Māori Knowledge of Animals

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This resource contains an introduction to Māori knowledge of a selected sample of animal species indigenous to Aotearoa – Te Ika a Maui, Te Wai Pounamu, and all the smaller offshore islands scattered around the coasts of these two larger landmasses. The information is presented under six headings corresponding to some of the major species and groups of animals that were known to Māori before the arrival of the European through specific indigenous frameworks of knowledge based on whakapapa. Relationships between humans and animals, embedded in whakapapa, make sense of the specific information and knowledge of animals amassed by our ancestors about the animals of Aotearoa.

The introductions to Mātauranga Māori about animals known to our tūpuna is presented in six sections below:

1. Kurī
2. Kiore
3. Ngā manu a Tānemahuta (pīwakawaka, tūī, kererū, rūrū, kōtare, tītī, toroa)
4. Ngā ika a Tangaroa (makō, tohorā)
5. Ngārara – te aitanga a Punga
6. Te aitanga pepeke.

This resource is structured by Māori categories, which sometimes contravene those of science, such as grouping tohorā (whales) under ika. Kurī (dog) and kiore (rat) come first, given their importance as the two mammals purposely brought across the Pacific Ocean to Aotearoa by the voyaging ancestors of Māori. The other four categories are based on whakapapa and the ancestors of animals. These summaries provide a sampling, not a comprehensive encyclopedia, of Māori knowledge of animals, but omit many others including the eel, octopus and marine mammals.

1. Kurī

Kurī lived with Māori households as pets or companion animals that also provided an important protein food source, and there are also Māori accounts of feral kurī populations. The kurī, along with all Pacific dogs and the dingo, is now included within the universal domestic dog species, *Canis familiaris*. Early European travellers to Aotearoa noted that kurī howled but did not bark; the lack of other comments on kurī behaviour probably means that they generally behaved like most other domestic dogs. In addition to being a food source, kurī hides, hair and bones were used to make and decorate clothing, jewellery, and tools. Māori also used kurī as hunting dogs for catching various birds.

Kurī were of traditional, cultural and spiritual significance within te ao Māori as recorded in narrative traditions. In terms of whakapapa, the ancestor of kurī was Irawaru, the brother-in-law of Mauī. Kurī were regarded both as ancestors and as kaitiaki or spiritual guardians of particular hapū and kingroups, and these traditions are still passed on today. Traditional stories tell of kurī who guided their waka and people to safe landing, and of supernatural beings taking the form of kurī. Kurī behaviour features in various whakataukī about non-desirable personal qualities: idleness – he whiore tahutahu, a often-singed tail (from laying near the fire); cowardice – he whiore hume, tail between its legs; or being dominated – he kurī e pōtete ana, like a dog led around on a leash.

In the colonial period, introduced dogs rapidly interbred with kurī, and in the late 19th and early 20th centuries, feral dog packs, believed to be kurī-European cross-breeds, were seen as a great nuisance, and shot on sight by shepherds and settlers. These feral dogs were exterminated as settlement proceeded. Purebred kurī disappeared during the second half of the 19th century.

2. Kiore

Kiore were purposefully transported to Aotearoa by Māori ancestors for nutritional reasons, as an important protein food source. Kiore populations were encouraged in reserves or rāhui kiore managed by Māori settlements and iwi. Not only kiore but also many manu or bird species were taken for food within those rāhui, showing they could live together in the same habitat as kiore are frugivorous (fruit eating). Kiore were trapped using spring traps placed across their paths, or in pit traps. Kiore were roasted, skinned, and preserved in fat in gourds, in a process (and product) known as ‘huahua.’ Huahua kiore were valuable commodities, used as currency in land exchanges. Kiore pelts were used to make fine cloaks.

