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Urban Beekeepers and Local Councils in Aotearoa, New Zealand: Honeybees Are Valuable Allies in Achieving the Sustainable Development Goals

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Abstract

Beekeeping is a popular hobby, and urban beekeepers make up the largest number of beekeepers in Aotearoa, New Zealand. The ease of purchasing beehives, together with New Zealanders' positive attitude toward honeybees, has meant that hobbyist beekeeper numbers have steadily increased since 2012. The impact of the increasing numbers of urban beehives has meant Aotearoa, New Zealand's local councils have been forced to deal with honeybees and, ultimately, with urban beekeepers. This has, in some instances, led to nonsensical bylaws that the urban beekeepers have largely ignored. However, this article will demonstrate that local councils and, by inference, urban planners should take an alternative approach to urban beekeeping only because urban beekeeping leads to better sustainability outcomes. This article will show how urban beehives and beekeeping link well to the Sustainable Development Goals and provide local councils and urban planners with justifications to engage with urban beekeepers. Finally, this article states that local councils should stop treating honeybees as farm livestock and instead treat them as valuable pollinators and the indicator species that they are.

Keywords

beekeeping and SDGs; councils and honeybees; honeybees and SDGs; urban beekeeping; urban planners and honeybees

1. Introduction

In Aotearoa, New Zealand (AoNZ), beekeeping is a popular hobby even though the number of beehives has declined in recent years (a loss of over 300,000 beehives since 2019). The decline in beehives is largely related to commercial operations that have faced poor honey production due to extreme weather events (Ministry for Primary Industries, 2023; Staff Reporters, 2023). However, where commercial operations are largely found in rural AoNZ, hobbyist beekeepers are mainly found in urban settings. Consequently, it is not uncommon to find beehives in back gardens, on the rooftops of high-rise buildings, and in schools.

Moreover, like many countries in the world, AoNZ recognises the importance of the European honeybee (*Apis mellifera*) for its pollination and impact on food production (both managed and wild ecosystems; Newstrom-Lloyd, 2013). Consequently, the ease of purchasing honeybees, together with the general positive attitude that New Zealanders have toward honeybees because of their benefits on pollination and honey production, has resulted in a steady increase in hobbyist beekeepers across the country.

However, this has resulted in local governments, especially those in urban areas (like cities), being forced to deal with honeybees (this article is limited to the European Honeybee which is kept in beehives). This has led to local government bodies, especially district councils, across AoNZ passing bylaws, which have tried to restrict beehives and, as a result, restrict urban beekeepers. Yet there are good reasons why AoNZ councils should encourage urban beekeeping and that urban planners should be motivated to include beekeeping in their plans. Therefore, this article will provide examples of how urban beekeeping is linked to specific sustainable development goals (SDGs). It will also discuss the challenges faced by urban beekeepers. Finally, it will provide justifications for local district councils to engage with urban beekeepers and why they should treat honeybees as the valuable pollinators and indicator species they are.

The following section discusses the role of local council authorities and urban planners and how they relate to SDGs. So, while it is argued that urban beekeepers can play an important role in helping local councils achieve their SDGs, sustainability reporting (including environmental sustainability reporting) is considered by most as a risk as well as an opportunity (Othman et al., 2017).

2. AoNZ Local Governments, Urban Planners, and SDGs

AoNZ has 11 regional councils and 67 territorial authorities—together, they share the environmental and public infrastructure (development and repairs) for the regions they are responsible for (Local Government Commission, 2024). With the increasing number of hobbyist beekeepers in urban areas, the local councils have faced increasing concerns about honeybees. Moreover, the public's perception (those who are not beekeepers) of honeybees' trend towards fear and anxiety is exacerbated by social media. For example, in Auckland's suburb of Ponsonby, it was reported in the media that "thousands of bees swarmed the skies" (Doyle, 2023) while on X (Twitter) it was reported that "the bees are angry and have taken to the streets in huge numbers" (Morgandonoghue, 2023). In a submission to the Waipa Regional Council, a member of the public claimed swarming bees attacked them. Not surprisingly, swarming honeybees are notably newsworthy and not always in a positive way. As a result, many councils have introduced bylaws or made bylaw changes to manage honeybees (beehives) in their regions.

