

Getting Schools Involved



ADVENTURE

is taking inappropriate equipment to out-of-the-way places.

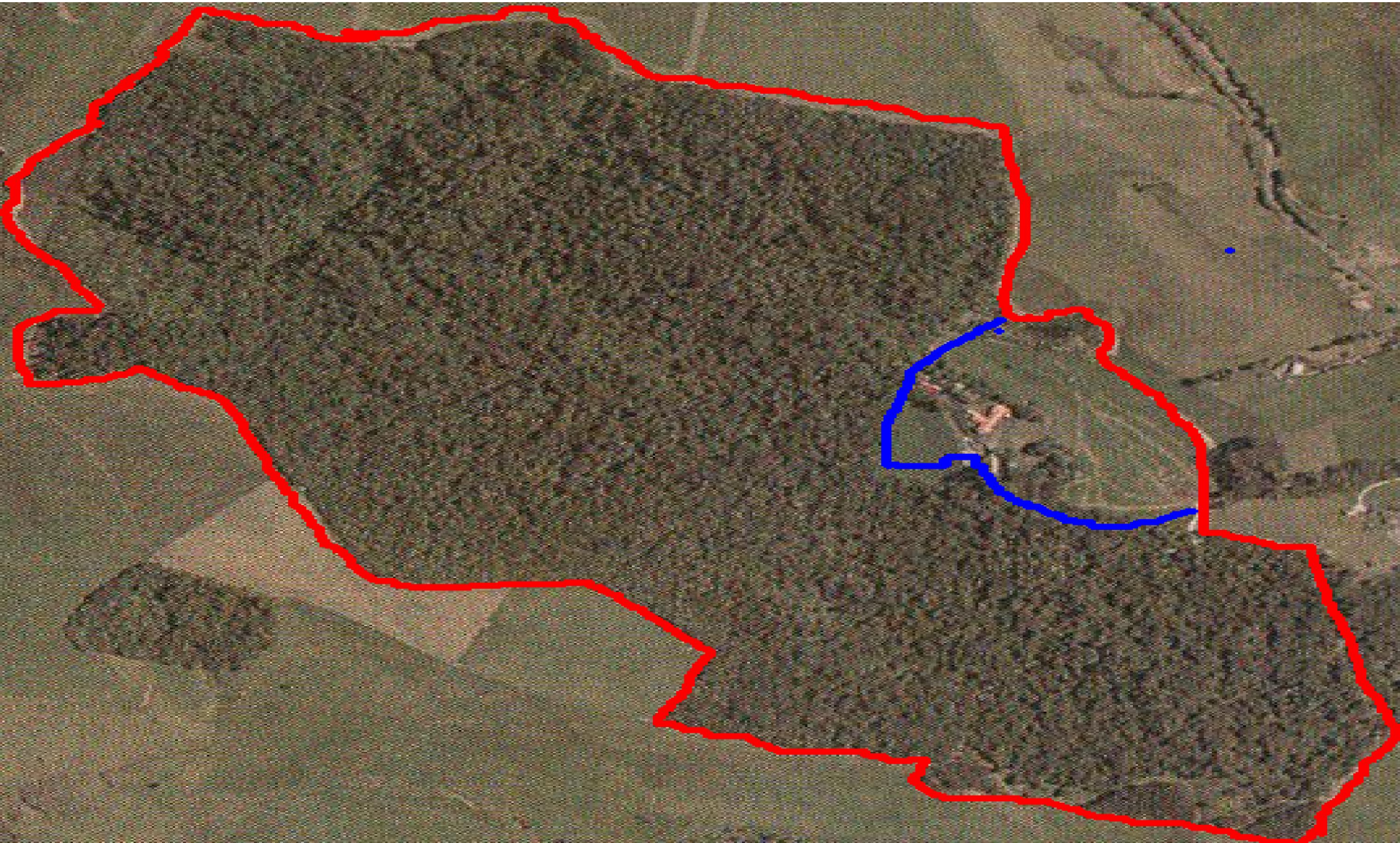
Aotearoa /  
Land of long white cloud /  
New Zealand - 80% forest cover when  
humans arrived. Now down to 20%. Mainly on hills +  
mountains.





## Aerial Photo of Bushy Park:

The Main Xcluder fence is shown in RED while the internal Rodent fence around the Homestead is shown in BLUE.







