



Mihimihi

E te tī, e te tā, tahuri mai ano ki te reo o Te Tuawhenua e karanga atu nei ki a koutou katoa, koinei te pānui tuatahi mo te tau. Haruru mai ana te Wao i te hinga mai o te tōtara e tīraha mai ana ki raro, koutou ngā mate e kore e warewarehia, hāere whakangaro atu.

Tēnei te mihi whakatau a Te Tuawhenua kia koutou e takatū nei, nau mai ki ngā pūkōrero a Te Tuawhenua.

“He manu hou ahau, he pī ka rere.”

“Toi Tū te Whenua, Toi Tū te Tangata.”

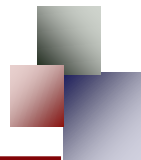
The Tuhoe Tuawhenua Trust has started a new project. This project is about developing matauranga-based methods of measuring and monitoring biodiversity, which just means the life in our ngahere, awa etc.

What does this mean?

There are certain tohu within our ngahere that tell us whether or not certain species are thriving or decreasing. For example: *te heke kereru*, (flock of kereru), when the kereru is thundering in the ngahere it is a sign that the kereru is flourishing and the *toromiro* is fruiting. Paetawa once said, “haruru ana te ngahere i te manu” A sound that has become silent in our ngahere. Such observations become key methods of monitoring change in our ngahere.



Here Menu Ripia is being interviewed by Puke Timoti sharing her knowledge about what she observed and learnt growing up in the ngahere.



Why do this project?

As tangata whenua we have long been part of our ngahere, yet currently matauranga or traditional knowledge is not recognized in how the taiao is monitored by DOC and other agencies in NZ. Indeed, the knowledge of indigenous people is not recognized across the world. Our project is being undertaken in partnership with Landcare Research and we aim to identify:

- ♦ a matauranga-based indicators (tohu) index for monitoring our ngahere, awa etc. – te taiao katoa, here in Te Tuawhenua region.
- ♦ matauranga-based approaches to enlighten biodiversity monitoring in NZ and globally where applicable

What does the project involve?

This project will expand over a period of 18 months in two stages. In the first stage we are conducting interviews and wananga to collect people's knowledge and their experiences relevant to this kaupapa. We aim

to cover 40 interviews from different age groups including kuia, koroua and rangatahi, ahakoa tane ma, wahine ma to help build this project. In the second stage we will produce reports and articles for this purpose on matauranga-based biodiversity monitoring. The matauranga will only be used in a general sense in analysis for these reports and articles.

Who's involved?

Our team consists of Puke Timoti as researcher, Brenda Tahi as project manager, Kirituia as research support staff and Phil Lyver of Landcare Research overall project director. We are privileged to be working with Phil who has worked with us on kereru research in the past and amongst other things was also instrumental in the management plan to harvest tītī on Moutohora (Whale Island).

We hope to involve as many of our people of the Tuawhenua in this project.

“Ko te manu e kai ana i te miro nona te ngahere.”

Manaaki Whenua Scholarship

Applications for this scholarship of up to \$3000 are now being accepted from 01 March to 30 April in 2014. Applicants should write their application covering:

- ♦ name, gender, birth date, contact details
- ♦ connection to and interest in the Tuawhenua
- ♦ your background and past achievements in work (paid or unpaid), training, education or contribution to the whanau, hapu or community
- ♦ details of your planned study or training
- ♦ intended use of the scholarship
- ♦ future aspirations relevant to the Tuawhenua and forest ecology
- ♦ the names of two referees who can comment on your application

Sign and submit your application by email to brenda@tuawhenua.biz or in hard copy to Brenda Tahi, Executive Trustee, Tuhoe Tuawhenua Trust, 363a Mataatua Road, Ruatahuna, Rotorua 3046, by 30 April 2014.

Previous recipient of this award was Nicole Bancroft in 2012-13



Honey Season 2014

Our honey business continues with 2014 being a season to consolidate our learning and to increase production and hive numbers. The beekeeping team of Nick Mitai and Te Uamairangi Rangihau dealt with a challenging season—a great spring, but a summer that went cold and wet at critical times impacting on our final harvest. Over this season we have also involved alongside the beekeeping team, a number of new people (Te Kaaho Tawhara, Toby Moon, Roy Edwards, Raymond Te Kurapa, Darrell Svenson, Hekenoa Te Kurapa) in the honey business for training and work in aspects of the honey business—the honey harvest, making hive-ware and extraction. And in the office, Kerewai and Wena have provided support in planning and procurement which becomes a big job for our growing operations.