Nevertheless, there are some very good reasons to have urban beehives and to encourage urban beekeeping. Where in other countries urban populations are declining, this is not the case for AoNZ (Ministry for the Environment, 2010). Furthermore, the central role played by local councils in delivering a quality urban environment for its constituents is critical, and therefore, the role of urban planners is an important driver in this space (Croucher, 2024). When urban planners intentionally approach biodiversity in urban spaces, cities can become specialised pollinator spaces.

This shifts urban planning beyond the traditional focus on human populations and integrates nonhuman inhabitants (Singleton, 2023). It is noted that this approach to urban spaces is not new. A broad spectrum of parties, such as international organisations, academics, scientists and the public, has advocated for nature-inclusive cities (also known as nature-based solutions). Examples include the framework developed by the IUCN (Gionfra et al., 2023) or the seven "lamps" framework (principles) developed by Parris et al. in 2018 (Parris et al., 2018). There is a clear call for a paradigm shift from urban planners because urban spaces offer an opportunity to advance sustainability development goals (Nilon et al., 2017).

3. Sustainability Reporting by Local Councils

Unsurprisingly, AoNZ councils are increasingly being challenged by sustainability issues, yet councils are closer to their communities and can be more effective in promoting local sustainability (Kaur & Lodhia, 2019). It is well-recognised that councils have the power to influence and change the behaviour of their constituents when bylaws and policy decisions are made (Othman et al., 2017). However, when it comes to sustainability reporting, the disclosures made by AoNZ councils tend to be minimal (Schneider et al., 2014). Furthermore, the reports almost always fail to incorporate the basic principles of the sustainability development goals (Hossain, 2018).

In other countries, such as the United Kingdom, for example, the Local Government Association has guided the councils on how to engage, implement and report on their progress towards SDGs (Local Government Association, 2024). However, this is not the case in AoNZ. Instead, there appears to be a hybrid model that combines environmental reporting (as required by the Environmental Reporting Act [2015]) and the guidelines provided by the Global Reporting Initiative (GRI). Where the Environmental Reporting Act requires councils to report on the state of the natural resources (including, air, fresh water, land, marine, atmosphere, and climate), the GRI covers performance-related biodiversity, environmental compliance, and anything relevant to their region's impacts. Consequently, the AoNZ councils will produce reports that are simply called *Sustainability Reports*. In addition, the AoNZ councils will use their own terminologies, selected content and the extent to which they will report, so consequently, the disclosures across the AoNZ councils are not comparable (Othman et al., 2017). From this perspective, it is apparent that the AoNZ councils are tailoring their sustainability reporting to meet their strategic priorities and service delivery imperatives (Thomson et al., 2014). Consequently, there is little evidence directly linking AoNZ council sustainability reports to the SDGs.

This is a missed opportunity by AoNZ local councils and urban planners because, firstly, sustainability publications by local councils improve their relationships with their constituents (Alcaraz-Quiles et al., 2014). Secondly, the literature has established that urban planning that includes SDGs propels local councils towards better and improved sustainable reporting practices (Hossain, 2018).

From this perspective, urban beekeeping should be encouraged because it is a practice that aligns well with the SDGs. Moreover, hobbyist beekeepers can contribute substantially to helping the councils meet their SDGs. With this in mind, the following section illustrates how urban beekeeping practices are linked to specific SDGs by providing practical examples.

4. Urban Beekeeping Meets Many SDGs

Hobbyist beekeepers are individuals with 50 or fewer beehives and are considered recreational beekeepers. However, urban hobbyist beekeepers are more likely to manage less than five beehives on their properties. In 2023, there were 920 registered commercial beekeepers, while in comparison, there were 6,868 registered hobbyist beekeepers (Ministry for Primary Industries, 2023). In fact, the number of hobbyist beekeepers has steadily increased since 2012 (there were 2,463 registered beekeepers) despite a slight drop from 2022 to 2023 (191 beekeepers de-registered). The implications of increasing hobbyist beekeepers are important for a number of SDGs but, more importantly, for councils.