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© 2007 Google™

Image © 2007 DigitalGlobe

Streaming ||||| 100%

Pointer 39°47'47.82" S 174°55'33.38" E elev 863 ft

Eye alt 3482 ft

First get either an experienced teacher or down load all the Curriculum information you need from the Ministry Website

- Picture won't move into PPt !
- So look at
- [http://nz curriculum.tki.org.nz/the.new.zealand.curriculum](http://nzcurriculum.tki.org.nz/the.new.zealand.curriculum)

Turn the raw data into something that you and the teachers can use.

**Bushy Park Education Centre c/o Terry O'Connor Email: [terryoc@xtra.co.nz](mailto:terryoc@xtra.co.nz)**

**New Curriculum Programmes /Visit Themes: Working Draft:** As the new Curriculum does not have to be fully implemented until 2010 this is a 'work in progress' . It will be used alongside the present Curriculum until full implementation. It is intended that by the end of 2008 it will have reached the stage it can replace the existing 'old' Curriculum visit files also found in this folder. The major difference is that the 'old files' are based on years as well as incorporating relevant references across all 'subjects' while the working draft is at present limited to Science.

*Note: Comments in blue are how I see this part of the New Science Curriculum applying to a visit to Bushy Park / the opportunities offered to enhance learning.  
Its only a first run through so will get better over the year.*

- **Level 1 Living world Students will:**

- Life processes\* Understand the processes of life and appreciate the diversity of living things.

- What better place to do this than in a forest that dates back to the age of dinosaurs. That has been restored by the removal of mammalian predators.

- Ecology\* Understand how living things interact with each other and with the non-living environment.

- Having both a pond area and a restored forest on an uplifted marine terrace gives every pupil the opportunity to gain greater understanding. The predator control programme and Xcluder pest proof fence brings home the need for 'ecological balance' and how easily this balance can be upset by unintentional actions and 'good ideas at the time'.

- **L1 Planet Earth and beyond**

- Students will:

- Earth systems\* Investigate and understand the spheres of the Earth system: geosphere (land), hydrosphere (water), atmosphere (air), and biosphere (life).

- The best way to gain this understanding is to go out and see all these spheres 'in action'. Erosion alongside the Xcluder fence due to rainfall or leaves covering paths as trees dropping leaves to reduce transpiration loss when rain does not fall are concrete examples. Having a weather station and keeping records also helps here.

- Interacting systems\* Investigate and understand that the geosphere, hydrosphere, atmosphere, and biosphere are connected via a complex web of processes.

- Where better to do this than in a forest where how long a tree stands/grows depends on soil, wind and rain as well as animals (possums and rata, wineberry, fuschia and five finger)

**Working in parallel should be someone doing a Risk Management Documents which can be simple as below or more technical like the one in Management your folder.**

- **Bushy Park Risk for Wanganui High Students; Existing Medical + Behavioural problems:** Existing medical conditions - get pupils + School to fill in Medical form before visit and check high risk pupils have appropriate medication with the before departing from school. Teacher (George Jones) will be given a list of known problems and will inform Bushy Park teacher as needed. (Bushy Park teacher has current Outdoor First Aid Certificate) **Transport to and from** - use reliable bus line + school vehicles + teachers vehicles with current WOF + Reg. Teacher (George Jones) to mark roll as get on and off bus ( and check numbers and if necessary call roll throughout day) **What could go wrong:** **i) Weather** - if too wet /windy cancel or postpone. If showers Bushy Park will issue coats to those who forgot - Bushy Park has set of 30 waterproof coats + at least six polar fleeces as well as complete change of outer clothes for four people.) Do not keep outside for too long if cold. Use shade / sunblock / hots if hot and sunny. If wind increases move to non windy areas or if extreme move out of forest and return to school. **ii) Pupil behaviour** - school rules apply. Any pupils engaging in unacceptable behaviour spoken to, if repeated isolate and if no change return to school. ( Worksheets kept in classroom to keep them busy while isolated) **iii) Getting lost** i) regular roll checks /head counts ii) Instruction on staying in one place if lost iii) Teacher /ranger with knowledge of area available for search if necessary iv) avoid by sticking to tracks / monitor lines. **iv) Injury** First aid kit located in Interpretation Centre + another smaller one with Teacher/ranger. Trained first Aider on call with Walkie talky + cell phone with stretcher in Gig shed. Phone at Homestead + emergency vehicle available at all times **v)**



# Be Aware of New Curriculum Values

- These values are to be encouraged, modelled and explored.
- Excellence
- Innovation, Inquiry and Curiosity
- Diversity
- Community – Participation for common good
- Ecological Sustainability

# Push the Key Competencies

Capabilities for living and life long learning.

