Nga Mokopuna o Tāne – FLORA

Flora – Introduction

These next two sections look at the mokopuna of Tāne or 'the children of Tāne' whom we refer to as being the trees, plants, insects and animals that inhabit the forest. This section looks at the importance of plant life.

The Ngahere (bush) that once covered much of the land held a massive diversity of life. Numerous plant and animal species lived beside each other, drawing all the essential resources each individual needed from around it. It is no coincidence that Māori art and symbolism celebrates the natural world such was its impact upon our ancestors.

Rākau

The most visual inhabitants of forests are the trees or *rākau*. Whether a tree was small or big they were appreciated by our ancestors both for the service they provided to other life but also for the role that they played in developing tikanga Māori.

Land without spreading tree roots is susceptible to erosion. The roots of mature native trees such as those that made up forests like Te Tapere Nui o Whātonga, gave the ground stability. The multiple levels of plants slowed down rainfall before it reached waterways at the base of hills. The branches and leaves of the trees filtered light from the sun so temperatures did not vary greatly throughout the year. This was a great advantage to fauna, and therefore Ngāti Hāmua, because flora were able to live and regenerate in a constant environment. Because the environment did not change year after year animals could either remain in, or return to, the same places. Trees grew and produced seed that would either fall to the ground or else be transported elsewhere by birds. The seeds on the forest floor would be nurtured in the warmth of Papatūānuku among the leaf litter. Many of the leaves and small branches that made up the nursery for a seed came from the parent and grandparent trees. Whenever a tree grew old and fell down to the ground a seedling would always grow upon its tupuna thereby continuing the cycle of life. Insects and fungi would also be doing their part by breaking down all the dead material that came their way. In turn they became the food for larger insects and animals. All this activity helped young plants and animals to grow by using dead parts to return all available goodness back to the land.

The growth of a tree was an important metaphor for our ancestors. If the roots of the tree were not strong the trunk could not grow tall and therefore the branches would not be able to spread far. When compared to humankind this meant that if the adults of a family were not solid then they could not successfully produce future generations. The trunk of a tree was akin to kaumātua who needed strength so that they might support and guide the branches of their family. The roots connected them to the earth, which gave them their standing place and connection to Papatūānuku. The branches were their children and the leaves and seed the next generations. If the trunk was not sufficiently strong it could not uphold the rest of its family's needs and therefore everything would fall over. Whenever a young tree or child was born it always had the umbrella of its tupuna above its head to protect and nurture it. If the young grew strong enough, one day it would take the place of its forebear and so the cycle would continue.

An example of a tree that was a part of a complex interrelationship is the rata. The rata seed would be carried on the wind until it attached to the top of a mature tree. Over time the rata grows down towards the ground, winding itself around the host tree until it eventually strangles it to become the host tree. In the meantime the insects on the host transfer their attentions to the rata. Fungi grow on the tree and other plants such as kiekie and tree ferns use the rata as a base to grow from. Large animals such as humans used rata for shelter as a hollow core could be left where the old host tree had rotted away.

Tipu

“Ka hinga atu he tete kura, ka hara mai he tete kura”

“As one fern frond dies, one is born to take its place.”

Plants and trees far outnumber humans such is the natural order. However, we take for granted how important trees and plants are to us due to their prolific numbers.

Rongōa Māori

Rongōa Māori is commonly known as Māori medicine although many of the applications used were applied as a preventative measure rather than as a curative one as is usual in a European definition of medicine. People took tonics made from a variety of plants to promote good health rather than wait for an affliction or sickness to occur and then seek a treatment for it. As you would expect sometimes accidents occurred or people did take sick. A variety of ‘medicines’ were developed to help correct any sicknesses that people were experiencing.

