 15-17.

101. NZPD 126 (1903), 706. The term "beauty-spots" was used by many speakers in the debate, including Seddon.

102. NZPD 126 (1903), 711.

103. Scenery Preservation Act 1903, clause 4(1).

104. This particular title was produced by Frank Duncan & Co, [Auckland, 1919?].

105. P. Walsh, "Public Ferneries: A Suggestion" TNZI 26 (1894), 621.

106. See Angela Ballara Proud to be White? A Survey of Pakeha Prejudice in New Zealand (Auckland, 1986); Leonard Bell The Maori in European Art (Wellington, 1980).

107. TNZI 17 (1885), 444).

108. Buller to Hooker 8 November 1899, New Zealand Letters: 1854-1900 vol. 174: 238, Archives, Royal Botanic Gardens, Kew.

109. In 1901 Buller offered his material to Augustus Hamilton for a supplementary volume to Hamilton's The Art Workmanship

of the Maori Race in New Zealand (Wellington, 1896-1900). Hamilton did not take up that offer, but he did apparently extract assurances that Buller's collection of artefacts would be deposited in the proposed National Maori Museum in Wellington. In 1911, after Buller's death the collection was donated to the Dominion Museum, Wellington, by his son. See Buller to Hamilton 15 July 1901, Box 96, folder (iii), archives of National Museum, Wellington; Percy Buller to "Tawa" [Gilbert Mair] 26 October 1901, private collection (Mrs R.M. Alison, Auckland); Hamilton to Buller 30 November 1903 MS papers 48, folder 22, Alexander Turnbull Library, Wellington; AJHR 1911 H27.

110. Buller's phrase here invites comparison with John White's The Ancient History of the Maori, His Mythology and Traditions (Wellington, 1887-1889) -the publication of which had just been terminated. Buller's comments to Grey suggest that his conception was rather different from White's collation of Maori oral history.

111. Buller to Grey 28 October 1890 GL:NZ B44(12) Auckland Public Library.

112. Felix Keesing The Changing Maori (New Plymouth, 1928); James Cowan The Maori Yesterday and Today (Auckland, 1930); I.L.G. Sutherland The Maori Situation (Wellington, 1935), and The Maori People Today (Wellington, 1940). Also see O.T.J. Alpers "The Young Maori Party" in Maori and Education; Or the Education of Natives in New Zealand and its Dependencies edited by Patrick M. Jackson (Wellington, 1931), pp. 144-151 (written in 1902).

113. See for instance R.F. Irvine and O.T.J. Alpers The Progress of New Zealand in the Century (London, 1902), chapter 3 ("The Maori"); Edward Tregear The Maori Race (Wanganui, 1904); Johannes C. Andersen Maori Life in Ao-tea (Christchurch, 1907); James Cowan The Maoris of New Zealand (Christchurch, 1910); Elsdon Best The Maori (Wellington, 1924), The Maori As He Was (Wellington, 1924); T.E. Donne The Maori Past and Present (London, 1927). For a Maori perspective on the same subject see Makereti ["Maggie Papakura"] The Old-time Maori (London, 1938).

114. AJHR 1903 H2, p. vi.

115. Bell (1980), pp. 70-94.

116. A. Hamilton The Art Workmanship of the Maori Race... (Wellington, 1896-1900); see also the series of books and monographs produced by Elsdon Best, for instance Stone Implements of the Maori (Wellington, 1912). The use of the term "classic" or "classical", which is still used by archeologists in reference to Maori culture of the period

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prior to European contact, was current by the early 1900s, if not earlier (see Irvine and Alpers, (1902), p. 23).

117. Quoted from the long title of Augustus Hamilton Notes...in the Matter of the National Maori Museum... [Dunedin, 1901]. See also the description of a carved pataka acquired by the Auckland Museum in 1906 as "an adequate memorial to the Maori race", New Zealand Herald 5 July 1906, quoted by Angela Ballara, Proud to be White? A Survey of Pakeha Prejudice in New Zealand (Auckland, 1986), p. 86.

118. Compare Murray L. Wax, "The White Man's Burdensome "Business": A Review Essay on the Change and Constancy of Literature on the American Indians", Social Problems 16, (1968), 106-113 (p. 108).

119. James Cowan Official Record of the New Zealand International Exhibition... (Wellington, 1910), pp. 141-145.

120. Cowan (1910), p. 160.

121. Cowan (1910), p. 310.

122. J.C. Firth Nation Making; A Story of New Zealand; Savagism v. Civilization (London, 1890), p. [v].

123. AJHR 1897 I3C, p. 3; see Chapter 5.10.

124. Elsdon Best Forest Lore of the Maori (Wellington, 1942), pp. 1-2. Most of the material in this book was compiled from papers Best read before the Wellington Philosophical Society in 1907-1908 but the passage quoted was evidently written later.

