

# MOU

## *Into the future...*



Fromleft: Rolien Elliot, Carl Hayson, Simon Fordham, Rob McCallum  
Photo: Julie Cotterill

On November 7<sup>th</sup> at the head office of the Department of Conservation offices in Auckland, a significant event took place with the signing of a Memorandum of Understanding (MOU) between the Supporters of Tiritiri Matangi and the Department of Conservation. Attending the occasion were members of the Supporters committee, including the Chairperson Simon Fordham and the Auckland Conservator Rob McCallum and Warkworth Area manager, Rolien Elliot. We believe that this is one of the first MOU signings, between the Department of Conservation and an environmental group, in NZ and this made the occasion doubly significant.

So just what is a Memorandum of Understanding and what does it mean for the Supporters of Tiritiri Matangi? Basically it is a legal document outlining an agreement between parties making clear the objectives and recognizing the different roles of each party. In the case of the Supporters, the document outlines our aims and responsibilities on Tiri and outlines a mutual cooperation and consultation with the Department on many aspects such as work programs, health and safety and concessions. The document protects the interests of both the Supporters and DOC and ensures the island receives the benefit of this partnership into the future.

*Continued on Page 2*

## In This Issue

**MOU ctd...**

Page 2

Page 3 Bird—**Tui**

**From the Chair  
Rule Changes**

Page 4

**Hihi Recovery Plan**

Page 5

**Flora & Fauna Notes**

Pages 6 & 7

**Kokako Report**

Page 7

**Argentine Ants**

**Periwinkle**

Page 8

**Eagle Rays  
Tracking Tunnels**

Page 9

**Kakariki Research  
Fernbird update**

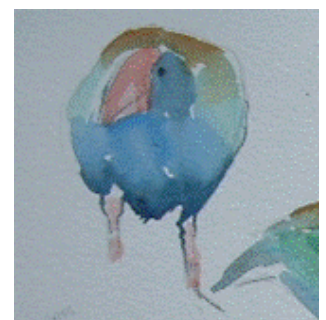
Page 10

**Events  
Pohutukawa  
Visitor Centre Update**

Page 11

**Foghorn**

Page 12



**The opinions of contributors, expressed in Dawn Chorus, do not necessarily reflect the views of the Supporters of Tiritiri Matangi Inc.**

## SoTM Contacts

### Chairperson

Simon Fordham 274 1828 simonf@clear.net.nz

### Secretary

Julie Cotterill 817 8714 julieatpiha@xtra.co.nz

### Treasurer

Bill Mancer 475 5997 bill.mancer@arbitrage.co.nz

### Membership Secretary

Val Smytheman 278 9309 vjess@ihug.co.nz

### Newsletter Editor

Sharon Alderson 299 3813 sharon64a@xtra.co.nz

### Committee

Cathy Catto 629 3903 higcat@actrix.co.nz

Margaret Chappell 4157119 getgrow@ihug.co.nz

Mark Davison 415 6654 marksd@xtra.co.nz

John Elliot 376 0337 johne Elliott@ihug.co.nz

Sally Green 377 8416 sallygreen@xtra.co.nz

Kay McLeod 631 5664 jmcLeod@ihug.co.nz

Helen Stringer 473 385 Theclaytons@xtra.co.nz

Graham Ussher 815 6622 graham.usscher@arc.govt.nz

### DoC Field Officers

Barbara & Ray Walter 476 0010 tiritirimatangifb@doc.govt.nz

Ian Price 476 0920 ian.price@xtra.co.nz

Bunkhouse 476 0920

## Fundraising Concert Success

Last November, SoTM members were not only treated to an evening of light classical and well-known music at The Pumphouse, thanks to the efforts of these five talented musicians we now have \$2,000 more in the Visitors' Centre fund. This event is being repeated in May, with a new selection of music and members are encouraged to come along and enjoy what will no doubt be another wonderful evening's entertainment.

# Editorial

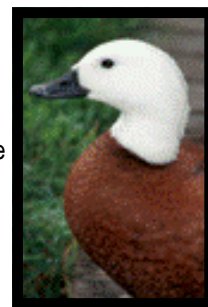


Photo: Simon Fordham

As this newsletter goes to press I have just received news that Daphne, the Island's favourite resident Paradise Shelduck, well known to many Tiri visitors, has died as a result of gunshot wounds. Daphne was injured in a cull which took place at the Gulf Harbour Country Club. Full details will be reported in the next Dawn Chorus, and all parties will be invited to provide their version of events.

While Daphne will be sadly missed, we must also consider the wider implications of this event. Many ducks were shot out of season, while in moult and possibly unable to fly. A permit of some kind was issued, but it is not yet clear whether all permit conditions were met. If this sort of treatment of our wildlife is permitted, the lack of respect for animals in the human environment sets a very poor example for future generations.

Simon Fordham, our Chairperson, is pursuing this matter on behalf of the Supporters. The New Zealand Herald featured Daphne's demise on the front page on 2 February and TV3 News reported the story on the same day. It seems likely that there will be Media follow up, and that further details will emerge. While that will not bring Daphne back, it may encourage better attention to Permit details, and enforcement of Permit conditions. It will also increase public awareness of wildlife management issues, and may lead to more informed decision making in future. We can only hope so.

Daphne will be returned to Tiritiri Matangi to rest in peace.

\*\*\*\*\*

**APOLOGY: In the last Dawn Chorus I made several errors in the "Silvester Wetlands Open" article. My apologies to Grant and Ossie for these errors, and thanks to those who pointed out the mistake. the correct information follows:**

Grant Dumbell from Aranovus Applied Ecology (not Ducks Unlimited as stated in article) was the contractor who organised the work and put in a lot of personal (unpaid) time to get the wetlands finished. He also wrote the article for Bulletin 57.

Ossie Malcolm is the contact for Ducks Unlimited, who organised Ducks Unlimited to pay for the Brown Teal sign and initiated the contact to get the latest release of brown teal onto Tiri. Ossie was also at the opening.

