



Art in the Woolshed
6 to 14 March 2010

TAWHARANUI OPEN SANCTUARY SOCIETY INC.
Newsletter No. 31 December 2009



Spring time at Tawharanui is busy for birds and volunteers.
Three NZ dotterel chicks at Jones Bay are metal banded for identification.



Hercules and Geo have done it again with two chicks each.
These kiwi chicks had a feather removed for DNA testing.

Coming Events

Sunday 3 January -Volunteer day. Meet at the Woolshed 9.15 am for morning tea
Sunday 7 February- Volunteer day. Meet at the Woolshed 9.15 am for morning tea.
Sunday 28 February -Working bee preparation for AITW (Art in the Woolshed). Meet at 9.15 am.
Saturday 6 to Sunday 14 March AITW (Art in the Woolshed). (10am to 5pm everyday)
Sunday 7 March -Volunteer day! AITW (Art in the Woolshed)

Chairman's Report

These days we are all bombarded with requests for financial assistance and I'd like to explain your committee's approach to donations and grants. TOSSI is lucky to have strong community support and we have established good relationships with funding agencies. Because of our good governance and because the sanctuary is such a good project we are generally successful when we apply for contestable funds.

We will never phone you to request a donation although we are aware that a fundraising call centre, cold calling for a large conservation organisation, did recently use TOSSI's name without authorisation. We have since received an apology from the organisation concerned.

Where does the money come from? A major source is the Art in the Woolshed fundraisers and this is supplemented by donations from TOSSI members and the general public. In 2009 we also received support from Community Conservation Fund, Pub Charity, BNZ Save the Kiwi Trust, Ransom Wines, Rodney District Council and Lion Foundation. We are not funded by the ARC.

Where does it all go? Well, it varies each year according to the projects being undertaken and it's used carefully. Our two largest expenses in 2009 were bird release, tracking and monitoring expenses totaling \$23,843 (2008 \$9,127) and nursery consumables, equipment and facilities totaling \$13,984 (2008 \$13,019).



If you would like a copy of our audited financial statements for the year ended 30th June 2009, tabled at our recent AGM, please email Treasurer Joe Crandle on secretary@tossi.org.nz.

This is our last newsletter for 2009 so I wish you all a merry Christmas, a happy New Year and hope that you will use the improving weather to bring your family and friends to visit the sanctuary and hopefully get involved in the many tasks that TOSSI members enthusiastically carry out. The more you put in, the more you will get out.
Paul Williams TOSSI Chairman

Editorial

It is spring and the birds have been busy and so have TOSSI committee members who have been out visiting other sanctuaries. Jan Halliday and Helen Crosby AITW coordinator visited Somes Island, Kapiti Island, Bushy Park, Karori, Mt. Bruce, Nganamu, and Mangatautiri. Jan says "coming back to Tawharanui was like coming home. There's a lot to learn from seeing what others are doing, but there's nowhere quite like our particular piece of magic."

Recently I visited Great Barrier Island, the original strong hold for pateke. I saw Glen Fern Sanctuary managed by Tony Bouzaid and supporters, and Windy Hill where Judy Gilbert organises a massive trapping regime across 620 hectares of dense bush. Also I visited Karen Walker who has been the Great Barrier bird rescue rehabilitator for the last ten years. On her ten acre property numerous banded rail with chicks, pateke and ducklings abound. Naturally I asked, "how is it that there are so many?" Living in her sanctuary garden, Karen had seen the few seconds of demise when pukeko gang up and rip live pateke ducklings apart and eat them. Without pukeko, cats and rats, the banded rail and pateke now thrive. Regularly on Great Barrier I saw pateke in flocks of up to ten and more and in one case there were sixteen pateke, and lots with ducklings all in broad daylight. None of these were in the presence of pukeko.



Just like the predators in the sea, fish eat fish, and birds eat other birds species especially other species chicks, and it seems that some of the more recent bird arrivals on the evolutionary scale predate the endemic birds. It is a tough world out there even inside a protected sanctuary without four legged mammalian predators. Harrier hawks eat pukeko, and pukeko eat ducklings, and black-backed gulls eat NZ dotterel chicks, and morepork eat North Island robin chicks.

And we humans will probably be eating chicken and turkey at Christmas!
Happy Christmas and may 2010 be a great year for conservation.
Alison Stanes Editor.

Open Sanctuary Coordinator Update

Ruddy turnstones! No, I'm not swearing. There's always something new and interesting to be seen at Tawharanui Open Sanctuary and this arctic breeding species was spotted at Anchor Bay in early November. These birds are common visitors to New Zealand but usually spend their time on our big northern harbours such as the Kaipara, Rangaunu, Manukau, Firth of Thames and Tauranga.

And although not always new, it is always exciting to see the flourishing of the taonga we nurture. While trundling back from one of the monthly pest surveillance tracking tunnel runs through the Mangatawhiri wetland, admiring the vigorous growth of the recently planted trees, I was startled and pleased to see a bittern launch itself into flight not far in front of me.

