



Help wanted!
Queen's Birthday Weekend
Sat. 1 and Sun. 2 June.
More planting days
Sun. 7 July. Sun. 4 August.
9.15 am.

TAWHARANUI OPEN SANCTUARY SOCIETY INC.
Newsletter No. 45 June 2013



Kakariki numbers are increasing. They are heard and seen more frequently around Tawharanui. This bird was determined not to show its legs so it is not known if it is a juvenile or one of the released banded birds.



Saddleback are thriving at Tawharanui. Ninety birds with coloured bands were released in 2012. They are breeding successfully because twenty chicks have been sighted with out colour bands and there might be more.



Chairman's Report

A walk around Tawharanui should convince any volunteer as to the usefulness of TOSSI's efforts.

Recent plantings are generally thriving despite recent drought stress.

There is also plenty of evidence of breeding success of the translocated bird species. A walk through ecology trail may need to be accompanied by a noise warning. One of our members recently dampened down the expectations of some visitors about the possibility

of seeing kiwi in the park only for her to almost trip over a kiwi while out for a night stroll in the Mangatwhiri wetland only half an hour later.

At the next AGM a motion will be put to the membership to limit the size of the committee to 9. At the moment membership is open ended and we could end up with a very cumbersome committee if it became too large. The major role of the committee is to deal with governance issues although traditionally the committee has also directed projects. As TOSSI's projects in the park increase it is no longer practical for projects to be driven solely by committee members unless the committee was to grow to a size which would make the governance function inefficient.

Fortunately TOSSI also has a history of projects being successfully lead by members outside the committee. Dorothy Cooper has been in charge of membership for a number of years, Paul Williams continues to direct the nursery since stepping down from the committee, Jenni McGlashan organizes the fence team and Roger Williams has organized a number of construction projects. In the future it is likely that more projects will be run from outside the committee enabling members to become more involved with the sanctuary without needing to suffer the tedium of a committee. The Sunday In the Park is one area where it would be useful to have more members able to lead groups in the park. We would particularly welcome members with enthusiasm and expertise in wildlife monitoring, planting and fundraising. If you are interested talk to any of the committee members.

Steve Palmer



Open Sanctuary Coordinator Update

Rain has arrived and Tāwharanui is bouncing back after the big dry. Soil moisture deficit values (the amount of water soil can absorb before becoming waterlogged) are now back within the normal range. Soils are now wet enough for planting with the first 1900 of the annual 20,000 high quality volunteer grown trees already in the ground. Join us at a planting day this winter and help create habitat for our growing wildlife.

The prolonged dry gave us cause for concern for a range of species on site. Some of our mature taraire and tawapou which were showing considerable signs of stress are now starting to show a few green leaves and might make it, though some clearly won't. One adult kiwi was found dead in a creek and another wee chick was picked up foraging in a paddock in the daytime, disoriented and malnourished due to the challenging conditions, and subsequently died. However, visitors and staff and contractors working nights on park still report kiwi sightings. A clearer picture of local kiwi population health will emerge after the annual call count survey. Despite seven known pateke deaths over the drought we still have good numbers sighted on the stock dam and lagoon.

A recent walk though of the Ecology Trail was a delight. In the company of several TOSSI members investigating possible guided walk opportunities we were treated to most of the key wildlife on park – pateke on the stock dam, robins, whiteheads and bellbirds through the forest, the honeydew producing scale insect on kanuka hosts, translocated mistletoe seedlings on a totara host and the remnant milk tree saplings in good health. Saddleback made themselves known at several locations and at each it was great to see unbanded birds present, indicating local born young. The unseen lurks too, with the night shift of eels, kokupu and kiwi tucked away in the daytime. All this is topped off with the big reveal at the top of the Ecology Trail with the Hauraki Gulf and islands in the distance and the Tāwharanui Marine Reserve in the foreground. If you haven't walked the Ecology Trail for a while, do take the opportunity to get out there and see first hand the difference TOSSI members and volunteers have made. It really is quite something to be proud of.

Matt Maitland

I can be contacted at matt.maitland@aucklandcouncil.govt.nz or 09 426 1200

Come and help restore Tawharanui

Big Plant Weekend

Sat. 1 and Sun. 2 June Queen's Birthday Weekend 9.15 am start.