Sharon Alderson

**Deadline for Next Newsletter: 22 April 2005**

## Memorandum of Understanding continued.....

Many hours of work and negotiation, not to mention blood sweat and tears, had taken place over the last 2 years to reach a consensus on the final draft of the document that was prepared for signing. Throughout the process the society's honorary solicitor, Ian Haynes, had scrutinized each draft to ensure the interests of the Supporters were not compromised. We wish to extend out thanks to Ian for his patience and assistance.

Similarly the Supporters wish to thank Rolien Elliot for her support of the document and for guidance throughout the process, and to Rob McCallum for his encouragement and backing. Finally the committee spent many hours discussing and digesting the contents to minimize the legal jargon and to ensure all aspects of the understanding between the two partners were covered.

A job well done and thanks to all those involved.

Carl Hayson

# Tui

## Parson Bird

*Prosthemadera novaeseelandiae*

# Page 3 Bird

Every visitor to Tiri soon becomes aware of New Zealand's most dominant honeyeater, the tui, hurtling through the forest at breakneck speed with noisy whirring wings as they chase one another, and other birds such as bellbirds and moreporks, from breeding or feeding territories. Elsewhere, they chase harriers, long-tailed cuckoos and even New Zealand falcons. People who have gone too close to a Tui nest have also been dive bombed.

The noisy whirring of the wings of the tui is caused by a notch in the eighth primary feather which makes the wing tips flutter. The wing slot is larger in males and is absent in first year birds who are therefore unable to make wing noises so are lower in the "pecking order". Tui are often seen to soar high above the canopy and to then make a noisy near vertical dive back into the forest.

Full of energy, the Tui is the first bird to sing in the morning, beginning before dawn and the last to finish at night, not stopping until after dark. Renowned as great mimics, the song varies with locality and season but usually contains bell like notes, intermixed with harsher clonks, croaks, coughs, clicks, grunts, wheezes and chuckles. The wide frequency range includes higher frequency notes inaudible to the human ear. Both male and female sing and some females even sing from the nest.

In earlier days, Maori kept them in cages and taught them to talk, used their feathers to adorn cloaks and took them for food. Reputedly, Captain Cook and his crew ate more tui, than any other native bird. Despite the clearance of large tracks of forest, tui have adapted well to a changed environment and occur throughout the three main islands (but are scarce in Christchurch and on the Canterbury Plains), Kermadec and Auckland Islands and most offshore islands. The other subspecies, the Chatham Island Tui is now rare on the main island but more common on the other islands of the Chatham group.

As well as eating nectar, birds eat fruit and invertebrates, especially large insects such as cicadas

and stick insects, obtained by gleaning leaves, branches and trunks, and by hawking. Tui play an important ecological role as pollinators of many native trees and are one of the main dispersers of the seeds of plants

with medium size fruits.

Although usually solitary, they are often partially nomadic and travel in small loose flocks to more distant winter feeding territories. Even though they may feed simultaneously in the same tree they have clearly defined feeding territories in the tree dominated by the largest, noisiest males who obtain greater access to nectar and plant species that provide the highest energy returns. The tongue of the Tui is highly specialised with a brush like extremity which is composed of four finely bristled arms. The black curved bill conforms to the curvature of the filaments of the flowers of the New Zealand native flaxes.



Photo : Simon Fordham

Tui establish their territories in September-October, singing from high perches and exhibiting a lot of beak clicking and wing rustling. The female builds the bulky nest of twigs and sticks lined with grasses and leaves in a fork or an outer branch in the canopy or sub canopy. Most eggs are laid in November-December and the two to four white or pinkish eggs with reddish brown spots and blotches are incubated by the female for about fourteen days. The chicks are first fed by the female, then by both parents and fledge at around twenty one days. Tui numbers fluctuate on Tiri over the year depending on which plants are flowering.

Although the tui appears to be black, when seen in the sunlight the plumage has a beautiful green, bluish-purple and bronze iridescent sheen. The white throat tufts or "poi" on the adult birds gave rise to the early name "the parson bird".

Morag Fordham



# From the Chair

Summer 2005

Tiritiri Matangi is not an island. Well, actually, our favourite piece of rock at the end of Whangaparaoa Peninsula is, but the Tiritiri Matangi project is not. It is but one part of a master plan to save those many native treasures that do still exist, in this case by creating and managing a habitat in which they can continue to, not only exist, but to thrive.

We know that Tiri is different from many previous projects in that, even if not the first, was established to create an easily accessible sanctuary where visitors can appreciate and learn about our native fauna. Advocacy is a key role of Tiritiri Matangi Island. By visiting places such as Tiri, and obtaining first hand experience, New Zealanders are more likely to understand why we need to save those species that we do have left.

Tiritiri Matangi has also set an unrivalled example as to what can be achieved through public involvement in a conservation project. It creates a sense of ownership.

Auckland now has quite a few like projects, driven by enthusiastic volunteers, many of them inspired by what has happened on Tiri. I recently attended a Forest & Bird presentation entitled "Auckland Naturally" and the focus was to highlight these groups and consider a way that they can network.

Although SoTM is not constitutionally permitted to operate outside of our project, there is no reason why we cannot support like projects through individuals offering assistance and utilizing the many years of combined experience that we have accumulated.

One direct way that conservation projects will inevitably become linked is the translocation of species from one area to another. Not only has Tiri received 12 species to date, but we have already "exported" saddleback, whitehead, robin and most recently, stitchbird. Our partnership with DoC ensures that we are consulted well in advance and given the opportunity to provide input into the proposal.

In general, we approve of the translocation of birds from Tiri but are always quick to qualify our support. Most importantly, any translocation must not jeopardise the sustainability of the population on Tiri. Because of our advocacy role, birds must not be taken from areas that would significantly reduce the chances of visitors seeing them. Thirdly, we invest considerable money into research projects so any translocation must have no affect on such studies.

As more projects come online, and habitats are restored to allow the reintroduction of threatened species, there will be greater demand for these. We must be very careful that Tiri is not viewed as an easy option for sourcing birds to the detriment of what we have created.

