



Dawn Chorus

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Getting to Tiritiri Matangi

360 Discovery™, which is operated by Kawau Kat Cruises, operates a regular ferry service.

**BOOKINGS ARE ESSENTIAL!
AND AVAILABLE ONLY FROM:**

360 Discovery Bookings
on **0800 888 006** or
www.360discovery.co.nz

Departs: Every day **Wednesday to Sunday** from Pier Three, Quay Street, Downtown Auckland City at 9:00 am and from Pier Z, Gulf Harbour at 9:50 am, arriving at Tiritiri at 10.15am.

Returns: From Tiritiri at 3.30pm, arriving Gulf Harbour at 4:00 pm and Pier Three at 4:50 pm.

Includes: Return ferry to Tiritiri Matangi plus approximately 5 hrs on the island.

Weather Cancellations: Please call 0800 FANTAIL (0800 326 8245) after 7am on the morning of sailing to confirm if the vessel is sailing.

Prices:

Ex Akl: Adult \$59.00 Child \$28.00
Senior/ Student/ Backpacker \$53.00
Family \$145.00

Ex GH: Adult \$35.00 Child \$17.00
Senior/ Student/ Backpacker \$30.00
Family \$85.00

NB. There is an extra \$3pp fuel surcharge on all bookings

Guided Walks:

Adult \$5.00: Child \$2.50

Discounts available to the Supporters of Tiritiri Matangi (SoTM) on special supporter weekends

Upcoming Events 2008/9

May 24th – 25th

Families Weekend

May 31st – June 2nd

Queens Birthday Working Weekend

August 23rd – 24th

Families Weekend

August 24th

Kowhai Trip

September 15th

Social night

September 20th – 21st

Non-working

October 25th – 27th

Working (Labour Weekend)

2009

January 24 – 26

Working Weekend (Anniversary)

February 6 – 8

Non-working Weekend
(Waitangi)

April 10 – 13

Working Weekend (Easter)

If you wish to attend one of these exciting days or weekends they can be booked **ONLY** by contacting Mary-Ann at the shop on Tiritiri Matangi, telephone 09 476 0010 or e-mail manager@tiritirimatangi.org.nz

Prices:

Ex Akl: Adult \$38.00 Child \$20.00

Ex. Gulf Harbour \$22.00 \$14.00

For non-event days please contact

360 Discovery Bookings.

School Visits

Schools wishing to visit Tiritiri should first visit our website:

**[www.tiritirimatangi.org.nz/
SchoolVisits.htm](http://www.tiritirimatangi.org.nz/SchoolVisits.htm)**

where you can download the school guidelines. Then contact Megan either by telephone 09 476 0010 or e-mail: manager@tiritirimatangi.org.nz.

Advance bookings are essential.

Overnight Visits

Overnight bookings can now be made on line. To find out more and/or make a booking go to www.doc.govt.nz/tiritiribunkhouse

Those who are "internet averse" can still make a booking by phone by contacting the Warkworth Area Office 09 425 7812 (a small booking fee will apply).

Supporters' doing official volunteer work like guiding or working in the shop, should book their accommodation through the guiding coordinator to obtain free accommodation.

This volunteer work has to be at the request of the guiding co-ordinator or the supporters committee.



Contact Details

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

From the Chair

Peter Lee

It was a great privilege in March to be elected Chairperson, for my second stint in the role – my first being from 1999 to 2002. Much has changed in the interim!

Firstly, on behalf of the supporters, I offer a big thank you to those from the outgoing committee who have stood down – to Simon Fordham, Bill Mancer, Paul Colgrave and Margaret Chappell.

Simon was on the Committee for 12 years in a number of roles, including four as Chairperson – the longest of any person in that role. In his time Simon has done an outstanding job, navigating the Supporters through an ever-changing landscape and some significant changes in our relationship with DoC. Fortunately, Simon's intimate knowledge of the Supporters is not lost, as he is staying on as membership secretary.

Our Treasurer, Bill Mancer, also

stepped down after four years in the role. His down-to-earth approach helped demystify this important function. Bill has graciously carried on while we locate a replacement. Fortunately David Meldrum, our indefatigable book-keeper, is carrying on this vital function.

Finally, thanks also to Margaret Chappell for her thoughtful contributions to the committee, and to Kathryn Jones, who managed the Membership secretary role for a year.

Welcome to new committee members Jill Courteaud and Murray Anderson. Jill will be well-known to all those who pass through the island shop, and takes on the secretarial function. Thanks, too, to those who are continuing their contributions to the main committee and to the various subcommittees, and to Paul Colgrave, editor of our superb and

top-quality 'Dawn Chorus'.

But what of the future?

This year the Supporters celebrates twenty years of action and a track record of success. But this success depends on our ability to work with our stakeholders such as DoC, volunteers, universities, 360 Discovery and others. Like any organisation, though, we cannot rest on our laurels if we are to really make the most of our resources and the hopes and dreams of so many.

I am confident that we have a great future ahead, and the Tiritiri Matangi project is not near its end, but is merely an adolescent. But what could our future be? Over the next year, the committee plans to work with members and with all our stakeholders to identify a common vision and goals, not for the next year, but the next twenty. Your comments and thoughts will be appreciated.

The Tiri Gift Shop

Greetings from the Tiritiri Matangi Island shop.

We have some beautiful New Zealand made products for you.

Pewter skink, tuatara and gecko on alpine rock either with or without paua from \$5 each.