Kiore is one species (*Rattus exulans*) also known as the Polynesian rat, which is the smallest of the rattus genus. This species originated in

Southeast Asia and spread throughout the Pacific as people undertook ocean voyages from island to island. In Māori thinking, kiore are not viewed negatively, as in Western ideas of rats and mice as enemies of mankind, carriers of disease and plague, vermin and pests fit only for extermination. The kiore is seen in Māori thinking as of great value. Māori views on kiore show how Māori thinking is often the opposite of modern scientific thinking.

In the colonial period starting from the early 1800s, kiore were rapidly assimilated or replaced whenever European rat species (*Rattus rattus* and *Rattus norvegicus*) took hold, starting from places near human habitation. Among the people of Ngāi Tūhoe, memories remain fresh of the loss of the delicacy of kiore, which were caught in abundance in the Huiarau ranges of the Urewera forest, up to the time of the introduction of the Norwegian rat. It is thought that kiore went extinct on the mainland by about 1922, but some kiore populations still survive on remote offshore islands.

In one simplified whakapapa tradition, kiore are descendants of Hinamoki, a junior sibling/cousin of Tānemahuta, ancestor of mankind and life on land, in the cosmic whakapapa that structure Māori knowledge of the natural world. Kiore are recorded as running back to their human owner Ruanui, in traditions from the northern iwi of the Mamari waka. The closeness between humans and kiore explains why kiore featured in wharenui carvings and names of people and places. Kiore were also part of everyday Māori customs as shown by references in waiata and haka, and metaphors captured in whakataukī comparing aspects of kiore life with that of humans.

3. Ngā manu a Tānemahuta

Manu, along with trees and mankind, are descendants of Tāne, and therefore related to each other. Another group name for manu is ‘te aitanga kapakapa a Tāne’ – the ‘wing-flapping children of Tāne’ and the forest trees are also called the ‘hua a Tāne’ – ‘hua’ meaning both children and the fruits and berries of the trees. While ‘manu’ is a generic word for ‘bird’ it is also used for other flying things, like bats or kites. In some situations, manu were seen as messengers from spirit worlds, carrying warnings or reassurances either from atua sources or from deceased loved ones.

Manu were an important source of protein foods; the kūkūpa/kererū and kākā were the two most important food birds to pre-European Māori, and both were snared and speared. The condition of the manu was always tested before deciding to proceed with a hunt. Manu were also caught using a mōkai – a ‘tame’ or decoy bird, or in fruiting seasons when they became too fat to fly away, or if it rained heavily and they became

‘grounded.’ Snares, traps, spears and ladders made for fowling demonstrate Māori craft skills and technologies.

In addition to food, bird feathers were valued items and used for diverse purposes depending on their qualities. Birds taken for feathers rather than food include kōkako, huia, kōtare and kōtuku. Feathers were used: to make cloaks, to wear in the hair, and to adorn clothing, weapons, waka, toys, containers and other objects. Bird feathers and skins were used in dressing wounds and burns, or for making fragrant sachets to wear as pendants. Bird oils were used medicinally and in tattooing, and to preserve foods in hue. The bones of larger birds were used to make many items, including needles, fish hooks, kōauau and earrings. Māori knowledge of birds extended to knowledge of bird habits and habitats – all of which was valued knowledge that was carefully taught and passed down from one generation to the next, in whānau/kingroup apprenticeships and wānanga.

Manu provide rich sources of Māori symbolism in sayings and metaphors, for example, a good singer or eloquent orator might be called a korimako/kōmako (bellbird), a restless person might be compared to a pīwakawaka/tirairaka (fantail), while a hooting rūrū (morepork) might be seen as expressing loneliness or lament for a lover’s absence. There are traditions of birds with supernatural powers, and stories of people riding giant birds, such as the beautiful sisters, Reitū and Reipae, who flew north from their home in the Waikato on the back of a magic kārearea (falcon), to marry and become important ancestors to the iwi of Te Tai Tokerau.

Some manu, including the first five below – tūī, kererū, pīwakawaka, rūrū and kōtare, are still fairly commonly seen, as they have managed to adapt (at least to some extent) to urbanised habitats containing indigenous and introduced trees and plants in residential gardens and nature reserves.