*Simon Fordham*

## Constitutional Review

As mentioned last year, the committee are conducting a review of the SoTM constitution. Members were invited to submit suggestions but none were received. We have considered a number of changes and sought legal opinion on these. Our honorary lawyer, Ian Haynes, has kindly drawn up these changes in a legal format, along with an explanation, and the resolution that will be put at the AGM. Members are invited to contact Simon Fordham (274 1828, [simonf@clear.net.nz](mailto:simonf@clear.net.nz)) if they require a copy of the draft rules or wish to discuss any aspect.

## Proposed changes to the Rules

**Chairperson** Reference to the "Chairman" has been changed to "Chairperson" throughout the Rules.

**Discounts for Advance Payments (Rule 5b(iii))** A new Rule 5b(iii) is proposed which will give the Committee the ability to allow discounts for payment of subscriptions in advance. This will allow the Committee to provide for longer term subscription packages - eg - a ten year package.

### Membership of the Committee (Rule 6a)

Rule 6(a) has been amended so that:

1. the minimum number of members is now 7 (to be made up of the Chairperson, the Treasurer and the Secretary (now known as the "Officers") plus at least 4 Ordinary Committee Members); and
2. the maximum number of members is now 12 (to be made up of the Officers plus a maximum of 9 Ordinary Committee Members).

The amended Rule empowers the Committee to fill casual vacancies. Any such appointment is valid until the following Annual General Meeting when appointees may stand for re-election.

**Quorum for Committee Meetings (Rule 6b)** Given the possible range in size of the Committee as a result of the changes to Rule 6a, it is proposed that a more appropriate quorum should be simply two thirds of the Committee members in office at the time. The original quorum was 4 which is now considered too few.

**Election of Committee Members (Rule 6c)** The Rule makes it clear that all members of the Committee (Officers and Ordinary Committee Members) must be elected at the Annual General Meeting. It is proposed that nominations must be received by 31 January each year. This will allow time, where an election becomes necessary, for candidates to present their cases in the February edition of Dawn Chorus/Notice of AGM.

**Projects or Assistance Provided by the Society (Rule 6g)** It is proposed that a new Rule 6g(iii) be added which requires any assistance or project to be consistent with whatever contractual arrangements are from time to time in place with the Department of Conservation.

**Calling an Extraordinary General Meeting (Rule 7b)** Reflecting the increased membership, it is proposed that the number of members required to call an Extraordinary General Meeting be increased from 10 to 25.

**Sending Notices of Meetings (Rule 7c)** Rule 7c has been clarified to provide that notices for meetings are to be sent to each member's last known address.

**Quorum at General Meetings (Rule 7d)** It is proposed that the quorum for General Meetings be increased from 15 to 30 members.

**Voting at Meetings (Rule 7f)** It is proposed that voting on voices be abolished and replaced by voting on a show of hands. A ballot can then be called by any three members. This accords with common practice. It is also proposed that voting by ballot be mandatory for the election of Officers or Ordinary Committee Members to ensure that members can vote on this issue in confidence.

**Termination of Membership (Rule 11b)** It is proposed that Rule 11b be changed so that membership ceases if a member fails to pay the annual subscription within two months of the start of the financial year. This is a reduction from the original 6 month grace period. The Committee will still encourage lapsed members to re-join.

**Other Minor Amendments** A number of other minor amendments have been made to reflect the changes referred to above, or to provide greater clarity.

# Species Recovery Plans

## What are they and why are they important?

When a species is reduced to low numbers or most of its habitat is altered or destroyed, it can become vulnerable to extinction. Much of New Zealand's endemic fauna and flora has become threatened or endangered and this has necessitated management action by the Department of Conservation.

A formal definition of recovery plans is... **"Recovery Plans are statements of the Department's (DOC) intentions for the conservation of particular plants and animals for a defined period."** In practice, a group of scientists and managers devise a plan that they can implement over a period of time to halt the decline in numbers of a vulnerable species and ideally provide the conditions suitable for the species to breed.

Recovery plans are continually being evaluated and updated with species being added every year. Species recovery is a massive task with 95 animal and 8 plant species included in the species recovery programme (2001 DOC data). In some cases the recovery plans encompass a number of species in the one plan; such as Kiwi species, Tuatara species, Giant weta species, Skink species and Galaxiid species.

The intention of recovery plans is to ensure species do not decline to critically low numbers where emergency management action is required. DOC has only limited resources and emergency action uses a disproportionate amount of these resources.

Tiritiri Matangi Island is a worldwide success story with its contribution towards species recovery. In many ways the Tiritiri Matangi project has shown that pragmatic action as well as intensive scientific preparation can work together in species recovery. Since 1973, eleven species of birds, one species of Tuatara and at least two species of endangered

plants ( NZ Begonia *Tecomanthe speciosa* & Kaka Beak *Clianthus puniceus* ) have been transferred / translocated to Tiritiri Matangi Island. All of these species are part of the species recovery programme and all have successfully established, with only the NI Tomtit not yet breeding. Some species such as Kakariki, NI Saddleback, Whitehead have bred so successfully that their numbers are in the hundreds. Recently, NI Saddleback, Whitehead, Hihi and NI Robin have been transferred from Tiritiri Matangi to other reserves and sanctuaries.

A significant part of a recovery plan involves the control and management of pests and introduced predators. On Tiritiri Matangi Island all the mammalian pests and predators have been eradicated. Eradication is the ideal situation for an island reserve but generally the recovery plans advocate the more achievable control or management of unwanted pests. An extensive annual weed management programme on Tiritiri Matangi keeps the weed plants under control.

Recovery plans are devised in joint consultation with Government scientists/ managers (DOC, NIWA, universities, museums), regional council scientists, iwi, volunteer organisations and the public. The recent transfer of Northern Tuatara (*Sphenodon punctatus*) to Tiritiri Matangi is a good example of all these groups working together.

The ideal end-point for a recovery plan is for it to become redundant. The desired outcome for species under recovery is for them lose the label of threatened or endangered and to start expanding into their former habitat range.

