Edit note

Flora & Fauna of Whareroa (last Update 12.07.2016)

WHAREROA GUARDIANS COMMUNITY TRUST · TUESDAY, 12 JULY 2016

In these notes we provde pictures and information on the flora and fauna of Whareroa:

What to do if you find a Lizard From the Pest Workshop, on June 11, 2016: Ecogecko indicated that one of the most helpful things to do, regarding lizards, is to tell Ecogecko about where and when, with photos if possible, of any and all lizards that have been found at Queen Elizabeth Park, Whareroa Farm and Paekakariki Escarpment.

Knowing what has been seen and where helps them plan for future surveys and monitoring programmes for the Kapiti Coast Biodiversity Project. The easiest way to tell them is by going to here: www.ecogecko.co.nz/ards.php and fill out the form. The form on this webpage is based on DOC's ARDS cards, so can be used to forward the same information to DOC, which is what we do as well. Don't worry if you don't know all of the information, just fill in what you can, and Ecogecko can fill in the blanks (Eg. Ecological District). H/T to Paul C for the info



Whareroa Fungi Fortunate Whareroa Fungi fans find fairly fascinating further flourishing Fungi photos for freely flicking through here... http://www.naturespace.org.nz/galleries/oowhareroa-fungi

Blue Petrel Helen and Tony recently (end May 2016) sent us the photo of a Blue Petrel "beach-wrecked", that they found right up at the northern end of the Carex Valley by the stile (at the bottom of the horse track).

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Blue Petrel, photo from Tony & Helen

They are uncommon (nzbirdsonline calls them even "rare" in NZ seas) and come from the subantarctic islands, the nearest colony is Maquarie Island, but some times they are found beach-wrecked on NZ mainland. The distinctive white tail is the clue to their identity. It must have been the big westerly storm at the end of May that sent the bird in the wrong direction. You can find more information here... http://www.nzbirdsonline.org.nz/species/blue-petrel

How to prevent window strike and associated bird deaths...

http://www.projectkereru.org.nz/preventing-window-strike H/T to Sue for the link

Last chance to save Kapiti little penguins at Queen Elizabeth Park, KAROLINE TUCKEY, March 29 2016. http://www.stuff.co.nz/dominion-pos...



Volunteers installing penguin nesting boxes at Queen Elizabeth Park on Wednesday; (from left) Esme Needham, Sue Blaikie and Carys Needham. The boxes were made by the Waikanae Menz Shed.

A recent survey found a Kapiti penguin population is teetering on the brink, but a new project has begun to help protect them.Little penguins (previously known as little blue penguins, and called korora in Maori) will be a focus species for the Kapiti Biodiversity Project. The project unites several ecological organisations who are working in a 16.5 kilometre area from Pukerua Bay to Raumati South, with the aim to reduce predator species, restore natural habitats, and nurture native wildlife in a 'Kapiti Mainland Island.'



Mark Taylor A little penguin

Raumati vet Sue Blaikie is project leader for the avian arm, which is monitoring bird populations, and has begun work to protect the little penguins that nest in dunes in Queen Elizabeth Park." Counting took place about five or six years ago, and there were thought to be about 20 or 40 pairs." A count last September found just two or three nesting sites, "so it does seem that they are just clinging on here". Most little penguins return to the place they hatched to build their nest, so now is the time to act to try to save this local population, she said."The little penguin is the smallest of the world's penguins, and is thought to have been quite populous all around the coastline."Fortunately there is a healthier sized group on Kapiti Island, and it is thought if the mainland site is made safer, some of the Kapiti Island penguins might expand there. The biggest threats are predators such as rats and stoats that raid the nests to eat eggs and chicks, and dogs, which sometimes attack the adults. The Biodiversity group has strategically stepped up pest trapping in the nesting area, and recently installed wooden nesting boxes to give the penguins more secure shelters. The group also has 50 dog muzzles to give out to dog walkers who use the park.Blaikie said a community project in Miramar to protect little blues has been successful, and is hopeful the same can be done here. She asked that the delicate dune environment in the park, and the nesting boxes be left undisturbed. Contact biodiversity.kapiti@gmail.com to inquire about muzzles.

Weta Motels Jan reports of a visit to Whareroa by 60 Paraparaumu school kids (today, Monday, March 14). The wetas were a real hit - in the general for public viewing houses in Kohekohe Bush there were at least 5 in one house and up in the study area one of the houses had 6 - The trapping must be making a difference. Attendees at a Pest Control Seminar on Sunday report that weta stocks are a good indicator of how many rats and other predators are about.



H/T to Jan (and thanks for the photo)

The "Dirty Dozen" of weeds: DOC has identified the worst weeds which communities can help to bring under control...http://www.doc.govt.nz/our-work/war...