Tūī/kōkō

Tūī, also known as kōkō, are famous songbirds; to say of someone ‘me he korokoro tūī’ (a throat like a tūī) is to compliment their good singing. Tūī also have amazing powers of mimicry, readily imitating the songs of other birds or any other sounds they hear. Young male tūī were kept as mōkai or pet birds by Māori, fed on berries and roast kūmara, and taught to speak, some learning to recite 40 words or more. Talking tūī were highly valued by their owners, and listened to with keen interest by the kin group since they were believed to have oracular powers. There are stories of gifted tūī that could recite incantations and whakapapa, and one tradition tells of a war caused by the theft of a learned tūī. A term of endearment for a pōtiki (youngest child of a family) might be ‘he kōkō iti’ – a little tūī. These Māori traditions persisted into the 20th century.

Kererū/kūkū/kūkupa

As is common for birds, these names for the native pigeon are onomatopoeic, imitating their soft cooing of alarm, apart from which they are 'placid creatures, easily approached, and usually silent.' The kererū is one of the forms adopted by the shapeshifter Māui, so that he could follow his mother Taranga to the underworld and meet his father. The main kererū season was autumn-winter, after they had gorged on miro berries. Many birds were taken while they were fat, and preserved as huahua manu for future use.

Pīwakawaka/tīrairaka

This cheeky little fantail follows people and other birds through the bush, snapping up insects disturbed by the movement, taking nearly all of its prey on the wing. It has around 20 different names, most of a reduplicated structure to mimic its repeated actions. The pīwakawaka also features in the Māui narratives, as the manu who foiled Māui's attempt to conquer death by climbing back up through the body of his ancestress, the guardian of the underworld, Hine-nui-te-pō, by twittering with laughter at the wrong moment. Pīwakawaka woke Hine-nui-te-pō, who brought her legs together, killing Māui, and death came into the world. Their part in this story may explain why it is a bad omen for a pīwakawaka to enter one's house.

Rūrū/koukou

Rūrū are nocturnal predators that have also adapted to live in farmland and urban areas. They are often associated with spirits, and many families have a rūrū as a kaitiaki or guardian, conveying messages from atua sources with the power to protect, warn, and advise. Ngāti Wai at Whāngarūrū in Te Tai Tokerau (Northland) have a kaitiaki known as Hinerūrū, whose calls and flight behaviour can be interpreted as either good or bad news. Watchmen standing guard over a pā at night were likened to rūrū, hooting a warning. People who have lost love might also compare themselves to the mournful sounding rūrū.

Kōtare

Kōtare are highly versatile manu and have survived drastic human environmental changes, living in native and exotic forests, farmlands, by lakes and streams, and on tidal mudflats. In the 1870s, the Acclimatisation Society of Whanganui introduced a bounty for killing kōtare because they were attacking the sparrows that the society had recently gone to great efforts to introduce from Europe and Australia. Thus the kōtare are part of a larger story about the disastrous Pākehā enthusiasm for importing birds, and all manner of other fauna and flora, and the history of Māori protest against these actions.

Māori compared a kōtare to a watchful sentry, and a high lookout platform in a pā was referred to as a 'kōtare.' Kōtare squabs (fledglings) were taken and cooked in hāngi, while the brilliant blue feathers were in demand for use to decorate clothing and for fishing lures. The saying 'he kōtare koe' is used of a person who turns up and watches others eat in hopes of getting some, a comparison with how a kōtare sits motionless on a branch, its 'gimlet eyes' searching out food. Māori children, on seeing a kōtare nest tunnel, would call: 'Putaputa kōtare, putaputa kōtare' (come out, kōtare, come out, kōtare) and also sang a rain ditty about the kōtare, seen as an omen of fine weather on the way.