And then there's the downright puzzling. How do shorebirds such as stilts and NZ dotterel that have evolved on our coastline over millions of years get the tide wrong? Two stilts nests and one dotterel nest have been flooded by the rising sea. And after we expend so much effort managing natural habitat, we will be thanked two pairs of NZ dotterel choosing to nest on the mown lawn! We know these things due to the keen and diligent eyes of our volunteer monitors, several of whom who can tell you the soap opera antics and family trees, triumphs and tragedies of most individuals. As I write there are currently seven dotterel chicks about, some nearly fledged and others with a few weeks to go, and further active nest yet to hatch.

Other bird happenings of interest include pateke ducklings on the stock dam of Ecology stream. Local breeding is important to firmly establish this reintroduced species. The last of four releases of 40 captive bred pateke is planned for February 2010. We'll advise details when this will be happening as we're always happy to share and celebrate such significant milestones. Again we'll need to monitor each and every bird via radio telemetry to see how they fare, as there are still information gaps regarding this method of establishing new populations that will guide future sites. A big thanks to our volunteer monitoring team who have kept a close watch on these birds over the past two years of this programme.

Four kiwi chicks have hatched from two nests monitored this season. Both fathers last year had two nests each, so we're hopeful for more, and presumably many of our non-monitored birds are producing young. Robins have fledged their first brood of twenty young, and most are rearing chicks of their second brood now.

Our grey faced petrel chick gets fatter by the day, with parental visits obvious as they knock over the 'toothpick barricade' at the burrow. Soon these visits will cease and the fully feathered chick will get hungrier and one day head to sea to find its own food. After a few years of oceanic wandering this chick will return to its natal territory to raise its own chick.

It's not all fluff and feathers at Tawharanui Open Sanctuary. We are lucky enough to be the venue for the Auckland Botanical Society Christmas field trip. With so many keen and knowledgeable eyes we'll be sure to have our understanding of the flora of Tawharanui expanded, and I'm sure this will generate discussion about how we can nurture our current and possible future threatened and rare plants at this site. This trip has been timed to coincide with the seasonal appearance of the rare orchid *Danhatchia* discovered last summer by a keen local botanist. Who knows what else might be out there waiting to be discovered?

Matt Maitland Open Sanctuary Coordinator

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



Matt and his daughters visit the TOSSI stand at the Warkworth Kowhia Festival.



A barricade of small sticks of bracken across the front of the grey faced petrel burrow help volunteers monitor nest activity. The sticks are disturbed every time parents return with food for the chick.



The grey faced petrel chick seen tucked inside the burrow.

Update on the robins at Tawharanui

Background On 16 March 2007, 21 robins (15 males and 6 females), were transferred from Tiritiri Matangi Island to the Ecology Bush at Tawharanui. Since only 6 females were caught in the first batch and to help balance the sex ratio, 4 additional females were captured near Puhoi and released at Tawharanui on 26 July and 10 August 2007. Tiritiri, the main source of robins for the transfer has a population of 35-40 pairs, which is productive enough to allow up to 30 robins to be removed at about two yearly intervals. At Puhoi, the population is derived from birds which have dispersed inland from Wenderholm, where 21 robins from Tiritiri were released in 1999. Since 1999 about 300 young robins have been produced in the Wenderholm area, and many of them have dispersed inland into mostly unmanaged scrublands and pine forest. The four females transferred to Tawharanui were caught in one of these areas.

Until recently, robins were absent from the mainland in the Auckland region, and they survived naturally only on Little Barrier. Elsewhere in the North Island, robins are quite widespread in native and exotic forests on the Volcanic Plateau and they are common on Kapiti Island. Since they occur on the mainland, robins were seen as suitable early candidates for release at Tawharanui after pest mammals were removed. The robin is also a very useful indicator species for the open sanctuary because they are tame and easy to monitor. While the population is small it is still possible to find and monitor almost every nest and to colour band most of the young.

Survival since release Survival of the founding birds after release at Tawharanui was high, and at the start of the 2007-08 breeding season, 23 of the 25 original birds were still present. These included 9 pairs and 5 single males. All 9 pairs bred successfully, and during the 2007-08 season they fledged 34 young (3.8 young/pair) from 21 nests.

Last (2008-09) season, there were 21 birds in total at the start of the breeding season comprising 18 of the 25 founding birds and 4 of the 34 locally-bred birds from the previous season. The population included 8 pairs and 5 single males. All of the pairs bred successfully and they fledged 33 young (4.1 young/pair) from 20 nests.

This (2009-10) season 24 birds were found at the start of the breeding season. These comprised 13 of the 25 founding birds, 2 of the 34 locally-bred birds from the 2007-08 season and 9 of the 33 locally-bred birds from last season. The current population (11 pairs and 2 single males) is summarised in Table 1, with colour codes showing surviving founding birds in green, and locally-bred birds from the 2007-08 and 2008-09 seasons in yellow and red respectively. By the time this newsletter went to print in mid-November, all 11 pairs had fledged their 1st broods and many of the females had begun 2nd brood nests. 20 young had already fledged of which 18 were colour-banded. This season's young birds are banded orange over metal on the left leg.

