



Part three:
plants

Ecosourcing

NOTE: *In his article, (see reference below) Philip Smith poses the question of just how closely we should adhere to purity in ecosourcing. This is a useful 'starter' for debate!*

Where did Tiritiri Matangi's plants come from?

In all conservation restoration programmes it is essential to conduct a botanical survey to establish what plants are in the area being considered and what plants were probably there originally but are not there any more. This is called 'retaining our genetic botanical diversity and restoring local character'.

On Tiritiri Matangi, a careful survey was carried out by Neil Mitchell in the early 1980's and then compared with two other surveys – one done ten years previously and one done even earlier, in the early 1900's.

As a result, the island was classified as mainly coastal broadleaf forest, consisting of kohekohe, taraire and pohutukawa, as well as containing a few puriri, rewarewa, totara, mangaeo, tawaroa and hinau trees.

When planting first began, all plants were to be sourced from Tiritiri Matangi in order to retain botanical purity, but because some of the original species had completely disappeared by the time of Mitchell's survey, those that were missing were allowed to be reintroduced from the nearest sources.

Therefore, kowhai came from Rangitoto and Shakespear Regional Park, and kotukutuku, pate, poroporo and other species, from Little Barrier Island (Hauturu).

Most of those from Hauturu died, and it is thought this may have been because their seed came from a mature rainforest ecosystem, whereas Tiritiri Matangi had almost no mature forest.

The careful recreation of Tiritiri Matangi's botanical heritage makes sure visitors to the island are able to see a unique ecosystem which represents what the island would have been like before humans altered it so drastically. Even more importantly, it provides the bird, reptile and insect populations with the habitat they need.

Reference:

Philip Smith: 'The Origins of Tiritiri Matangi's Existing Flora', in SOTM Bulletin 42, Winter 2000.

Plant medicines

Maori plant medicines, foods and other uses

When Maori came to New Zealand they had to get used to totally new surroundings and cooler weather. The forests were full of birds. The seas, rivers and lakes were full of fish. Within four hundred years Maori had named every bird, tree and plant, and every fish, mountain, lake, island and harbour.

From plants came the materials for their clothing. From trees came the materials for building. Plants and trees provided herbal cures for wounds and sicknesses. Herbal knowledge meant Maori could survive in a world where they depended completely on their environment. The list below provides examples of how Maori used native plants.

Tikanga provided the code of rules by which Maori worked out their relationships with themselves and with nature. The concept of tapu, which identified certain things as sacred, ensured that the people looked after their resources and customs.

The tohunga was a specialist who kept the gods happy and advised the people about the spiritual meaning and consequences of any action. He was of the highest rank, usually the first born of a noble family. From an early age he would be carefully trained to be the special 'go-between' in matters between the people and their gods. He had immense influence and was often feared. People absolutely trusted in his powers.



Be aware!

With any plants, don't ever try to eat or use any part of them unless someone very knowledgeable is with you and is able to **GUARANTEE** they are safe.

Ancient Maori knew far more about plants than we do and even then they made some tragic mistakes.

Not all the plants in the list which follows are to be found on Tiritiri Matangi but look for them around your own area.

Hangehange

- The bark could be used to ease itching, and the sap to treat children's skin diseases.

Harakeke (flax)

- Gluey stuff at the base used for sores and to alleviate diarrhoea.
- Roots used as a laxative.
- The nectar used to sweeten other foods such as bracken fern root (aruhe).
- The fibres used to hold buildings together, make nets and traps, clothing, bags (kete), mats, sandals and decorate the inside of buildings.

Hauhere (lacebark)

- Lacy inside of the bark used for rope, headbands and cloth.

Hinau

- Pudding-like cakes made from the crushed berries.
- The black berries of the Hinau also provided colouring for flax garments such as piupiu.

Horopito (pepper tree)

- Leaves chewed to relieve toothache.

Kahikatea (white pine)

- Bark used for bruises.
- Leaves used for medicine.
- Heartwood for weapons
- Soot used for moko (tattoo).
- Orange 'berries' used for food.

Kamaha

- Inner bark boiled in water and the liquid used as a laxative, a tonic and a warm ointment to treat burns when mixed with pork fat.

Karaka

- Berries very carefully soaked and steamed to remove the deadly poison from the kernel, then cooked for food. If this was not done properly, people could die or be crippled for life.
- Leaves placed shiny-side up onto wounds.
- Karaka trees were so valuable that groves were a highly-prized possession.

Kauri and kohuhu

- Provided chewing gum.