Mark Davison  
Institute of Natural Resources  
Massey University

## Hihi profile increases with support from Prime Minister!

Sunday the 16th January proved an important day for Tiri's hihi and has helped increase the awareness of this species at a national level. Tiri was chosen as the appropriate location for launching the Department of Conservation's 2004-2009 Hihi Recovery Plan, and for the presentation of a cheque for \$18500, raised by the New Zealand National Parks and Conservation Foundation, to be utilised for hihi research by Troy Makan (past DoC hihi contractor) on Little Barrier.



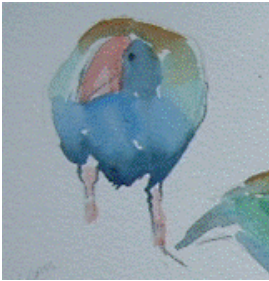
Prime Minister Helen Clark not only accepted this money and launched the plan, but also stayed overnight in the bunkhouse along with Conservation Minister Chris Carter and friends. An enjoyable time was had by all and Tiri's birds rose to the occasion with close up encounters with hihi, plus viewing kiwi on a night walk and the famous bellbird dominated dawn chorus!

John Ewen

## Recipe Request

We are endeavouring to put together a Tiri recipe book. Over the years many people staying in the Tiri bunkhouse have developed special Tiri recipes - much loved and appreciated by those for whom they were cooked. Cooking in the hustle and bustle of the bunkhouse kitchen requires a certain skill - not least good footwork and the ability to procure a sharp knife and suitably sized utensils. If you have a recipe for food cooked/ eaten on Tiri that you would be prepared to share with others please send it: by e mail to: [kd42ak@yahoo.co.nz](mailto:kd42ak@yahoo.co.nz) or by snail mail to: 102 Grampian Road, Auckland 1005. A short introduction to the recipe giving your bio details in relation to Tiri and/or the occasions your recipe was cooked for would also be appreciated.

Sally Hally



Takahe  
Lynda Harris

# Flora and Fauna Notes

Compiled by Barbara Walter, Morag  
Fordham & Jan Velvin

Pohutukawa  
Jan Velvin



## Tiritiri Matangi Island Nursery

The time has come to say a fond farewell and heartfelt thanks to our nursery.

Central and fundamental to the entire Tiri reforestation project has been the nursery and the tireless dedication to the task by Ray Walter and his many many helpers.

This daunting task has required detailed planning, daily observation, care and a huge amount of work for 22 years. Collecting native seed and growing numbers to planting dates is a skilled occupation and we need to be thankful that we had on hand the endless energy and skills of Ray and his enthusiastic band.

Next time you walk through all of those trees, pause, and think about the small seed they all began from.

*"To plant a tree is to plant a future".*

## THANKS RAY

(The glasshouse from the nursery will move to Motuihe Island to be reused)

## Flora

Our great flowering season is continuing. *Kunzia ericoides* - Kanuka, has been looking like it is covered with a mantle of snow. May be we did have a "White Christmas".

For fragrance the *Melicetyis ramiflorus* - Mahoe, is adding it's perfume to the bush. As the season progresses a lot of spring, summer flowering plants are beginning to set seed.

The *Phormium tenax* - Harakeke - flax spikes can be seen everywhere as are the *Cordyline australis* - Ti Kouka cabbage tree flowering heads. These flower heads are setting seed which is white, eventually taking on a pale blue colour.

The *Myoporum laetum* - Ngaio, has plants both with flowers and seed, and can be seen on the track from the wharf to the Kawerau track.

Good examples of *Coprosma repens* - Taupata - Mirror Plant and *Coprosma robusta* - Karamu with the last of the flowers and some berries can also be seen in this area. On both plants the berries ripen to orange.

Just prior to Hobbs Beach are some *Macropiper excelso* - Kawakawa forming fruit which also ripen to orange - birds permitting.

The *Pseudopanax arboreus* - Five finger fruit is very obvious hanging in big bunches - despite the fact that it is not ripe yet it is attracting a lot of attention from the birds.

Again it is an interesting time to be in the bush as lots of trees are setting fruit attracting the birds.

Jan Velvin

## Fauna

### Takahe

Ahikaea and Bellamy (and helper Calico) had two chicks but both died within a week of each other in mid December. JJ and Blackwatch had two eggs so the second

egg was given to Iiti to incubate but it was added and was later removed. As usual JJ's chick hatched during a storm with thunder and lightning on 23/11 and is now up at the lighthouse area and is growing well. Iiti nested again but the egg was infertile. The egg of Kristina and Rossie turned out to be an early dead embryo. @Dot and Blake, Mungo and Irene stayed together as pairs but didn't breed. At the beginning of January Blake left @Dot and both birds are now wandering all over the island. Now that the weather has improved Greg and Tiri (his daughter from last season) are back on Hobbs Beach so "Greg Watch" has been reinstated to protect the birds and the public from each other. All the single birds are fine.

### Stitchbird/Hihi

As at the 18/1 there were 140 fledglings and 22 females on second clutches. The first three chicks of the season hatched on 24/11. The only natural nest contained five eggs but it is not known how many hatched. One nest was so poorly built it was dome shaped instead of a cup and the egg just rolled off! This nest was replaced with an actual nest built last year and the female was happy to use it. One female has used one of the new Red-crowned Parakeet nesting boxes. Sarah Withers, a research student watched a mother stitchbird encourage her four chicks to fledge by standing at the doorstep of the nesting box calling them and regurgitating food to lure them out. There are plans to translocate some Stitchbird to Karori Wildlife Sanctuary in February and May.

### N I Robin

There are 36 breeding pairs and as at 18/1, 87 chicks had been banded, 65 had successfully fledged and there were three nests with two eggs in each and one nest with two chicks about to fledge. 15 pairs are still feeding their fledglings. Quite a few second nests failed during incubation either due to the inclement weather or predation. The garden/nursery pair produced chicks. Two of the original females translocated to Tiri are still alive making them at least 12 years old or more (unknown age when transferred to Tiri) which is a very good age for a robin. The second translocation of birds to Great Barrier Island will occur beginning of April.



females translocated to Tiri are still alive making them at least 12 years old or more (unknown age when transferred to Tiri) which is a very good age for a robin. The second translocation of birds to Great Barrier Island will occur at the beginning of April.