- 1. Wilding conifers...http://www.doc.govt.nz/nature/pests...
- ${\tt 2.\ Woolly\ Nightshade...http://www.weedbusters.org.nz/weed-...}$
- ${\it 3. Buddleia...} http://www.weedbusters.org.nz/weed-...$
- 4. Wild Ginger...http://www.weedbusters.org.nz/weed-...
- 5. Ivy...http://www.weedbusters.org.nz/weed-...
- 6. Tradescantia...http://www.weedbusters.org.nz/weed-...
- 7. Darwins Barberry...http://www.weedbusters.org.nz/weed-...
- $8.\ Climbing\ Asparagus... http://www.weedbusters.org.nz/weed-...$
- 9. Old Man's Beard...http://www.weedbusters.org.nz/weed-...
- ${\tt 10.\ Moth\ Plant...http://www.weedbusters.org.nz/weed-...}$
- 11. Banana Passionfruit...http://www.weedbusters.org.nz/weed-...
- 12. Japanese Honeysuckle...http://www.weedbusters.org.nz/weed-...

Of forest orchids and stick insects At the end of November 2015, 100+ kids were doing a "Catchment Studies Day" in Whareroa. They were pretty excited to discover a forest orchid (see photo) which was "in a barriered off place on the up side of the vols track maybe 100 metres into the bush from the west end". Andrea thinks it may be a Greenhood Orchid, either a Pterostylis or Diplodium and mentions a great book 'Wild orchids of the lower

North Island', published by DOC.



This rather cool looking stick insect is likely a Prickly Stick Insect (sometimes called a Black-spined stick insect). No males of this type have ever been identified, and females can produce eggs without being fertilised by a male.



 ${\bf 10~NZ~Native~Bird~Facts~www.stuff.co.nz/.../ten-things-you-never-knew-about-new-zeala...~by~KIMBERLEY~COLLINS,~October~23~2015}$

New Zealand is famed for our native birds, and it has to be noted how strange and unusual some of them are. From the flightless kiwi to the curious kea or the fast falcon — there's a lot to be proud of. But there are also a few facts you may not know about our special birds. Here are 10 weird and wonderful facts to help you decide which entrant should get your vote to become 2015's #BirdOfTheYear.

KERERŪ CAN GET DRUNK ON FOREST BERRIES We all know kererū are gluttons. Come springtime, they're often seen guzzling berries and doing anything (including hanging upside down in trees) to get a good feed. But when New Zealand pigeons gorge on too much fruit, they must sit in the sun to digest it. And when the weather is good, ripe fruit can ferment in their crop and turn to alcohol, getting them sufficiently boozed up and giving new meaning to the term "daytime drinking". In years where fruit is bountiful, there have been widespread reports of kererū literally falling out of trees because they're too drunk to perch.

FANTAILS ARE BABY-MAKING MACHINES The friendly "cheet cheet" call of the fantail would be much more common if it wasn't for introduced predators wiping out their nests. Every year, between spring and summer, fantails can make up to 4 nests, raising 5 chicks in each. They should be as common as blowflies around a dunny. But rats, stoats and possums eat their chicks, eggs, and even adults before they even get a chance to leave the nest.

KĀREAREA ARE NEW ZEALAND'S FASTEST FLYING BIRD The New Zealand falcon is faster than a V8 supercar and perfectly adapted to take fast corners. Flying at speeds of up to 230 kilometres an hour, they are perfectly adapted to swoop and dart through the forest in pursuit of live prey. These aerial acrobats are highly territorial and a pair recently made the news for launching "fists of fury" in Wellington to protect their nests.

BLACK-BILLED GULLS ARE WORLD'S MOST THREATENED GULL You may see gulls every time you visit the beach but their numbers are falling so fast they now appear on the threatened species' list. Found mostly in the South Island, black-billed gulls live inland and nest on braided rivers where they are well hidden among the rocks and shingle. But why are they so threatened? There's the usual tale of introduced predators like cats, rats and stoats eating their chicks and eggs. Humans, dogs, even other birds can disturb the adults, forcing them to abandon their nests and leaving their eggs exposed to the heat where they get fried. People haven't been particularly kind to them either. Remember when hundreds of these gulls were shot, or that time someone drove their car through a breeding colony?

ALBATROSS HAVE THE BIRD WORLD'S LOWEST DIVORCE RATE "Divorce" is a word we usually associate with humans but some birds also fail to mate for life. But not the albatross. A study on the breeding behaviour of birds found that albatross have the lowest "divorce rate" in the bird world and are completely faithful to one another. These handsome ocean wanderers return to land every 2 years to breed with the same partner. But not all birds have the option of coming home. Every year 100,000 albatrosses are killed at the end of fishing hooks. Adult birds are attracted to baited hooks, get caught, and are drowned - leaving their life partners to wait and wonder.

 $TUI\ HAVE\ TWO\ VOICE\ BOXES\ T\bar{u}\bar{u}$ have beautiful voices. But they can also sound like they're nursing a bad cough. Having two voice boxes is how they sing their incredibly varied song that combines clicks, barks, cackles and wheezes. Some of their sounds can be too high for humans to hear, so if you see a silent $t\bar{u}\bar{u}$ with its beak open and its chest puffed out - you will know why. $T\bar{u}\bar{u}$ are also great mimics and Māori prized them for their ability to imitate things, keeping them in cages to welcome people onto the marae. One bird even learnt the Pizza Hutt jingle!