125. NZPD 142 (1907), p. 790.

126. NZPD 142 (1907), 785-786, 790.

127. W.M. Hamilton "Little Barrier Island", N.Z. Journal of Science and Technology, 17, (1935), 465-495 (p. 476); subsequently reprinted in Department of Scientific and Industrial Research Bulletin 54 (1937), and (with minor changes -"Maoris" for "Native owners of land") 137 (1961). For a similar view that the "scruples of the compulsory purchase...can be forgotten in the excellence of the motive" see Auckland Sun 8 March 1930.

128. On colonists' attitudes to the Treaty in this period see Claudia Orange The Treaty of Waitangi (Wellington, 1987), pp. 226, 234-236.

129. Quoted from the "official" English text; for this and other versions and translations, including the Maori version originally signed see Orange (1987), pp. 257-266.

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130. Apirana T. Ngata "Maori Land Settlement" in The Maori People Today; a General Survey edited by I.L.G. Sutherland, (Wellington, 1940), pp. 96-154 (pp. 111-112). The August 1989 case is reported in "Maori pigeon hunting claim fails" New Zealand Herald (Auckland) 17 August 1989 section 1, p. 1.

131. NZPD 103 (1898), 450.

132. Supplement to the "Birds of New Zealand" (London, 1905), I, 69. Of the three specimens obtained earlier two had gone to the British Museum and the other to Dresden -Buller "On the Ornithology of New Zealand" TNZI 31 (1899), 1-37 (p. 3).

133. Hector to Colonial Secretary's Office, 23 September 1898, file IA1 1898/2511, National Archives, Wellington.

134. Buller occasionally referred to the "national collection" in the same sense -see Buller A History of the Birds of New Zealand first edition (London, 1873), p. xiv.

135. E. Ray Lankester to Lord Ranfurly, 13 October 1898, file IA1 1898/2511, National Archives, Wellington.

136. Richard Henry's involvement is described by Susanne Hill and Richard Hill Richard Henry of Resolution Island (Dunedin, 1987), pp. 263-264; the whole collection is described in W.R. Ogilvie-Grant "On the Birds procured by the Earl of Ranfurly in New Zealand and the adjacent Islands," Ibis (series 8) 5, (1905), 543-598.

137. Quoted from J.N. Findlay's essay on "The Imperial Factor in New Zealand", Tomorrow 22 December 1937, reprinted in Verdict on New Zealand edited by Desmond Stone (Wellington, 1959), pp. 138-142 (p. 140). Findlay was born in South Africa and in 1937 was Professor of Philosophy of the University of Otago.

138. Buller "Notes on New Zealand Ornithology, with an Exhibition of Specimens" TNZI 28 (1896), 326-358 (pp. 327, 336).

139. Evening Post 13 June 1913, cutting in file IA 46/18/4 pt 1, National Archives, Wellington.

140. For an example with relevance to New Zealand, see Joseph Banks's musings in 1770 on the native life and native people of the country -in J.C. Beaglehole The Endeavour Journal of Joseph Banks: 1768-1771 (Sydney, 1962) II, 20.

141. Raymond Williams "Ideas of Nature" in Ecology, the Shaping Enquiry edited by J. Benthall (London, 1972), pp. 146-164; John Passmore "Attitudes to Nature" in Nature and Conduct edited by R.S. Peters (London, 1975), pp. 251-264,

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and Man's Responsibility for Nature; Ecological Problems and Western Traditions second edition (London, 1980). See also Keith Thomas Man and the Natural World; Changing Attitudes in England 1500-1800 (London, 1983); Frank N. Egerton "Changing Concepts of the Balance of Nature" Quarterly Review of Biology 48 (1973), 322-350.

142. Eugene C. Hargrove "Foundation of Wildlife Protection Attitudes", Inquiry 30 (1987), 3-31 (pp. 15-18).

143. Hooker had been privy to Darwin's evolutionary ideas from about 1844 -see W.B. Turrill Joseph Dalton Hooker; Botanist, Explorer and Administrator (London, 1963), pp. 75-77.

144. Joseph Dalton Hooker The Botany of the Antarctic Voyage of H.M. discovery ships Erebus and Terror...II. Flora Novae-zelandiae (London, 1853), I, p. xx.

145. Report of the Meeting of the British Association for the Advancement of Science 27 (1888), p. 732.

146. Buller (1888), I, p. x; AJHR 1892 H6, p. [1].

147. Spectator (London) 24 September 1892, p. 416. The source of Wright's poetic quotation has not been identified.

148. In June 1989 Don Merton of the New Zealand Wildlife Service was awarded the "Queen's Service Medal for Public Service" (see the honours list and Merton's comments, New Zealand Herald (Auckland), 17 June 1989 p. 10.

149. TNZI 1 (1869), p. 14 (spelling as in original).

150. James Drummond Feathered Friends of the Bush [Christchurch, 1907], p. 3.

151. See for instance Buller, "Further Notes on the Birds of New Zealand" TNZI 25 (1893), 63-88 (p. 65-66); Supplement to the "Birds of New Zealand" (London, 1905), I, 199.

152. Charles Robinson, report dated 31 March 1894, file Tol 1901/197, National Archives, Wellington.

153. AJHR 1907 C6, p. 2.

154. James McKenzie, Under-Secretary of Lands, 1918, quoted by L.W. McCaskill A History of Scenic Reserves in New Zealand (Wellington, 1972), p. 4; see also pp. 1-3.