4.1. SDG 1: No Poverty, SDG 4: Quality Education, SDG 8: Decent Work and Economic Growth, SDG 9: Industry Innovation and Infrastructure

With the rise in urban beekeepers, there is also an increased need for beekeeping supplies. Consequently, beekeeping suppliers can now be found across the country, in retail stores (such as Ceracell, Ecrotek, and NZ Beeswax), also online (such as Beequip), and in sections of established businesses (such as Farmlands Co-operative). Hobbyist beekeepers have been vital in driving the growth and expansion of beekeeping suppliers while at the same time becoming an important market for the suppliers.

This expansion of bee suppliers is notably significant because, in the early 2000s, there were only two main beekeeping suppliers in the AoNZ—one in the North Island (Ceracell Beekeeping Supplies Ltd) and the other in the South Island (Ecroyd Beekeeping Supplies Ltd). While there is little research in this area, a Google search for “beekeeping supplies NZ” revealed eight pages of results.

Moreover, while it is generally accepted that the commercial apiculture industry has not had the technological advances of other agriculture industries (Fels et al., 2019), significant research has been conducted and developments have been made in the hobbyist beekeeping space. The most notable would be the flow hive, which was initially developed for commercial beekeepers but has been taken up solely by hobbyist beekeepers (The Bush Bee Man, 2022). Regardless, ergonomic beehive design that focuses not only on the health and the welfare of the bees but also on the health and welfare of the beekeeper is an area of research and development undergoing significant changes (Fels et al., 2019). There are specialist beekeeping suppliers, such as those supporting organic beekeeping, heritage hives, and digital beehives (Foth et al., 2016). This area could benefit from further research; undoubtedly, the beekeeping supplier industry has grown significantly and is a significant employer nationwide.

Furthermore, a hobbyist beekeeper makes a substantial investment in beekeeping equipment (without the bees)—the set-up cost of a single hive is usually more than NZ$350. These costs increase as the hobbyist gains more experience and more hives; moreover, hobbyist beekeepers are deterred from purchasing second-hand equipment because of the bee disease American Foul Brood which can contaminate beehive

equipment. So they are constantly replenishing or expanding their stocks from beekeeping suppliers. Also, there are additional costs the hobbyist beekeepers must source from beekeeping suppliers, such as varroa mite treatments (varroa mite is a beehive pest) and bee nutritional products. Thus, hobbyist beekeepers are an important economic source for the beekeeping supplier industry but also for all its associated industries.

While the commercial honey markets have declined in recent years, AoNZ's commercial apiculture industry continues to grow, with demand for AoNZ's hive products in six different countries increasing (New Zealand Trade and Enterprise, 2023). Thus, despite the current honey price slump (2023), the demand for skilled commercial beekeepers remains an issue for AoNZ's commercial beekeepers. Commercial beekeeping employers report that experienced beekeepers are difficult to recruit, and consequently, skilled beekeepers appear on AoNZ's immigration regional skill shortage list. However, free apiculture courses have helped to attract beekeepers to the commercial apiculture industry to support commercial entities. The AoNZ government has provided fees-free beekeeping courses for many years through industry training organisations (e.g., Land Based Training) or polytechnics (e.g., Otago Polytechnic). Moreover, the students attending these courses tend to be mainly hobbyist beekeepers who want to transition into the commercial side of the apiculture industry. Thus, hobbyist beekeepers are an important resource for the education sector and for recruiting employees into the apiculture industry.