Hand crafted pohutukawa leaf earrings (spot the real one) by well known Auckland artist, Sue Bancroft, only \$40 a pair.

A large range of Bob Steiner ceramics including a small dip bowl, \$14, and fern plate, \$26.

We are happy to take phone or email orders.



The search for the elusive skinks

In mid-December 2006, Tiritiri Matangi received two new additions to the family – shore skink (*Oligosoma smithi*) and Duvaucel's gecko (*Hoplodactylus duvaucelii*).



Forty shore skinks were released at Fisherman's Bay with the presence of volunteers and day-visitors (Main picture). Volunteers and visitors were given opportunity to look at individual skinks close-up, even helping in taking them out from the boxes and releasing them onto the beach. The Massey University Ecology and Conservation Group even had their Christmas party on the island after the release!

After release, the shore skinks were monitored every month from December to March, and then every three months from May onwards. Skinks were surveyed using two types of traps and by handsearching.

Pitfall traps were set up in a grid all along the beach, which are opened

during survey trips and closed during the rest of the time. The second trap type is a funnel trap, which is more mobile and is taken away from the site after each survey trip.

Low numbers of skinks have been re-captured since release and they are proving to be very hard to find! The highest number of capture was in the beginning of January 2007, where up to three skinks were caught in one pitfall trap. No shore skink was caught in autumn and winter, and overall

they seem to be concentrating at the coastline (just above the high tide, and before thick grass and *muehlenbeckia*). Capture rates are expected to increase this summer, as reptiles are more active in warm weather.

Baby shore skinks have been caught and spotted since February 2007, indicating the first island-born shore skinks. Most females were gravid when release onto the island in December. The next breeding season is coming up, so hopefully they will produce more young next year!

The big storm in July 2007 managed to wash away the first row of the pitfall traps, and not surprisingly the skinks disappeared as well! The grid was re-designed, and more monitoring equipment (artificial refuges and tracking tunnels) were added in August and October. I did a quick hand-search in beginning of October and found a couple of shore skinks close to the regenerating *nihinihi*



About the shore skink

Oligosoma smithi

Endemic to New Zealand.

Body length up to 80 mm.

Gives birth to 2 – 6 live young every year (all native lizards, except for one species, give birth to live young).

Found in coastal habitats in the northern part of North Island, from Three Kings Island down to Gisbourne.

High variation in colour and pattern, from pale white to jet-black.

Lizard trapping methods



Live pitfall trap



Single- ended funnel trap



Artificial refuge (left) and tracking tunnel (right)



Neonate shore skink

(*Alystegia soldanella*) on the sand area of the beach. So it looks like they may have moved up the beach when the storm hit, and are now moving back down again.

Monitoring will continue for at least another year to determine the survival and breeding of the shore skinks on the island.

Acknowledgement. I would like to thank the members of Ecology and Conservation Group, Supporters of Tiritiri Matangi, Auckland Regional Council, Department of Conservation, and the many Tiri volunteers for their constant support in this research.

For more information on research conducted by the Ecology and Conservation Group, please visit <http://www.massey.ac.nz/~dhbrunto>

Extending the trapping programme will save precious lives

By DOC

A trapping programme protecting the endangered takahē in Fiordland's Murchison Mountains is about to be extended after its benefits were highlighted during a beech mast season that saw stoat numbers explode.

The extended trapping programme, to be rolled out over two years, will include the entire area of the Murchison Mountains Special Area, about 50,000 hectares, and cost about \$205,000 to set up and \$65,000 annually to run. Presently a third of the area is covered.

The Department of Conservation is confident the increased trapping programme will prove its worth not just for takahē but for a range of species such as the kiwi and whio/blue duck who are vulnerable to stoat predation.

Moves to increase the trapping range came after recent takahē population census counts showed stoats were affecting survival levels, the first time

this had happened since monitoring of the population began 50 years ago. Only a few stoat predation incidents on adult takahē have been recorded in the past.

The counts showed an increase of takahē in the trapped area - an initiative set up in 2002 to test the effectiveness of trapping for takahē, but a decline outside the trapped area.

"In the past, most takahē deaths have been from cold winters and food availability," said Reg Kemper DOC, Area Manager in Te Anau "but what our monitoring is telling us is that stoats can and do kill adult takahē, and this is most upsetting."

The impact of stoats in the Murchison Mountains Special Area has caused a

25 per cent decline on the total takahē population, now estimated to be 225.

Mr Kemper said despite the stoat plague, a 2 per cent increase in the trapped area was recorded, proving that trapping is an effective tool and the increased protection will assist in the recovery of this loss.

"The great work of the takahē recovery team, those at the Burwood Bush Rearing Unit, and the support from Mitre 10, has put the species in a position to sustain, and successfully recover from this stoat assault.

Mitre 10's support has been integral to the success of the trapping programme and notwithstanding this event, Mitre 10 has confirmed its involvement is for the long term.

"I dread to think how this could have turned out if a mast year event of the same magnitude happened 10 years ago when takahē numbers were considerably lower," Mr Kemper said.

Background

By 1898 takahē were officially thought to be extinct but a number of birds were rediscovered in 1948 in the Murchison Mountains. Shortly afterwards this range was set aside as a Specially Protected Area for management of takahē. Annual census throughout the 1960's revealed that the population was in decline and, by 1971 it had become clear that takahē were heading for certain extinction.