*Thinking, Using language symbols and texts, Manage self, Relate to others, Participate and Contribute.*

- As pupils carry out the tasks requested by their teacher (and organized into a safe, coherent programme that fits into the time available so we don't disrupt the whole school bus network) they will be put in situations that cause them to **think** about the future and what sort of world they and their grandchildren want to live in. While most of the **Writing** will occur after a visit we have informative signs (in both English and Maori) that they can **Read** and the problem is not to get them **talking** but to stop them talking when we are trying to sneak up on some of our more wary birds. They will be involved '**can do projects**' related to saving endangered species which will challenge them to learn more and **set goals** to do their bit elsewhere. They will need **to relate to others** – leave them space to move on monitor lines, stand so others can also see the North Island Robin feeding and **co-operate** as part of a team to move materials to where they are needed.

- **Trampoline;** Keep off signs up for school visits. (At present is off site and may not return).
- **vi) Other**
  - a) Misuse of tree planting tools - **i) Pupils stay on bank with their adult and in sight of Mr O'Connor or teacher.**
  - ii) When using tools keep clear of other people.**
  - iii) Walk at all times and look before you put your foot down. **iv) Work in small groups**
  - v) If missusing tool take it off them **b) Pupils by pond: i) Keep out of mud and out of pond.**
  - Keep to tracks and use platform. **Don't throw things in pond or deliberately scare birds or damage shrubs /small trees.**
  - ii) Pupils stay on bank with their adult and in sight of teacher in charge.**
  - iii) Work in small groups** **c) In Forest**
  - i) Students to stay on track and in sight of all adults** **ii) Don't walk on tree roots they are slippery. Keep to track.**
  - iii) Work in small groups in 'buddy system'**
  - d) Homestead , glasshouse, rear of stables is out of bounds unless accompanied by teacher or ranger or on specific task approved by teacher.**
  - e) Pupils will be shown traps + bait stations and instructed on potential dangers and told to leave them alone. Anyone seen interfering with them will be dealt to. Only low risk items used in reserve.**
- **Whose Responsible :** Each group/class will have an experienced teacher leader who will be instructed to put the safety of the group as their number one priority - the days programme comes second. Overall responsibility lies with the Bushy Park Teacher /Ranger whose worksite is being used. **Emergency plan: In case of fire /earthquake etc.** Assembly site by the Emergency assembly sign at front of Homestead between pohutukawa and flagpole. Assembly if fire alarms sound or once earthquake stops. **Summary :** As in 'Whose Responsible' above, the safety of both the class and individuals must take priority over anything else. We can always find another way to teach or show something or do it at a different time. This means that the Programme timetable is a Guide to what will happen when but must be adjusted for weather and pupil health /tiredness and unexpected pupil behaviour /response.



They can  
come out  
and get  
information  
on trees if  
you put up  
informative  
signs

# Tawa

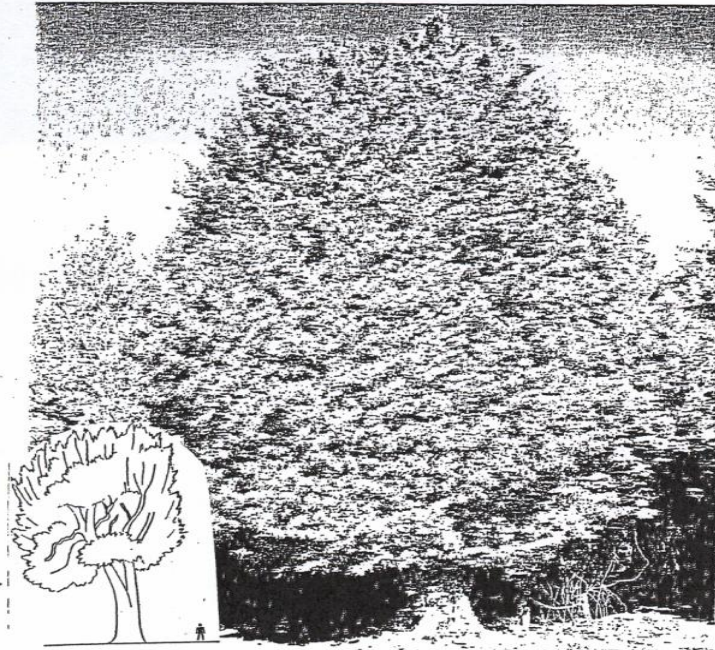
## *Beilschmiedia tawa*

(Translation of Maori name = Mottled.)