TOSSI. BBQ provided.

More plant days

Sun. 7 July 9.15 am. Auckland Council Planting Day. BBQ provided.

Sun. 4 August 9.15 am. Auckland Council Planting Day. BBQ provided.

Bring a water, gloves, sturdy boots and raincoat.

Planting in a gentle sloping gully at the West End of the park.
Follow directions when you arrive at the park to planting area.

Mid Week Volunteers

Would you be available and like to know what volunteer activities occur during the week? A chance to go to special places at Tawharanui that one might otherwise not get to. Activities that are occurring during the week include pest plant control, infill planting, planting day organization, trap lines, sea bird work, bird monitoring, board walk and track construction.

We would like to build up a e-mail data base of people who may be available during the week to help with these projects. Such projects would not occur on a regular basis but we would like to be able to call on extra help when it is needed. Of course any e-mail that you receive would simply outline the project and date. Being on the data base would not be a formal commitment.
Contact Alison Stanes 095240291 alison.purple@xtra.co.nz

Volunteers required in the nursery to prepare trees for 2014

Have the satisfaction of doing something worth while Tuesday mornings.
Contact Paul Williams 425 9877 pgrwilliams@xtra.co.nz

Volunteers to count kiwi calls

This year's kiwi call count season is June. Kiwi call counts give us an index of the population health of our Tawharanui kiwi and contributes to the national survey of kiwi health.

Volunteers are sought to join us. What is involved? Volunteers stationed at six listening sites listen for the first two hours of darkness on each of four nights for kiwi calls (and other night noises). The four survey nights can be undertaken during the listening period on nights when weather conditions are suitable (e.g. no rain and not much wind). Volunteers can make themselves available for all four nights or just one. Full training is given, all you need is reasonable ears, enthusiasm and lots of warm clothes. Volunteers can listen alone or in pairs.

Friday 7th, Sunday 9th June, Friday 14th, Sunday 16th June. 5-9pm.

Spare nights in case of cancellation of earlier nights, are Friday 28th and Sunday 30th. June

Contact Pat Williams: port.williams@clear.net.nz Phone 09 425 9127

Planting

Once again the planting season is upon us and have already completed a small planting near the lagoon, but our major focus for the year will be an area known as M16. This is an area of 10 ha west of the Twin Hills Planting and close to the predator fence. The area is essentially a basin with a low lying area that originally would have been wetland forest. The surrounding hills contain residual broadleaf forest so that there is already some vegetation to build on.

The attraction of planting this area is that it will eventually form a fairly continuous 30ha area of **revegetation from the Mangatawhiri wetland, along the bull sidling, to Twin Hills and Keith Edwards'** planting and finally M16. Although it will be some time before there is a bird population comparable to that of the ecology trail it will be a major contribution to new bird habitat, not forgetting insects and reptiles.

Last year's planting at Anchor Bay has clearly suffered from the effects of this year's drought and you might well think that the planting has been a failure as you viewed it from the road. However the plant survival higher up the slope is more encouraging and with some infill planting lower down we should still have an attractive planting within a few years.

This years planting is supported by the Ministry of Environment as part of a three year grant funding our revegetation programme."
Steve Palmer



Park in the Dark - Kiwi Monitoring

Nationally, June is the Kiwi Monitoring month for all scenic reserves and protected environment areas where our national feathered icon lives. This important annual activity is sponsored by the Bank of New Zealand.

At Tawharanui, volunteers sit out in specified places around the Regional Park four or five times during June, listening for the calls. This is the month in which the darkest nights occur, without the moon.

So the group are gathered together being all keen and ready for the first evenings training and are given the various pieces of equipment required for the task. A CD is played to refresh everyone's memory of the call of the Kiwi, both male and female. Then the group are taken to their specified positions, in pairs, where they make themselves comfortable and sit quietly for 2 hours, from 6pm to 8pm.

