



## TĀWHARANUI OPEN SANCTUARY SOCIETY INC.

Newsletter 67. December 2018.



A sign of success — this combination of birds resting happily together — showing what can be achieved in a predator-free sanctuary.



Tāwharanui Open Sanctuary is a joint project with Auckland Council.



## Coming events

Sunday in the Park: meet at the woolshed at 9.00am (wear sturdy shoes/gumboots; bring a bottle of water) BBQ lunch is provided.

- 3 February 2019
- 3 March 2019
- 7 April 2019

## Volunteer Days

Tuesdays 9am The Nursery team meets at the Tāwharanui nursery.

If you would like to join this dedicated team,

Contact: Ray Blackburn 425 4995. magsandray@gmail.com

Thursdays 9am A small group of volunteers meet at the Vol Hole for interesting track and maintenance work.

Contact: Roger Williams 425 9127. ropeworth@gmail.com

Volunteer checking (to be done in your own time) See page 11.

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## Chairperson's Comments

Spring is a magical time at Tāwharanui with lots of delightful surprises and occasional disappointments. It is pleasing to see that the large flock of red-billed gulls returned to nest on Phoenix Rock after two years of choosing some other location for nesting. The activities in the breeding colony are noisy, busy and fascinating as they get on with procreating: courting, partner bonding, squabbling, sexual encounters, finding the right real estate for your nest on a crowded building site, and raising the children. Anthropomorphism or not, it seems that their actions are not that different from ourselves, only they do it all in one season!



The New Zealand dotterels are out there too, determined to reproduce, despite all sorts of inclement weather, roving hungry black-backed gulls and harrier hawks. Added to their challenges, as many other birds in the sanctuary are also coping with, are the recreational activities of Sanctuary visitors. A key principle of Tāwharanui is the integration of recreation, conservation and farming. Recreation can work along side conservation as long as we understand species' needs and give them space. Sometimes conflict can occur within this integrated approach.

An unfortunate incident took place in the sanctuary in October. Permission was given for a fun-run to pass within 50 metres of a dotterel nest which later coincided with the death of an adult dotterel. Dotterels nesting on the beach are accustomed to human activity but this pair back in the dunes would have found it disturbing to have over a hundred runners passing nearby. We understood that the runners would not be visible from the nest site. However, we overlooked the fact that in the distance the birds could see every single runner as they came off the beach to cross the dunes. As a result the male dotterel would have been giving warning cries all day and the female would have been constantly hopping on and off the nest. These are just the distress signals an opportunist harrier hawk would have required for a meal of adult dotterel and three fresh eggs. We found a pile of feathers beside the empty nest and no footprints, indicating an attack from above. The missing female was one of the best breeders on the Park. We had known and watched her for eleven years. Her partner with identifying colour bands, was on the beach, not the cheeky bird we know but instead limp, lost and grieving. We are not supposed to project human emotion onto birds but what other words could one use to describe his body language? This was an experience we can learn from. TOSSI and Auckland Council manage potential problems by careful timing of events and will aim to avoid spring breeding time in the future.

It is said that monitoring dotterel is like a rollercoaster ride from elation to despair and back! Recently on the South Coast, as I climbed down the bush-clad bank to Blue Bell Point, there were none of the normal warning calls. I could see that the tide had been over the nest site below. At the bottom, feeling somewhat disappointed, I rounded a corner to find three tiny little fluffy chicks and two very protective adults! They must have hatched just before the spring tide. The season is looking good for New Zealand dotterel as well as many other endemic species in the Sanctuary. It is fortunate that by summer time chicks throughout the Sanctuary are bigger and more able to cope with the influx of visitors.

May you all have a very happy Christmas and a great summer holiday.

Alison Stanes

## Open Sanctuary Senior Ranger Update

It's been a busy few months with a flurry of recent animal pest incursions. Occasional invasions of animal pests previously eradicated are not altogether uncommon and we tend to deal with a handful of different incursions from different pests each year. It has in fact become an area of unexpected expertise for the team detecting and removing these first invaders before they can establish breeding populations and build to numbers that threaten the increasing wildlife values of the Sanctuary.