NEW ZEALAND IS HOME TO THE WORLD'S RAREST DUCK You may not have heard of the Campbell Island teal but it's a real battler. Found only on Campbell Island in the Southern Ocean, it was thought to be extinct until 1974 when Heritage Expeditions founder Rodney Russ helped rediscover them. The Department of Conservation quickly started a rigorous captive breeding programme, removed introduced predators from Campbell

Island, and released over 150 ducks to the wild where they are now thriving.

BLACK STILTS LURE PREDATORS BY PRETENDING TO HAVE A BROKEN WING These "distraction displays" are meant to divert the attention of predators away from the nest or young birds. Talk about sacrifice! Predators will go for the easier target as injured prey is much easier to take down. Unfortunately for the black stilt, feigning an injury only slows down the process of them being killed by introduced predators. As with many of New Zealand's birds, they are unable to protect themselves against the onslaught of rats, cats and stoats.

GODWITS FLY OVER 11,000 KILOMETRES TO ARRIVE IN NEW ZEALAND These long-haul fliers have the longest migratory flight of any bird in the world - and there's no chance of an in-flight snack. Their first stop is in China and Korea where the wetlands they depend on to feed are quickly disappearing. Then, it's onto Russia, through Canada and North America and over the Pacific to New Zealand, where around 90,000 godwits will spend their winter feeding along mudflats and estuaries.

KIWI ARE THE ONLY BIRD TO HAVE NOSTRILS AT THE END OF THEIR VERY LONG BILL. They use their nostrils to probe in the ground, sniffing out their dinner of invertebrates and fallen fruit. But this is just one of many weird facts about our national bird. They're also flightless, have long whiskers and hair like feathers. They have even been called an "honorary mammal" by some, which actually seems a bit ironic. Just like most of our native birds, kiwi are threatened by introduced mammals. Kiwi chicks are eaten by stoats, while adults are at risk of being attacked by dogs. The competition closes on Sunday at 5pm, vote online at www.birdoftheyear.org.nz This piece was written by Kimberley Collins who is the Online Communications Officer for Forest & Bird.

How to identify pests... This has got to be a useful website! www.pestdetective.org.nz/ It links pests to pictures of their: droppings, footprints, vegetation damage and a few other clues

Karearea, the New Zealand Falcon (Falco novaeseelandiae)

Only two diurnal (active in the daytime) birds of prey or raptors inhabit New Zealand, the common Australasian harrier hawk and the nationally vulnerable, endemic and protected NZ falcon. The harrier does not inhabit forests.



Regarded as one highly variable species, there are 3 forms. The bush falcon is found in forests of the North Island and northwestern South Island, the eastern falcon in the open country east of the Southern Alps, and the southern falcon in Fiordland, Stewart Island and the Auckland Islands.

The 2006-2009 survey of falcon distribution recorded observations of 1761 birds. Breeding was confirmed in the Wellington area and the central North Island. Falcons were more likely to be seen in March, April and May. 5000 pairs is one estimate of the population size. While it is assumed mustelids pose a significant threat to falcons, a number have been observed attacking and defending nests from stoats; also eating a young stoat. Falcons were seen eating carrion such as roadkill but this was uncommon.

The usual diet is freshly killed small birds e.g. introduced & native species including chaffinches and fantails plus skinks, rabbits, mice, ducks and dragonflies. The prey might weigh up to six times heavier than the falcon.



As the top native diurnal predator in NZ (the ruru being the top nocturnal predator), falcons are relatively fearless and photographers comment how close they could approach. Falcons appear to mate for life and jointly defend permanent territories. They are usually solitary when hunting and fly rapidly with skillful maneuvering through the forest as well as in the open by virtue of short wings and long tails. Overseas falcons have been tracked at speeds of up to 230kph. And their eyesight could be eight times more powerful than humans.

Three or four eggs are laid onto the ground or a rocky shelf. These hatch in about 30 days and the chicks fly by 35 days. The young are offered whole prey and taught to attack it. It is not known how long falcons live but one sanctuary has recorded a 17-year-old bird. The national Bird of Prey Centre is in Rotorua http://www.wingspan.co.nz

You can find out more information here as well as hear their voices...

www.nzbirdsonline.org.nz/species/new-zealand-falcon

Many thanks to Sue for the text and Jan for the photos

North Island Kaka flying over Kapiti Coast (August 2015) We have been asked 'how do I know it's a kaka flying over?' See below for an answer and for other information about Nestor meridionalis septentrionalis. These forest parrots may be flying alone or in a group. They are almost as large as kereru, with a more athletic streamlined body and they're bigger than tui. The silhouette in flight is quite distinctive. If seen at low altitude, flame orange colouring under the wings becomes apparent.



Kaka can be noisy, and it's not usually a pleasant sound – at times harsh squawking 'scraaak's are heard over considerable distances.