A Tall erect tree up to 25 m tall with a trunk 1.2 m through. Bark is smooth and even textured. This is the most common tree in the forest and forms most of the canopy. Its yellow-green (light kahki) leaves form the background colour for the brighter green of the Pukatea, Pigeonwood, Northern Rata and Rewarewa. The roots are buttressed on larger trees but not to the same extent as the Pukatea.

The small flowers turn into an oval purplish coloured fruit that is 2 to 3cm long. They are an important source of food for the birds of the forest. Our Kereru feed off these from October to March. The fruit are also food for insects which are an important source of protein for baby birds.

The leaves are like willow - long and narrow. They are up to 10 cm long and 2cm



**Human uses:** Timber, paper making and firewood. Maori used the straight wood for making long bird spears as it was soft and easy to work with. Flesh of the cooked kernel of berry can be eaten. Maori stored cooked and dried kernels as an emergency food supply. Berries taste better if ripe, otherwise very turpentine flavoured. The sap was used as a lotion for wounds and the bark for stomach and common colds.







Your Tawa 'page' should now contain the following extra information.

*Genus:* Bielschmidia      *species:* tawa

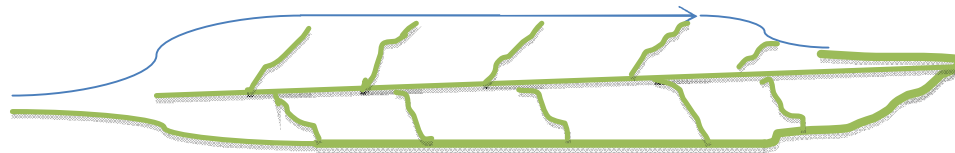
Leaf is yellowish green on top and whitish underneath. Trunk is mottled (patchy colours)

*Layer of mature plant* : Canopy

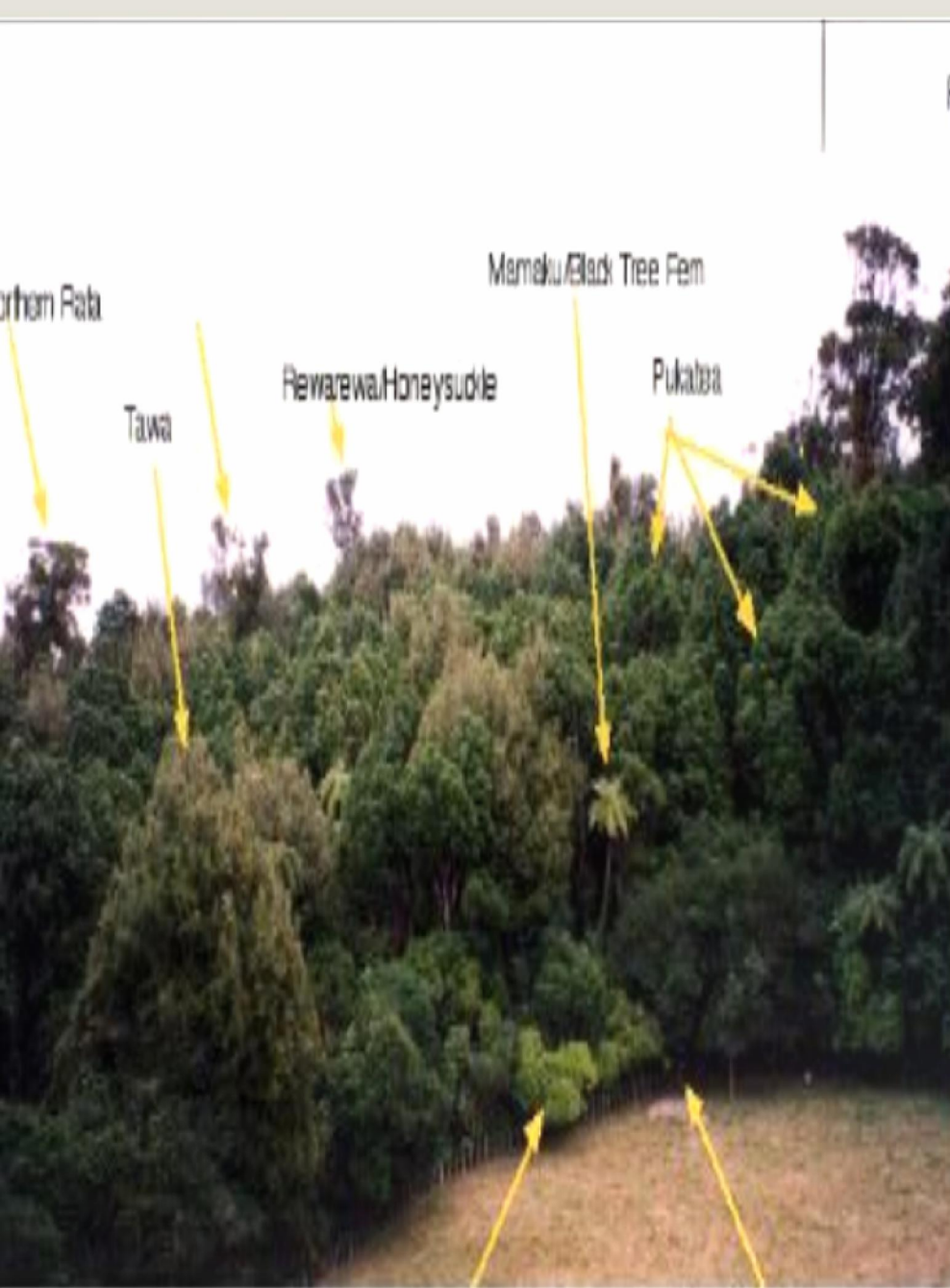
*eaten by:* birds eat berries, especially Kereru