## Brown Teal/Pateke

Ev a and Finn on the bunkhouse dam have two ducklings. Their September duckling and one female from their April clutch are also still seen on this dam. Daisy is still with Ruan. Blue Bonnett and M/RWB and an unbanded duck are on emergency landing dam. Connie and Ralph are still at N E Bay and Jemima and Ossie are still on the wharf dam. From time to time a lone male with just a metal band is seen at lighthouse valley/emergency landing dam. Rose (MWB) has teamed up with Blue Bonnett's brother (R/M) on the bush 21 dam. A colour banded female with one chick seen in bush 3 in the last week of November is at least 11 years old.

## Tomtit

There are sightings from time to time including a male seen on the East Coast track at the end of November and a male seen in Little Wattle Valley just before Christmas. A male was also seen at the top of the Kawerau track in early January and the most recent sighting was of a banded male at the bottom of the Kawerau track.

## Other Birds

So far 55 saddleback chicks have been banded including some from natural nests. Two dead chicks were found in their nesting box after a storm in November.

The Blue Penguins are starting to come ashore to moult. Around Christmas one was discovered in the bunkhouse ablution block in the middle of the night – must have been caught short! When the demolition of the shop and the propagation shed began, under Elizabeth Morton's wrapping bench in the far corner amongst all the little boxes was a very fat penguin starting his moult. He was removed in a box and put under the public loos but this was not to his liking and he dropped not only lots of feathers but left a penguin deposit before disappearing.

At the beginning of November a Long-tailed Cuckoo was sighted on the Wharf Road being harassed by a flock of Whiteheads. Later the same day two Bellbirds were seen chasing a Long-tailed Cuckoo.

The Weka was seen on a guided walk in the same week.

At least three Kaka have been seen on and off over the past few weeks.

The Moreporks in the Kawerau have again successfully raised two chicks and there are other chicks elsewhere on the island. A New Zealand Dotterel has occasionally been seen to the left of the Wharf and a Reef heron was seen in the same area. The Kingfisher chicks in the bank down at the Wharf fledged in early January.

There is a New Zealand Pigeon chick about ready to fledge. A nest in Wattle Valley had one cold egg.

A few baby Quail started to appear just before Christmas but very few seem to survive more than a few days.

At the end of November a Dunnock (Hedge Sparrow) was seen at the beginning of the Eastern Track.

At the beginning of November a research student heard scrapping noises coming from behind the fireguard in the research room. On investigation a very sooty Daphne was discovered – she had obviously come down the chimney so no need to get the chimney sweep in this season. Perhaps she was just practising before applying for a job as Santa Claus. At the beginning of December she was rebanded with a yellow band on her left leg and her partner Francis was given a blue band on his right leg (he was not impressed). About this time she started her moult and left Tiri and went straight back to her previous family at Gulf Harbour. She has

been seen on the pond at the Country Club Lodge, Gulf Harbour. Translocated Whiteheads have been seen in the Waitakeres, and one was also seen on the mainland at Sandspit.

## Tuatara/Lizards

Now that it is finally warming up there have been more sightings of Tuatara and they are all in good condition.

At the end of December Jonathan Ruffell found some more Common Gecko including a gravid (pregnant) female.

*Morag Fordham & Barbara Walter*

## Kokako Update

The 2004/2005 season for Kokako has been very productive. Seven Kokako nestlings have been banded this year (banding occurs when the chicks are around 17 days old) and with a bit of luck these chicks will all fledge and begin hopping around the forest within a couple of weeks.

Four pairs produced chicks: Cloudsley Shovell and Te Koha Waiata in Wattle Valley, Kahurangi and Bel Canto, Shazbot and Te Hari, and Ruby and Kaha.

Cloudsley and TKW had a failed nest early on, but made a quick recovery building another nest and laying 3 more eggs which hatched three chicks. The third chick died in the nest, presumably of natural causes (it is difficult for a Kokako pair to raise three chicks), and was captured on video being removed from the nest by Cloudsley. The surviving two chicks are both of a good size and have been named Wairua (WM-R) and Storm (BO-OM).

Kahurangi and Bel Canto also had a failed nest early on. Their first three eggs were removed from the nest when they failed to hatch. The eggs were sent to the museum where they were blown and will eventually be put on display. Kahurangi's second nest again had three eggs, two of which hatched and produced two chicks, Squirrel (OM-RY) and Tsindi (BM-W).

Shazbot and Te Hari laid an unknown number of eggs high in a Mahoe tree which produced one large and vigorous fledgling named Blue (M-BY). Blue is already being spotted regularly on the road between the end of the Kawerau track and Ridge road.

Ruby and Kaha have produced two chicks from three eggs despite having built an absolute shocker of a nest this year in a small Kanuka with almost no cover. One of the chicks is half the size of the other but he/she is growing and is being fed regularly by both parents. The smaller chick is named Chinook (YM-Y) and the larger Zephyr (GM-R).

Which brings us to a total of 21 Kokako on Tiri! As the Stitchbird/Kokako monitor this year, I had a lot of help and I'd like to thank Renske Kwikkel and Morag Fordham for finding three of this year's nests. I'd also like to thank Ian Price, Kevin Parker, John Ewen, and Rose Thorogood for their help with banding and hauling ladders and the heavy batteries for the video monitors around. And finally a big thank you to all the supporters who recorded band combinations and did nest watches and all the other little things that made my job so much easier. It's been a real pleasure to work with you.