Discussion Overall, the robins seem to be doing quite well at Tawharanui. Survival of the founding birds has been good, with 52% still alive 2 years after release (cf. Wenderholm where 38% were alive after 2 years). Productivity has also been high, with a total of 87 young produced to date, including those fledged so far this season. The breeding population has held its own with 9 pairs the 1st season, 8 pairs the 2nd season and 11 pairs this season. The territories held by the breeding pairs have been quite stable with most of the founding birds still living in the same places where they originally settled.

Although high numbers of young have been produced, we think there has possibly been high dispersal. At the start of the 2008-09 season, only 4/34 (12%) of the previous year's young were still in the open sanctuary. The remaining birds are assumed to have either died or dispersed elsewhere. This year a higher proportion (27%) of the young produced the previous season, were still present. We have searched some of the nearby forest areas inland from Tawharanui, including parts of Hubbard's Bush and other forest and scrubland patches on the Hubbard property, but we have found no robins. It is possible that some have dispersed much further inland as they did at Wenderholm, where young birds moved up to 10 km inland.

At Wenderholm, as a result of very high dispersal of young out of the 60 ha protected area and very few staying, too few have been recruited to maintain the population. As a result, numbers have declined to the point where this year only 2 pairs remain. Wenderholm is linked by forest corridors to significant bush patches along the Waiwera River and in the hills west of Puhoi, where the dispersing robins have established several small outlying populations. The nearest population is just 2 km from Wenderholm. Although it is easy for robins to move through the forest linkages, no young from any of the inland sites have dispersed back to Wenderholm.

Although it is possible that we may see the same process happen at Tawharanui, Ecology Bush and Takatu Point Bush are already functioning as two small meta-populations with birds moving between them. Our colour banding shows that young robins are definitely moving in both directions. Possum Gully, the South Coast and Hubbard's Bush could all potentially support robins, and natural and planted linkages between them should allow robins to move freely between them all. The movement patterns we are already seeing at Tawharanui, where the dispersal is not just in one direction, hold promise for a successful outcome.

Tim Lovegrove Natural Heritage ARC

Table 1. Tawharanui robin population at start of the 2009-10 season * indicates a photo FYI -Colour bands are read, from the birds left leg to right—top to bottom

Pair #	Colour bands – Male Female	Location
1	*YR-YM, OP-RM	Ecology Bush, slopes N of dam
1a	*PR-YM, *PG-RM	Ecology Bush, W end of Mystery walk
1b	YB-MG, YG-RM	Ecology Bush, area SW from top kissing gate
2	YW-YM, *PM-RP	Ecology Bush, 1 st clearing E of bridge
3a	YB-YM, OO-RM	Ecology Bush, gully head N Coast paddock
4a	RW-RM, OW-RM	Ecology Bush at robin release site
5a	*YR-GM, *RO-RM	Ecology Bush, gully W of North Punchbowl
6	*BG-BM, GW-YM	Takatu Bush, Pen 7 area Elephant Pt Track
8	BB-WM, PN-RM	Takatu Bush, N slopes 200m E of top gate
8a	*MB-YB, PM-WY	Takatu Bush, gully S of Ngaio Bay Track
9	MY-BW, BR-MW	Takatu Bush, N of N fork of Takatu Loop Tk
Singles		
	WR-BM, male	Ecology Bush, gully head N Coast paddock
	OB-RM, male	Takatu Bush, puriri gully near Takatu Point

If you see NZ robins with colour bands outside the park please inform:
Tim Lovegrove
ARC
or
Alison Stanes
09,5240291



Notes on the table:

13/25 surviving 2007 founding birds from Tiritiri and Puhoi shown in green

2/35 remaining young from 2007-08 season shown in yellow (banded -YM on R leg)

9/33 remaining young from 2008-09 season shown in red (banded -RM on R leg)

09-10 chicks banded Om left leg



YR-YM in Ecology Bush



BG-BM Tokatu Bush



MB-YB in Tokatu Bush



PM-RP Ecology Bush



YR-MG and partner RO-RM in Ecology Bush



PR-YM and partner PG-RM in Ecology Bush



October Volunteer Day

Occasional showers driven by a cutting nor-westerly wind did not deter 17 faithful TOSSI volunteers including Pat and Roger's delightful twin granddaughters, from participating in the successful work day programme.

After an introduction in the Woolshed by TOSSI secretary David Stone and Open Sanctuary Co-ordinator Matt Maitland of ARC, volunteers broke into three groups. One group strode through the sand dunes attacking the last of apple of sodom and lupin while a small group attended to weeding in the nursery. The remainder tackled resanding of the sand ladders at Anchor Bay and towards West End. Consistent eradication by previous groups meant weeders were soon free to join those working on the sand ladders. To the probable amusement of some hardy surfers trying to make the best of an onshore slop, volunteers replenished the sand ladders to the beach in rapid time. New volunteer Keri hoisted heavy bucket loads along with regulars Olivia, Hannah, Wendy, Leanne, Penny, Jill, Brad, Deputy Chair Steve and Matt Maitland.