Some incursions are trickier than others and of late we've been a bit stretched by simultaneous stoat, cat and rat sightings. We run continuous surveillance and control tools both inside and outside the Sanctuary fence. Sometimes these standard traps and bait stations don't find favour with our target pests who avoid them by one or a combination of good luck or cunning. This is when we get creative and delve into our peer networks around the country and our own imaginations to find ways to entice these invaders to our control tools.

Basic animal biology informs most of our thinking as we seek to exploit the basic drive for shelter, food, Mates, and avoiding predators and competitors. A variety of trap sets have been deployed along with traditional and novel lures. Typically, lures are food or prey oriented, offering the animal a tasty treat to entice them into our 'nice warm box' (apologies to Spike Milligan's Bad Jelly). We're trying a few scent lures and some of these definitely fall into the exotic category. Interesting times indeed when I have to explain online perfume purchases to my manager as I seek scent with a base of civet musk as a cat lure. I was delighted that a regular volunteer could connect us to a local Leigh perfumier who was able to provide raw civet musk. What a community we have around us! Another stinky scent is ferret pheromone. This was originally tested by Patrick Garvey as a potential stoat deterrent on the basis that the smaller stoat would be scared of the bigger ferret relative. Cage trials proved quite the opposite with the stoats proving to be attracted to the B.O. of the ferret. Now comes the real test though, of having one or more of these tools deliver the goods of body-in-trap. It's a vitally important task as lives do literally depend on our success.

The Sanctuary keeps ticking over despite these occasional challenges. Volunteers Keith Edwards and Ray Blackburn have been assisting with rabbit control in the Tāwharanui sand dunes for a few years, making a day of it on most Fridays. The results are quite spectacular with an increasing abundance and diversity of plants in the dunes. One particular aspect that really surprised me was the prevalence of several fern species quite happy to grow in what seems a harsh sandy environment. An interesting recent discovery by Keith and Ray was a dead 2-3m female blue shark (*Prionace glauca*) on Ocean Beach on the marine reserve boundary. I'm told by Department of Conservation shark expert Clinton Duffy, that these are a relatively common species and it must have been reasonably fresh as the gorgeous blue colouration was still vivid and that this tends to fade fast. Not many of us get to see these sharks up close.

Another pleasing area of increased volunteer effort is the beginnings of a monthly weed team led by Keith. Auckland Council does engage contract weeders to deliver the bulk of plant pest control but like many areas of endeavour the resources can't quite cover the task at hand. The new weed team will target weed species and areas not covered by the contractors, and also provide a valuable audit of the contractor's work. We know what a significant contribution volunteer weeders can make, having virtually eradicated the invasive Apple of Sodom (*Calotropis procera*) from the dunes and now making substantial inroads into the next priority dune weed species, tree lupin (*Lupinus arboreus*). Several years of monthly Sunday in the Park weeding teams' efforts have delivered substantial gains for this key dune ecosystem, despite the prospect being quite daunting at the outset.

Thank you all for your support of Tāwharanui Open Sanctuary in 2018. I wish you all a relaxing and enjoyable summer. I hope you take the time to visit the Park as visitors and maybe share it with family and friends.

Matt Maitland

I can be contacted at [matt.maitland@aucklandcouncil.govt.nz](mailto:matt.maitland@aucklandcouncil.govt.nz) or 09 427 3270



Santa Claus arrived on the last Sunday in the Park work day of the year, to bring some Christmas cheer... and the new TOSSI Information Trailer.

Above, Santa and the TOSSI committee (absent: Karyn Hoksbergen)



Left, Alison Stanes (with a young budding conservationist) explains the contents of one of the three-dimensional dioramas housed in the Information Trailer. There are three dioramas: the shore, the bush, and the wetlands. Below each diorama are photos of the birds on display, with brief explanations about their habitat and/or behaviour. In the base of each diorama are 'peep-holes' showing birds on their nests, such as kiwi and korora (little blue penguin) in burrows. Other sections feature control of predators and information about Tāwharanui Open Sanctuary.

This fantastic resource is the result of Alison's creative concept and design, countless hours supervising its production, and determination to have it completed in time for the busy summer season in the Park. It will be positioned at strategic locations around the Park, with volunteers in attendance to provide assistance. It will also be available to support Auckland Zoo with their education programmes based in the Park.

Below, one of the very realistic dioramas, the shore, showing the many bird species, their habitat, and related information.