*Medicine use* : Sap for wounds.

Bark for stomach pains and colds

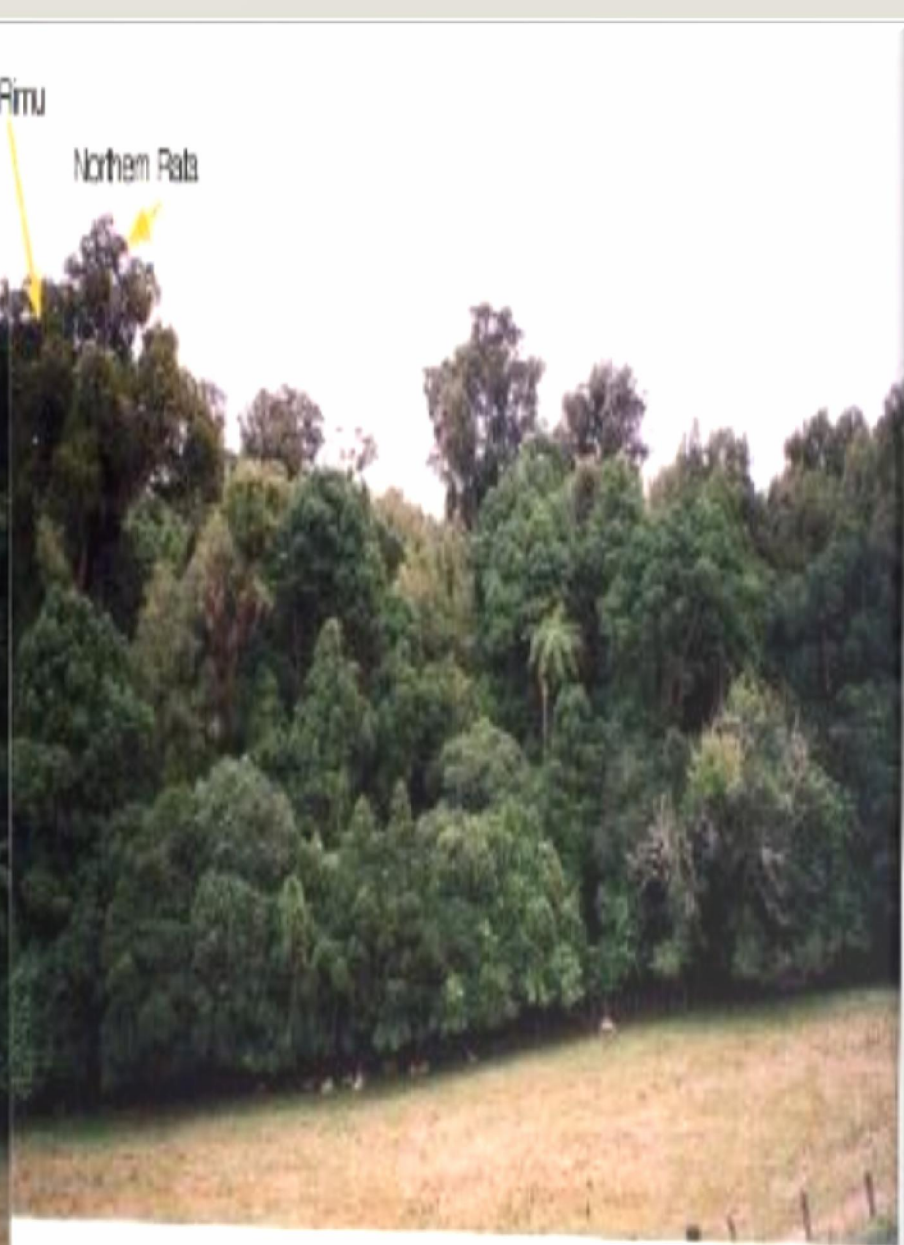






Wanaka Forest 1 - 2001

Whakapapa Forest





Once you have got them coming out  
you can allow them to help you by:



You can get them to help you Monitor  
tracking tunnels and traps.