Active management began in the 1980's with the development of a captive rearing programme and sustained deer control. In addition to this a number of islands were seeded with takahē to act as insurance for the population. These management techniques turned the tide on takahē decline and by 2006 the total population had increased to just under 300 individuals.

In 2002 a stoat control programme was setup with the aim of determining whether stoats were impacting on the rate of takahē recovery. Preliminary results showed that stoats were having an effect on takahē survival but it wasn't until the 2006/07 season that it became clear how significant this was. At this time stoat and rat numbers escalated following a beech mast.

Additional information

- The extended trapping programme will be in place by next season.
- The heavy beech flowering the previous spring and the subsequent heavy seed drop (beech mast) led to a huge increase in the number of rats which meant increased food for stoats and an increase in stoat numbers.
- More than 1200 stoats have been killed in the trapped area since its inception, including last winter's tally of 250 which resulted from the beech mast year.
- The Murchison Mountains trapping is part of a pest control programme undertaken by DOC and community groups that includes significant areas between Milford Sound and the Kepler Mountains. This programme

provides benefits to a range of species, not just takahē.

- The trapped area saw takahē numbers increase from 45 birds to 46. Any increase during a beech mast year is phenomenal achievement.
- The stoat numbers stayed high through the winter (possibly due to it being too mild to knock them back and enough food available to sustain them than would usually be the case). They have tailed off now and other food is available for them so they are not desperate enough to take on 2kg adult birds.
- While takahē can kill stoats in their powerful beaks, it appears that when stoat numbers are very high, the likelihood of a stoat encountering an unaware takahē, like one sleeping at

night, increases. In this situation it is easier for a stoat to make a kill.

- Takahē have withstood previous beech mast years and while some losses have been sustained, nothing like what has been experienced during this beech mast.
- The following graph shows the trend in the wild takahē population over the past 25 years. The years following beech mast periods have been highlighted. Note that while there have been population dips following beech masting these have never been of this magnitude. In addition they have typically been accompanied by other factors such as very cold weather and limited food availability that the losses have also been attributed to.

This last week-end a group of 14 birders from OSNZ Auckland came over to do one of their biannual bird counts on the island. They set up the project in 1986 in the early days of tree planting with a view to monitoring the bird population as the regeneration of the island progressed.

From the start it was thought this would be an interesting exercise but none would have anticipated how dramatic the changes have been. In the 22 years so far there have been the early introductions of Whitehead and Robins, and more recently the arrival of Kokako and Fernbird, all of which now feature prominently in the records, but the biggest single event impacting on the project has been the eradication of Kioie in September 1993.

The OSNZ data shows a sudden and spectacular increase in the number of birds that live or breed on the ground: Kakariki, Spotless Crake and Brown Quail being obvious beneficiaries, but undoubtedly the eradication would have been good for many other bird species.

Over the years there have been "spikes" in the data. These are caused by weather conditions or seasonal variations to food plants; for example

bad weather or strong winds result in much lower counts than normal while in contrast early flowering or fruiting produces big numbers of birds concentrated at these points.

This March count looks like having some of these positive spikes. There is a lot of food available at the moment

in the form of Mahoe and Karo fruit particularly, but the island is very dry, so the birds are to be found where there is both food and water, and no better place to go than Wattle Valley.

The bird numbers have increased greatly over the years and continue to do so, albeit at a slower rate now as some species – Saddleback and Robin for example - appear to have peaked. The 20 year results have just been written up and will be published later this year as a scientific paper. The plan is to continue the project for at least another 20 years and write up the results every 10.

So every March and November if Guides spot the yellow and red marker flags on the edge of the tracks during a tour you'll now know what they are all about.



Mist Netting Kokakos for the Hanuvas

At 5:30 am we leave the bunkhouse and head for the implement shed. We use torches to find our way through the darkness. In the implement shed we pick up the equipment we will need for today's catching. Mist nets, lengths of nylon cord, a roll of tape, speakers, speaker wire and MiniDisc players all go into packs. From here we split into two groups.

Stacy, Carmel, Lucy, Gerhard and myself are going to a site in Bush 2. Tertia, Morag, and Shane are going to another site.

Tertia and Stacy are contractors hired by DOC for their catching and bird handling expertise. Carmel is a volunteer with a great deal of previous kokako experience. Morag is our own local kokako expert and the rest of us are volunteers with relatively little experience. For me today is the first time I will see a mist net in action.

The two sites were setup yesterday afternoon. At each site two tall aluminum poles are held upright by stays of nylon cord. A taut top rope runs between them. Side ropes drop to the ground from the top rope beside each pole. The net is suspended vertically between the side ropes. Each side rope is a continuous loop that allows the net to be quickly raised and lowered. To keep the net clear of the ground, a long cord is run back and forth across the site at hip height in a zigzag pattern.



In mature forest the net would be supported by large trees. On Tiri, where most of the trees are still relatively small, we usually have to use the poles. When we prepared the poles Gerhard's knot-tying skills, from his time as a merchant sailor, came in very handy.

We arrive at the site and set to work by headlamp. Stacy lays the mist net across the zigzag and clips it to the side ropes. Gerhard and I trim

back some branches that threaten to snag the net. Carmel and Lucy place speakers in the trees opposite either face of the net. The two speaker wires are run to a battery powered amplifier. Shortly after first light everything is ready and we can already hear a kokako calling.