Tītī, ōi

The name tītī is mostly used for the sooty shearwater, but is also a generic name for many species of seabirds – shearwaters, petrels, prions and others, that visit the shores of Aotearoa. Tītī were dubbed 'muttonbird' by Pākehā because the fatty meat resembled mutton. Ōi is the grey-faced petrel found in North Island habitats, also covered by the name 'muttonbird.' Large breeding colonies of tītī are found on the small offshore islands around Rakiura (Stewart Island). Tītī are an important food source, also used for trading with other iwi, and for their feathers and down. When the squabs become very fat, they are collected from the nests. Later, when fledgelings are emerging after sunset to exercise their wings, they are hunted using torches to dazzle them. The manu are plucked, cleaned, boned and boiled, then preserved in their own fat, traditionally in pōhā, large bags made of kelp but more commonly now in lidded plastic buckets.

One common tauparapara used to begin a mihi starts with the words 'ka tangi te tītī... ka tangi hoki ahau' showing basic identification of Māori people with this ancestral food source. Another whakataukī is 'he manawa tītī' to underline the qualities of a person with great endurance. The harvesting of tītī remains an important cultural and economic activity for Rakiura Māori, and there have been decades of work, both politically to retain access to the resource, and in partnership with scientists to study the manu and ensure its sustainability. Some whānau still harvest ōi on the Mokohinau (off Ruakākā) and Aldermen (off Whitianga) islands.

Toroa

The name 'toroa' comes from the effortless gliding flight of this manu, which was said to have been brought to Aotearoa from the twelfth heaven by Tāwhaki following his battles with Whiro, and whose white feathers were among the adornments prized by Māori, kept in small carved wooden boxes, as with huia feathers. Toroa feathers were used to make headdresses worn by rangatira, in making kites, and to decorate cloaks, waka, and the face by being worn through the pierced nose septum. Toroa wing bones were used to make tattooing tools, nose flutes, necklaces and earrings. A young toroa would be taken from its parents

and kept as a pet in a seaside village, sometimes breaking its pinions to prevent it flying away, and to ensure a ready supply of feathers, as well as for its eggs and flesh.

Toroa have salt glands and ducts connected to their bills that act as desalination systems, which makes them able to drink seawater. Their salt secretions are commemorated in a distinctive weaving pattern, used in cloaks, mats and wall panels, called 'roimata toroa' – albatross tears. Various stories and whakataukī refer to the seagoing travels of the toroa, its spiritual origins, and its brilliant white plumage. 'Me he toroa e tau ana i runga i te au' – like a toroa gliding on the updraft – and 'me he toroa ngunungunu' – like a toroa nestling its head under its wing – are both compliments comparing people to the physical grace of the toroa.

Toroa feathers are a symbol of peace for Taranaki iwi. To wear a single white toroa feather in the hair was adopted as a tikanga (custom) by 19th-century Taranaki prophets and political leaders, Te Whiti o Rongomai and Tohu Kakahi, as a sign of their movement centred on Parihaka. They led a campaign of peaceful resistance to being unfairly evicted from their homelands to make way for Pākehā settlers.

4. Ngā ika a Tangaroa

There are many traditions regarding the whakapapa of fish, but it makes sense to call them the 'children of Tangaroa' since Tangaroa is god of the sea and all that dwell within it. When the canoe captained by Tamatekapua was voyaging towards New Zealand, it met Te Parata, an ocean creature who almost swallowed the canoe and its crew. They were saved by a shark, in honour of which the crew renamed the canoe and their tribe Te Arawa (a shark name).

Fishing was and is an important food source for Māori and our ancestors caught fish by many methods – spearing, line fishing, trapping and netting. Net fishing was the main economic business in the thickly populated Bay of Islands at the time of early European arrivals. Māori seine nets made of muka (flax fibre) dwarfed the size of those of the British arrivals. Making a new fishing net, like all big jobs, was a communal activity, imbued with tapu for the people and place of making. No-one was allowed at the scene of operations except those actually engaged in the task. Despite the inconvenience, such restrictions were rigorously enforced, with severe punishment for trespassing. No fire could be lit and no food could be prepared within the forbidden area until the net was finished, and the tapu was lifted.