You can get them to put out and collect rodent bait stations if the baits are put in ziplock bags.





# Flax, Hebe and seats







They can track Robins to their nests

And what lives in healthy ponds





They can plant out things

They can wheelbarrow shell rock to paths  
and Bentonite clay to seal ponds.







They can fundraise to sponsor Kiwi  
transmitters



They can study invertebrates



# 'Explosion' of stick insects 2007





# Seven Kereru eating Tree Lucerne in winter





Two week old Kiwi chick









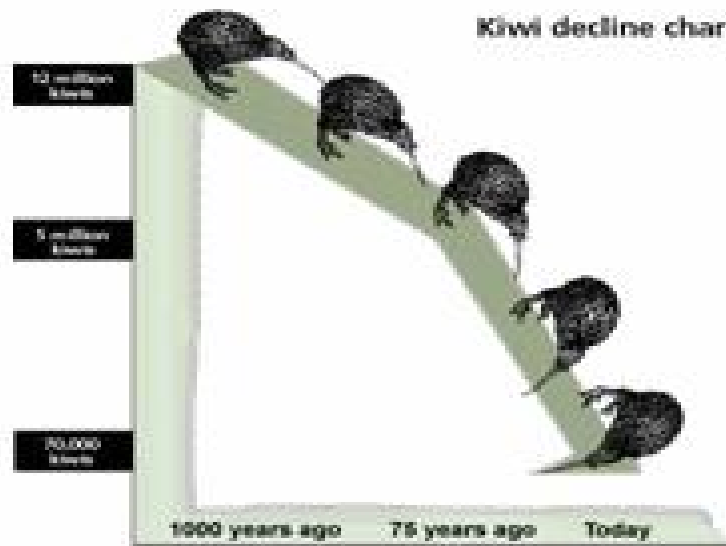
You can make them think about  
the world





**Think Galactic – act local**

To keep the teachers and Ministry  
happy you need resources  
12 million one thousand years ago,  
5 million in 1920.  
Only 57 thousand today ?



# Hangehange / New Zealand Privet

*Geniostoma ligustrifolium* /*rupestre*  
(Layer: Shrub to sub- Canopy)



A much branched shrub or small tree up to 4 m tall. The leaves are arranged in pairs opposite each other. The leaves are 5 to 9 cm long and 2 to 4 cm wide. The larger leaves are found on the plants growing in shadier places. The leaf has a distinctive narrowing and pointing at the tip (acuminate apex). The leaves provide food for insects which themselves, become food for the skinks, geckos and birds. Fruit eaten by birds.