The group retired to the shelter of the Woolshed for lunch, except Sue Crawshay who had stoically continued with weed eradication and trudged back much later saturated but satisfied with a job well done.

After lunch Matt Maitland explained and demonstrated the various types of traps used at Tawharanui Open Sanctuary as the wind whistled and rain pounded the roof.

David Stone Volunteer Day Host

November Volunteer Day

37 people including 6 from France, 2 from Spain, 7 visitors from Awhitu Landcare, new volunteers and regulars arrived at the woolshed and shared a noisy morning tea. An introduction power point presentation gave information on the Open Sanctuary progress, and updates on recent chicks, kiwi, robins, NZ dotterels and grey faced petrel. Other photos displayed the weeds that had to be removed from the dunes targeting mainly fleabane, and lupines.

We split into three teams:- hard labour removing thistles from planted area between Lookout paddock and Ecology led by David Stone, medium labour clearing water tables in upper Ecology Track led by Sue Crawshay and soft labour removing fleabane and lupin from the dunes between Triangle and Comet Rock where there are no known NZ dotterel nests, led by Alison Stanes with Matt Maitland.

By noon everyone had regrouped in the dunes for the return of 7 of our shore skink from Massey University. Children enjoyed releasing individuals. A barbecue lunch prepared by Steve Palmer and a yummy cake made by Penny Palmer followed.

Fifty litres of Nufarm Spray was donated to the Open Sanctuary by Miles Cain of Nufarm. David Stone gratefully accepted the spray for use on the park.

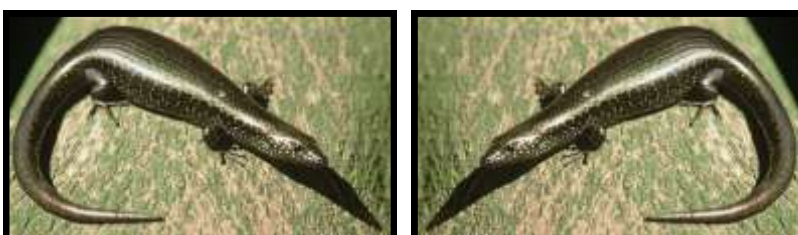
Matt Maitland gave a talk on kiwi translocation and led a walk in Ecology Bush and out on the old fire wood trail. Alison, David and Jill retreated to Jones Bay to work with John Dowding banding three NZ dotterel chicks with metal Identification numbers. Photo on front cover.

A big thanks to those team members who assisted the host in making the day an enormous success.

Alison Stanes Volunteer Day Host



David Stone & Miles Cain



Shore Skink



Manualea from Massey University talks to volunteers about shore skinks before they are released back into the dunes.

Art in the Woolshed 2010

We are well underway with the planning and preparations for AITW Tawharanui 2010 and it is great that the Mahurangi Group will be showing simultaneously in Matakana. Two sheds – two shows! Diary 6th – 14th March and tell as many people as you can so that we can make AITW2010 a great success, keeping up the tradition of the past four exhibitions.

If you are able to volunteer to help with the exhibition would you please email Rhys Thompson at gordini@clear.net.nz or telephone 09 426 5421. Rhys will be working out the roster. I unfortunately mucked up the timing for the March workday to prepare the woolshed, setting the opening day on the first Sunday of March so we will be having a working bee on the woolshed and surrounding area in mid/late February.

Again anyone able to help please contact Helen AITW2010@ihug.co.nz or telephone 09 422 9936.

Kowhai Festival

On Saturday 10 October TOSSI displayed a stand at the Warkworth's 40th Kowhai Festival. Thousands turned out to this wonderful family day, despite little annoying showers of rain! The TOSSI stall was nicely situated between DOC and Forest and Bird who both had covered displays. With great amusement DOC staff teased, "such a shame TOSSI is out in the wetland, while we are under a forest cover!" As the weather situation deteriorated DOC kindly took us into a corner of their stand which kept our stuffed predators dry. Thank you to Joe Crandle, Liz Harrison, David and Jill Stone and Sue Hoyle who all helped to make it a very worthwhile day. Alison Stanes



TOSSI stall Kowhia Festival



David Stone and Joe Crandle

TOSSI volunteers work with ARC on bone seed

For two full days in October TOSSI volunteers worked together with ARC staff removing bone seed from Tokatu Point. During October bone seed, a shrub tree that grows faster than pohutukawa, has a bright yellow flower and can be easily identified. The work was strenuous, clambering around steep banks and sawing down thick trunks, but satisfying. It was amazing what a team of dedicated workers can achieve. Maurice Puckett scored top points for agility and commitment. Only those involved will have the enormous satisfaction of being on Tokatu Point and seeing almost no bone seed.

Alison Stanes

Gen-I visit Tawharanui.