4.2. SDG 2: Zero Hunger, SDG 3: Good Health and Well-Being, SDG 11: Sustainable Cities and Communities, SDG 12: Responsible Consumption and Production

Private urban green spaces such as gardens and allotments constitute a significant portion of total green spaces in AoNZ cities (Blaschke et al., 2017). For generations, the food system for New Zealanders was based mainly around backyard gardens with a focus on growing their own edible fruit and vegetables. However, with the rise of supermarkets, fast food chains, and large agribusinesses controlling food systems, many people have become disconnected from food sources. Urban beekeeping not only creates communities and brings people back to nature but also connects a community to a food source through honey production and hive products (like propolis and beeswax).

Despite the government policy towards boosting urban density to address AoNZ's housing shortage (Ministry of Housing and Urban Development, 2024), the ethic of being self-sufficient remains. More importantly, urban food production offers many economic and environmental gains, and urban gardens are considered by many to be the beginning of their sustainability journey. Paris was one of the first cities to introduce city beehives (in the 1980s), and France was one of the first countries to recognise urban beekeeping as an industry. However, for many councils, beehives are treated as farm livestock; thus, bylaws are created to restrict or ban the keeping of bees. Cities in the USA are examples of this, including New York City. Los Angeles and Boston, however, have changed their positions and now encourage beekeeping since it was realised bee activists were ignoring the bylaws which banned urban beekeeping.

The livestock classification is predicated on the fact that the honeybees are managed (kept in beehives) and they have commercial value by delivering pollination services in agricultural settings (Geldmann & González-Varo, 2018). This is particularly relevant for AoNZ, where pollination services are vital for food production and exports (Newstrom-Lloyd, 2013). Moreover, as honeybees produce food that enters into the human food chain (including honey, pollen, and propolis), there is every justification to treat honeybees the same as any other food-producing animal (American Veterinary Medical Association, 2017).

Yet, in developed countries, urban beekeeping has become part of a larger movement to make cities and the buildings within cities greener because beehives are quickly being recognised for their role as pollinators not just in rural agricultural settings but across all environmental settings. Thus, proper pollination is imperative for the successful production of fruits and vegetables in urban settings, reiterating that honeybees undertake most pollination.

Unfortunately, there is not much research on pollination outside commercial pollination in AoNZ (Newstrom-Lloyd, 2013). Regardless, urban pollination also benefits AoNZ's native insect population and other domesticated and wild animals (like birds and bats) and underpins wild plant production. Honeybees are considered the canary in the coal mine for ecosystem health, or not (Geldmann & González-Varo, 2018). For example, long-tailed bats that were once widespread throughout AoNZ are endangered. Hamilton City, which has a high population of urban beekeepers, is also one of the only cities in AoNZ which has a resident population of long-tailed bats (Waikato Regional Council, 2024). Moreover, the health benefits of private and public green spaces are well-documented and include but are not limited to reducing stress, depression, and anxiety; increasing quality of life; providing a sense of community; positively impacting cognitive function for the elderly; and, finally, increasing commitment to sustainable food sources (Wall Kimmer, 2015).

In countries like the United Kingdom, urban beekeeping has been used as a therapeutic education tool to support refugees (for example, see Ruskin Mill College) and students with disabilities. From this perspective, urban beekeeping creates community-building activities, supports individuals with tacit learning skills and promotes environmental sustainability. It makes sense that the integration of beehives in an urban setting not only adds to the well-being of those who learn/undertake beekeeping, but a single beehive will pollinate flowers up to three kilometres away. Therefore, even if the gardener does not own a beehive, they reap the benefits of having a neighbour who does. Consequently, there is an increasing public tolerance towards beehives as more people recognise the importance of bees not only as a source of food (honey) but also as important pollinators.

The fact that beehives boost crop production in urban areas and encourage urban communities to protect their ecosystems so that pollinators, including honeybees, thrive is well established in the literature. From this perspective, many New Zealanders are trying to reconnect with nature, which has also led to an unprecedented growth in beekeeping clubs. It is a hobby that brings with it personal enjoyment, but membership in beekeeping clubs provides intellectual stimulation (for example, the use of guest speakers such as Dr Mark Goodwin, a New Zealand apiculture scientist, or international guest speakers such as Randy Oliver, a US apiculture scientist), continued learning (such as practical demonstrations at club evenings), and community involvement (such as doing demonstrations in primary schools with viewing hives or providing presentations in shopping malls on World Bee Day, a global event). Moreover, Apiculture NZ makes a list of all the bee clubs available on their website so that new beekeepers can easily locate a club near where they live or if they want to visit another club in another region (Apiculture New Zealand, 2024). Moreover, bee clubs provide free swarm collection services to their local councils.