Value concepts like tapu-noa are associated with objects and places for catching fish. In terms of Māori knowledge of the animal itself, sharks and whales were more significant to Māori.

Makō/mangō

There are many Māori names for the various types of sharks found in the waters of Aotearoa, but mangō (in the north) and makō (in the south) are among the most well-known and used as generic terms for sharks. Warriors are compared to sharks, in battle cries such as 'Kia mate uruora tātou, kei mate-ā-tarakihi' (let us die like white sharks, not tarakihi). The makō is equated to the tiger shark, blue pointer, dogfish or gummy shark.

Ocean taniwha could take the form of sharks, such as Ruamano, a taniwha of iwi in the far north. If a waka capsized, the crew would call upon Ruamano to save them. In such cases, taniwha are also acting as guardian animals – an atua acting through an animal.

Among Ngāti Wai people at Whangaruru, northeast of Whangarei in Te Tai Tokerau, guardian animals are called 'mana' equivalent to the Tūhoe usage of 'kaitiaki.' Mana refers to a *class* of divine beings and is always associated with supernatural power. Guardian animals are deities who have entered a specific member of an animal species, and calling these animals 'mana' expresses the belief that the guardians are the source from which people derive the power of mana. The fisherman who catches fish has mana because success in fishing is essentially uncertain. A person with great mana will succeed whereby human reckoning they are likely to fail. People also have mana when they have the mana of the tribe visit them and give them the power.

Of the six guardian animals known to the people of Whangaruru there were two sharks, a stingray, a shag, a morepork (Hinerūrū) and a dog. These mana come very close to certain people of their own volition, and their appearance always has a specific and important meaning to those they visit.

Tohorā

Māori traditions include whales in the category of ika, whales being the largest of the children of Tangaroa. Tohorā (or tohoraha) is equated with a generic term for whales, but also specifically used for the southern right whale, a migratory whale that ranges through all the coastal waters of Aotearoa. Another generic Māori name for whales is 'te whānau puha' - the family of animals that expel air. An ocean taniwha sometimes takes the form of a whale.

In Māori thinking, a stranded whale is a gift from the gods and a bountiful 'cut and come again' buffet. Before touching a stranded whale, karakia needs to be recited to free it from tapu. Whales are regarded in Māori thought as *both* supernormal *and* subservient, at least to some people, and were relied on as guardians of vessels and rescuers of people in marine mishaps and shipwreck.

Several of the oceangoing waka of migration include stories of being guided and aided by whales. Māori traditions include multiple stories of people riding whales, including Paikea, a prominent Ngāti Porou ancestor. Whakataukī about whales compare them with rangatira. 'Te kāhui parāoa' – a gathering of sperm whales – indicates a group of chiefs. 'He paenga pakake' (beached whales) refers to fallen chiefs on a battlefield.

5. Ngārara – te aitanga a Punga

Ngārara is used today to mean 'reptiles' but its traditional meanings also include insects, demonstrating again how the Māori categories for animals diverge from those of science. In whakapapa terms, ngārara are the progeny of Punga, son of Tangaroa, whose descendants were said to be ugly and repulsive, hence the name 'te aitanga a Punga.' The tuatara is named for its spiny back; lizards (skinks and geckos) are known as mokomoko. Ngārara as a Māori category is also the name of a type of taniwha, a supernatural class of being, which takes the form of a giant mokomoko or tuatara. Traditions tell of cosmic arguments between the descendants of Punga about living on land or in the sea, making another example of the common theme in Māori traditions of battles being fought over binary choices found in the nature narratives of whakapapa.