Sixty participants from a Gen-I Convention at Matakana made a field trip to Tawharanui. They arrived on two large buses and were ushered into the back door of the woolshed, where docking of lambs had recently taken place. They were told, accompanied by a good odour of lambs, that this was the Tawharanui Open Sanctuary Convention Centre! Some of the contingent came from Wellington others Christchurch and some from Australia. After a power point presentation about the triumphs of Tawharanui, the buses took them to the camp ground. They had been told they were going to make a contribution to the community. Just as well because they might not have come had they realised the contribution was removing fleabane from the dunes. With the help of Steve and Penny Palmer three sweeps were made across the dunes taking out this new annual weed that has turned up there. It was truly amazing to see the results and the grins on faces as they returned to the buses for some lunch. Best of all, Steve Palmer's team spotted five orcas out in the bay. The rest of us were too busy working with heads down! A big thank you goes to Sandi and the team from Gen-I.

Alison Stanes Volunteer weed extraction specialist!



Geo's nest on a steep cliff on the South Coast. Steve and Penny Palmer hold the chicks, Maurice Puckett holds Geo while Matt Maitland prepares for action.



A chick has a feather plucked for DNA testing to determine gender.



The other chick waits its turn.



Geo has his brood patch inspected.



The family is returned to their burrow.

Prostrate manuka at Tokatu Point



Prostrate manuka flowers in August, September, and October at Tokatu Point. TOSSI volunteers have assisted in removing random patches of gorse from this area creating wonderful carpets of prostrate manuka.



Examples of how some prostrate manuka grows flattened to the ground while others grow taller.



Volunteer Sue Crawshay jubilantly waves gorse removed from this glorious rounded prostrate manuka on Tokatu Point.



While Tawharanui has prostrate manuka, Great Barrier Island has prostrate kanauka. Above is an example of prostrate kanauka growing on Mt. Hobson Great Barrier Island.



An example of prostrate manuka alongside manuka grown at the TOSSI nursery. Steve Palmer

In Praise of Manuka

"Manuka is so boring." "I spent 30 years getting rid of the stuff and here am I planting it." –quotes from TOSSI volunteers.

Manuka is an amazingly adaptable and variable plant, which is the subject of more interest lately because of the discovery of antibacterial properties of manuka honey and manuka essential oils. Maori used manuka for cough medicine and the tough wood for tool making.

Captain Cook infused manuka leaves as a tea substitute and later in brewing beer, which he used to help prevent scurvy in sailors deprived of fresh vegetables and fruit. The beer was well received although the sailors had little choice as their ration of spirits stopped when the beer was brewed.

Manuka is New Zealand's most widespread and adaptable native shrub, growing on exposed coasts, in subalpine scrub, dry soils and wetlands where it develops air breathing roots. Manuka scrub provides rapid erosion control and as much carbon accumulation as plantation forest as well as being a precursor to regenerating native forest. Manuka is a single species with one variant, Northland form, with pink tinged flowers. The variation in this one species from 5m trees to prostrating ground cover is striking.

There has been considerable investigation in to the role of genetic and environmental factors in the variation in manuka but it is now clear that both are significant. The manuka seedlings grown at the nursery at Tawharanui illustrate the genetic factors.

Plants raised from the prostrate manuka on Tokotu Point have a prostrating form even when grown in the sheltered nursery while plants raised from seed collected in the sheltered wetland have the more usual upright form. The prostrating manuka have been planted out at Tokotu Point, filling gaps left from removal of gorse. Our Kiwis appear to appreciate this habitat.

Penny Palmer Nursery Volunteer

Botanical Society Visit

A keen team of Botanical Society members visited Tawharanui this month under the guidance of Maureen Young and Rebecca Stanley from ARC. The visit was timed with the appearance of a very rare small orchid named *Danhatchia* which only comes above ground in December and January. This little orchid has no chlorophyll and survives on a fungi associated with taraire roots. There was great excitement as specimens were found in Home Bush behind the home of the resident ranger at Tawharanui.

In Ecology Bush much attention was paid to *streblus* known as Milk Tree. The visitors were pleased to find berries on one of the specimen trees indicating that it is a female. Also two smaller examples were found growing near the bridge in Ecology Bush, affirming that in the absence of rats and possums, this rare species is doing well.

Alison Stanes Editor and Botany novice!

December Volunteer Day

The tasks for the December volunteer workday gave plenty of room for choice, covering many of TOSSI's areas of interest. Ten people headed for the nursery with Steve Harrison, Matt Maitland took a group of seven to Tokatu Point to tackle a variety of weeds, and Sue Crayshaw and four others went off to continue the attack on lupins in the dunes. As well two volunteers headed for some carpentry, making cat traps with two junior rangers.

Much was achieved: after an overview of the nursery operation the nursery group re-potted 536 flax seedlings into PB3's; pampas and gorse were removed at Tokatu Point, and a previous infestation of willow-leaf hakea checked, with only two very small plants found; those working in the dunes reported a good-sized area to be lupin-free; and eleven cat traps were constructed –these will be placed at the northern fence end in the near future.

Thanks to those who led the different activities, and to Maurice Puckett, duty ranger, for helping to organise the day.

Jan Halliday Volunteer Day Host

Regional Parks Management Review

The Regional Parks network cared for by Auckland Regional Council is managed in accordance with the Regional Parks Management Plan. This document is currently under review, and a draft plan has been released for public submissions.