## A takahē's tale: 'The United Nations go takahē hunting'

How three kiwis (Kerry, Matt, Moe), a Belgian kiwi (Justine), a Frenchwoman (Adelie) an American (Berlin) and two Canadians (Blaine and Adam) hunted, lured, chased and then pounced upon Dampier...

So, Dampier had taken umbrage when Pūkekohe (male) decided Pleiades was a better mate and ignored her. She decided to leave the Park in a huff and reside in Home Bush (behind the workshop). A substantial search over a few days suggested she had hidden well, possibly in the upper reaches of the (outside) Mangatawhiri, as not a squeak was heard from the telemetry equipment. Justine and Kerry both kindly offered to attempt a listening search and struck it lucky with a signal heard, which was originally thought to be in the Mangatawhiri but was in fact beyond the predator fence! Eventually Dampier was lured into the open with playback calls. The catch was a case of running her down and hand-netting her in the paddock. Not as simple as it sounds but ultimately successful. Dampier's wanderings were a clear sign that she wasn't settled with her fellow takahē in the Park, so on 7 December she moved to the Burwood Takahē Center to live with a new bloke.

When asked for comment, Dampier released the following statement through her 'minder', Kerry:

"Wot about those jolly rabbits, that's wot I wants to know? There's only a couple of hundred of us bleedin' birds that can't even fly, let alone breed, yet it's ok for those bleedin' rabbits, that breed like rabbits, to be in the yard. Oh yes, piles of fencing materials carefully stacked so they can shelter/hide under them. Wot do us birds get? We have to carry a personalised PLB around ALL THE TIME, day and night! And they have a guy come every now and then, and scrag us, stick us in a bag, hang us on a spring, stick needles in us and tie our wings up so we can't even flap 'em even if we wanted to. AND they just keep us here to get more of us to get sent away somewhere. Ruiha reckons they just want to keep us barefoot and pregnant like her gran told her they would. It's just not a fair go. Bloody bunnies..... laughing at us. They didn't laugh so much when that hairy ranger with the dogs was around all the time. Or when that guy that works all night comes and keeps us awake with his bloody noisy motorbike and his 2000 candlelight spotlight, and his bloody pop gun. That quietened them down, that's for sure. Weren't so cocky then, were they? Anyway, that's all I have to say about that. I have friends who are helping me and mine from the inside, and leak us info ahead of the so-called capture days. We'll be here long after you mammalies are gone, and birds will rule again!"



Left, U.N. Swat Team leader, Commander Maitland with the renegade, Dampier.

### Takahē up-date — the big picture

- There are now 376 takahē in the world at the end of the 'takahē year' on 30 September 2018
- Last year's figure was 347 and importantly included 100 pair
- 2016 crossed the significant 300 bird threshold (306)
- 1981 was the historic low point of 118 birds.

The Kahurangi National Park takahē translocation project:

- 12 takahē released on 1 March 2018
- 18 takahē released on 20 March 2018
- All 30 takahē released are still all accounted for

Most of the released takahē have remained around the Goulard Downs area. One young female has walked down the Heaphy track to Mackay Downs Hut.

In November a team went in to do breeding monitoring. It is hoped to have some juveniles fledged by the end of the 2018 - early 2019, and if this happens then progress will have been made towards ticking both of the necessary boxes (survival & breeding) involved with this translocation.

Source: DOC Takahē Recovery Programme: [www.doc.govt.nz/our-work/takahe-recovery-programme](http://www.doc.govt.nz/our-work/takahe-recovery-programme)

## Action in the Park



On the Sunday in the Park work day, 4 November, a team of volunteers set about dismantling all the now unused display material from past *Art in the Park* exhibitions. Their hours of effort resulted in a full skip bin and a pile of firewood!



Three of the regular Thursday volunteers (from left) Sharon Kast, Ron Dyer, Roger Williams and Karyn Hoksbergen (who took the photo) managed to resurrect the erosion dam that had washed out, and wire it back. They also fixed the remainder of the netting on the Fisherman's Trail boardwalk.

Providing nourishment for the hard-working volunteers on Sunday in the Park work days is an important way to say "thanks" as well as enhance the social aspect of the day. The BBQ lunches are created by a dedicated team of volunteers.

Right, volunteers tuck into the special Christmas lunch after the last work day of the year.