Listening, listening. Sometimes the waves are crashing onto the rocks below. Or an airplane flies overhead all lit up in the complete darkness. At times it can be quite exciting when a seabird crash lands nearby or their young squeak as the adult arrives back to the ground burrow with food. The occasional Morepork on the prowl perhaps looking for a mate, gives a clear call of 'More Pork!' Sometimes this is quite scary to anyone not familiar to sounds in the bush! A Pukeko may screech nearby trying to find its family group. All these sounds are a bit strange until you get used to them. But eventually the call of the Kiwi can be heard and so the counting begins.

1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11! Yes, that's a male kiwi alright. They can even call as many as 20 times. Sometimes after sitting out in the dark for about 1 1/2hrs, the answering call of the female Kiwi can then be heard – a sort of scratchy screeching sound, quite different to that of the male. So there they are, having finally found each other and another mating of our treasured icon may then occur. Some nights the call seems as though it's right there beside your foot! Other times it can be several kilometres away, depending on the wind direction. So the details which are needed to be recorded are the numbers of calls, male or female, in what direction did the call come and from about how far away. Go on line and listen to more-pork, pukeko and kiwi so that you are sure you know the different calls.

Of course warm clothing is essential. If the weather is not good the evening is called off for another time. There's always a good cuppa and cake to follow, once all volunteers have returned to the base for the delivery of their data and chatting time. Come join us – it's fun!!

So if you think you'd like to 'have-a-go' give Patte a call on 09 425 9127 and experience the wild of the night at Tawharanui Regional Park!
Patte Williams

Ransom Wines' Sponsorship

Ransom Wines have been a generous sponsor of TOSSI since 2008 with money being donated through sales of their K-Syrah wines, fundraising dinners and tasting charges at their vineyard. A sum approaching \$10 000 has come from the sponsorship plus money from the fundraising dinners. Given TOSSI's limited fund raising ability this sponsorship has been invaluable and has helped members concentrate on what they enjoy most, developing the park. In particular the sponsorship has enabled the establishment of a sustainable population of kakariki, another K bird for their syrah wine. These birds were a difficult translocation and early on it appeared that many would simply leave the park as they are capable of long distance flight. More recently the kakariki have become more prominent and it is now unusual for me to visit the park and not hear them calling. On a recent visit I heard kakariki in four separate sites. Being seldom still they are seen less frequently than heard.

Marion and Robin Ransom report that they get a very enthusiastic response from visitors to their cellar door when they talk about TOSSI, the sanctuary and their support of it. The wall of beautiful paintings by Julian Ransom often endangered indigenous birds draws visitors' attention to the topic, so Tawharanui often becomes the focus of attention ahead of wine! They feel the benefit to TOSSI of the relationship has been greater than simply providing sponsorship funding, by raising awareness and support for the Tawharanui sanctuary more generally amongst people, many of whom might not otherwise know or find out about it.

For this major contribution and ongoing support TOSSI wishes to thank Marion and Robin Ransom for their dependable sponsorship.



Petrel Stations at Tawharanui

A new phase of the program to restore seabird populations at Tawharanui has begun.

For the past 18 months, three sound systems have broadcast a variety of seabird calls from the headlands of Tokatu Point far out over the waters of the Gulf to give the impression of a busy seabird rookery. It's clear that many birds have responded and the discovery of a Diving Petrel chick in November confirmed the success of the project so far.

The next step is to install artificial burrows to make Tawharanui an even more attractive breeding location.

Our 'Petrel Stations' are essentially bottomless boxes buried in the ground with a curved plastic pipe as an entrance. Their lids are removable to allow for monitoring. We are providing 16 large boxes intended for Grey-faced Petrel and the same number of smaller boxes for Diving Petrel and Fluttering Shearwater. The seabird nest box design we are using has been successful at Young Nicks Head.

In addition we have drilled burrow-sized holes into sloping areas in the vicinity of the speaker systems to see if the birds will adopt these as well.

A recent survey using a trained sniffer-dog has found additional Grey-faced Petrel activity at Tawharanui and further occupation of known burrows. Grey-faced Petrel 'prospect' for nesting sites in May and then head off for a month or so before returning to lay in mid June to late July. Hopefully, with some new housing opportunities, more will adopt the sanctuary as home.