*Tamara Henry*

*And latest news from Auckland Zoo: Tiri Waiata, the female kokako from Tiri currently in residence at the zoo, has a nest with two chicks!*

## Argentine Ant Update

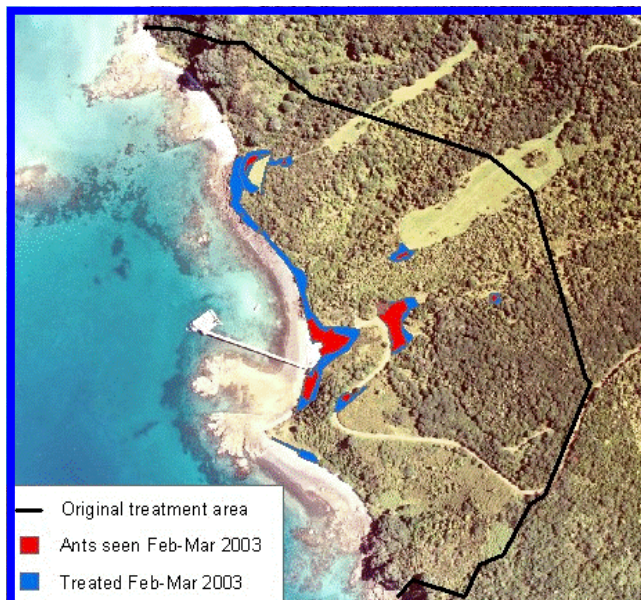
Argentine ants were first discovered on Tiritiri in March 2000 (see Bulletin 41). The species is recognised as one of the 100 most important pests of the world due to the impact it has on other wildlife, particularly invertebrates, but also lizards, frogs and birds. The ant has many attributes which make it such a successful pest (see Bulletin for details) but three key features stand out. Each nest can have huge numbers, up to hundreds of thousands, foragers are active 24 hours a day, unlike most ants which are either diurnal or nocturnal (not both), and all Argentine ant nests co-operate with each other. These, and other features, mean the species can dominate whole ecosystems where conditions are suitable.

During the summer of 2001 a group of 14 ant specialists and volunteers from around New Zealand assembled on Tiritiri to administer the first treatment of poison baits over the whole 11 hectare area mostly centred around the wharf but also including a small population at Northeast Bay. Insecticide paste baits were placed every 2 – 3 metres in a grid fashion, as described in Bulletin 45. Intensive post-bait monitoring revealed that a massive 99% of the ants were killed (see Bulletin 48). No longer were swarms of ants seen on trees and concrete edges by visitors waiting for the afternoon ferry.

Following on from that first treatment a second treatment was applied in December 2001 (also reported in Bulletin 48), again covering the entire previously infested area. As in the first season, there was a good kill but, frustratingly, once again a small number survived. However, there was no sign of any at Northeast Bay. In fact there hasn't been an Argentine ants seen there since autumn 2001. Yeah!!

During the 2002-03 season, with the assistance of Landcare Research, there was a lot of research into monitoring methods to detect small nests of surviving ants. Sticky traps, pitfall traps and various non-toxic baits were trialled. In the end we chose non-toxic baits placed in tubes with netting covers to prevent interference from other wildlife.

Monitoring from December 2002 through to February 2003 showed surviving colonies of Argentine ants at just eight sites (see red areas on photo). All of these were initially small colonies but two, around the wharf shelter and above the wharf pond, grew rapidly in size during summer with the ants covering about 300 square metres at each site by early March. All eight sites, plus buffer areas (blue areas on photo), were treated with insecticide baits during March - April. Compared to the large scale treatment of the whole 11 hectare area (inside the black line on photo) the spot treatment of these sites was straightforward. However, particular attention was paid to



*Aerial photo of main Argentine ant infestation showing entire area treated in years one and two (within the black line), ant sites for year three (red areas) and buffer areas (blue) treated in year three.*

getting optimum weather conditions and ensuring there were no gaps in bait coverage. Each site was baited twice, a month apart.

Intensive monitoring during January – March 2004 showed no surviving Argentine ants at any of the sites spot treated during 2003 so the attention to detail really paid off. Other sites were monitored and only two small nests were found. Both were spot treated twice, as per the previous season.

Therefore, after four years of the eradication programme I feel we are very close to eradication but now the real grind starts. In any eradication programme the last individual is always the hardest and most expensive to kill. Making sure there are no survivors is the tricky part – that is the current challenge. Two years Argentine ant-free status is required before the programme can be declared successful.

Argentine ant was first found in New Zealand in 1990 and is now widespread in many parts of Auckland, as well as some towns to the north and south. **Thus we all need to be forever vigilant to ensure no new nests of Argentine ants are transported to Tiritiri.** As with rodents and other pests, prevention is better than cure.

*Chris Green, DoC*



*Photo: K McCombs (Christchurch City Council)*

## What's that Weed? Periwinkle – *Vinca major*

Periwinkle is a dense smothering ground cover, with oval leaves and distinctive mauve-blue flowers. Supporters may remember large areas of it around the lighthouse area (or the large areas of brown after spraying). It is very invasive, forming a thick covering blanket which prevents native regeneration. It is still found in some places on the island. It is important to monitor areas where weeds have been found, to check for regrowth. For this reason, if you remove any invasive weeds you find, please report details to one of the DoC rangers, who will ensure the area is checked for regrowth at a later date.

*Ian Price*



## As seen From the wharf..



Photo: Anne Rimmer

Eagle rays (*Myliobatis tenuicaudatus*) are common in New Zealand waters and are frequently seen in the sea around Tiritiri Matangi, often from the wharf as you walk from or to the ferry. Eagle rays are found in shallow intertidal areas, estuaries and rocky reefs up to depths of 100 metres. Rays are related to sharks and have adapted to feed on the ocean floor, feeding on urchins, crabs and scallops.

Eagle rays tend to have the same habitats as stingrays (*Dasyatis* spp); however, they can be fairly easily distinguished from each other. The eagle ray has a rounded head, which is pronounced compared with the stingray's pointed snout and less defined head. The eagle ray has been

described as diamond shaped versus the stingray's kite shape (i.e. the eagle ray is wider compared to its length). Eagle rays often half bury themselves in the sand in shallow water, and care needs to be taken to avoid standing on them, as eagle rays have a barbed spine coated with a toxic slime at the end of their tail. When leaving the seabed, eagle rays rise onto their wing tips before accelerating off.