We went through the season with about 360 hives, placed in yards or apiaries set out through the valley. Good apiary sites need to be near floral sources in the bush and need to be sheltered from cold southerly winds. We tried different sites to get different types of honey, and we also found that some sites are better than others for the quantity of honey produced. You may have noticed our hives or our bees around your home and garden. With our beekeeping operation we have seen the benefits of bees with the pollination and bountiful harvest from fruit trees throughout the valley. Look forward to this happening consistently in the future.

The Tuhoe Tuawhenua Trust would like to thank the many people at home and out there that have continued to support us since the launching of our brand Manawa Honey NZ. The marketing for our product is truly putting us to the test but we keep working on it and we're now seeing some pockets of success. Your feedback is really important to us so join us on Facebook (Manawa Honey NZ) to share your korero, or to order some of our fabulous honey, check out our website www.manawahoney.co.nz or just email us on info@manawahoney.co.nz.



Here Nick Mitai is showing Te Kaaho Tawhara how to do splits. Before you can do splits you need to look for the Queen bee which is really hard to distinguish from all the other bees if you haven't had much experience. Kia kaha Te Kaaho!

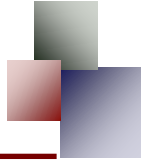
A Bit of Timber ...

You know that we have not been doing much in the timber field lately as we are undertaking market research before we get back into any operations. But it was great to have Tim Henneveld and his friend visit one day last year to purchase some of our milled timber for the many woodworking projects they get involved in (including a community service making low-cost coffins!) When he told us that he makes wooden block sets for children, we sent some timber back with him to make a set of wooden blocks for the local Kohanga Reo.

Tim kindly completed this work earlier this year and presented us with a big box of different-sized blocks that will last forever and look just beautiful made from Tuawhenua timber. The blocks are also a bit of a puzzle to keep the mokopuna thinking as they have to be put back in some order to be able to fit them in the box. Just shows what just a bit of timber can be used for!! Many thanks to Tim Henneveld for such a kind thought for our Kohanga Reo.



Above is a photo of Tane Rua, trustee of the Tuawhenua Trust presents the blocks to the Kohanga Reo in Ruatahuna. From left, Hariata Timoti (Kaiawhina), Kuini Rota, Moko Tawhara, Rehita Taputu, Kahurere Te Kaawa, Te Wainamu Howden-Riini (Kaiawhina), Rongamaukahutia Howden, Taumoana Howden-Rangihau, Tane Rua, Te Waipunaora Rurehe-Tawa at the front of the photo.



Did you know about Wasps

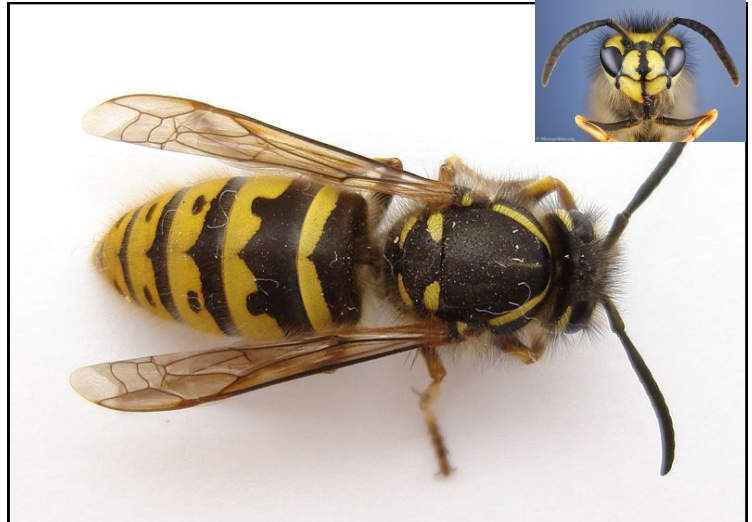
The first *Vespula* wasp to establish in New Zealand was the German wasp (*V. germanica*), which arrived in 1945 spread rapidly to become a significant pest. The common wasp (*V. vulgaris*) was thought to have arrived in the late 1970s, and is now the most abundant species, particularly in the South Island.

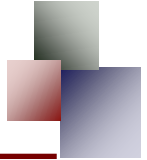
Social wasp colonies are started from scratch each spring by a queen who was fertilized the previous year and survived the winter by hibernating in a warm place. When she

emerges, she builds a small nest and rears a starter brood of worker females. These workers then take over expanding the nest, building multiple six-sided cells into which the queen continually lays eggs. By late summer, a colony can have more than 5,000 individuals, all of whom, including the founding queen, die off at winter. Only newly fertilized queens survive the cold to restart the process in spring.