The Nesting Boxes were constructed by Long Bay College woodwork class. Thanks to Jeff Evans and Tim Lovegrove for organizing this and to the students for their work.
James Ross

Mid Week volunteers

These midweek volunteers had an opportunity to help install grey-faced petrel burrows



Tunnel entrances made of nova pipe are yet to be installed in these nest boxes.



Volunteer Ray Blackburn rolls the nova pipe down the path.



Keith Edwards and Ray Blackburn install nest boxes.



Troy White and James Ross drill additional nest burrows.



While others install nests Megan Friesen a research student checks out a grey-faced petrel that has returned early to the site.



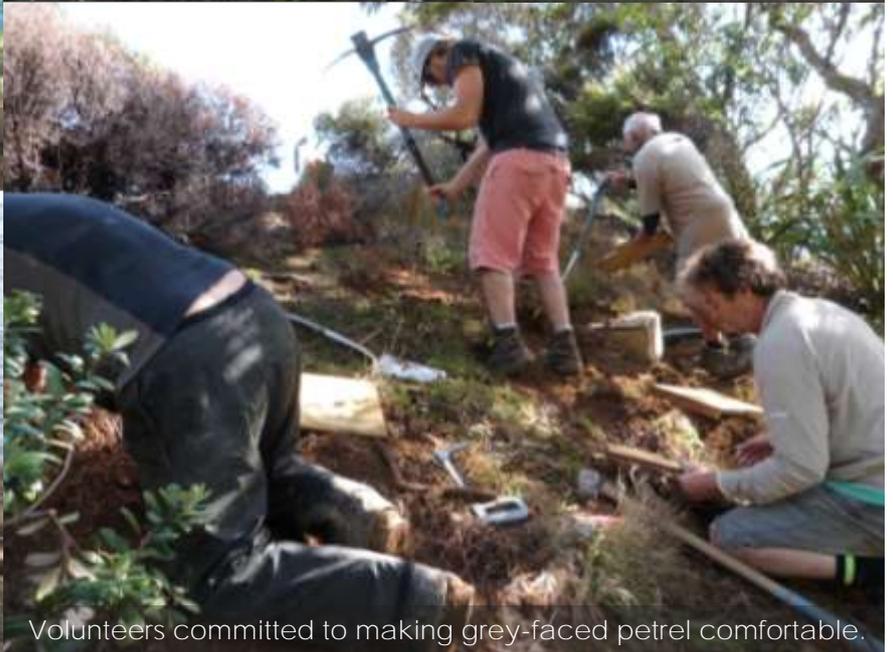
Chris Gaskin the project coordinator project is pleased to discover a diving petrel in this flax bush.



Penny Palmer and Ray Blackburn furnish the nest boxes with sand and leaf mulch.



Chris Gaskin inspects a nest box .



Volunteers committed to making grey-faced petrel comfortable.



Mid week volunteers have great opportunities to visit areas all over Tawharanui seeking out weeds, birds and planting trees. They become eyes and ears for the sanctuary. Contact Alison if you would like to get on the mid week volunteer email list. alison.purple@extra.co.nz



Mid week volunteer Keith Edwards, who knows every corner of Tawharanui, removes a pampas from Twin



Keith Edwards discovered this long leaf hakea on Tokatu Point. It was quickly dealt to.



While searching for pateke in a dried out wetland Ray Blackburn found this unwanted long leaf willow. Keith Edwards and Maurice Pucket inspect asking how did it get so big without any one noticing it?



Ranger Maurice Pucket deals to the long leaf willow with a chain saw.

Interesting geological feature at Anchor Bay

The geology of Northland is surprisingly complex, recording as it does the transition from a passive continental margin (Australia) to the vigorous plate boundary separating the Pacific and Australian tectonic plates which dominates the geology of modern New Zealand. Much of this geological history is dispersed in localities the length of Northland.

At Tawharanui we get a glimpse of this history in the outcrops behind the beach at Anchor Bay. At the eastern end of the beach the rocks are dark grey and on close inspection very complex and contorted mixtures of sandstone and mudstone that have become hardened during their long history (~280 million years) since their origin as sediments deposited off the east coast of the Australian continent. These rocks are commonly referred to as greywacke and they are the basement rocks on which most of the North Island has been built.