**Human uses:** Sap for skin disease of children. Bark for itch (scabbies)

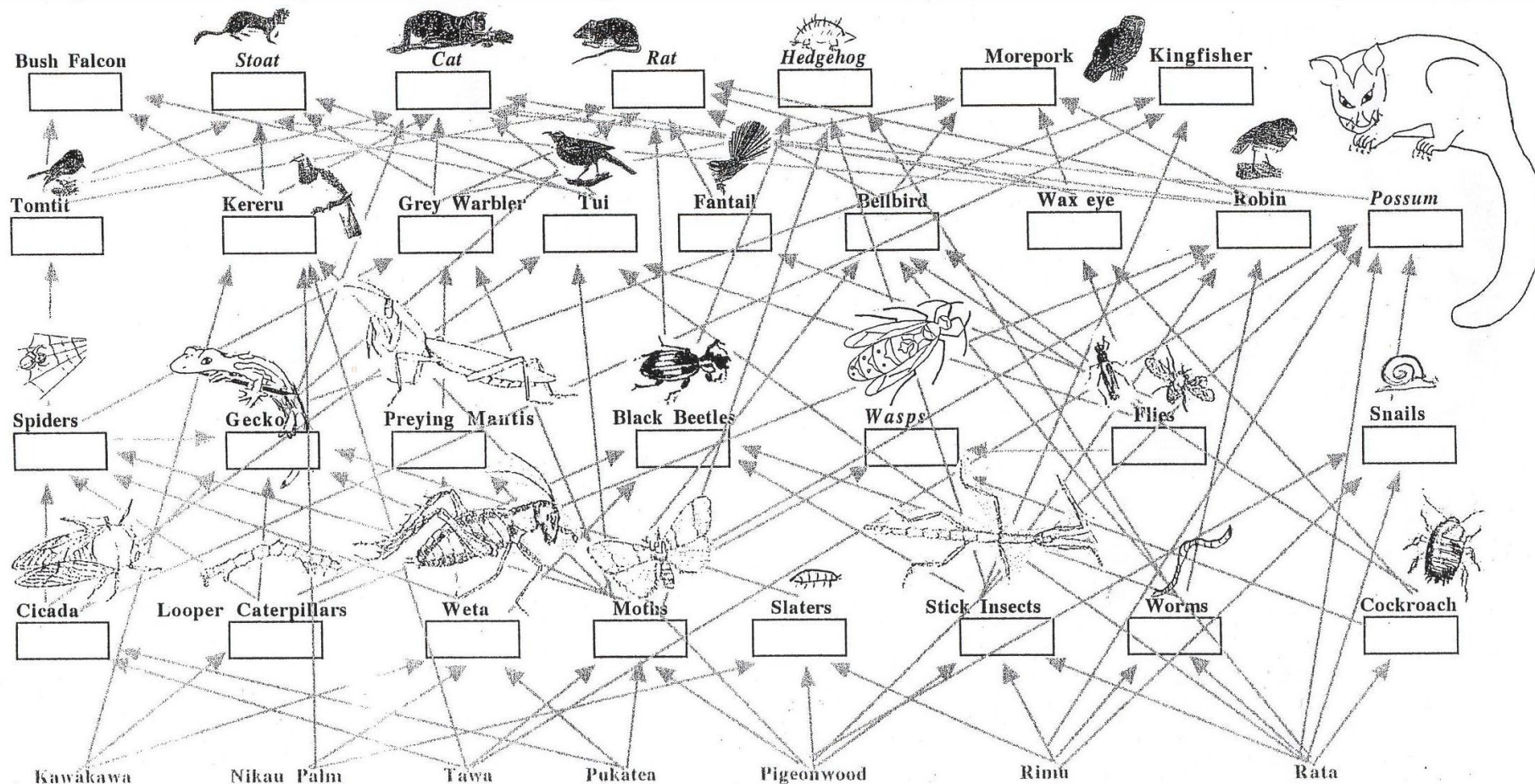




# THE WORLD IS IN YOUR HANDS. FIND OUT HOW IT WORKS BEFORE YOU USE IT

## A simplified Food Web:

Your task is to see how many of each of these animals you can find (see or hear). Use the rectangles to record numbers. You will be working in a group of 2 to 4 people. Each group will have a square of white material to help them find the smaller animals hiding on the leaves. Note: Not all links ('what gets eaten by what') are on this food web.