155. William Pember Reeves New Zealand and Other Poems (London, 1898), pp. 4-8.

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156. The revised final stanza (on a slip tipped-in at p. 8) is the version quoted in early anthologies such as W.F. Alexander and A.E. Currie New Zealand Verse (London, 1906), and O.T.J. Alpers College Rhymes; an Anthology of Verse Written by Members of Canterbury College (Auckland, 1923). Reeves revised the poem again before reprinting it in The Passing of the Forest and Other Verse (London, 1925) pp. 9-12: "Ah, bitter price to pay/For Man's dominion -beauty swept away!"

157. G.H. Scholefield New Zealand in Evolution, Industrial, Economic and Political... (London, 1909), p. vii.

158. See Chapter 5.4. For an example of nineteenth-century United States usage see the papers on "Conservation and Practical Forestry" presented to the American Forestry Congress held in Cincinnati, April 1882, cited in Andrew Denny Rodgers III Bernhard Eduard Fernow; A Story of North American Forestry (Princeton, 1951), pp. 56-57; see also Gifford Pinchot Breaking New Ground (New York, 1947), p. 326.

159. Pinchot (1947), pp. 322-326; Pinchot "How Conservation Began in the United States" Agricultural History 11 (1937), pp. 255-265; see also J. Leonard Bates "Fulfilling American Democracy: The Conservation Movement, 1907-1921" Mississipi Valley Historical Review 44 (1957), pp. 29-57.

160. New Zealand Forest Service Conservation Policy and Practice (Wellington, 1970), p. 5, Forestry Is Conservation (Wellington, 1974).

161. AJHR 1892 H6, p. [1].

162. H. Guthrie-Smith Bird Life on Island and Shore (Edinburgh, 1925), p. viii.

163. H. Guthrie-Smith Tutira; the Story of a New Zealand Sheep Station third edition, (Edinburgh, 1953), p. xiii (Preface, dated 1940).

164. Compare clause 2 in the Conservation Bill 1986 and the Conservation Act 1987. The definition in the latter closely follows that suggested by the Native Forests Action Council in Maruia, 11 February 1987, p. 1.

165. John Passmore Man's Responsibility for Nature; Ecological Problems and Western Traditions second edition, (London, 1980), pp. 73, 101.

166. O.H. Frankel and Michael E. Soulé Conservation and Evolution (Cambridge, 1981), p. 4.

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167. See for instance Roland C. Clement "The Relationship of Conservation and Preservation" Environmental Ethics 9 (1987), 285-286 -responding to Bryan G. Norton "Conservation and Preservation: A Conceptual Rehabilitation" Environmental Ethics 8 (1986), 195-220; also Bates (1957), pp. 29-30; Orris C. Herfindahl What Is Conservation? (Washington, D.C., 1961); Thomas R. Dunlap "Conservationists and Environmentalists; An Attempt at Definition" Environmental Review 4 (1980), 29-31.

168. John A. Hayward Environmental Management; Science or Ethics (Dunedin, 1988), pp. 2-6. Hayward's is an extreme case but see also Peter D.H. Allen "The Conservation Movement in New Zealand" (unpublished B.A. Hons. dissertation, University of Waikato, 1967), which discusses Pinchot at length but does not mention T.H. Potts.

169. See Graeme Wynn, "Conservation and Society in Late Nineteenth-Century New Zealand" New Zealand Journal of History 11 (1977), 124-136, and "Pioneers, politicians and the conservation of forests in early New Zealand" Journal of Historical Geography 5 (1979), 171-188; M.M. Roche Forest Policy in New Zealand; An Historical Geography (Palmerston North, 1987); David Thom Heritage; The Parks of the People (Auckland, 1987).

170. AJHR 1892 H6, p. 2.

171. George to Grey, 3 July 1880, published in G.M. Fowlds An Interesting Correspondence; Sir George Grey and Henry George (Auckland, 1967), pp. 8-9.

172. Hayward (1988), pp. 3-6; on Muir and Pinchot see also Stephen Fox John Muir and His Legacy: The American Conservation Movement (Boston, 1981).

173. "Robin Hyde" [=Iris Wilkinson] The Godwits Fly (London, 1938), here quoted from the reprinted edition (Auckland, 1970). The description "autobiographical-novel" is Wilkinson's own (introduction, p. x).

174. The Godwits Fly (1970), p. 32.

175. Keith Sinclair William Rember Reeves; New Zealand Fabian (London, 1965), p. 285.

176. E.H. McCormick Letters and Art in New Zealand (Wellington, 1940), p. 161.

177. In 1909 Mackenzie became Minister in charge of both Scenery Preservation and of Tourist and Health Resorts, before briefly becoming Prime Minister in 1912.

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178. The "Three Castles" Book of New Zealand Birds [Dunedin, 1930], preface. The illustrations are coloured reproductions of the chromolithographs from Buller's A History of the Birds of New Zealand second edition (London, 1888).

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