Distinguishing eagle rays and stingrays when they are swimming is easy, as eagle rays swim with flapping wings, whereas stingrays' wings tend to alternate and the forward drive is provided by the rippling motion of the wings.

Alison Forbes

## Tracking tunnels on Tiri

Tracking tunnels around Tiritiri - more than 70 of them - are the first line of defense against unwanted pests such as rats and mice.

Each tracking tunnel has an inked card, two poison bait blocks and a lure, designed to attract and trace a rodent that might have arrived on Tiri, either by boat or in a visitor's bag. The theory is that a rat or mouse would be attracted by the lure or the bait, move onto the centre inked part of the card to investigate, and after feeding, move off onto the dry white card leaving behind its' paw prints as it exits the tunnel.

The cards and bait are replaced monthly by volunteer helpers or DOC staff, and each card is checked for paw prints. To date, none of the tracking tunnels have shown any trace of rodents since the successful eradication of kioie from Tiri in 1993. A pleasing result. The most common results on the cards are print marks of snails, beetles, tree weta, skink and in some locations, a gecko.

The tunnels are placed under trees and around buildings on Tiri, especially near any beaches where people come ashore from visiting yachts and launches. If there was a rodent track on the cards, the DOC rangers have emergency response gear ready to move quickly to an area and trap any unwanted visitor.

It takes volunteers a full day to do all the tunnels once a month, a job they usually spread over a weekend to make the most of their visit to Tiri.

Suzi Phillips



### Tiri on a Trailer...

#### Mairangi Bay School Christmas Parade Float

The children from Mairangi Bay School created a float that represented a traditional kiwi school trip—in this case a trip to Tiri! The float featured a working lighthouse (on loan from the North Harbour Rugby Supporters Club) and cardboard birds of the rare NZ birds that are protected on the island. The children enjoyed being able to give out pamphlets and Fullers timetables (Fullers also supported the float). The float "School Trip to Tiritiri" was the children's way of saying thank you.

# Red Crowned Parakeet Research



The red-crowned parakeet / kakariki (*Cyanoramphus novaezelandiae novaezelandiae*) was the first bird species to be transferred to Tiritiri Matangi Island. The transfers occurred between 1974 and 1976. In 1975, Mark Dawe started a study to document the biology of the red-crowned kakariki on Tiri and Little Barrier Island. At that time, the species was not as abundant on Tiri as nowadays and only a few nests were found. Nearly 30 years have passed since that study started, and Tiri has changed a lot (vegetation structure, kiore eradication, bird numbers etc.).

Last September I started a research project aiming to answer basic questions about the red-crowned kakariki population on Tiri. Some of these questions are: How many kakariki are on the Island? What are their preferred foods? How many eggs are laid? How is the survival of chicks related to clutch size, sex and

age of the chicks? This project is part of my Master's degree, under the supervision of Dianne Brunton. Funding for this project comes from Supporters of Tiritiri Matangi Inc., Massey University and the University of Auckland.

*Female Kakariki.*

I have some exciting news! I have been monitoring 25 nests (all of them in artificial nest boxes except three: one in a mahoe, another in a wattle trunk and the other at the base of a flax plant). Over 100 eggs have been laid in these nests this breeding season, with clutch sizes ranging from 4 to 9 eggs. This is important because another part of my research deals with the way parents distribute food in a brood. Kakariki lay one egg a day and chicks hatch asynchronously; so how do females feed chicks of different ages? Imagine nine hungry beaks each with different food needs (in one nest the oldest chicks is three times heavier than the youngest!) What happens if food supply decreases? Which chicks have less chance to survive? I'll keep you informed as my research progresses.

*Luis Ortiz Catedral*

**(Luis will be the Guest Speaker at this year's AGM)**

## Inside the nest....

*Luis Ortiz Catedral*



New! Improved!

## The Tiri Shop

In temporary premises during construction of the new visitor Centre, but with all your favourite Tiri items still on sale....

cards, caps, clothing, cups, CDs and many other things beginning with "C", not to mention the rest of the alphabet.

**Call Barbara on 476 0010 for phone orders**

## Fernbird

Stop press!!! The fernbird population is growing!

On a recent early morning walk from the bunkhouse to Northeast Bay via the ridge track I encountered a large number of fernbird. Standing on the bridge at Northeast Bay I could hear three pairs calling to each other, including one pair that have recently moved into the vegetation next to the new lower dam. There are at least two other pairs in the Northeast Bay area, and probably a few single fledglings floating about. I know the locations of five other pairs of birds and around 10 single birds on the island. A conservative estimate of the current Tiri fernbird population would be around 30 fernbird, however I am quite confident that the population is larger. The single birds could well be pairs and there will be birds out there that we do not know about. So things are looking good. As with past translocations it often takes a couple of years for birds to become more visible as the population increases and establishes itself. This is worth keeping in mind when you are out there looking for tomtits. Little birds have an amazing ability to go undetected.

Likely spots to see a fernbird include Wharf Road, the seat on the track in Little Wattle Valley, and the cottonwood sign on the Ridge Track. Birds can also be heard calling, particularly early morning, in Lighthouse Valley, Northeast Bay and Tiritiri Matangi Paa. Please pass on any sightings to myself (via the Editor) and keep an eye out for banded birds.

I had recent reports of a visitor to the island going off track to find a fernbird nest. If any Supporters see such activities please tell the individuals concerned to stop immediately. Fernbird nests are low, well concealed and easy to trample and we do not want anything impeding the continued growth of the Tiri population.

*Kevin Parker*





## Calendar of Events

**2005**

### Annual General Meeting

Monday 14 March

(See wrapper for details)

### Easter Working Weekend

25—28 March

(2 places left)

### Supporters Families Weekend

9—10 April

### Supporters Families Weekend

30 April—1 May

(FULL)

### Supporters Adults Weekend

(non-working)

14—15 May

### Supporters Working Weekend

4—6 June

### Bellbird Trip

6 June

**For all of the above  
(except AGM) bookings  
must be made with  
Barbara, not Fullers —  
476 0010**

## POHUTUKAWA

*Metrosideros excelsa* (Metro = middle sideros = iron)

New Zealand Christmas Tree

This is the tree that most New Zealanders feel a strong affinity toward. Many splendid examples of this majestic tree, which can grow to 20m, can be found on the cliffs of Tiri, and this year we have been treated to a flowering period of more than eight weeks.