They are likely to being flying in a fairly direct path over the coastal strip from Kapiti Island to access the Akatarawa Forest, or returning to the Island. Kaka are obligate forest feeders – seeking out insects, fruit, seeds and nectar. Sweet nectar and sap are lapped up with the brushlike tip of its tongue. Strong, sharp beaks are able to rip off bark and wood to expose protein-rich insect larvae, such as those of the puriri moth. A scattering of wood chips near the base of a tree is one sign of kaka activity further upwards.



Populations are increasing in the Wellington region with safe breeding areas on Kapiti and Mana Islands as well as at the Zealandia Sanctuary. Zealandia has banded over 600 birds (January 2015) from an initial group of 14 established a decade earlier. Now kaka are

frequently seen around Wellington CBD and suburbs, in places where they had been extinct for nearly a century.

Rearing young makes kaka particularly vulnerable to stoats, rats and possums. The nest is often in a rotten or hollow branch or tree trunk. Chicks are reared there for a relatively long period - about 70 days.

Fledglings are unable to fly for the first few days and they hang about on the forest floor to practice becoming airborne. Once flight is mastered, kaka tend to be found in much safer refuges - high in tall trees.

Species to plant locally to attract these unique parrots are kowhai, northern rata, miro and flax.

Many thanks to Sue for the posting

http://www.nzbirdsonline.org.nz/species/kaka

Native plants seen at Whareroa Farm Reserve: POHUEHUE or

Muehlenbeckia A smothering cloak or a haven of biodiversity? Muehlenbeckia pohuehue) is a native climber with sprawling tangled wiry stems. It has male and female flowers on separate plants. The petals are partly fused and form a fleshy cup in the fruit. The fruit have tiny three-sided nuts.



By the Lookout in WFR

With its rampant growth engulfing trees and roadsides, native Muehlenbeckia might seem like a weed but it occupies an important place in New Zealand's ecology.

Pohuehue grows naturally in places where there is plentiful light and climbing support such as forest edges, cliff faces, scrub and regenerating vegetation.

It has flourished since human settlement because land clearance has created conditions it favours such as edges around forest remnants. Brian Patrick of Otago Museum says that pohuehue fulfills an important ecological function, forming a protective seal around forest edges and over exposed bluffs and banks, and healing natural or human induced disturbance.



Growing Pohuehue sheltered by grass

Often, it is the only native species persisting in highly modified areas. 'As the most prolific native host plant for our native fauna it contributes enormously to biodiversity,' Brian says. Managing Muehlenbeckia



Growing Pohuehue sheltered by grass

John Dawson, botanist at Victoria University, advocates a cautious approach. 'These vines are part of the nature of disturbance and regrowth. Together with our forests they've been here for millions of years. 'It's wise to monitor Muehlenbeckia before intervening, to see what effects it's really having.' Pohuehue may be particularly beneficial to enhance the diversity of insect life, heal exposed areas such as an erosion prone gully or an exposed bush edge, or suppress weeds.



More mature Pohuehue spreading

Muehlenbeckia australis is being fostered at a Nelson covenant to suppress blackberry and provide riparian protection. However, pohuehue may need controlling where it is competing with rare or threatened plants or overwhelming young plants on a revegetation site. In most cases where control is needed, cutting the vine at ground level, without poisoning, is sufficient to weaken it.



More mature Pohuehue spreading

Many thanks to Sue for the article and the photos

Native trees seen at Whareroa Farm Reserve (WFR): Puka (or akapuka) is the Maori name for Griselinia lucida and puka (or pukanui) also refers to Mertya sinclairii.



Photo 1 – Sue is checking out a Griselinia trunk

The Griselinia genus links New Zealand to Gondwana more than 80 million years ago as it contains just six trees and shrubs, four of which are found only in South America and the other two are present in Aotearoa.

G. lucida eventually forms a wide spreading tree up to 5 metres high with bright green shiny leaves. Remarkably, it begins life as an epiphyte in other trees before its roots grow down the host's trunk to become an individual tree in its own right.



Photo 2 shows the Griselinia trunk supported in the middle of its host tree

See photo 1 – Sue is checking out a Griselinia trunk which has grown after the aerial roots have reached the ground. It follows the original roots downward path but is now transporting water and nutrients upwards.

Photo 2 shows the Griselinia trunk supported in the middle of its host tree. The host may die before the Griselinia, leaving the latter freestanding, and apparently having always

been so - which is not the case.

Photos 3 and 4 show a WFR puka in the centre, where its location in the upper canopy ensures the leaves continue to have access to full sunlight. Putting energy into establishing leaves first is an alterative to investing in roots on the shaded forest floor. This adaptation gives an advantage over species that start growing on the forest floor, where many plants compete for light and survival.



Photo 3 In WFR, a puka in the centre, where its location in the upper canopy ensures the leaves continue to have access to full sunlight



Photo 4, In WFR a puka in the centre, where its location in the upper canopy ensures the leaves continue to have access to full sunlight

WFR has several mature puka specimens including one visible from The Hub as you look

towards The Dell. Reference: The New Zealand Gardener's Encyclopedia of New Zealand Native Plants by Yvonne Cave and Valda Paddison, Godwit, 1999. Thanks to Sue for the photos and the article.