Consequently, it is not unusual for beehives to be found in AoNZ's schools where the students are beekeepers (Birkenhead Primary School and St Paul's Collegiate are examples of just a few). Beekeeping is a way to engage students in nature-based learning and to demonstrate a commitment to sustainability. Students can engage more fully in pollinator education and honey-themed events. Furthermore, taking care of bees and harvesting

hive products like honey is not only a way to actively help the environment but also to produce food, as many of the schools also have fruit and vegetable gardens.

The misconception that honeybees are aggressive needs to be addressed by AoNZ councils. Urban beekeeping is a way for communities to learn that honeybees (beehives) are not a threat; people can live in close proximity to honeybees and beehives. It is the swarming of bees (a natural way in which bees will replicate) that causes the most attention (as well as fear and anxiety). A queen bee and thousands of worker bees swarm to find a new place to start a new beehive. Unbeknown to non-beekeepers, swarming bees are unlikely to sting because they have filled their honey stomach/crops before leaving the hive of origin, so they are heavy and bloated. However, if communities are actively engaged with beekeeping and beekeepers, there should be less fear and anxiety about swarms and more appreciation of the human/honeybee interaction.

With this in mind, beehives are also found in public gardens (Hamilton Gardens, for example), on the rooftops of major hotels (Crown Plaza Hotel in Auckland, for example), on public conservation lands, and in national parks (Beard, 2015). In Christchurch, land that is no longer inhabitable for housing due to the liquefaction after the 2011 earthquake has been turned into park areas where beehives can be found. Commercial entities are quicker to acknowledge that having beehives on their roofs qualifies them for different types of sustainability/green certifications (Ministry of Environment, 2024) and want to be recognised as having a positive, sustainable impact.

International non-profit organisations, such as Biophilic Cities, partner with global cities in efforts to make cities more natural and greener, and to increase biodiversity in urban areas. The cities are designed so that city residents can see, feel, and experience a diverse range of animals (including honeybees) and trees during their everyday lives (Ziari et al., 2018). Wellington (AoNZ) appears to be the only city that is a member in AoNZ, and its focus brings AoNZ's natural nature into the city, connecting Wellington residents (Biophilic Cities, 2024).

It is from this perspective that honeybees are considered an indicator species because they reflect the condition of their surroundings and are often the first to be affected by adverse changes to their environment (Barmaz et al., 2010). AoNZ councils are committed to creating greener cities, which means introducing different initiatives to see what works best; unsurprisingly, beehive health is an easy and effective measuring tool for such programmes.

4.3. SDG 13: Climate Action, SDG 15: Life on Land, SDG 17: Partnerships for the Goals

The western honeybee was introduced into colonial New Zealand in 1839 and thrived (James, 2022). Feral honeybee populations can be found in AoNZ's native forests, and Māori (the indigenous people of AoNZ) were considered the first commercial beekeepers as they were selling considerable amounts of honey to the colonial settlers (New Zealand History, 2021). Missionaries, such as Reverend William Cotton, took it upon themselves to teach beekeeping to Māori and encouraged Māori to make up beehives from the swarms. Historical records show that Māori had apiaries (for example, bees were kept on Waiheke Island and continued to be kept there by the local hapū, a sub-tribe, usually a related group of families that sits below an iwi, the prominent tribe; Cotton, 1846). Māori beekeepers have existed since the colonial settlers arrived (New Zealand History, 2021).