Photo: Jan Velvin

For tenaciousness in a tree the pohutukawa can't be beaten, as the tiny seeds can settle in cracks on exposed rocky cliff faces and grow. A splendid young example of this habit can be found on the track to Hobbs Beach from the wharf. A few meters past the last penguin box on the right a three metre high tree is growing directly out from the rock face, a product of it's 800+ year old cousins found above Hobbs Beach.

The Pohutukawa at the time of early settlement was found on the coastal areas of the North Island from the Three Kings Islands to Poverty Bay on the east coast, and around the Ureniu River on the west coast, and also at some of the Rotorua lakes. If you are fortunate enough to be driving to New Plymouth at Christmas time the legacy of some of those early plants follows the coast road and are just magnificent - the west coast seas adding weight to the name Pohutukawa - "drenched with spray".

This spectacular tree was first recorded botanically by botanists Dr Daniel Solander and Joseph Banks during the first voyage of Captain

James Cook RN on HMS ENDEAVOUR in 1769. They sailed between Cape Rodney and Little Barrier Island anchoring on November 25 at the entrance to Whangarei Harbour, which they did not enter. Christmas was spent in sight of the Three Kings Islands.

The genus *Metrosideros* belongs to the Myrtaceae family. Other plants of note in this family are *Leprospermum*, *Guava*, *Eucalyptus* and *Lophomyrtus*. This genus contains some 60 species - trees, shrubs, and lianes (climbers). Eleven of these are endemic to New Zealand and include the Ratas.

As with other coastal plants, Pohutukawa have thickened leaves with tomentum, a felt like underside, that enables it to withstand extremely windy situations. It's copious flowers provide nectar for the birds and insects. Although mainly recognized for it's red flowers, there are naturally occurring plants with flower colours varying from orange-red to deep red, pinks, and even yellow.



Photo: Jan Velvin

Most plants have now finished flowering and the seed capsules are forming. This seed should be ripe in March - April. Take the time to have a look in the capsule as it splits open. It is unbelievable that such a minute seed could produce such a magnificent 20m tree.

Jan Velvin

### Visitors Centre Update

The contract has been let for the construction of the new Visitors Centre. The builder is Holloway Builders Ltd and construction will start in February and finish on 18th June. The old garage has been converted into a temporary Visitors Centre while the new one is being built. The old Visitors Centre has now been demolished to make way for the new building. A barge is due to arrive onto the Island on 9th February with a large digger and truck loads of timber ready to begin the work.

John McLeod

The commencement of work on the Visitors Centre has been made possible, in part, by the extremely generous bequest of \$50,000 from the late Penny Mutu.

Penny was a keen supporter for many years, and kept in touch with Tiri happenings by phone when illness prevented her from visiting in person.

Penny's bequest will be appropriately acknowledged in the Visitors Centre.

# Foghorns of Tiri—Part 3

*Carl Hayson*

In 1976, a modern AGA automatic fog detector was installed to take over the manual function of starting the horn when fog occurred. This unit, working on the backscatter principle, consisted of two lenses. (Refer photo) One lens transmitted light and one received back any reflected light from hydro particles in the air i.e. fog. When the reflected light received was intense enough i.e. fog conditions existed, a photoelectric cell triggered the foghorn. The unit continued in operation until 1986 when a fault in the apparatus caused the cessation of foghorn operations on Tiri. Additionally the Swedish company, AGA, no longer make navigational aids and parts are not available.



*Automatic Fog Detector*

In 1983, the increasing cost of maintaining the Diaphonic signal necessitated the Ministry of Transport to replace it with a modern AGA Omni directional signal model LIEC-300. The concrete pad under the mounting has the names M Cole, D Mitchell, I Blair and W Ward, 4/10/83 engraved in it, giving an accurate time of installation. (Ray refused to sign his name, considering it to be an act of vandalism!) This unit was mounted on a pole and had two emitters to give a wide range of sound. The power was AC driven from the cable supply to the island at that time and had a maximum output of 1000W. It was loud,

at 140 decibels and had a usual sound range of 2.7 nautical miles, the blast being heard every 60 seconds. A warning device was mounted on the building to alert anybody when the unit was about to start.



*AGA Omni directional signal*

However in 1986, as indicated above, a fault developed in the fog detector and the default switch became fixed at the on position. For 3 months, day and night, the signal emitted it's loud sound to the chagrin of all including Ray Walter, who finally in utter frustration rang the Ministry of Transport and threatened to take out the signal with a rifle shot if something wasn't done to fix the problem. The official on the other end of the phone told Ray to wait and rang back 15 minutes later authorizing the unit to be shut down, never to sound again.

Now, thanks to the introduction of GPS satellite navigation, the sound of fog signals from Tiri that have been present for over seventy years over 3 distinct stages of development are but a memory to those lucky enough to have heard them.

*Article & photos: Carl Hayson*

## Subscription Notice:

Thank you to all members from throughout New Zealand and from overseas who have renewed their subscriptions for 2005 – you have a “smiley face” on your address label! Thank you, too, for your affirming comments, good wishes, and Christmas/New Year greetings. We appreciate your continued support. We also gratefully acknowledge all those who generously sent a donation along with their subscription.

To those whose 2005 sub is now overdue (you have no “smiley face” on your address label!), we would be grateful if you would continue to support our wonderful island by forwarding your subscription at your earliest convenience [as our subscription year is the calendar year and subscriptions expired at the end of 2004](#). If you are unable to continue your membership, we would appreciate it if you could please let us know. Please note that, unfortunately, we will be unable to continue sending the Dawn Chorus to non-financial members.

Any subscription queries, please contact the Membership Secretary, Val Smytheman.

(We apologise that any payments made since early February will not have been processed in time for this mail-out).