Shallow Heritage and Environmental Impact; Legacies of Dairying in the Waikato, New Zealand

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IGU Conference Presentation; Commission on Sustainable Rural Systems
Session in Building B5, 9:00-10:45, Wednesday, 20 August, 2014
Revealing the heritage detail

While Māori historical occupance of Waikato stretches back over perhaps 700 years, European (or Pakeha) history is limited to perhaps 150 years. It is the history of dairying in New Zealand that we explore.
Types of ‘evidence’

Text, Map, Image, Video, Oral, Performance

<table>
<thead>
<tr>
<th>Current</th>
<th>Future</th>
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<tbody>
<tr>
<td><strong>Text</strong></td>
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<tr>
<td>Flat and searchable, word-based evidence like Papers Past, Footprints, published local histories.</td>
<td>On-line and paper based</td>
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<td><strong>Video</strong></td>
<td><strong>Images</strong></td>
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<td>Screen-based and hyper-linked</td>
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<td><strong>Images</strong></td>
<td><strong>Other</strong></td>
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<td>Maps</td>
<td>GIS</td>
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<td>Other</td>
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150 years of heritage detail for Waipa District

Revealing heritage to contemporary and future generations; the next 150 years
Heritage detail in text form

Flat files – tremendous volumes of hand-written or published materials with casual and formal purpose of recording heritage detail.

Value of national, region and local libraries and the knowledge staff who given willingly of their time.
The consolidation era – butter and cheese production figures from 1931-1933. Waipa data extracted from records held in the National Archives in Wellington.

<table>
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<tr>
<th>Location</th>
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<th>1933 Tons</th>
<th>1932/3 Price</th>
<th>1933/4 Price</th>
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<td>Waitoa</td>
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<td>3087</td>
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<td>Waharoa</td>
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<td>1429</td>
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<tr>
<td>Matangoi</td>
<td>1292</td>
<td>1620</td>
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<tr>
<td>Te Awamutu</td>
<td>1152</td>
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<td>Frankton Jn.</td>
<td>724</td>
<td>725</td>
<td>25/-</td>
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Revealing the cartographic heritage detail
1864 One of the earliest maps, showing the colonial cartography of the advance up the Waipa river and ultimately to Orakau. The map recognises the Māori fortifications at Pāterangi and PikoPiko.
... as uncomfortable as the content might be, the cartographic heritage is impressive
One of the most instructive maps of the New Zealand Survey
North Island of New Zealand Shewing Counties, 1897. S Percy Smith, Surveyor General
Note the use of Geographic Co-ordinates and the scale of one inch to 10 miles.
Abolition of Provinces (1876) produces the first identifiable Waipa County and the county towns of New castle, Hamilton, Cambridge and Alexandra

In 1877.
Before the local government reorganisation in 1989, Waipa County maps looked like this.
Contemporary maps of Waipa District are indicated in this reference map.

The map of Waipa that most people see in 2014: the ubiquitous Google source.
Uncovering the mapping heritage requires some image processing. If we are to ‘relate’ maps and their detail, we need a common reference system, and Geographic Information Systems provide the toolbox. Starting with the original lat./long. version of 1897...
The current standard is the NZ Transverse Mercator, based on the NZ 2000 Geodetic datum. The projected co-ordinate system gives us recognisable measurements in metres rather than geographic co-ordinates in lat./long.

‘Rubber sheeting to get an overlay on a common base. GIS tools
Richness of the image files held in local, regional and national collection like the National Library in Wellington
Harapepe Creamery

Ngaruawahia Creamery
Survey plans need to be cited for each property where individual title are issued. The Institute of Cadastral Surveyors creates a searchable database of PDS and SO records.
Te Rauamoa Creamery in a desolate environment

First N.I. Factory
Pekerau Road

Monovale Creamery
What does the cartographic heritage reveal about the Waikato, and about Waipa region
In the Waikato region there are parts of Waikato and Matamata-Piako districts that have similar patterns of pre-industrial, then local area and regional development in the dairy industry. It is not until the Diary Industry Restructuring Act (DIRA) that we see national industrial base.
Some creameries (like Te Rahu, Puahue, Kihikihi) are missing, and some need to be relocated on the basis of NZCS Institute data. The ‘pattern’ won’t change.
Environmental determinants as well as history have a role to play.
With hindsight, and a different set of historical conditions, we can see the great environmental stress involved in the conversion of land under indigenous vegetation to the pasture we see today. It is clear that the environmental challenges facing the dairy industry today are far greater than the economic ones.

But our focus is on using heritage information to represent what happened in Waipa. The next two slides will suggest there were four stages in the development of dairying in the region. The 50,000 words of heritage texts collected for the region’s dairy industry for this project will substantiate this case.
1. Pre-industrial. **1841 1882.** Domestic butter and cheese production from local farms traded locally. Holstein-Friesian and Jersey animal stock. Good personal records, statements. Refrigerated exports from 1882 changed what was possible.

2. Creameries, butter and cheese factories. **1882-1920.** Most factories owned co-operatively by farmers by 1900. Horse and dray movement off-farm of whole milk to produce cheese and/or butter, but also cream/skimmed milk in creamery concentration of supply; down the Waipa River or up the railway line from Waipa. Perhaps 20 farms involved per creamery.
3. Industrial phase. **1920- 2000. Milking machines on farm.** With improved technology and greater investment in plant, factories grew in size, and the numbers fell from the national high point of 600 in 1920. Just a few of the old wooden creameries remain in Waipa today. Cream can collection at the farm gate stopped in 1951; tanker collection became the norm.

4. Corporate. **2000 – 2014.** Fonterra’s emergence meant that only one dairy factory survived 100 years from foundation – Tatua. I suggest Fonterra’s legacy likely to be reflection on the increasing creation of mega-farm enterprises, and progressive changes in rural demography with decay or re-occupation of rural housing,
The change in farm enterprise and the processing of farm produce is fundamentally economic, but there are other activities that contribute to rural heritage.

Communities were built around local creameries which were often located a road junctions for convenience of access. Rural schools were built to collect children in the same sort of ‘catchments’.

In time, rural halls provided a focus for the communities social life, and these equally provide part of the dairy industry heritage.
With the exception of the halls in Cambridge and Te Awamutu (historic) all of the community halls shown are in rural settings.
If local schools were added to the locational mix, we would get a good idea of the strength of the historic rural settlement pattern that characterises so much of Waipa.
Unanswered questions

What role did statutory/regulatory environment have on the development of dairying in Waipa?

How influential were Henry Reynolds, Wesley Spragg and Sir William Goodfellow in Waipa?

In terms of age and gender, what has happened to rural Waipa through time, and what will happen next?
We’re time-bound and ‘of an age’; the social and infrastructural character of Waipa is changing, and some vital heritage will not last.

The way we record the heritage detail for posterity is also in flux; at every step we must ask ‘how do I make this information digitally useful for the next 30 years/generation’?
Disappearing heritage; the contribution of dairying to the character of contemporary Waipa

References

Substantial texts


Community documents

Paterangi School 1876-2001