Volunteer, Keith Edwards has taken the bit between his teeth and initiated a Weed Group. Once a month this group will tackle weeds that are present in areas not controlled by Auckland Council contractors and do audits after the contractors have been through. Any new members would be heartily welcomed.

Above, the inaugural weed team head off for a spot of death and destruction.

Left, a keen team of weeders attacking moth plant (*Araujia hortorum*).

Moth plant is probably one of the worst invasive weeds in New Zealand. It is an aggressive climber that grows up to 10 metres smothering everything in its path. The fruit carry thousands of silky tufted seeds which are dispersed by the wind. The plant is capable of eventually killing mature trees. Sites at Tāwharanui are recorded with GPS and inspected annually as the seed lasts in the ground for 20 years and variable seasonal conditions can suddenly trigger germination.



Right, Keith Edwards carefully untangles a moth plant in bush at Tāwharanui and then collects all the pods (seen hanging above his head) for safe destruction.

## Flora Report

Over 19,000 plants produced by the TOSSI nursery were planted in the 2017/18 season. After community planting days in June, July and August, further planting was carried out by the nursery volunteers. Bigger trees, that we raise in the shade house for several years, such as puriri, kohekohe, karaka, totara and kahikatea are used as infill planting. We planted them in lightwells in the kanuka/manuka canopy of previous years' plantings. We also had special planting projects such as screening the bird hide at the Lagoon and a border beside the Information Hut.

Once the nursery was almost empty it was time for regular maintenance. First tidying and cleaning, then repairing all the equipment. Next, spraying the premises to control moss, lichen and mould.

At the beginning of November the next stage commenced. Trays of seedlings germinated at the Auckland Botanical Gardens, mostly manuka and kanuka, arrived and pricking out of tiny seedlings began. By the end of the month 6000 kanuka seedlings were placed in tubes, along with seedlings of coprosma, mahoe and mapou. In a break from tradition the manuka seedlings won't be pricked out until January when they will be put directly into trays with 28 holes, each holding half the volume of potting mix that a PB3 holds. We hope these will be easier to put out across the steep slopes of Slip Gully next autumn. Because karo seedlings are so difficult to germinate we again collected hundreds of small seedlings near the woolshed and potted them directly into PB3s.

We have been having regular turnouts of over 20 volunteers each Tuesday lately so it has been challenging finding enough jobs for everyone. As a result, a few of us spent last Tuesday releasing karo and pohutukawa, planted next to Cactus paddock in 2017, from choking weeds. To our surprise we were visited by a kaka who chose to display his acrobatic skills and use his brush-tipped tongue to feed on numerous harakeke (flax) flowers just two meters away. Such are the rewards of working in the Park!

Susan Gibbings

### **Pūkeko Research at Tāwharanui**

My name is Blaine Landsborough and I am a PhD student in Jim Quinn's lab at McMaster University in Canada. Before joining the Quinn lab and travelling across the world to study pūkeko, I completed a Master of Science degree studying the vocal behaviour of nocturnally migrating songbirds in North America.

Over the years, you have likely noticed the pūkeko within the Park, sporting colour-bands and wondered why someone would go to the effort of banding them? Despite being common around much of New Zealand, pūkeko exhibit a rare behaviour where up to three females from a social group will lay their eggs in the same group-nest. Less than 1% of the world's birds will share nests, and our lab studies this joint-laying behaviour. It is clear how male birds benefit from these larger clutches, but it is unclear why a dominant female will allow other females to lay within her nest. My PhD research focuses on the factors affecting co-operation among female pūkeko.

This year, my field season has focused on investigating the synchronized clutch hypothesis, which suggests that two related females laying eggs over the same period may produce more young that share genes with dominant breeders, compared to the prolonged laying period of a dominant female, were she to lay twice as many eggs. Joint-clutches that are more synchronous (i.e. clutches with less time between the first-laid and last-laid egg) should benefit from higher hatching success and reduced failure due to nest-predation, as the clutch will spend less total time being incubated in the nest. This synchronisation of joint-clutches in kin-groups may increase reproductive success by hatching more offspring in less time and allowing fewer eggs to be abandoned in the nest. To test this hypothesis, I have been manipulating the hatching synchrony of some pūkeko clutches within the Park and tracking the nests to monitor how this synchrony affects hatching success, and the growth and survival of offspring.