Our targets for this morning are Shazbot (RM/-, female) and an unbanded bird, known as "Chatterbox", who has paired with her. Shazbot had been paired with Te Hari (YM/W, male), her uncle. To separate them Shazbot is to go to the Hunuvas. Te Hari was inadvertently caught earlier and is now in the temporary aviary. In the mean time Chatterbox has paired with Shazbot. He was quick to leave his mate, Te Rae (OM/JO, female), after Te Hari was captured.

The mist net is made of fine black thread and is nine meters across. It's very difficult for the birds to see the net so they blunder into it and become ensnared. The net hangs vertically and has pockets that run horizontally. After a bird strikes the net it drops into one of these pockets. To draw kokako into the net, pre-recorded kokako calls are played back through speakers. These calls attract the kokako to investigate who has invaded their territory.

Gerhard and I are assigned to be the net minders. We watch the net and will lower it as soon as a kokako,

or any other bird, becomes caught. Stacy is the runner who will secure any birds that are caught. Carmel is running the sound system and is also the backup runner.

We all take our places and Carmel begins to play the recorded calls. Shazbot and Chatterbox are soon spotted bounding through the trees. They make a pass parallel to the net and then retreat a short distance. Carmel plays different recordings trying to find one that will motivate the birds to move towards the speaker and into the net.

At this point a pair of bellbirds shoot across the site and hit the net at speed. Gerhard and I immediately lower the net and Stacy and Carmel begin to untangle the two birds. Bycatch is a constant problem and a lot of time is spent getting unwanted birds out of the net. Kakariki are particularly dreaded for the damage they can do to fingers with their strong beaks. They don't just bite, they bite hard and grind. Bellbirds seem to have a special talent for getting tangled.

After about twenty minutes the two bellbirds are freed and we can raise the net again. Carmel resumes playing the kokako calls and we wait.

Shazbot and Chatterbox seem reluctant to approach again. Unexpectedly a third bird shows up and starts calling from the opposite side of the net. With this additional challenge Shazbot and Chatterbox make their move. They hop through the tree tops to the edge of the site. One of them launches into a glide and goes straight into the net. We quickly lower the net and Stacy runs to secure the bird. We've caught Chatterbox. He is not our first priority but still a





good catch because he needed to be banded. Chatterbox will later be officially dubbed Chatters (RG-M).

After disentangling Chatterbox and placing him in a carrier we raise the net again in the hopes of catching Shazbot. We can still hear her calling so we know she is still around. The third bird is also still on the scene and eventually links up with Shazbot. Shazbot is apparently well liked. Shazbot and her latest partner also approach the net as a pair and this time they both land in the net. Stacy runs to the spot but one bird has already freed itself and flees into the undergrowth, Stacy brings her hands up to grab the second bird just as it too escapes the net. We can only watch helplessly as the second bird makes its getaway.

We briefly resume playing the recorded calls but by this time the sun is shining directly on the net, making it easier to see. It's time to stop catching for today and see to the bird that we've caught. Chatterbox needs to be banded. We also need to prepare an aviary for the bird that the other team has caught.

The temporary aviary is next to the bach and looks like an ordinary family-size tent. Inside it is divided into separate compartments for the birds. On the walk back we cut branches with which to stock the aviary. Branches of mahoe and karo with lots of fruit on them are chosen.

After lunch we prepare a new site for tomorrow's catching. The other team will be use the new site. My team will return to the same site to make another attempt at Shazbot.

After dinner Tertia demonstrates how to make a transmitter harness. The

birds taken from Tiri will be released in the Hunuas to add to the kokako population there. Transmitters will be attached to the birds so they can be tracked for the first 6-8 months. The harnesses are made from shoelaces and have a weak link that will break



away in case they get caught on anything. The bird's feathers conceal the transmitter itself so all that can be seen is the steel wire antenna protruding from the bird's back.

The next day Shazbot, alone this time, is quickly caught. In all, seven birds are caught during the operation from April 3 to April 10. Shazbot (RM/-, female), Chinook (YM/Y, male), Tsindi (BM/W, male), and Sweetie (formerly unbanded, WO/GM, gender unknown) are sent to the Hunuas. Chatters (RG/M, male), Te Hari (YM/W, male), and Te Karanga (YM/WR, male), sporting a fresh yellow band, are released back onto the island.

The purpose of the translocation is to prevent inbreeding within the Tiri population of kokako. Chinook and Tsindi are inbred and there is 50-50 chance that Sweetie is as well. Shazbot had paired with her uncle, Te Hari.

On the last morning Morag, Hazel and I go looking for a kokako chick, the offspring of Chatters and Te Rae. Hazel is a DOC ranger who monitors the Hunua kokako population. The chick has recently fledged and is special because of Te Rae's rare Taranaki lineage. On the Kawerau Track I spot Chatters hopping through the canopy. We track him until he joins Te Rae. We watch the two of them for some time but there is no sign of the chick. This is cause for some worry.

Since then the chick has been seen twice on its own in Bush 1.



Tiritiri Matangi a Photographers' Paradise

Tiri is a stunning location to take photographs of flora and fauna. The variety and accessibility of the birds make it a perfect training ground to learn how to use your camera; experiment with your technique; and discover what makes a great shot. Every time I visit Tiri I'm asked "How can I take great photographs?" usually followed by "What camera do I need?"