Rongōa Māori had worked effectively for centuries before the European settlers arrived. Ngāti Hāmua people had compiled an unwritten encyclopaedia of which materials found in their natural word would help to prevent or cure a specific illness. As the environment had remained relatively unchanged they knew what they were dealing with and where to find and how to prepare the correct dose. As with all other aspects of their daily routines karakia were an essential part of medicinal practice. Finding the right species of tree and then mixing a batch of tonic was not enough to make the concoction powerful enough to work. The person gathering the required supplies had to know the correct karakia to ask permission from specific atua to go about his work. He then had to recite another karakia to invoke the atua to allow the goodness of the plant to come out. Even before applying the finished product the atua had to again be asked to assist in making the person better. Even after the person started to recover those that knew how had to continue to karakia to thank the atua and ask for their continued support.

New Zealand Fern Frond

Plant Uses

The following provides an idea of how some plants and trees were utilised by our tupuna

Whakatauki – Māori Proverb

Hutia te rito,
Hutia te rito te harakeke,
Kei hea te komako e ko,
He aha te mea nui i te ao,
Maku e ki atu e…
he tangata, he tangata, he tangata. Hei!

If the centre shoot of the flax is pulled out
The flax will die
Leaving no place for the bellbird to sing
Although these conservation factors are
important, if I was to ask myself…
What is one of the most important things in
the world? I would answer…

…it is people. it is people, it is people!

Aruhe (Bracken fern)

Aruhe was a very important food because when crops failed, abundant quantities of aruhe remained available. In normal times it was gathered as a part of the diet but was especially valued due to the nutrition it provided in times of need. The root was roasted on embers and then beaten with a hard object before being peeled and eaten.

Aruhe was taken before fishing trips to avoid seasickness.

Kiekie

Kiekie are the small flax like plants seen living on other trees, particularly in the mountains. Kiekie produces the Māori banana (ureuro) a fruit that is ready to eat during winter.

The inner leaves of the kiekie were used to produce the finest whāriki.

Harakeke/Flax

Flax was very important to Ngāti Hāmua both for its practical uses and also for the medicinal purposes that could be derived from the leaves and roots. As a plant that thrived in Wairarapa weather and soil conditions it was readily available in large quantities.

Various forms of weaving were developed to make items that supported daily activities. These included kete (baskets), whāriki (mats) kākahu, (clothing), taura (rope) and kupenga (fish nets).

Some kete were made for specific kai. A kete was produced for paua, one for pipi, one for koura and so on. Each had a different thickness and size depending on what was being gathered. Individual kete used to be destroyed after being used just once. The kete would be burnt as the activity of gathering kai was tapu but the kai itself rendered the kete *noa* (safe) once placed inside.

Harakeke supports the gathering of kai from the ngahere (bush), moana (sea) and awa (river) and is therefore a very important plant. The practice of cutting flax for use was ruled by strict procedures; only outer leaves were taken so that the young inner shoots could continue to grow. The analogy used here is the same as taking any young, even humans. How will the plant or animal survive if the babies are not allowed to grow and eventually multiply?

The healing properties of flax were understood through the successful use of the gum found at the base of the leaves being rubbed onto wounds and burns. The gum mixed with water was also used to cure diarrhoea while the base of the leaf helped to loosen up a person who was constipated.

Kawakawa

The leaves of the kawakawa tree, which is usually found in small bushes, had a number of uses. In fact the kawakawa is one of the only plants still used by our people today. The bruised leaves drew pus from boils and skin infections. A drink made from the leaves helped stomach problems and rheumatics when rubbed on joints. Chewing the leaves even got rid of toothache.

Karaka

By the month of February the smaller branches of karaka trees will hang low due to the weight of the ripening berries growing at the ends. These oval berries were a major food source of our old people. But they were also very poisonous and it took careful preparation to make them safe to consume.

The berries were picked and then boiled several times before being put into water for a couple of weeks Later on, the kernels were removed from the fleshy parts and were either eaten or stored for future use.

When the karaka was in fruit the Māori knew that all the other animals such as kereru and kiore would be gorging themselves on the bounty of fallen berries. This would in turn fatten them up ready to be hunted.

Karaka trees were grown specifically for the berries where they were planted near pa. Today karaka groves on the coast are always an indicator that pre-European Māori visited that place regularly. The groves also make good markers for fishing parties in the sea as their glossy leaves stand out from other vegetation when looking back towards land.