The plan covers 23 regional parks and sets out how the council intends to manage these over the next ten years, with a view to the future beyond. The draft plan covers aspects such as the role and purpose of regional parks and sets general policies for: management of natural settings; key relationships; sustainable management; infrastructure; and how recreation and other activities will be provided for.

Each park has a section reflecting the specific management focus for the next ten years. For Tawharanui this includes managing the park as an open sanctuary, integrating recreation, conservation and farming; restoring native habitats and reintroducing absent flora and fauna; enabling people to learn about wildlife and habitat management; advocating for the marine park to be upgraded to a marine reserve; facilitating camping and informal recreation; and managing a sheep and beef farm implementing sustainable farming practises.

The draft plan, frequently asked questions and submission forms can be viewed at www.arc.govt.nz/parks
Matt Maitland

Biodiversity Monitoring Programme

The Auckland Regional Council is in the process of implementing a biodiversity monitoring programme across the Auckland region.

This is intended to:

- Determine how biodiversity (native habitats, plants, and animals) is doing across the Auckland Region
- track the impacts of key threats such as habitat loss and fragmentation, and weeds and animal pests (where they occur)
- measure the benefits of ecological restoration efforts (which includes Tawharanui and Shakespear)

To achieve these objectives we will be field monitoring of forest and shrublands, wetlands, and dunelands across the region, and in each of these habitat types we plan to setup permanent monitoring stations where we will monitor vegetation, birds, and mammalian pests (where they occur).

As part of this larger programme, a number of volunteers (in particular Dave Craddock) and ARC rangers and staff from the Natural heritage team have setup monitoring stations on Shakespear Regional park and more recently on Tawharanui Regional Park. There has been a total of 30 monitoring stations setup in each Park, and in addition to monitoring vegetation, and birds, we'll be monitoring ground-dwelling invertebrates and skinks. The monitoring of invertebrates and skinks was considered a particularly important add on because we still do not know if it is better or worse for these animals to be subject to predation from high abundances of mice, or from lower abundances of a number of different types of mammalian pests as occurs on the rest of the mainland. This research may help us better understand the importance of eradicating mice, or the need for a smaller mice-free enclosure inside the parks.

All monitoring stations will be sampled over spring/summer 2010/2011 which will give us one year of baseline data before the Shakespear fence goes up and the pests are eradicated. Monitoring will be done by field teams using a professional field team leader, some staff, and as many volunteers as we can get our hands on!

Details will be finalized winter of next year
Matt Baber Natural Heritage Scientist. Heritage Programmes ARC

Six adult NZ dotterels no longer seen at Tawharanui - have you seen them?

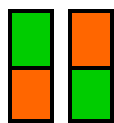
22/11/06 m-OR disappeared from a one egg nest on a sand dune slope just outside the West End Koru. Cat paw prints were observed in the area. These were the colour bands on this NZ dotterel.

m for metal band on the left leg.



This incident was before I had a camera suitable for photographing dotterel colour bands.

18/12/06 GO-OG a male NZ dotterel disappeared at night from a three egg nest behind the big dune. Two eggs were broken and one was whole lying a metre from the nest. Cat prints led to a scuffle zone in the sand three metres from the nest.



Green orange on the left leg and orange green on the right leg read from top to bottom.



Photo John Dowding

YM-YK (male) disappeared 13/11/07 with a scuffle zone observed 20 metres from the nest just outside the Predator Proof Fence where a cat or cats are known to be in the vicinity.

YM-YK and m-WKY pronounced Yum Yuk and Wacky, were an excellent breeding pair often fledging three chicks a season. They were the only breeding pair that survived in tact as a pair after the bait drop in 2004. After Nov. 07 when YM-YK disappeared the nest was abandoned as WKY could not manage incubating day and night. The following season WKY returned and became a great aunt to OB-WG and UB chicks protecting them as if they were her own. She now resides at Omaha without a partner.



YR-YR (male) known as Socks disappeared with three one week old chicks on 7/11/09 Socks had been observed the day before with three chicks at West End. The chicks also vanished.



GO-GY (male) + BW-OR. GO-GY disappeared with 3 chicks on 23/11/09 from West End. BW-OR later returned alone. This season she has a new partner. The pair are having trouble sorting out a territory. She appears unsettled after losing her partner last year and does not want to go back to the same territory.

If you see any NZ dotterels with these colour band combinations please contact:
Alison Stanes 09 5240291
Sharon Kast 09 4229990

UN (male un-banded) + OB-WG UB and OB-WG disappeared on 12/11/09 this season from a nest territory just outside the west end koru. Cat prints were observed in the area. Neither bird has been seen since. It is harder to prove the loss when the male is un-banded. We are hoping OB-WG the female will turn up somewhere. Please get your binoculars out and look for her especially at Omaha and inform Alison or Sharon.

Annual Summary

Year	Nests	Pairs	Eggs	Eggs lost	Chicks	Fledged	Chicks Lost	Adults lost	
06-07	16	9	40	14	26	17	9	Males m-OR and GO-OG lost off nest.	2
07-08	13	10	32	10	22	10	12	Male YM-YK lost off nest	1
08-09	15	10	44	10	31	5	26	Males GO-GY and YR-YR with 3 chicks each	2
09-10	11	10	32	13	6	3	1	UB+OB-WG last seen 12/11/09 lost off nest	1

NB. The bottom line was updated 27/11/09. The 09-10 season is incomplete as we are only half way through the season.