Native trees seen at Whareroa Farm Reserve: NGAIO or Myoporum laetum

Ngaio is a small tree with stout spreading branches. It grows rapidly, is drought tolerant and may reach up to 10m tall. Its trunk (up to 30cm diameter) has rough and deeply furrowed bark.



Young leaves are sticky and often dark brown to black. The mature leaves are dotted with prominent glands, which produce an oil toxic to many animals. Maori used juice from the leaves to repel sandflies and mosquitos.



Flowering is seen between mid spring and mid summer. The partially tubular flowers are white with purple spots, grouped in small clusters.

Fruit mature during summer to early winter and are fleshy, almost round. They vary from pale to dark magenta in colour.



Ngaio has been planted extensively at WFR as a primary species in areas being restored to native forest. It's tough, fast growing and quickly provides shelter for other species.

Reference: Field Guide to New Zealand Native Trees by John Dawson and Rob Lucas. Craig Potton Publishing 2012. Thanks to Sue for the photos and the article.

Whareroa Farm Reserve and World Wetland Day, February 2nd 2015

www.doc.govt.nz/getting-involved/events-and-awards/national-events/world-wetlands-day/Wetlands now cover less than 2% of NZ's land area but they are home to 22% of our native bird species.

They support a wide variety of animals, some of which are endangered including the bittern and short-jawed kokopu. Most are not found anywhere else in the world such as fernbirds, dabchicks and paradise shelducks.

Fernbirds prefer wetland with dense ground cover under a variety of shrubs and small trees like manuka. They are rare in the Wellington region.

Dabchicks feed in deep open water but build nests on floating rafts of vegetation among reeds.

Mudfish are also unique. They spend their whole life in wetlands, or drains, or weed filled creeks. During dry weather, they have the incredible ability to hibernate deep into mud or under logs for months.

Many NZ native freshwater fish live in wetlands for some of their lives and must be able to journey to and from the sea. A watery pathway is essential.

Whitebait is the collective name for the juveniles of banded, giant and short-jawed kokopu, inanga and koaro. Their eggs hatch in autumn and the larvae are washed out to sea. 6 months later they make a hazardous return. Most whitebait caught and eaten is inanga. Juvenile kokpu and koaro can migrate over 100km upstream, climbing damp rocks beside waterfalls to reach wetland.

Amphibians and reptiles live in wetlands, which typically is habitat for hundreds of normally unseen insect species.

Conservation and restoration is facilitating the improvement of NZ and Whareroa Farm

Reserve's wetland health and will ensure survival of irreplaceable species into the future.

Thanks to Sue for the photos and the article.

And here an extract from the DOC website about the World Wetlands Day:

2 February each year is World Wetlands Day, marking the date of the adoption of the Convention on Wetlands on 2 February 1971 in the Iranian city of Ramsar. This is an international date with a different theme and message on a relevant subject set each year by the Ramsar Secretariat. **World Wetlands Day 2015** The theme for World Wetlands Day 2015 is "Wetlands for our future Te tirohanga ā mua mō ngā māria" The future of humanity depends on wetlands. Wetlands provide a multitude of benefits, including filtering and replenishing our water, providing food, acting as a natural shield to protect our coastlines and mitigating climate change. Unfortunately, these benefits are not widely known and since 1900, 64% of the world's wetlands have disappeared. Young people of today will be the future leaders and decision makers of tomorrow, so it's important they take an interest in environmental issues. For World Wetlands Day 2015, teens and young people, in particular, are being asked to spread the word about wetlands and their vital importance for future life on earth.

Native trees seen at Whareroa Farm Reserve: MAHOE or Whitey Wood,
Melicytus ramiflorus Mahoe is an understated lowland species found in the
understory and on stony soils of stream terraces and landslides. It may reach over 10m tall
with a trunk diameter up to 60cm. It has smooth bark that is white in young trees,
becoming grey with age.



Mahoe can be semi-deciduous. The leaves are simple, medium thick and have serrated edges. As they decay whole dainty skeletons litter the forest floor. Older trees often have many sucker shoots sprouting near the base of the trunk.

Flowering, frequently direct from woody branches, occurs in several flushes between late spring and summer. On female trees flowers and fruit can be seen together. On the male trees the cream flower clusters are smaller and not as sweetly scented.

Round ripe berries are deep purple-blue in colour.



Mahoe is the most numerous natural colonizing species at WFR in areas where land has been retired from farming and stock are excluded. It's tough, fast growing and shades out gorse in 4-6 years. It provides shelter for other native species to germinate and grow. Reference: Field Guide to New Zealand Native Trees by John Dawson and Rob Lucas. Craig Potton Publishing 2012. Many thanks to Sue for the photos and the article!

Tunnel Web Spider

Jan Nisbet, with one of her many school groups, found this spider in Whareroa in November 2014



It is a black tunnelweb spider, Porrhothele antipodiana, found throughout much of New Zealand and the Chatham Islands in bush and gardens (this is NOT a funnel web spider, a related but separate type of spider)

It is a considerably large species, it can measure up to 30 mm in body length, up to 50 mm including the long legs. Males are often found indoors during spring and summer when they leave their burrows to find mates. When found inside, they are typically near a source of moisture such as a bathroom or laundry because they need water/humidity to survive. Typically living under logs and rocks, they build a silken tunnel with a broad area at the entrance for the detection of prey (often beetles, but they have been recorded eating snails and mice).