At Anchor Bay itself these rocks form outcrops at beach level and they are overlain by a completely different type of rock. These overlying rocks have the appearance of gravel. They are in fact deposits of gravel that were laid down in a near shore environment as the Auckland region subsided beneath the sea about 20 million years ago and have since become hardened to form the rock known as conglomerate. These deposits mark the beginning of New Zealand's time as part of the plate boundary which in the Auckland was represented by a very rapid deepening of the ocean. Initially gravel was deposited, and this is what we see at Anchor Bay; after this there was a series of sand and mud submarine avalanches onto the sea floor that became the sedimentary sequences now seen widely in the Auckland region and known as the Waitemata sediments. At Anchor Bay the boundary between the greywacke basement and the overlying gravels is a gap in the record of geological time known as an unconformity. This unconformity represents almost 200 million years of geological record that is missing because the rocks formed during that interval have been eroded from the record. Dr. Ian Smith Geologist and nursery volunteer



Ian Smith gave an interesting talk to many nursery volunteers after half a morning's work! The line immediately behind Ian in this photo is where unconformity occurs at Anchor Bay. This is a unique formation where 200 million years of geological record is missing between the grey wacke basement rock and the conglomerate gravels known as the Waitemata sediments on top.

Bird News

NZ dotterels from Tawharanui have moved off now to the flocking site at Omaha for March and April where they have a good feed source in the Whangateau Harbour. Although dotterels feed on invertebrates on the tide line and among rock pools at Comet Rock and Jones Bay when the tide is out, during the season at Tawharanui they will fly off for a day or two and for an extra feed in the Whangateau Harbour. Areas such as Snells Beach and Shakespeare Sanctuary have open mud flats for the dotterels to feed on so they do not have to journeys to additional feeding areas. NZ dotterels who have good nesting territories will return early from the flocking site to make sure no one else claims them. Alison Stanes

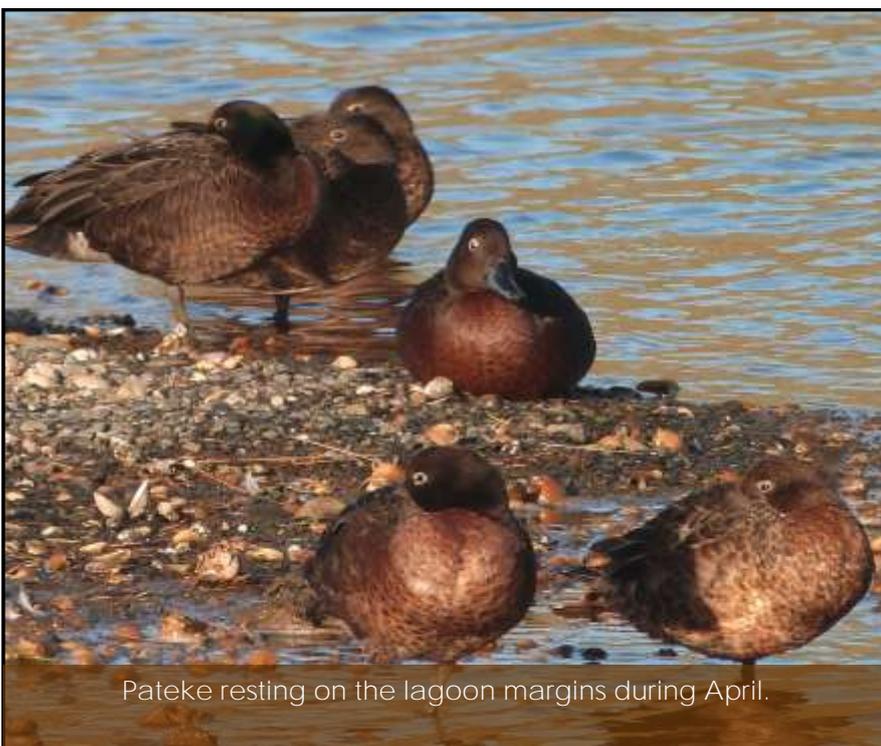
Robins 18 pairs this season. 12 pairs last season. Banded 75 chicks. After January nests failed because of the dry. 12 out of 63 recruited from last year.