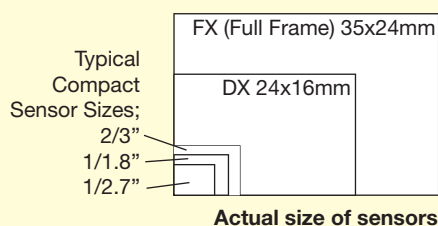
In this, the first of three articles I'll cover 'selecting equipment and making sense of the jargon', followed in later issues of Dawn Chorus by; 'taking the shots' and 'what to do with them next'.

Before you spend a cent

You can spend from \$10 to \$100,000+ on camera equipment, but before you spend a single cent you have to answer one question and be very honest. What are you going to do with the photographs once you have taken them? The answers range from 'make 6x4 prints and put them into a photo album for my pleasure' (I can't think of a more satisfying reason to take up photography) through to 'being commissioned by National Geographic' (an almost impossible goal). Being honest about your goals can save you a lot of money and frustration. A \$10 second-hand camera off TradeMe® can be a great starting place but is unlikely to be good enough to get your pictures into NatGeo (but you don't have to send \$100k either!)

Megapixels and Sensors

Inside a digital camera is a sensor which varies in size. A compact camera can have a sensor as small as 5mm x 4mm whereas an SLR 'DX' camera is 24mm x 16mm and an SLR FX (or full frame format) is 36mm x 24mm (the same size as a 35mm film frame). They are covered in light sensitive pixels. So if a sensor is 6Mp (megapixels) it could have those pixels arranged in a 2,000 x 3,000 pixel grid - that's a lot of pixels to squeeze into a sensor and that's where size matters. If the 6Mp sensor is 5mm x 4mm those pixels are going to be very tiny. If the sensor is 24mm x 16mm the pixels are going to be a lot larger,



Selecting a Camera

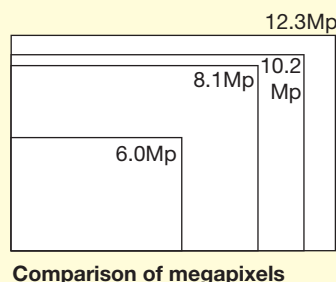
Film or digital (yes, you can still buy film!)? You may laugh, but digital photographs are not free: it costs quite a lot to print them yourself (paper and ink are just the day-to-day expenses) and it can be quite expensive to buy the computer, software, storage device(s) and printer that you'll need. Whereas you can buy a top quality, semi-pro film SLR for \$50 off TradeMe®, a reasonable quality telephoto lens for as little \$1 (it's true!) and, with a few rolls of film you're off to a great start. Going the film route is the cheapest way to take high-quality photographs.

However, digital is the fastest way to produce high quality photographs, and enables you to experiment and get instant feedback; a real bonus for getting up to speed. It's also easier to get digital photographs accepted by magazines and stock libraries etc (film has to be scanned, which can become a barrier). Most digital photographs need some computer manipulation to get the best out of them, learning those

positively huge in comparison, so they will be performing a lot better than the tiny ones. The final image will have less 'noise' and will produce a far superior image when a photograph is taken in poor light.

The number of megapixels the camera has must be viewed in relation to sensor size. It's not unusual for a 6Mp camera to outperform an 8Mp camera if the 6Mp sensor is physically bigger.

Also it pays understand the differences between 6, 8, 10 and 12Mp sizes. There really isn't that much difference, check out the diagrams.



skills can be quite a challenge.

So, to the choice of camera. Compact cameras are small and can slip into your pocket, they're relatively inexpensive and to a point are quite capable of recording a good image (see the robin on the opposite page). They can have quite long telephoto zooms built in (good for filling a frame with a bird) and many have excellent macro facilities (getting close for insects or flowers). If you can afford it, try to get one that will allow some manual control of the exposure and, if your chosen subject is birds, a long telephoto lens is required. If going digital, the down-side of a compact is the size of the sensor (see the side bar on megapixels) which will restrict the quality of the final image. Most film compacts (now only available 2nd hand) use 35mm film which is ideal. The other problems is, they're all range-finders, which means that what you see through the view finder isn't necessarily what you'll capture in your photograph. Using live view on a digital compact monitor (if available) is a solution, but the biggest problem of all (and very frustrating) is 'shutter-lag'. The time it takes from pressing the shutter button to the photograph being taken, can easily result in a photograph of where a bird was once sitting.

Next up is the 'SLR-like' cameras. An SLR is a single lens reflex camera, where you can look through the viewfinder and see exactly what will appear in the final photograph. These are all bigger to carry, have a fixed lens usually of reasonable quality, and, if digital, will have a larger sensor (again see the side bar). Because compromises aren't being made on the camera's physical size they should produce a better quality picture. Shutter-lag should also be reduced, but this is one feature you need to check out with a good independent test (see the links at the end of the page). The main restriction is, if you're serious about your photography, you could end up spending quite a lot of money on a non-expandable system, which is explained next.

SLR's are the most adaptable cameras to buy and the way to go if you are serious about your photography. These

are known as 'system cameras' because of the wide choice of lenses and accessories that are available. Canon and Nikon are probably the best in the business at the moment and probably have the largest world-wide network of service agents. The general rule when choosing a camera body is, the more you pay the more robust the camera is. The top of the range models will survive quite a bit of abuse as they have seals behind every button to keep dust and moisture out and often have a metal casting (instead of plastic) as a frame. All good for a pro' who needs to rely on the camera day-in-day-out to earn a living, but for the rest of us many of the features are available on the lower priced models. Avoid gimmicks on a camera. All you need a camera body to do is accurately expose a piece of film or digital sensor and give you control on how it does this (manual exposure settings, aperture or shutter priority and compensation). The rest of the features may enable you to work quicker or easier, but won't change the fundamentals of getting a perfect exposure.