# *Food Chains*

Wineberry → Tui → Falcon

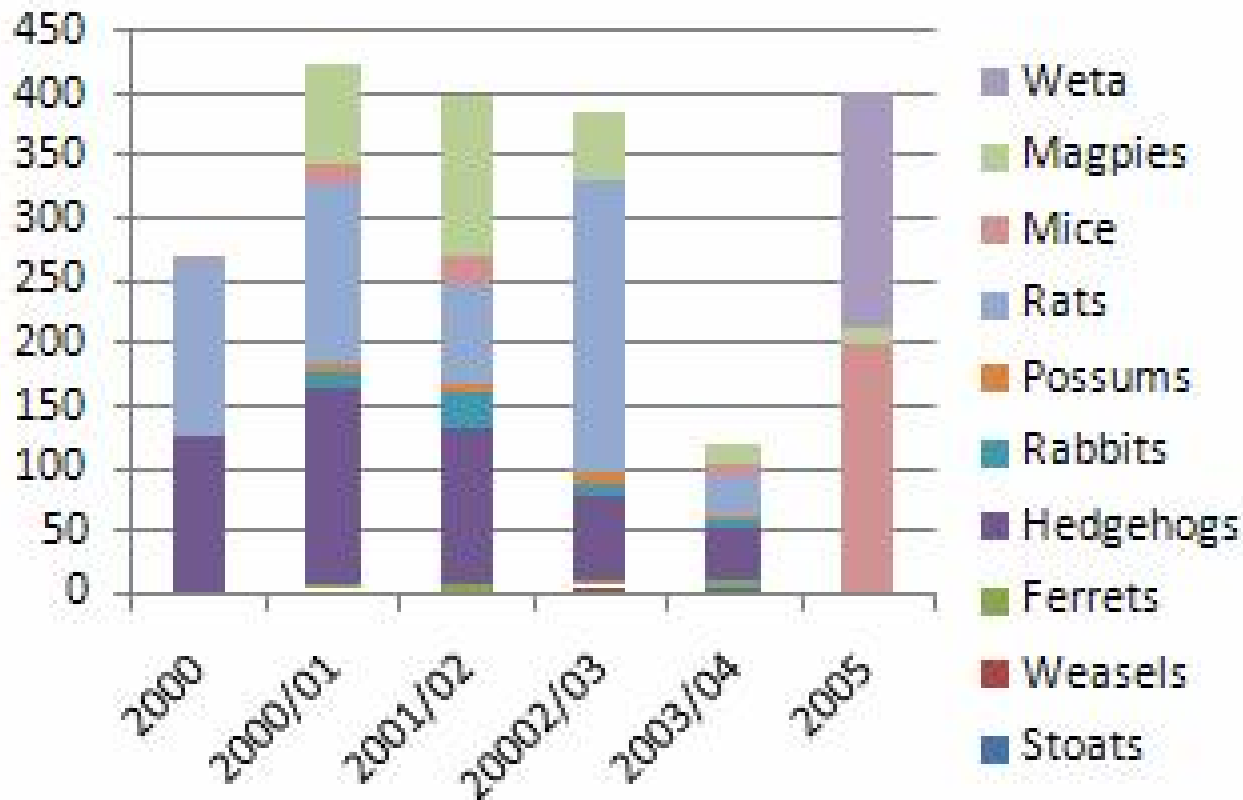
Tree Fuschia → Bellbird → Falcon

Mahoe → Weta → Spider → Robin → Morepork

Kawakawa → Looper Caterpillar → Gray Warbler → Morepork



# Bushy Park “Catch” Summary



The Mainland Island programme only became fully operational in October 2000 and stopped in December 2003. 2005 figures for mice and weta are for footprints in tracking tunnels.

## Environmental Bubbles – getting the ‘mix’ right.

You should also be looking for a ‘hook’. What will make students want to come back, cost you a minimum of money and fix a important environmental information in the memory.



You can let them study wetland ponds and catch tadpoles in season if you make your own nets from 6mm reinforcing rod, curtaining and bamboo poles.



- You will need to get the addresses and emails of your local schools from Ministry's TKI school address site.



- You will need to learn to accurately predict the local weather by comparing TV, Newspaper and Metservice and having a look at the Weather Radar at 7.10 am and as a final check go outside and look at the sky in the direction the weather is supposed to arrive/clear from.

- You should get yourself a good first aid kit with lots of brightly coloured plasters – they work like magic. You should also go to a Mountain Safety First Aid Course because they assume the Ambulance will not arrive any time soon.





- No matter what you do some one will always miss out hearing about what you have to offer so get out Pamphlets, Posters, emails, Newsletters and Cd's and above all send away happy teachers and students to talk about what they have done. Get your project in the News but be warned the Ministry wants signed permission from Parents and students

- Get an answer phone and fax but encourage everyone to email so you can reply at a time convenient to you and you don't waste time playing telephone tag. Have a cell phone for emergency's but don't turn it on unless it is an emergency.



- While you can visit schools and talk to assemblies it's the teachers who have to do all the extra paper work and take the responsibility of anything goes wrong.
- Take groups of teachers out and show them what you can provide. Convince them they can trust you with someone else's pride and joy.

- Above all get them doing real tasks that help the future of endangered species.



- Convince students that its not worth getting lost – they can survive three days without water and three weeks without food and with an anti obesity campaign running the longer they stay lost he more weight they will lose.
- Emphasise that if students stay still you will know where to find them but if they walk off you have no idea where to look so will wait until they get tired and stop before you start looking again.

- You should get yourself a class set of coats for wet and windy days as 50% of the class will either not have one or it will be a fashion item that absorbs water and only slows the wind.

# Funding

- THERE WILL NEVER BE ENOUGH !!
- Sponsorship – works if you are in a large center with lots of people who could buy your sponsors product.
- Schools share costs of Educator in return for access to service.
- Get retired teachers to support your programme as a 'hobby'
- Apply for LEOTC funding – compete with Museums, Zoos and Mt Bruce, etc