Mamaku (Black Tree Fern)

The gum of the Mamaku was rubbed onto cuts and the young fronds placed onto irritated skin.

Miro

The berries of the Miro tree were a favourite food of the Kereru (native pigeon) the largest bird available to our people. Some Miro had their own names as they were used as snaring trees, a place where the pigeons would come to feed year after year. Knowing the name and history of a tree announced your familiarity and therefore rights to utilise the tree.

Oils gained by pressing the ripe fruits were given to people recovering from a fever.

Akeake

This small tree is seen in gardens all around modern day Masterton. It produces a very hard heavy wood that was shaped into handles for implements.

Koromiko

The top of the leaf was pulled off and the juice ingested to cure stomach-aches.

A liquid drink was made with young koromiko leaves to help ease the pains of childbirth and a poultice was made for dressing boils.

Kowhai

The bark of this otherwise poisonous tree was added to a hot bath to fix itches and skin diseases. The flowers of kowhai trees are said to represent the tears of the deceased.

Photo above shows the tui singing in a kowhai tree

Poroporo (Deadly Nightshade)

Is a very poisonous plant that can kill a human if unripe berries are consumed. However once the berries are soft and black they are edible.

Rata

The rata tree was linked with the *patupaiarehe* or the fairy folk of the Tararua Mountains. In local history these people were known as the remnants of a banished hapu that had been chased into the mountains for some long forgotten offence. The patupaiarehe were said to be smaller than normal men, of a paler complexion with wild white hair and red eyes. People travelling through the mountains would be extremely cautious because the fairy folk were mischievous at all times and downright dangerous most of the time. Unaccounted events in the valleys were sometimes attributed to a visit from the fairy folk; stolen babies, stolen wives and missing food supplies were laid at the feet of the patupaiarehe. It was said that any stolen items were carried back to the forest where the offending fairy would ascend to his treetop home by way of a winding rata staircase.

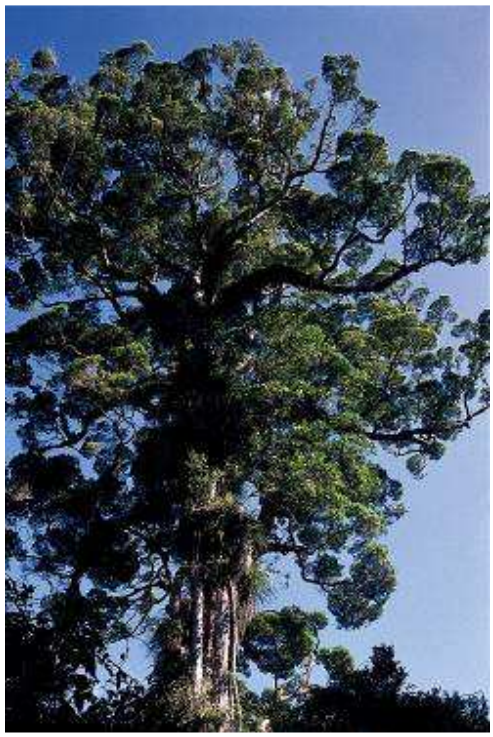

Photo above – Northern Rata

Piko Piko (Common Shield Fern)

Young piko piko fronds were gathered and then cooked on embers. As with the aruhe, piko piko was not only a standard food source but also one to fall back on should a cultivated food crop fail.

Pingao

The dried grass of the pingao was a valued material in the production of tukutuku panels. Although quite rare It can still be found along the Wairarapa coastal areas growing in the sand fore-dunes. Its greatest threat is from stock and exotic grasses such as Marram grass, which overtakes its habitat.

Manuka/Kanuka (Tea Tree)

The leaves and bark of the Manuka tree were used extensively. Nature also assigned a special role for Manuka; they act as nursery trees for regenerating bush, remembering that accidents did occur where tupuna destroyed forests that afterwards needed to start growing again.

The vapour from leaves and young branches when placed in hot water helped with all sorts of head and breathing problems. Boiled leaves and bark made an excellent product for massaging sore areas. An infusion made from the inner bark helped as a sedative while tea made from the leaves promoted good bladder and kidney function.