2009 - 2010 New Zealand Dotterel and Variable Oystercatcher Review

"Monitoring New Zealand dotterels is a rollercoaster of despair and ecstasy and not too much of the ecstasy" says Mags Ramsey, an ARC Ranger and also a member of Friends of Tamaki Strait Dotterel. Mags spends some work time and much of her spare time looking after dotterel from Whitford to Kawakawa Bay. As a monitor at Tawharanui, I feel much the same way. From thirty NZ dotterel eggs at Tawharanui this season fourteen eggs have been lost. To add to this, a nest just outside the predator proof fence was recently deserted. Cat prints, were observed in the area of abandonment.

Male dotterels incubate the eggs at night when they can not see predators approaching. Cat predation has been documented by the Dept. Of Conservation in 1995 at Mangawhai Estuary on a film named "My Cat Did That?" "The Field Guide to Birds of New Zealand" by Barrie Heather and Hugh Robertson states that "Southern New Zealand dotterel numbers are reduced by cat predation, especially on males, which incubate at night".

At Tawharanui, observations suggest that over the last three years four incubating male NZ dotterel and two males each with three chicks, have been lost to predators, in the ocean dune area. The demise of these birds is not proven because evidence is circumstantial. The six lost adult NZ dotterel have slowly been replaced from the flock at Omaha, bringing the numbers back to ten pairs. However, the ocean dunes are silent at the moment compared with three years ago when there were so many dotterels squabbling over territories that it was hard to tell who was who. The new NZ dotterel pairs have taken up territories at Jones Bay and Phoenix Rock, most likely to avoid activity in the dunes. Efforts to trap the offending cat or cats are being stepped up by ARC. Also researchers from Massey University are studying NZ dotterel at the park.

At Jones Bay, three variable oystercatcher chicks and three NZ dotterel chicks have fledged this season. The variable oystercatchers hatched, in a perfect dry sheltered nest under a low over-hung bank, conveniently screened by a dripping strands of kikuyu grass, on the edge of the lagoon. The three NZ dotterel chicks have fledged where beach pebbles keep them well camouflaged. Both variable oystercatcher and NZ dotterel chicks appear to do well early in the season especially if the chicks have fledged before mid December. Based on my experience, over the last three years, I believe that as the season progresses, black backed gulls and pukekos start hunting for protein to feed their own large hungry chicks and that is when they become a threat.

Predator attacks are all the more frustrating because, while many hours are given to monitoring NZ dotterel and variable oystercatcher, it is difficult to actually observe the few seconds of demise. We are rarely able to gather the required scientific evidence of the cause to be able to act within conservation guidelines to eliminate predators. According to Dr. John Dowding black backed gulls are known to take chicks and eggs, "Threatened Species Recovery Plan page 8".

In recent reading, I discovered this quote, "even when evidence may be only circumstantial the case can seem to be proven beyond reasonable doubt", "The Flight of the Huia" by Kerry-Jane Wilson, senior lecturer in ecology. I go on, knowing that NZ dotterel and their eggs and chicks, as well as adult NZ dotterel and variable oystercatcher eggs and chicks, are continuing to disappear at Tawharanui Open Sanctuary. Yet without sufficient evidence to prove the cause, as a volunteer monitor, I can do nothing about it. More despair than ecstasy!

As this newsletter goes to print variable oystercatcher have laid 17 eggs this season and 12 of them have disappeared. Just last week in the dunes, Sharon Kast discovered a predated variable oystercatcher nest with fragments of eggs scattered around. Without seeing whole eggs this loss is not recorded.

There are twelve NZ dotterel eggs and six chicks on site at the moment. These numbers change day by day. As well as a sanctuary for rare endangered species Tawharanui appears to be a haven for increasing numbers of black-backed gulls, pukekos, Australasian plovers, magpies with some hedgehogs and a visiting cat or cats. The gathering of sufficient evidence, to show that common species may be destroying rare endangered birds and eggs, is vitally important so that action can be taken and unnecessary loss of birds endemic to New Zealand can be avoided.

Alison Stanes NZ dotterel volunteer monitor

The Hunua team visit again

During November a team of south Auckland ARC volunteers visited Tawharanui for a weekend. This is the second generous visit they have given us as each visit gives many man hours to the park and we appreciate it. On the Saturday they replaced all the traps on the boundary line with freshly waxed traps and reset them. This was a massive operation delivering traps and people to the correct sites. On Sunday they resorted to a little dune weeding. Our sincere thanks go to them for their efforts. Photo shows Mags Ramsey, ARC Ranger giving out instructions for the days procedure. Alison Stanes



Ransom Dinner

The third TOSSI dinner at Ransom's winery just outside Warkworth was held on 17th October. As has become the custom, it featured good food, fine wine, convivial company, and an excellent after-dinner speaker.