Bites are painful and may cause localised swelling, itching, or numbness. Victims are advised to disinfect the area to reduce the risk of infection. The venom is usually not dangerous to humans.

This spider was described by director Peter Jackson as the inspiration for his depiction of Shelob in his The Lord of the Rings film trilogy.

More information can be found here (including that females can live up to 6 years, males usually not): www.tepapa.govt.nz/researchattepapa/enquiries/spidersweb/what/pages /tunnelweb.aspx

Many thanks to Jan for the story and the photo.

Hochstetter's Blue Pinkgill A blue fungus, fond of beech and totara for its growing environment, found on the New Zealand 50 dollar note and an 80c stamp. Who knew? Well, many people knew and you can find out more here...

http://sporesmouldsandfungi.wordpress.com/2014/07/12/hochstetters-blue-pinkgill/



Clematis Clematis paniculata (Clematis or Puawhananga transl. = 'flower of the skies') is a native climber which produces masses of very showy white flowers in late winter and spring. Not to be confused with a pest plant, Old Man's Beard which is deciduous and flowers later (Dec - April).

The vines grow up and over forest trees and are either male or female. Male flowers are up to twice the size of female ones. The leaves are palm shaped, dark green and glossy. To climb upwards, clematis' touch sensitive leaf stalks wrap around objects they contact, providing an anchor for the next part of the ascent.

Between August and October, tui and honeybees are visible collecting nectar from clematis. Kereru prefer to eat the leaves. Two native moth species lay eggs on clematis and the caterpillars feed on the leaves until they pupate or possibly are eaten by kereru!

And here is a great site with some more photos of native Clematis..http://www.terrain.net.nz/friends-of-te-henui-group/new-plant-page/native-clematis.html Posted August 2014





Peripatus in Whareroa Tony found 2 Peripatus on Whareroa in August 2014! *Peripatus* (velvet worm) is an invertebrate, said to be a living fossil because (1) the living members appear similar to fossil species as much as 570 million years old, and (2) the group is transitional between the Arthropoda (including crustaceans and insects) and primitive Ecddysozoa (animals that shed their skin) such as tardigrades (including marine 8 legged micro animals), priapulids (mainly primitive marine worms) and nematodes (mainly Roundworms)

It feeds by trapping its prey (mostly small insects) in a white, sticky fluid it ejects from two antennae near its head. The fluid hardens on contact with the air immobilizing the prey. *Peripatus* then chews a hole in its prey's exoskeleton with its mandibles (which move independently of each other), injects digestive enzymes, and begins sucking out its prey's

pre-digested innards.

Peripatus is native to many habitats around the world, being found in Africa, Asia, Australia, New Zealand, Costa Rica and Brazil but none are known in Europe or Antarctica There are about 70 species, in two families: the Peripatidae, which are viviparous (a placenta or a yolked egg which develops inside the body); and the Peripatopsidae which are oviparous (lay eggs with little or no embryonic development inside the mother). See also www.doc.govt.nz/conservation/native-animals/invertebrates/peripatus-ngaokeoke/ And here is a great PDFbrochure on peripatus: www.doc.govt.nz/Documents/conservation/native-animals/invertebrates/peripatus-facts-brochure.pdf
Many thanks to Tony and Helen for the find and the photos (and to Wikipedia & Sue for the info)





Fungal wood rot When trees fall, what is the best way to deal with them? Some should be left to rot, others should be harvested for environmentally very sound reasons A great article about this topic you can find here:

http://sporesmoulds and fungi.wordpress.com/2014/07/09/so-what-do-you-know-about-d

fungal-wood-rot/

We also placed the article herehttps://www.facebook.com/Whareroa Guardians/posts/696651463721660

Basket Fungus Ileodictyon cibarium, Basket fungus or white basket fungus. This inedible species of fungus in the stinkhorn family. It is found in New Zealand and Australia. Basket fungi grow alone or in groups on plant debris such as rotting logs and mulch or in grassland during late autumn - winter.

This photo below shows a mature fruiting body on the banks of the Wainui Stream in Queen Elizabeth Park from June 2014.

The unique structure is a hollow round geometric shape made up of interlaced branches, varying from 5-15cm diameter. On the inner surface are the spores which become a foul-smelling slime, probably to attract insects. Prior to this stage greyiish egg-shaped 'puffballs are seen. These open to reveal a white ball of meshes which quickly expands and may roll away.