My field season started in August and ends 10 December. However, I will be returning next year to follow up and conduct additional studies, recording results next December.

Blaine Landsborough



Pūkeko researcher, Blaine Landsborough (left) taking the head measurements of a pūkeko chick, assisted by Kyle, a fellow researcher.



Well-camouflaged dotterel eggs (left) and chicks (right) in nests in two very different habitats.



Never seen before at Tāwharanui, a surprise flock of juvenile dotterels resting after a storm.



A pied stilt chick is all legs.

Photos: Alison Stanes

## Summer guiding in the Park

TOSSI has an *Education, Awareness and Appreciation Plan*. Not only is the new Information Trailer an outcome of this plan, but this summer season will also see the provision of guided walks being led by volunteers.

On 14 December, the first group of guides will have completed a two-part training programme, giving them the skills and information to provide high quality experiences for visitors to the Park.

Guided walks will take place in all the key areas of the Park, such as in Ecology Bush, the shore, the wetlands, and grasslands where takahē roam. Guided night walks for spotting kiwi and other aspects of nightlife (non-human, that is!) in the Park will also be available.

A schedule of guided walks will be created and notified on a notice board at the campgrounds and the Information Trailer. These guided walks will be a fund raising activity for TOSSI, asking participants to make a gold coin donation.

Specific guided group walks can also be organised for set times and dates, as required. To make a booking, contact Marguerite Vanderkolk on 09 422 7747.

## Join the Fence Team

Due to some members having to step down after many years of voluntarily monitoring the integrity of the Predator Fence, we are looking for replacement checkers.

You would be joining a team of 20 others who work in pairs, one each side of the fence, taking a turn every 10 weeks and choosing a day in the week rostered, starting from Wednesday through to the following Wednesday. You will be introduced to the procedure of recording your time in the Park, the gear you take on your check and recording your observations. You will then be walking approximately three kilometers over a three hour period, checking the fence which includes the buried skirt, cap and netting; checking that culverts are clear; posts are erect; etc.

This offers a great opportunity to enjoy Tāwharanui Regional Park while ensuring the reintroduced species are protected to the best of our ability.

For more information contact:

Roster compiler  
Richard Taylor

021 102 1065

rb.taylor@auckland.ac.nz

### TOSSI on Facebook

TOSSI is back up and running on Facebook. You can find us by searching 'Tāwharanui Open Sanctuary Society Incorporated' or using the URL <https://www.facebook.com/TOSSI.NZ/>  
Please feel free to post photos and other updates that you feel followers will be interested in. Follow the page to get notifications of upcoming events.

### NEWSLETTER CONTRIBUTIONS WELCOME

If you would like to write a brief article about any activities you've been involved in, or an experience you've enjoyed in the Park which you'd like to share, please email it to me: [editor@tossi.org.nz](mailto:editor@tossi.org.nz)  
And if you have any good photos of interest, please supply a brief caption and email them to me.

Marguerite Vanderkolk  
Editor.

### Trapline Volunteers Needed

Trapline volunteers help maintain the network of traps and bait stations throughout the Park. They serve a crucial role in detecting and eliminating pest predators that have somehow managed to get into the sanctuary. Volunteers adopt a line which they usually service once a month. You can do this alone or with a friend to help share the load. The lines vary in length and difficulty: some are physically demanding, others are literally a walk in the Park! Full training and advice will be provided.

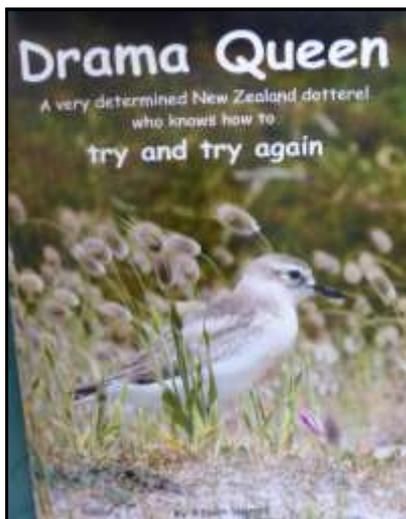
If you are interested please contact James Ross: [jjross801@gmail.com](mailto:jjross801@gmail.com)



TOSSI monogram patches are available for sale with black or white surrounds, to sew on garments — hats, shirts, fleeces etc.