The presentation on translocations by conservation scientist Kevin Parker was relevant and stimulating, providing a context in which to view the translocations of endangered species in which TOSSI is involved.

TOSSI is grateful for the continued support and interest of Marion and Robin Ransom, who provide sponsorship through donating to TOSSI a dollar-a-bottle-sold of their excellent K-Syrah wine, and provide wonderful hospitality for these dinner events. Jan Halliday

Mahurangi Kindergarten

Thought that you might enjoy seeing the future protectors of the birds & the bush. I've never experienced a class more knowledgeable and interested in nature than the Mahurangi kindergarten in Warkworth. It was a pleasure to spend last Tuesday with them. We are planning a field trip to the Open Sanctuary next semester. Believe it or not, many knew about the TOSSI logo on my tee-shirt and knew I was from Tawharanui. Pretty amazing, huh? Sharon Kast



Kissing Girls

Forty two dollars was raised by Emma London and Lucinda Goldscmitz at the Matakana markets for TOSSI. Emma and I Lucinda thought it would be a fun yet a beneficial opportunity to raise funds for a local programme. After thought they have begun selling kisses. Innocent, with red lipstick we offer a kiss on the cheek for a gold coin donation, with the slogan 'kissing kiwi chicks to save kiwi chicks'. This is not a provocative concept, rather sweet and innocent, and so far they have a positive feedback from the local community. As each evening at the market people are reminded (with the lipstick imprint) that they have supported a local cause as they enjoy the other various festivities. Well done and thanks girls. Information forwarded by Helen Crosby.

Warkworth Walks annual weekend

Just a note of thanks for the fabulous walk at Tawharanui on Sunday. We loved every minute of it. The weather was great, the transport was great, the company was great and the guide was great and we learnt so much. We enjoyed Alison's Power Point display and our guide Sharon's untiring enthusiasm and knowledge plus Maureen as our tail-end-Charlie to keep us on course. It was a great effort by all concerned (seen and unseen) and we did appreciate the time given over to it by you all. We loved every minute of it Thanks again Lesley and Steph

Apologies

Apologies from the Editor for an error in the last newsletter on page 7. Lost plants on Twin Hills were less than 2% (not 25% as stated) and survival looks to be above 95%. That makes more sense! Thanks goes to Steve Palmer for this correction.

Native plant nursery needs your help

Do you like chatting with interesting and positive people, enjoy nice home baking and have greenish fingers? If the answer is yes to any of the above, then TOSSI's nursery is the place for you. Now that spring is here we need your help to get through our busiest season so please give me a call on (09) 425 9877 or email secretary@tossi.org.nz. Also, we'd love to hear from you if you know of any community or business groups who would like to have a session helping out.

Over the past three months we've seen our nursery almost completely emptied of plants and now we've started to fill the space again. Special thanks go to Penny & Steve Palmer for sowing and germinating most of our seeds and many thanks to Gill & Colin Sargent, Steve Harrison, Rachel Frost, Elizabeth Clark, Christine Brockes, Sheila Jenkins, John Lowe, Tony Keane, Dorothy Cooper, Jenni McGlashan, Deanna Yarndley, Jenny & Jim Clarke, Penny Allen, Susan Beer, Maggie Cornish & Ray Blackburn, Barry Lett, Sheila & Rhys Thompson, Ray Woolford, Barry Ferguson, Kerry McGee, Jill Ronald, Ngaire Maddren, Joy Bowyer, Steve Rigby, Geoff Ledbrook and his Rural Sustainability students and Ranger Maurice for helping out in the nursery during the last three months.

Paul Williams Nursery Manager

Signwriter Needed

TOSSI would like a sponsors recognition sign in our native plant nursery to acknowledge the contributions of our financial supporters.

Is there someone with sign writing skills amongst our membership who would be happy to volunteer their services?

Please contact Paul Williams on 09 425 9877 or email on secretary@tossi.org.nz.



Four hungry song thrushes in a nest in a pohutukawa tree in the dunes.

TOSSI COMMITTEE

Chair	Paul Williams	09 425 9877
Vice Chair	Steve Palmer	09 368 7074
Secretary	David Stone	09 528 5712
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or Membership Secretary
P.O Box 112
Matakana 0948, New Zealand

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

Application form for NEW MEMBERS Tawharanui Open Sanctuary

Name(s): _____

Address: _____

Phone No. _____

E-Mail _____

Occupation _____

How did you hear about TOSSI?

Please tick how you would like to help:

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

Membership fee:

\$20 single membership \$ _____

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Additional contribution (optional) \$ _____

Donations over \$5 are tax deductible

Gift Membership:

Please send membership to

Name: _____

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Total amount enclosed \$ _____

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

TOSSI Membership Secretary
P.O.Box 112
Matakana 0948



Pohutukawa



Pohutukawa 2



Clematis



Nikau in bud



Kowhai



Fantail



Morepork



NZ dotterel



Kakariki



Bellbird



Kaka



Tui



Wood Pigeon



Oystercatcher



Pied Stilt

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Ecology bush



Lagoon sunset



Kiwi Chicks



Cattle



Sheep



Surfer