They have been noted on Whareroa Farm near the steps leading down into Kohekohe Bush. Many thanks to Sue for this article



Kohekohe A couple of photos taken in May 2014 of kohekohe flowers and the kohekohe seed pod opening up. After such a good flowering last year in May and June the forest floor in Kohekohe bush is now (one year later) abundant with these reddish seeds. See further notes on Kohekohe below









Tomtit – miromiro Whareroa Farm Reserve's Bird Watcher, Helen, has in May 2014, sighted the first tomtit since monthly 5 Minute Bird Counts began on the farm three years ago. This adds to more than 30 species of birds recorded – seen or heard - at the reserve. Tomtits or *Petroica macrocephala* are endemic to New Zealand and there are several subspecies. They are considered to be common and widespread. All tomtits are protected. The male of the North Island subspecies, *P macrocephala toitoi* or the pied tit, is about 13cm long, mainly black with distinctive white banding on the wing feathers and has a white breast and abdomen. The female is a greyish-brown and she keeps a lower profile compared

to her territorial partner. He is more likely to make himself visible to human intruders with a short, high pitched 'zee - zee' call.

Tomtits inhabit varied forest areas including podocarp, tall manuka and exotic pine plantations. They usually feed in the upper canopy, and are insectivorous. They catch a wide range of insects from foliage and bark, often 'pouncing' or swooping suddenly to grasp small moving creatures. Nesting starts in September and second broods are raised in December – January. Nests are built in crevices or hollow logs and are very well camouflaged; being made of moss, strips of bark and lichen bound together with cobweb.

3-5 eggs are incubated by the female for about 16 days. Both parents feed the chicks until they are ten days old, when the female leaves them to the sole care of the male and begins to build another nest. The chicks fledge about 2 weeks later, meanwhile a second clutch of eggs can have been laid. All very efficient!

You can find the list of birds sighted at Whareroa Farm Reserve since 2011 (with pictures and links to www.nzbirdsonline.org.nz) here: www.naturespace.org.nz/documents /reference-websites-for-the-identification-flora-and-fauna-work-in-progressYou can find bird count info going back a while here: www.naturespace.org.nz/documents/whareroa-bird-counts







Wetland Life DOC has made a poster (in 2012) of common plants and animals (incuding fish & invertebrates) found in lowland swamps. The PDF file is 1.8MB in size and you can find it here...http://www.naturespace.org.nz/docum... Many thanks to DOC for producing it and also to Jan for bringing it to our attention

Piwakawaka Recently piwakawaka numbers seem to be flourishing at Whareroa Farm if their increased presence is anything to go by. Of course, it may be that walkers disturbing the vegetation is attracting them close. The diet of this tiny greyish-brown and white bird with its distinctive fan-shaped tail is almost entirely small flying insects, usually captured in flight. Walkers scuff up leaves which activates insects living in the litter.

The fantail (Rhipidura fuliginos...a) is widespread throughout Oceania, from Vanuatu and the Solomans to Tasmania and mainland Australia. It is the NZ native bird familiar to most

people being unusually tame and inquisitive and just plain cute. Its aerobatics are stunning viewed at close range. The squeaky high-pitched song is frequently heard.

Piwakawaka breed 3-4 times per season, hatching up to 3-4 eggs per clutch, i.e.16 fledglings are possible. When this is compared with other species of birds who produce a maximum of 4 fledglings per season, the fantail is able to withstand losses to rats and stoats and still survive in areas without effective pest control.

Distinctive tapered nests are built in small trees and shrubs using bark fragments and moss, held together with spider web. They can be lined with hair or wool.

Did you know 20% of South Island fantails are black?

www.nzbirdsonline.org.nz/species/new-zealand-fantail





Rats Rats have a major impact on New Zealand's wildlife because they eat birds and their eggs and chicks, lizards, and invertebrates. They also eat a wide range of native fruits and other plant material, which puts them in competition with native wildlife for food. Ship rats (Rattus rattus, the black rat or matapo) cause the most damage to wildlife because they are good climbers, and are able to gain access to most bird nests high in trees. Although sometimes called the black rat, the coat colour can be quite variable; it's usually sooty

brown with white underneath in the North Island. The tail is relatively long and black. Ship rats weigh around 150g compared to the larger brown rat (Rattus norvegicus). They are active at night, relatively solitary and live mainly above ground, in trees. Rattus rattus originated from the middle east and spread to Europe in the 1300s (at the time of the Crusades). They are found in every continent except Antarctica. This species probably came to NZ with the first Europeans and soon became widespread, common & devastating to native wildlife. Unlike the Rattus norvegicus, the tail of the Ship Rat is longer than its body and Ship Rat ears, when pulled forward, will cover its eyes. Mickey Mouse, despite the cleverly deceptive surname, is not a mouse, but a Rattus rattus and not a Rattus norvegicus (Thanks to DOC for that MM "fact").