Saddleback 84 of 90 released observed on the park. 20 chicks this season. Tim Lovegrove

Saddleback on the Ngaio Bay track two saddleback were seen accompanied by a flock of whiteheads and six fantails all feeding as they moved through the trees together. It looked a though the small birds were around the saddleback for protection from possibly the aggressive tui and bellbird. On reading the very same evening *New Zealand Birds*, Oliver 1935 page 514: I discovered, "After the nesting season whitehead move about in flocks and tieke, two or more, usually follow them. Percy Smith suggested that the saddleback acted as guardians to smaller species and quoted Maori name tieke as meaning guardian but WW Smith is of opinion that the reason for the saddleback following the flocks of whiteheads was really to feed on the insects which those birds disturbed or rejected." Alison Stanes

Pukeko Many animals have complex social lives. Pukeko are one such species-they live in permanent groups of 2-16 individuals and in these groups each individual has a specific role. Pukeko groups are often kin-based, and as with any family there can be quarrels and disagreements. My research at Tawharanui focuses on how pukeko solve conflicts with fellow group members by dominance and communication. Specifically, I am interested in understanding the formation of dominance hierarchies within pukeko groups and how these hierarchies help groups to function. I am also studying what physical traits pukeko when establishing dominance relationships. My previous research has shown that the pukeko's frontal shield is used as a dominance signal and I hope to continue exploring the role of this unique ornament.

I will be around Tawharanui performing this research from April until June. If you see me please don't hesitate to stop for a chat. Cody Dey



Pateke resting on the lagoon margins during April.



A pateke rests with a mallard behind and a Australasian shoveler in front.

Visit TOSSI's new bird hide on the edge of the lagoon.

Coping with a drought



Some taraire berries this season were small and dropped early with out liquid to plump them up.



As soon as the rain came taraire berries plumped up to their normal size.



If there are no taraire berries, kowhai leaves make an alternative food source.



This wood pigeon was caught chomping through kowhai leaves in the Ngaio Bay gully.



Beilschmiedia taraire and Beilschmiedia tawarao stressed and maybe dying in the Ngaio Bay Gully. As a forest succession the death of trees opens space for new growth. Some of these trees still have a few green leaves and with luck will survive.



A whitehead photographed in Ecology Bush.

TOSSI Committee

Chair	Steve Palmer	09 422 6441
Vice Chair	James Ross	09 422 6760
Secretary	David Stone	09 528 5712
Treasurer	Ngaire Wallen	09 627 1526
Editor	Alison Stanes	09 524 0291
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	Steve Harrison	09 425 8500
	Patte Williams	09 425 9127
	Ray Blackburn	09 425 4995

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P.O Box 112 Matakana 0948

Email secretary@tossi.org.nz
Website: www.TOSSI.org.nz

Thank you to our sponsors

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Application form for NEW MEMBERS Tawharanui Open Sanctuary

Name(s): _____

Address: _____

Phone No. _____

E-Mail _____

Occupation _____

How did you hear about TOSSI?

Please tick how you would like to help:

- | | |
|--|---|
| <input type="checkbox"/> Planting/workdays | <input type="checkbox"/> Bird Counts |
| <input type="checkbox"/> Fund raising | <input type="checkbox"/> Administration |
| <input type="checkbox"/> Monitoring Pests | <input type="checkbox"/> Nursery |
| <input type="checkbox"/> Predator fence monitoring | |
| <input type="checkbox"/> Environmental educational | |
| <input type="checkbox"/> Publicity/promotion | |
| <input type="checkbox"/> Art in the Woolshed | |
| <input type="checkbox"/> Other _____ | |

Membership fee:

\$20 single membership \$ _____

\$30 Family membership \$ _____

Additional contribution (optional) \$ _____

Donations over \$5 are tax deductible

Gift Membership:

Please send membership to

Name: _____

Address: _____

Amount of Gift membership(as above)\$ _____

Total amount enclosed \$ _____

Please make cheques payable to Tawharanui
Open Sanctuary Society Inc. and return the
completed form to:

TOSSI Membership Secretary
P.O.Box 112
Matakana 0948