Selecting a Lens

Once you've selected a body you'll need a lens (or 2...or 6...). Sadly buying a lens is quite a challenge due to the compromises you'll have to make. Photographing birds typically requires long telephoto lenses (400mm+). Admittedly this is not quite so critical on Tiri as you can get pretty close to the birdlife, but it's easy to get disappointed at most other locations. The other criteria is the aperture of the lens, a lens that lets in a lot of light, f2.8 - f4, is desirable but not necessarily affordable! Having an image stabilising system (IS from Canon) or vibration reduction (VR from Nikon) system built into the lens, also adds to the price but can help to improve on the sharp image success rate.

For close-up photography (flowers, insects etc.) a macro/micro lens is required. The good news is they don't need to be fast, have auto focus or any form of image stabilisation - quite the opposite in fact! You can even get away with a short, manual telephoto

lens (135mm) and a set of (as cheap as you can buy) extension tubes.

Buying second-hand is a good start. If you look hard and are patient you can get 'long-ish' lenses for very reasonable prices. For specific guidance, check out the lens test sites on the web (at the library if you don't have a computer) listed at the end.

Just remember only 3 things really matter: how good your camera is at exposing the film or sensor; the quality of the lens; and what you are recording it onto/via (film or sensor).

Additional Equipment

You also need a tripod (regardless of the camera you buy), to reduce vibrations it needs to be as big and heavy as possible. You also need a cable release to prevent any camera movement while firing the shutter. A flash gun is also a very valuable addition (as powerful as possible - you can always reduce the light output but not increase it) as the walkways around Tiri can be pretty dark at times. The birds don't seem to be bothered about a flash gun during the day but don't use one at night to illuminate a Kiwi!).

Check out these web sites for more information:

www.dpreview.com

Don't spend a cent until you look at what is probably the best site on the web for independent camera tests and comparisons. They are starting to add lens tests too.

www.birdsasart.com

Arthur Morris is one of my favorite bird photographers, you can pick-up loads of tips from his site and newsletters. His books are also superb!

www.naturfotograf.com

Great tests on Nikon lenses old and new, especially macro/micro lenses.

www.colgrave.co.nz

You can find an enhanced version of this article in my blog, along with direct links to the sites mentioned. Part 2 and 3 will be added soon. Also if you have an queries feel free to e-mail me.

JPEGs (the devil in disguise)

I have to come clean, I hate JPEGs. Sorry for that, but they have caused me more problems in my working life than anything. You see JPEG (Joint Photographic Experts Group) is a 'lossy' file format, which means that when you compress a file using JPEG you lose some of the data in the file which results in the quality of the image degrading. Compression is usually on a scale of 1-12. 1 is a very small, highly compressed file. Also, and this is very important, every time you save a JPEG (even if you use the max quality/12 setting) you are still degrading the image, everytime you hit save!

Golden rule number 1: if you can, always use RAW as the chosen format in your camera (not all cameras have a RAW setting). Golden rule number 2: if you have to shoot in JPEG format convert it into TIFF/PSD/EPS... (anything!) Keep your valuable files away from JPEG. If you have to send a file through the internet and you have to compress it, try TIFF compressed, other wise use JPEG max quality setting (12), but only convert your file into a JPEG as the last thing you do to it and make sure you keep your original non-jpeg file safe.



Flora Notes

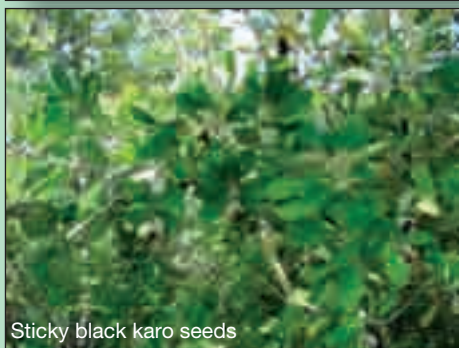
by Warren Brewer

The major activity in the forest over this quarter has been fruit and seed production. This is a splendid follow up to an exceptional flowering season.

The birds have harvested all of the fruit from the cabbage trees and most of the fruit from the coprosmas and mahoe. They are still visiting kohekohe fruit as it is splitting open and the sticky black karo seeds are also disappearing. A good crop of pohutukawa seeds are forming in the many ripening seed capsules.



Koreru harvesting cabbage tree fruit



Sticky black karo seeds



Purple mahoe berries



Kohekohe fruit splitting

Four Woody Climbers on Tiri

These woody climbers (lianes) on Tiri are a diverse and interesting group of plants. They add character to it's flora.

1. *Clematis paniculata* puawhananga Vine branch bearing panicles (loose clusters of flowers)

There are about 250 species of clematis, mainly occurring in temperate regions. N.Z. has 9 species, all endemic, with white or greenish yellow flowers. They are all dioecious (separate male and female plants).

Clematis paniculata has bouquets of starry white blossoms in early spring which show as splashes of white among the green treetops of our forests. The flowers do not have true petals but are formed by the sepals (a normally green and leaf-like whorl of floral parts which surround the base of the petals). The male flowers are almost twice the size of the female.

Clematis belongs to *RANUNCULACEAE* buttercup family. Ranunculus is Latin for little frog (tadpole) referring to the swampy habitat of some species.