Cost: \$15

Contact: Sally 09 425 0161



### Children's Book: *Drama Queen*

At last a reprint is available! A delightful story about a New Zealand dotterel that lives at Tāwharanui. Excellent birthday or Christmas gift.

Cost: \$20

Contact: Alison 09 524 0291

### TOSSI Committee

Chair	Alison Stanes	09 524 0291
Vice Chair	Roger Grove	09 422 3459
Secretary	Karyn Hoksbergen	09 585 1315
Treasurer	Kim Grove	09 422 3459
Committee	Sally Richardson	09 425 0161
	Tony Enderby	09 422 6127
	Justine Sanderson	021 654 554
	Marguerite Vanderkolk	09 422 7747

Newsletter Editor Marguerite Vanderkolk  
09 422 7747

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E-letter Janet Poole 021 054 0600  
Website [www.TOSSI.org.nz](http://www.TOSSI.org.nz)  
Correspondence Chairperson or Membership Secretary  
PO Box 112  
Matakana 0948

### Application form for NEW MEMBERS

#### Tāwharanui Open Sanctuary Soc. Inc.

Name(s): \_\_\_\_\_

Address: \_\_\_\_\_

Phone No. \_\_\_\_\_

Email \_\_\_\_\_

Membership fee:  
 \$20 single membership \$ \_\_\_\_\_  
 \$30 Family membership \$ \_\_\_\_\_  
 Additional contribution (optional) \$ \_\_\_\_\_  
 (Donations over \$5 are tax deductible)  
 Total amount enclosed \$ \_\_\_\_\_

Membership as a gift to family or friends:  
 A gift membership will be sent to you.  
 Recipient's name: \_\_\_\_\_

Recipient's address: \_\_\_\_\_

Please make cheques payable to Tāwharanui Open Sanctuary Society Inc. and return to:  
 TOSSI Membership Secretary  
 PO Box 112  
 Matakana 0948

You can also pay by bank transfer to:  
 ANZ 06-0483-0072390-00  
 The membership name should be clearly referenced if the payee name is different to the membership name, e.g:

Payee	Payment details	Membership
Bloggs, J.	\$20/\$30	Bloggs Family

If making a donation with membership, please reference clearly.



## Birds in the Sanctuary

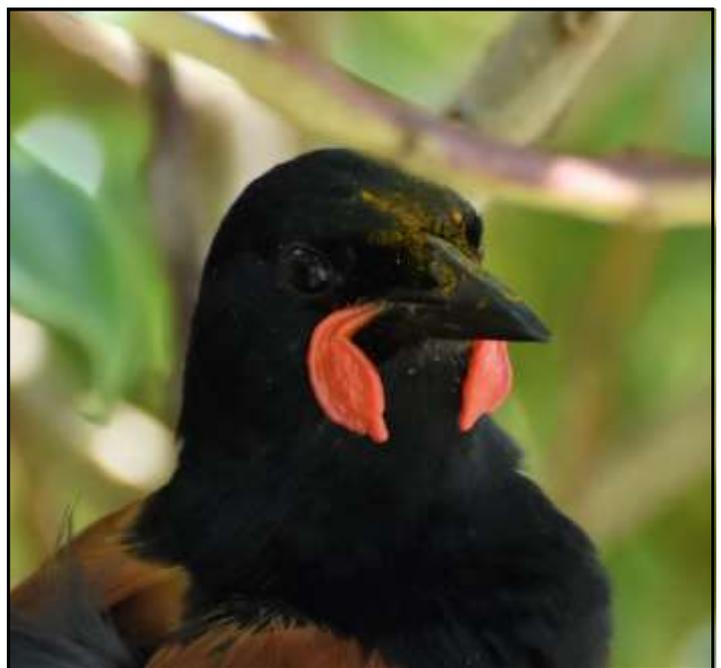
It's all go on Phoenix Rock!

Left, red-billed gulls have returned to nest and breed at this spot.

Below right, white fronted terns on Phoenix Rock.

Below left, a ruru (morepork) has taken up residence in the woolshed, and keeps an eye on the human activities there.

Photos: Alison Stanes



Tieke (saddleback) are thriving at Tāwharanui. Not only feeding amongst leaf litter on the ground, they also use their acrobatic skills to find food in tree bark.

Photos: Tim Rainbow