To see a mokomoko inside one's house is considered an ill omen; both mokomoko and tuatara were traditionally regarded as bringers of bad luck (spiritual messengers). In other circumstances, ngārara were placed at special sites to live as kaitiaki or guardians. These ngārara traditions invoke atua protection over places such as burial caves, or mauri, which are venerated stones or other totem objects, used to guard and ensure the health of particular inhabited places such as gardens or forests.

6. Te aitanga pepeke

This group name equates to 'the insect world' and calls to whakapapa in the concept of 'aitanga' meaning living creatures descending from the primordial atua who are the supernatural origins of the natural world. In this Māori category, 'pepeke' refers both to bent legs and jumping ability. Te aitanga pepeke feature in cosmogenic narratives of conflict between primordial brothers, Tānemahuta and Whiro, who used te aitanga pepeke to form his armies of attack, stinging people and animals. In other versions of these nature narratives, Tūmatauenga, the ancestor of humans, killed Namuiria, the primordial sandfly, and in return his tribes of Waeroa (mosquitoes) and Namu (sandflies) attack humans.

Te aitanga pepeke also drive the narrative of Rātā, the canoe maker, who failed to ask permission of the forest before felling a large tree. The insects and birds were angry, and after Rātā had retired for the day, they raised the tree up again, calling on all the branches and broken pieces to

bind together. Twice Rātā felled the tree, and twice ngā aitanga pepeke raised it up again.

Eventually, instead of leaving the forest at the end of the day, Rātā hid, and observed the insects and birds raising the tree once again. Dialogue ensued that made Rātā overcome with shame and remorse, for which sign of humility the aitanga pepeke and manu offered to build him a waka, a canoe. The story of Rātā and his waka is an Indigenous parable about tikanga, right ways of behaving, and respect for nature.

Conclusion

Māori knowledge of animals is vast, and the above sections provide only a taster of the knowledge collected by tūpuna about the animals of Aotearoa by detailed empirical observation, which is one of science's trademarks. There is general agreement that there are similarities and overlaps between Mātauranga Māori and science. Perhaps even more interesting are the ways in which Māori knowledge is different from science.

Māori knowledge of the natural world includes traditional narratives that reinforce the overall structure of the traditional Māori cosmos as based on dualities that operate at many levels, from the cosmic to the psychological. Many traditional stories tell of primal ecological battles – between different factions of the birds, fish, reptiles, insects, etc., which help explain the natural world of Aotearoa encountered by tūpuna Māori.

Māori knowledge of animals is underpinned by whakapapa, the organising principle of reality in te ao Māori, on which stand the two basic concepts of tapu and mana. Making a new fishing net was declaring a group's intention to harness the power of nature and ngā atua, hence it was an activity governed by the law of tapu, which dictates how people behave in relation to that activity. A successful hunter or fisher had mana, since they showed their ability to turn that power to their own ends. Mana is related to a person's ability to keep the cosmic forces of ngā atua in balance (utu).

In some ways whakapapa works as a Māori alternative to evolutionary theory in biology. Dogs, rats and humans, for example, are considered to be closely related, not only in terms of phylogeny, but also whakapapa. In Māori iconography, whakapapa is represented by the double spiral motif called takarangi, with each generation represented by a notch between the two spiral lines. An icon that mimics the molecular structure of DNA makes a tantalising connection between whakapapa and genetic inheritance at the heart of evolutionary theory. In our DNA we literally carry our ancestors and our evolutionary links to other animals. Whakapapa in this sense is like an ethical Indigenous version of the concept of evolution. Our tūpuna fully utilised the animals of Aotearoa to

survive and thrive, but did so while remaining aware of their relationships with animals through whakapapa.

Whakataukī – Proverbial saying

Te manu e kai i te miro, nōna te ngāhere
Te manu e kai i te mātauranga, nōna anō te ao.
The bird that eats of the miro tree owns the forest
The bird that eats of knowledge owns the world.

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Te Toi Wakapapa image © Georgina Stewart and Sally Birdsall.

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