Clematis paniculata can be seen at the corner of Grahams Rd and Wharf Rd.



Clematis paniculata

2. *Parsonsia heterophylla* kaihua N.Z. jasmine. James Parsons 18th C. Scottish doctor and natural historian / differing leaves

There are 40 species in the genus found in tropical Asia, Australia and N.Z. N.Z. has 3 endemic species. Kaihua is a stem twining , branching



Kaihua (a) mature pods



Supplejack (showing leaves)

3. *Ripogonum scandens* kareao supple jack / flexible joints to climb

Maori used kareao to tie pieces of framework together and hold thatch in place. It produces its leaves and flowers in the sunlight on the treetops so we mainly see the hanging jointed canes. Its soft asparagus like growing tips are edible and taste like a fresh green bean. Sprays of tiny greenish flowers are followed by red berries which are sought after by pigeons. A few species are

soft wooded vine. Its white fragrant flowers are often borne in great profusion on the terminal branches. The fruit is a long narrow green pod which when ripe opens to release tufted seeds dispersed by the wind. The plant is often draped over the top of the canopy making it difficult to see.

Kaihua belongs to *APOCYNACEAE* dogbane family. The family consists of trees, shrubs and vines with milky, often poisonous sap. They are mainly from tropical areas.

A named specimen of Kaihua can be seen on the kawerau track. More examples can be seen further along. Look for thick vine stems twining around a supporting tree trunk.

found in Australia and New Guinea.

Kareao belongs to *SMILACACEAE* Smilax family which contains 4 genera of woody vines.

Kareao vines can be seen in the old forest on the Kawerau track.

4. *Tecomanthe speciosa* flowers like *Tecoma* (*see below) beautiful

Tecomanthe is a genus of 20 species occurring in Australia, New Guinea and N.Z. All are vines.

Tecomanthe speciosa in the wild is very rare. One single specimen was found on Great Island of the Three Kings in 1945. It is a vigorous climber with leathery dark green leaves. It has quite large tubular creamy white flowers tinged with green. These are followed by fat green pods which when ripe split into two, revealing many flattened winged seeds.

It belongs to *BIGNONIACEAE* bignonia family named after Abbe J Bignon 18th century French royal librarian.

Other family members are
* *Tecoma species* *Tecoma* name derived from Aztec word tecomatl - a clay pot (possibly referring to the shape of the flowers).

e.g *Tecoma stans* yellow bells (5cm yellow tubular flowers)

Jacaranda species which are native to drier areas tropical and sub tropical South America.

Tecomaria capensis Cape honeysuckle - often grown as hedging in older parts of Auckland City.

We have *Tecomanthe* growing at the visitor centre alongside the kokako display boards.



Tecomanthe

Fauna Notes

Compiled by **Morag Fordham**

Takahe

In March as part of the agreed Takahe Management Plan, Harakeke (Ahikaea's and Montague's chick) together with four other chicks (two each from Maud and Mana Islands) were all sent down to Burwood Bush (DOC facility near Te Anau). We have since heard that she is most definitely the boss.

Despite being in good spirits, ToeToe (Cheesecake's and Rossie's chick) was very underweight for its age so at the end of March the chick was sent to the vets at Auckland Zoo for a check up. Sadly ToeToe died at the Zoo on 5 April.

Rossie and Cheesecake, Blackwatch and Mahuika, and Blake are all still at the Visitor Centre.

Now that summer has ended Greg has deserted Hobbs Beach in favour of the Visitor Centre.

The Visitor Centre is definitely the "in place" for Takahe as Mungo and his partner Edge (formerly NE Bay/Wetlands area) are here too.

Montague and Ahikaea can usually be found along the Ridge Road and Whakama is seen from time to time around the Eastern track/Wetlands area.

Stitchbird/Hihi

There were 116 nesting attempts this season versus 98 for last season. In total 458 eggs (387 last year) were laid and 343 (250 last year) or 75% of these hatched and a total of 197 (157 last year) chicks or 57% fledged. Chick

mortality was 43%. There was one known natural nest from which two unbanded chicks fledged.

The February 2008 census recorded 226 birds (37 females, 61 males and 128 juveniles) versus 139 birds in the February 2007 census.

Birds translocated to the Ark in the Park site in the Waitakere Ranges, Auckland in 2007 have successfully fledged chicks. The birds chose to nest high up in Kauri trees rather than using the nesting boxes that had been provided for them.

Up to another 60 juveniles will be translocated to the Ark in the Park in May this year.

I have just been told that an additional 5 juvenile female Stitchbirds will be caught at the same time as the catch for Ark in the Park. These birds will be going to Karori Wildlife Sanctuary as they are short of females.

Kokako

The birds have kept the best until last this breeding season with the wonderful discovery (first seen by the OSNZ group on their March census) that Te Rae (one of the Taranaki females) and her partner Chatters (previously unbanded Tiri bird) have produced a healthy chick, Naki who has now fledged! This is the first of the Taranaki birds to breed.

As part of the ongoing management of kokako on Tiri the kokako catch team were back in April. They successfully caught Shazbot (paired with her uncle Te Hari), Chinook (inbred), Sweetie

(unbanded) and Tsindi (inbred). All of these birds were successfully released into the Hunuas where they are being monitored. Te Rae's mate, Chatters was also caught and banded (RG/M) and then released again.