New Zealand's natural ecosystems evolved in a unique way due to millions of years isolation from other large land masses. Social bees, wasps, ants, and termites are of major functional importance to terrestrial ecosystems around the globe, but New Zealand has no native eusocial bees or wasps, and very few native ants or termites. Humans have accidentally introduced 4 social wasp species (the two *Vespula* species and two paper wasps), and about 30 ant species. Honeybees and four species of bumblebees were deliberately introduced to pollinate crops. As with introduced mammals, introduced social insects, like *Vespula* wasps, have found little resistance from the native fauna and quickly established themselves as dominant players in suitable habitats. The wasp problem is worst in South Island beech forests that are infested with a native scale insect that produces large quantities of energy rich honeydew. This honeydew is a major source of food for native birds and insects, but is also a super fuel for wasps. As a result, these forests have the highest densities of wasps recorded anywhere on earth. Wasp numbers peak over late summer and autumn, and during that period it has been calculated the biomass of wasps in these forests is greater than the weight of all the birds and introduced mammals combined. Wasps plunder the supply of honeydew and take large numbers of native insects, threatening the survival of species that are forced to compete with them for food resources. The very high wasp populations also impact on visitor activities, with the risk of stings and allergic reactions often keeping people away from the worst affected areas.

Wasps also have significant economic impacts. Fruit growers, especially vineyards, are affected through significant amounts of wasp damage to crops. There are losses to apiarists as wasps compete for honeydew and nectar, kill bees, rob honey, and prey on bee larvae in the hives. Forestry operations are often disrupted





by disturbing wasp nests, losing time and endangering the lives of workers. Farmers have reported deaths of stock that have received wasp stings to the nose and mouth while grazing. The tourism industry suffers as visitors avoid areas of high wasp numbers during the peak of the season. A recent survey of public attitudes towards pests identified wasps as the most hated pest in New Zealand.

How to deal with German and Common wasp nests

German and Common wasps generally nest underground. In areas of cover their nests can be difficult to find. To locate their nests, look for wasps' flight path at dawn or dusk on a warm sunny day when large numbers of wasps will be leaving or returning to the nest. You can track wasps by first using a plate of cat food to attract the wasps. As they land, sprinkle them with flour to make them more visible. Follow the wasps as far as you can then repeat the process until you find the nest. Be very cautious as you approach the location of the nest. Do not attempt to kill the nest during daylight hours as wasps are active at this time.

Wasp control is best attempted at night or at twilight on cool days – wasps are generally inactive at these times. If using a torch at night time to locate the nest do not hold the torch while carrying out the control as any wasps that may fly will head to the torch. Nests found in flat ground can be easily destroyed using diesel or petrol. Take a bottle containing approximately one litre of fuel and upend in the mouth of the nest. Leave the bottle in the hole as this blocks the entrance preventing wasps from escaping. **Do not light the fuel!** The fuel and fumes will seep into the nests and kill the wasps.

For nests located in banks, walls, tree trunks etc the use of an insecticide is recommended. There are several suitable products available from hardware and garden shops. These include: Permex Insect Dust (Environment Health Products) Wasp Killer Squeeze Duster (Yates NZ Ltd) Rentokil Wasp Killer (Rentokil Ltd) Carbaryl powder, also available from garden and hardware stores, is also an effective nest killer when applied in entrances of nests. However, as it is meant to be diluted with water, it is unnecessarily strong and its use will contaminate the environment.

First Aid

If you accidentally disturb a wasp nest, you will be lucky to escape without being stung. However, you can minimise the risks of being stung by wearing light-coloured clothing, and by sacrificing your food to any scavenging wasps that may be disrupting your picnic. If you are visiting bush areas, particularly during the warmer summer months, go prepared for a possible wasp sting. Antihistamine cream and tablets are available from any chemist without prescription and should be carried. If you are allergic to insect stings carry an adrenaline kit as well, and ensure your companions are informed where it is and of its use. If you are stung, cold pads and antihistamine cream on the area of the sting/s will help reduce swelling and associated pain. Sting or stings to the mouth and neck area are serious, whether you are allergic or not. They may result in swelling of the throat which may block the airway. Take an antihistamine tablet immediately and seek medical attention. **Do not wait to see if you have an adverse reaction to the sting.**