Kawakawa (pepper tree)

- Leaves used to heal cuts and wounds, as was the juice from roasted leaves.

- Chewed to ease toothache.
- Pulped and applied to aching joints, bruises and skin diseases.
- Taken internally for colds and kidney disorders, and to purify the blood.
- Soaked in boiling water along with twigs, and then the liquid drunk for stomach ache.

Kiwikiwi (fern)

- Leaves chewed for a sore mouth.

Kohekohe

- Leaves soaked in boiling water and used for washing boils and abscesses and making a gargle for sore throats.
- The vapours used to help treat colds and fevers.
- Boiled leaves used as a poultice, and the leaves and bark together used as a medicine to stop coughing.
- Young bark used to make a tonic.



Koromiko (hebe)

- Leaves used for vapour baths.
- To help dysentery.
- To make poultices for treating boils, abscesses and ulcers.
- To make a pack for headaches.
- As a mouthwash (liquid obtained by boiling the leaves).
- Mixed with shoots and young leaves to treat kidney and bladder disorders.

Kotukutuku (tree fuchsia)

- Berries for food.
- Liquid also used as a gargle and mouthwash.

Kowhai

- Bark boiled and the liquid applied to itchy skin, bruises and fractures.
- Crushed, soaked in water and the liquid drunk to help colds and sore throats (sometimes mixed with manuka bark).
- Made into a poultice and used for boils, skin rashes and tumours.
- Mixed with manuka bark to make medicine drunk for internal pains and rubbed on the body for pains in the back and sides.
- Mixed with wood ash to make a medicine which was rubbed on the body to treat skin diseases.
- Made into a medicine to heal fractures.

Kumerahou

- The leaves were soaked and the liquid drunk for TB, asthma, bronchitis, coughs and colds, as well as for applying to the skin as a tonic and for purifying the blood and helping the kidneys.

Mahoe

- Boiled leaves bandaged onto surfaces affected by scabies.
- Boiled liquid used to ease the pain of rheumatism.
- A steamed-leaves plaster placed over a stomach wound.
- Frayed inner bark applied to burns.

Nikau

- Very young leaves and the pith of the stem is eaten (called rito or korito).
- The pith is a slight laxative and was used to help ease childbirth.
- Immature flowers can be cooked like cauliflower.

Ngaio

- Use a solution of ngaio leaves and water to wash in, to protect from mosquitoes and sandflies.
- The inner bark was chewed to ease toothache.
- The bruised leaves were warmed to release the oil and make a pack to place over septic wounds.
- A preparation of leaves relieved eczema in babies.
- Ripe ngaio berries were eaten by Maori in ancient times but tests have shown they contain a toxin.

Patete (seven finger)

- Sap used on ringworm and other infectious skin diseases.
- The leaves contain a substance that works against common fungi which can cause ringworm.
- Leaves soaked and the liquid drunk for TB, asthma, bronchitis, coughs and colds and also to purify the blood and help the kidneys.
- Applied to the skin as a tonic.

Pohue, puha, young five finger

- All provided greens for food.

Pohutukawa

- Honey from the flowers to ease a sore throat.
- Bark placed in the mouth to ease toothache, made into a poultice to stop wounds bleeding, and placed in boiling water and the liquid drunk for dysentery and diarrhoea.

Pukatea

- Bark pulp for toothache, and soaked in water for sores and ulcers.

Puriri

- Water from boiled leaves used to bath sprains and for backache, and to treat sore throats and ulcers.

Rangiora (bushman's toilet paper)

- Leaves used for bandages and wrapping food for a hangi.

Raupo

- Huge quantities of pollen from each flower collected and made into cakes.
- The rhizome provided starchy food.

Taraire

- Berries for food, which when cooked taste like potato.

Tarata (lemonwood)

- Leaves and flowers used to make scented body oil.
- Sap as chewing gum.

Tawa

- Wood for bird spears.



Tataramoa (bush lawyer)

- Leaves soaked in water and the liquid drunk for sore throats, and chewed and swallowed to ease stomach ache or toothache.
- Bark soaked in water and the liquid drunk to treat dysentery and diarrhoea.

Ti (cabbage tree)

- The fleshy tap roots are sweet to cook and eat before the tree flowers.
- The core of some species of ti could be cooked and eaten, as could the heart shoot.

Titoki

- Hair oil made from the crushed black seeds.
- Pulped fruit swallowed to relieve some symptoms of TB.

References:

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Crowe, Andrew. 'A Field Guide to the Native Edible Plants of New Zealand' Auckland: Penguin (1981) 2004.