Ponga (Silver Fern)

The inner pith was used as a covering to help cure ulcers and boils. The silver fern also came in handy as a building material for the construction of temporary shelters.

Toetoe

The stalk of the toetoe was eaten, firstly as a food and secondly to cure bladder and kidney ailments. The well-known white plumes of the toetoe stalks could be compacted into a covering that would stop bleeding. A paste was made from burning toetoe and then adding the ashes to water for placement on burns.

Tawa

The tawa tree produced large berries, the whole of which could be utilised for food. The fresh berries were very juicy and the kernel could be cooked, dried and then used later.

Raupō

Raupō grew alongside flax in swamps, rivers and lakes. Raupō served many purposes for man not to mention the shelter it provided for insects and fish.

A loaf called pua was made from the yellow pollen of raupō. The pollen was added to water and then baked for two hours. The root called kōreirei was used as a food during summer. The white fluff seen in spring was used as stuffing for mattresses and poi (balls on strings now associated with action dances, but earlier used for wrist suppleness in warriors). The leaves were used as a thatch for the roofs of buildings.

Photo above shows raupō along the water's edge

Photo - Tī Kouka or NZ Cabbage Tree

Tī Kouka (Cabbage Tree)

The heart of the clumpy leaves of the cabbage tree was used as a food. The outer leaves were stripped off leaving a vegetable that could be eaten raw, cooked on embers or boiled.

The leaves of this tree had various uses. By rubbing them a clear liquid was produced that helped to heal cracked skin and sores. They were also used in the weaving of cooking baskets.

Although tī kouka are less abundant than in past times you cannot go many miles on Wairarapa roads without seeing a cabbage tree. Kaumātua remember driving along on the back of old trucks while their elders looked for food. Sometimes a group of healthy tī kouka would be spotted. The kids had to scramble off the truck and see who could climb up a tree and come back down again with the head of the tī kouka.

Tupakihi (Toot)

In March, the berries of the Toot were picked to eat and to make a drink. By combining toot berries and rimurapa (bull kelp) a jelly was made. Although the berries were very much a part of the diet every other part of the tree was avoided as it could cause paralysis or even death.

Rimu

Our old people did know how to make alcoholic beverages prior to the introduction of the European varieties. Fermenting the leaves of the rimu was one such method of making beer.

Small amounts of the red gum from rimu were mixed with water to stop internal bleeding.

Totara

Immense totara trees were once a dominant feature of the Wairarapa valley. Ngāti Hāmua history tells a story that occurred in the 1600s where large tracts of the totara forest were destroyed. The people's kumara crop had failed during summer one year and so a party was sent north of present day Masterton to catch enough eels to sustain the people. Although this was unseasonal they needed the extra food. The expedition went well and so the tuna were hung above drying racks to be smoked by fires set underneath. An unexpected northwesterly wind blew up fanning the flames beyond the control of the people gathered at this place called Mokonui. The resulting fires burnt large areas of forest before they were extinguished.

The totara was a favourite as a building material due to its hard wood. The extraction of this timber required strong karakia *prayer,* as this was one of Taanemahuta's giant children that protected its smaller siblings. The totara was also chosen by man to care for pito (umbilical cords) and whenua (afterbirth). Totara were sometimes grown in circles to indicate the places where generations of pito and whenua were buried. A few examples of this practice or rather these trees survive today.

Medicinally, the inner bark of totara was used to treat fevers and the outer bark to make splints.

Photo (left) Totara trees alongside the Hutt River

Quick quiz – Flora

1. With what mythical creature is the rata linked?
2. Koromiko leaves were used to cure what ailments?
3. What does rongōa Māori mean?
4. In what month are the berries of the Tupakihi harvested?
5. What are the Māori names for the following tree species – Cabbage Tree, Deadly Nightshade and Black Tree Fern?

Answers at the back of booklet

Key Points – Flora

- The ngahere or bush holds a huge variety of life forms;
- It provides us with food, clothing, medicine, materials to build our homes and warmth;
- This is the domain of Taanemahuta; and
- Rongōa is still practised today.