A Ship rat in a fantail nest

Ruru Spotted in Whareroa on March 4,2014 @ 7:30am by the Upper Link Track. Many thanks to Ann for the great photo

Ninox novaseelandiae is NZ's only native owl since the larger laughing owl became extinct in 1914. It's status is common but protected. Owls are found on all continents, except Antarctica. Similar to hawks, owls possess hooked beaks and sharp talons for capturing & killing live prey. In contrast to other birds of prey, owls (usually nocturnal) have several unique characteristics such as immovable large eyes. To compensate for this immobility, the birds are able to revolve the neck by 270 degrees. They have 14 neck vertebrae compared to the usual seven, which turn the head to follow prey. Their external ear openings are very large which allows them to accurately pinpoint sounds. These very efficient night hunters have downy flight feathers giving an eerie ability to fly silently. The diet varies with location. Mostly it's made up of insects, from small moths to large beetles and stick insects. Moreporks are fond of wetas, a common prey in native forests and they also catch mice, geckos and small birds. Ecologically, their role is to provide balance in the natural food chain. (Reference: New Zealand Forest Birds and their World by Geoff Moon, New Holland 2009).



Ruru seen near Link Track

Fungus Fans.... Spotted in the Kohekohe Bush in January 2014, of the species Ganoderma, approx. 30cm widehttp://naturewatch.org.nz/taxa/5396-Ganoderma

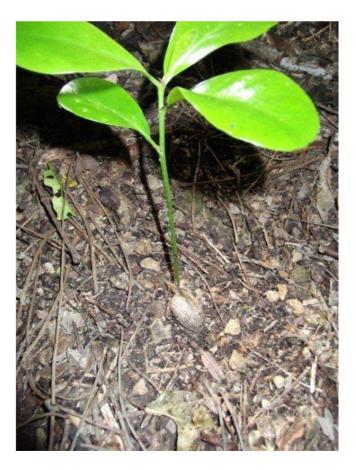








 $\bf Karaka\, seed lings\,$ It is easy to see how karakas take over - this seed was just sitting on the ground



Fungus Fans... Spotted in the Kohekohe forest (but not attached to a Kohekohe tree) in December 2013 was this.... either its a Agrocybe Parasitica or a Armillaria spp. Often linked with a dead or dying tree. You can find out more here: http://naturewatch.org.nz/taxa/9533-Fungi





Kereru - aerial acrobats The large colourful wood pigeon or kereru (Hemiphaga novaeseelandiae) appears clumsy when engrossed in feeding at the end of a branch too weak to hold its weight. The ungainliness vanishes when they are gliding on balmy updrafts above Matai bush and the gums in summer.

Kereru are seasonal migrants, who seek out ripe fruits. They are capable of reaching native forest remnants that are within sight of one another. They disperse the larger seeds of miro, matai, tawa, hinau, pigeonwood and karaka.

Catch a look and sound here: love the easy access to audio of birdsong on this website:www.whatbird.co.nz/content/new-zealand-pigeonor even try here:www.nzbirdsonline.org.nz/species/new-zealand-pigeon



Weta Hotel (Kohekohe Bush) Seen in November 2013 in one of the Weta Hotels in the Kohekohe Bush. There is a male and female in this photo (the female has the long ovipositor at her tail) Recently seen in one of the Weta Hotels in the Kohekohe Bush...

There is a male and female in this photo (the female has the long ovipositor at her tail)



Kamahi flowering Seen on the terrace just above the Dell in Whareroa in November 2013...Weinmannia racemosa. This is the most common tree in the Tararuas. Bees love it and make a nice honey from it.



Orchids flowering Seen in the Kohekohe Bush in November 2013...The common greenhood orchid (Pterostylis banksii, tutukiwi) flowers Sept - November. It is endemic to all of NZ including the Chatham Islands and is found from coastal to mountain areas in indigenous or exotic forests and shrubland. Orchid flowers show a wide array of shapes, sizes and colours. The form and markings of the tepals (petals) and the scent are specialised to assist pollination by insects





Puriri Trees Puriri trees would not have been native to the Kapiti region. They have been introduced from further north and are seen in domestic gardens in the area. Eg this splendid specimen on Mill Road, Otaki. Birds benefit from the winter flowering of puriri which tends to occur before kowhai and other native species open their buds.

Other facts about vitex lucens: naturally occurring from Taranaki and Gisborne northwards. Frost tender when young. Suits larger gardens as it will grow to 20m with a trunk diameter up to 1.5m. The deep green leaves are ribbed & curved. Pink flowers are present most of the year, the nectar attracts tui and kereru are frequently seen eating the red fruit.



Puriri Tree

Kohekohe (Dysoxylum spectabile) The NZ mahogany tree grew as lowland coastal forests from North Cape to Nelson. Remnants on Whareroa Farm have statuesque trunks 10-15m tall with younger specimens proliferating. The leaves are large, oval and glossy green. Truly remarkable are the sprays of creamy flowers in late May & June which sprout from bare trunks & branches. Male & female trees are separate, with marble size fruit forming slowly and eventually splitting to reveal scarlet seeds.



Kohekohe in blume

Nikau (Rhopalostylis sapida) Photo taken on Whareroa Farm autumn 2013. Nikau are very slow growing palm trees up to 10m tall, which begin to flower at about 30 years of age. The bright red fruits - visible below the fronds in the centre of the photo - take a year to ripen. The seeds germinate readily and there are many young Nikau growing since stock has been excluded from the restoration areas.



Nikau near Matai Bush

Stinkhorn Fungus (aseroe rubra) Photo taken on Whareroa Farm autumn 2012.