More importantly, the Māori worldview links everything to the land and is considered sacred (Asher & Naulls, 1987). The link to the land includes the water and the air above it, and Māori consider themselves kaitiaki (guardians). Consequently, Māori hold significant mātauranga (Māori worldview of knowledge) about AoNZ, which has become more widely recognised because of its sustainable approach to environmental management. Moreover, mātauranga Māori drives an intergenerational view of the environment: that care should be taken with natural resources for the generations that follow. It is this worldview that sets Māori beekeepers apart from traditional beekeepers.

Beekeeping has played an important role in the economic well-being of Māori, which is demonstrated in two ways. Firstly, Māori have also suffered from rural-urban migration, similarly to other indigenous communities around the globe. However, beekeeping has allowed Māori to reconnect with their tribal lands. From this perspective, increasing numbers of Māori are undertaking beekeeping courses and engaging in beekeeping to benefit their families.

More recently, there has been greater recognition of the rich cultural and local knowledge that Māori brings to their beekeeping practices. Climate change and how it is affecting AoNZ illustrate this. In the last few years, AoNZ has experienced extreme weather events: storms, flooding, droughts, fires, and landslides. This was demonstrated when the Auckland region experienced epic flooding, and then two weeks later, Cyclone Gabrielle (February 2023) was estimated to have destroyed more than 5,000 hives in Tai Rāwiti (Radio New Zealand, 2023). Many argue that AoNZ's apiculture industry is ill-equipped to deal with climate change, while others argue that there are greater opportunities to work with Māori to face the challenges of climate change.

The local Māori of the regions affected by the extreme weather events were aware of the flooding and rain events that have hit those regions in the past because Māori are renowned for recording historical weather events in place names (King & Skipper, 2006). Therefore, weather events in a region are easily known because clues from the past are found in the historical oral traditions of Māori (King et al., 2008).

Recent research demonstrates that there should be more integration of traditional meteorology together with Māori historical knowledge of regional weather patterns. For example, Ngāti Porou beekeepers are collaborating with researchers from the University of Auckland to investigate whether they can determine a beehive's health using circadian rhythms (University of Auckland, 2023). In keeping with their worldview and tikanga, Māori beekeepers have shown how beekeeping can be diverse, with clear differences in the purpose and context of beekeeping yet aligning closer to sustainability.

Moreover, modern Māori beekeepers are likely to integrate maramataka (the Māori lunar calendar) when beekeeping, illustrating the close connection they have with their honeybees and how they use their traditional mātauranga to enhance their beekeeping practices (Hurkmans, 2020). Maramataka governs activities related to agriculture (planting/harvesting) and environmental and ecological practices.

While AoNZ councils are no longer mandated to have Māori representatives with the elected government of 2023, there are still clear obligations under the Treaty of Waitangi and Local Government Act. But more than that, when it comes to urban beekeeping, the inclusion of Māori, and specifically Māori beekeepers of the region, brings forward indigenous views and aspirations that cannot be known by others (Tiakiwai et al., 2017).

5. Challenges for Urban Beekeepers

The cities in which we live are as varied as the urban environments in which they sit. Factors that affect urban beekeeping are the population density, availability of green spaces (both public and private), location (coastal areas are quite different from inland regions), and this list is not limited to what is found here. So, while it is acknowledged that one size does not fit all, it is apparent that councils have tried to take this approach when looking at urban beekeeping. So, the following are some of the challenges that urban beekeepers face when working with councils.

5.1. Banning Beehives Does Not Work

Los Angeles banned honeybees and beehives for 136 years, until 2015, when a law change occurred. In the past, cities such as New York, Boston, and even Paris attempted to ban urban beekeeping. The ban on beehives was largely based on the perception that honeybees were dangerous, posing a risk to the public, and that they were considered farm stock, which had no place in urban areas. Honeybees were grouped under the same bylaws as pigs, chickens, and dogs, often referred to by many councils as the "keeping of animals, poultry and bees" bylaw. Regardless, urban beekeepers ignored the bylaws and continued to keep beehives; this was demonstrated in New York City, where honeybees swarmed Madison Avenue every season, even though beehives were banned.