Te Koha Waiata's and Cloudsley Shovell's chicks, Punga and Fern have now fledged.

Moby and Pukaha (Taranaki female) continue to frequent the Visitor Centre much to the delight of the shop staff, guides and visitors alike.

Brown Teal/Pateke

Solita (and sometimes Finn the Philanderer) and their four ducklings are still on the bunkhouse dam. They can often be seen around the Visitor Centre at night. Blue Bonnet (and sometimes Finn) and her one duckling are still on emergency dam.

In April Ossie and his new mate Bella produced four ducklings but sadly the ducklings all disappeared within the first few days.

There are still no ducks on the Wetland dams as there is still not enough water in the dams.

Other Birds

In early March an unbanded male tomtit was seen on the Kawerau track. Four reef herons were seen near the wharf one day in April.

Early one morning in mid April a kaka was seen briefly near the Visitor Centre.

Other Fauna

There have been a lot of tuatara sightings in the usual spots and also a couple of sightings during the day at the top of the Kawerau track.



Photograph
© Diana Cremers
A visitor from
the Netherlands.

Hey everyone!

This issue is all about the grey-faced petrel and other native seabirds. Those who went on Tiri's night walk might have seen some of these and if you haven't, keep on the look out when you are on the ferry. Jo and Tess

Grey-faced petrel facts:



- The Maori named it Oi.
- It is 41cm from the tip of its bill to the tip of its tail.
- It is blackish-brown in colour apart from its grey face.
- It has black legs and feet.
- Spectacular sweeping and soaring flight.
- It breeds during winter.
- It nests in burrows on cliffs.
- It breeds on many islands around the northern North Island including Tiri.

Look for the underlined words in the wordfind below

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | S | L | A | N | D | S | D | K | E | U | T | A | I | L |
| Z | N | L | R | E | K | E | G | J | A | W | S | M | P | E |
| O | D | I | H | U | I | D | C | O | L | O | U | R | L | R |
| T | H | B | C | S | M | B | L | W | X | A | I | R | I | T |
| B | M | L | P | K | G | E | I | S | Z | N | S | A | H | E |
| L | S | E | B | T | U | G | F | I | L | T | T | B | G | P |
| A | B | E | U | R | N | P | F | Y | T | N | N | U | B | D |
| C | L | P | R | I | S | F | S | H | I | H | F | T | A | E |
| K | E | A | R | O | I | O | C | W | H | N | D | G | N | C |
| B | V | A | O | D | T | Y | I | U | E | A | V | J | A | A |
| Z | O | Z | W | W | P | N | X | U | L | E | J | O | M | F |
| S | U | T | S | O | T | P | H | T | L | J | P | S | A | Y |
| K | M | L | T | E | D | I | M | F | O | S | H | I | N | E |
| J | O | P | R | I | K | O | A | F | I | M | O | E | N | R |
| C | C | M | S | D | E | E | R | B | T | O | E | S | A | G |

Unscramble the words below to reveal the **names** of other **seabirds**. Which ones might you see around Tiri?

1. SOSTALARB
2. GLESUAL
3. WMAYLOLMK
4. WEASTRHAER
5. ETNR
6. NAGTNE
7. CATRIC KASU
8. GEPINUN
9. GAHS

How many words can you make from the word:

PETREL

5 - good, 9 - great, 12+ - excellent!

Remember you can only use each letter once and each word has to have 3 or more letters in it. Good luck!



Tiritiri Matangi Island was recognised earlier this year by Metro Magazine as one of this country's top unmissable day trips cementing something we at 360 Discovery have long known... this island is a little cracker!

So just who is 360 Discovery and what have they done for us lately?

360 Discovery used to be known as Kawau Kat Cruises which is why our vessels are registered MV Kawau Kat I, II, III and V.

We travel to Tiritiri year round and are pleased to be able to offer SoTM guides free travel as well as carrying a range of freight for both SoTM and DoC free of charge. We also offer a range of comprehensive discounts for everyone from research students to construction workers as part of our ongoing commitment to the future of the island. We are in it for the long haul and try wherever possible to support the island's initiatives be it carting aviary building materials or helping evacuate ailing birds off the island.

Our Wildlife Discovery trip to Tiritiri Matangi spearheads a great range of products on offer from our Auckland base ... a beautiful little Harbour Cruise that takes guests around the Hauraki Gulf three times a day, weekend excursions to Motuihe Island and we are the only ferry operator going between Auckland and Coromandel and we travel there five times a week! But wait, there's more All our vessels are available for private charter for everything from harbour trips to weddings and special number birthdays.

The company is also involved in a wealth of other eco-positive initiatives, we have just helped to release 50 red crowned kakariki onto Motuihe, we are key sponsors of the Hihi Project on Little Barrier Island and we recently participated in the 2008 Variety Bash in an eco-friendly vehicle that was fitted with a special device designed to cut our carbon emissions by more than half!



The 360 Discovery team headed off to TRENZ 08 in May to meet tourism wholesalers and retailers from all over the world, Tiritiri Matangi is one place they all want to know more about and we did our best to oblige!

For more information on what we do and how we do it check out our website www.360discovery.co.nz

We certainly look forward to being involved with Tiritiri for many more years to come and hope to see you all soon enjoying one of our other experiences.

Liane Clarke
Marketing Manager



Supporters of Tiritiri Matangi Inc. PO Box 90814, Auckland Mail Service Centre, Auckland 1142



Dawn Chorus