5.2. Council Bylaws Are Often Difficult to Comply With

Unfortunately, there has been no common standard for councils to use when it comes to beehives. Until only recently, Waipa Regional Council required resource consent under the Resource Management Act, a cost of NZ$1,200 per beehive. Unsurprisingly, the bylaw was ignored by hobbyist urban beekeepers who kept beehives regardless. When the bylaw came up for review, the council members went to the local primary school to view their beehives only to find that they were, for all intents and purposes, illegally placed beehives (the beehives did not have resource consent compliance). In 2021, the bylaw was changed, and urban beekeepers in the Waipa Region no longer require resource consent.

However, this has not prevented other district councils from classifying beehives as livestock, and the perceived threat to the public from beehives persists. Consequently, some councils impose specific regulations on beekeeping, such as requiring beehives to be at least 10 metres from any public place (Kapiti Coast District Council), limiting them to a maximum of two within the urban area (Whanganui District Council), requiring council approval for the hive's location (Manawatu District Council), setting a minimum distance of 20 metres from adjoining properties (Wellington City Council), and obtaining neighbour consent before setting up a hive (Porirua City Council). This list is not exhaustive and it is not long before an urban beekeeper realises that most council requirements are difficult to meet, if not impossible. Urban beekeepers are more likely to ignore the bylaws than to follow them if they do not make sense.

5.3. Honeybees Swarm

No matter how good the beekeeper is or how often they attempt to prevent their beehive from swarming, inevitably, at some time, a beehive will swarm. For cities where the public has been encouraged to have

beehives, swarming can be a problem (for example, Ljubljana has a high beehive population in its city, and every year, swarming is an issue). For the general public, it can cause problems such as bee swarms landing on cars, in neighbours' gardens, or on shop windows. AoNZ is not unlike its international counterparts; swarming in urban areas is also a concern as a swarm in a public place like a shopping area or a school can result in safety issues, but swarms have also landed on parked aircraft and the cages at the local zoo as well.

Most councils in AoNZ lack the resources or services to relocate swarms from public places and will only remove swarms from council-owned land, such as the Horowhenua District Council. Furthermore, the AoNZ councils are not above having the swarm exterminated (pest control) if they believe there is a risk to public health and safety. So, regardless of whether the council embraces sustainability rhetoric or urban beekeepers are eager to remove and rehome swarms, they often do not get the opportunity. The AoNZ councils frame the extermination of swarms, in this instance, in terms of public danger and nuisance.

On the other hand, the local bee clubs usually provide a swarm list. Swarms are typically removed at no cost, and urban beekeepers are encouraged to add themselves to the public list. Moreover, many bee suppliers are keen to see the population of beehives increase, so they also offer free advice on swarm collection (see Ecrotek for example).

5.4. Māori Perspectives on Urban Beekeeping Are Not Included

Even though Māori urban beekeepers exist, councils have committed to partnering with Māori, whose voices are largely unheard and lag behind the rest of the population. The exclusion of Māori worldviews (and the exclusion of their cultural imperatives) means their sustainable beekeeping practices are ignored, and more importantly, the contribution of Māori mātauranga towards environmental knowledge could address the challenges of local environmental policies but is never made or asked for. The literature establishes that the contribution of such knowledge supports sustainability practices, especially tacit knowledge of honeybees and beekeeping.

6. The Role of Councils in Urban Beekeeping

Urban beekeeping is practised across all major cities in developing countries with relative success. The success of urban beekeeping is predicated on the councils taking affirmative action and working with urban beekeepers rather than working against them. So, the following are some practical tools that will normalise beehives in urban areas.

6.1. Councils Should Engage With Local Bee Clubs

The hobbyist beekeeping statistics in AoNZ speak clearly: there are a growing number of beekeepers, and these are mainly urban beekeepers. It is from this perspective that communities need to be more involved in the local decision-making around beehives in urban spaces. Councils need to have genuine relationships with local bee clubs so that they can define the issues they face with beehives in urban spaces and determine intelligent solutions. Community engagement is something touted by nearly all councils; however, when the council consults and engages with the local bee clubs, the solutions are more sensible and urban beekeepers will have a stake in bylaw outcomes. As a result, the council will work more closely with the urban beekeepers,

and the urban beekeepers have the opportunity to contribute more positively to their local council. This simple change could change the language of how honeybees and swarms are perceived by the public.

6.2. Honeybees Should Not Be Considered Livestock

While there are good reasons to consider the large commercial apiaries to be holding livestock of bees (up to 40–60 beehives in an apiary), this is not the case for beehives in urban spaces. In contrast, the apiary of an urban beekeeper will generally contain two or maybe three beehives in their urban section. There is no comparison. The purpose of urban beekeepers is significantly different from that of a commercial beekeeper. Often, an urban beekeeper will keep bees for the pollination services they provide as well as the honey they produce. Therefore, their beehives meet the environmental needs of urban ecosystems by improving the yields of edible fruits and vegetables grown by many backyard gardeners.

For this reason alone, council bylaws need to reflect the domesticated perspective of urban beekeeping rather than the commercial perspective. Furthermore, urban green spaces are essential for the physical and social well-being of communities, yet they cannot thrive without pollinators—particularly honeybees from urban beehives, which play a central role. This change would result in a significant shift in how councils and urban planners perceive beehives in urban spaces. The focus would shift to encouraging urban beekeeping rather than trying to restrain and limit it.

6.3. Urban Beekeeping Aligns Well With the SDGs

Councils in AoNZ are expected to communicate with their constituents about their performance in meeting their sustainability targets. To date, it is evident that all councils are producing some form of sustainability report and most AoNZ stick to the same local authority agendas of the past, which does not allow local councils to truly integrate the SDGs into their sustainability strategies. Moreover, few, if any, are including the integration of urban beekeeping as part of their SDG targets.

The SDGs offer local councils the opportunity to create functional green urban spaces for their communities; however, the needs of urban beekeepers should not be ignored. This article has demonstrated that urban beekeeping aligns well with many of the SDGs, and therefore, local AoNZ councils must not only take more action on how honeybees are perceived in an urban setting but also on how the keeping of bees in an urban setting can transform lives. This shift would allow urban beekeeping to flourish and encourage economic growth and employment opportunities. Moreover, communities would be encouraged to use green spaces—whether public, like parks, or private, like gardens—ultimately improving community health and well-being.

6.4. Māori Need to Be Included in the Decision-Making

Māori beekeepers bring a richness of mātauranga knowledge to the apiculture industry, and the commercial apiculture industry already recognises this. In addition, although researchers and universities are increasingly interested in the contributions of Māori beekeepers, local AoNZ councils do not seem to share this interest.

It seems counterintuitive that local councils would not also tap into this knowledge by including Māori urban beekeepers in their decision-making. The Māori view beekeeping as reconnecting with the land and creating

intergenerational employment, a significantly different purpose and context than traditional urban beekeepers. Therefore, local councils should provide support and encouragement for Māori urban beekeepers to achieve those ends.

7. Conclusion

This article has discussed the role of local councils and urban planners and the part they can play in urban beekeeping. Urban beekeeping links well to the SDGs, yet few local councils in AoNZ engage with urban beekeepers outside of addressing honeybees as a nuisance and a danger to public health and safety.

This article revealed that urban beekeepers play an important role in providing community engagement through clubs and education, greening urban spaces (public and private), and encouraging community health and wellbeing, but AoNZ local councils largely ignore this. Urban beekeepers have witnessed growth in the bee supply sector, along with increased interest in beekeeping education. Furthermore, this article reveals that Māori urban beekeepers have much to contribute to sustainability conversations in both climate change and the local knowledge of regions, but Māori knowledge is currently being overlooked.

Finally, this article encourages AoNZ local councils to collaborate with urban beekeepers to create a more just outcome for urban beekeeping. Urban beekeepers are the most affected by some of the most draconian bylaws, so they should also be heard.

Conflict of Interests

The author declares no conflict of interests.

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