



TAWHARANUI OPEN SANCTUARY SOCIETY INC.
Newsletter No. 34. September 2010



A New Zealand dotterel, known as Roy (colour bands WR-OY), in full breeding plumage ready for the season. **Roy's territory is in the dunes behind Ocean Beach at Tawharanui.**



Five pateke ducklings on the banks of Ecology Stream.

Coming Events

- Sun. 3 Oct. Sunday in the park. Meet at the Woolshed at 9.15 am. Followed by a sausage sizzle and a presentation by Sarah Wells on Tui population structure and mating systems.
- Sun. 7 Nov. Sunday in the park. Meet at the Woolshed at 9.15 am. Followed by a sausage sizzle and a special guest speaker.
- Sun. 5 Dec. Sunday in the park. Meet at the Woolshed at 9.15 am. Followed by sausage sizzle and a presentation by Joanne Peace on translocation of shore skink from Tawharanui to Crusoe Island.

The speakers are permit holders with ARC for postgraduate research work at Tawharanui and other parks in the system

Chairman's Report

Unfortunately Paul Williams has resigned as chairman of TOSSI. Hopefully the new committee will be able to follow his productive example and add to the success of the Tawharanui Open Sanctuary. He and others, such as Hamish Alexander, Rhys Thompson, Les Cave and Alison Stanes, who remains on the committee, have led the Society in adding to the success of Tawharanui Open Sanctuary. In fact, the 3 stages listed on the TOSSI woolshed notice board are all but complete. Paul's contribution over the past few years has been considerable. Initially he was the TOSSI treasurer and for the last two years has been the Chair.



Probably his biggest contribution has been the setting up and running of the TOSSI nursery. Few volunteers at planting days fail to comment on the health and sturdiness of the trees coming from the TOSSI nursery. Paul would quickly point out that he is ably supported by a group of hard working nursery volunteers who also deserve our thanks. Fortunately Paul has agreed to stay on and continue supervising the nursery. From all of the TOSSI membership, thank you Paul.

The work and success of past TOSSI committees, ironically, makes the task of the present committee more difficult as the original aims of committee are all but complete. Of course we could simply sit back and enjoy the success of others but clearly we wish to continue to improve the Open Sanctuary. The new committee will need to spend sometime to determine new priorities and directions. There are some exciting potential projects but I believe we first need to assess our priorities. I would hope that we can report back to the membership on the results of our deliberations in the next newsletter. If you have ideas that you feel should be considered pass them onto committee members or e-mail secretary@tossi.org.nz.

While we determine priorities we have the luxury of being able to enjoy the success of others' earlier efforts. Trees continue to grow and translocated species of birds and reptiles thrive in the sanctuary. Thank you for your continued support of the Tawharanui Open Sanctuary.
Steve Palmer Chairman

Editorial

Tawharanui involves people and volunteers. In this newsletter one will see that in the last three months volunteers have been very active. As well as TOSSI volunteers working on the park, there has been a corporate visit planting and international volunteers doing an array of tasks. Two young men from France and CVNZ volunteers came from Germany and England. The volunteers that I really want to acknowledge are the TOSSI officers who spend unregistered hours at home, behind the scenes often on computers planning, accounting, reporting, agendas and the rest. To the outgoing chairman Paul Williams, we say a big thank, not only for the enormous roll in chairing the committee but also thank you for the hidden hours!

Alison Stanes



Open Sanctuary Coordinator Update

Spring again already! Robins are nesting, NZ dotterel in full breeding plumage, kiwi incubating eggs, petrels returning to burrows, pateke ducklings growing and flowers bursting to mention but a few of the exciting things happening at Tawharanui. Right now Tokatu Point is my pick of the park with the manuka and clematis in bloom.

Congratulations again to the TOSSI nursery crew and many planting volunteers for the production and planting of 20,000 quality native seedlings. This task is so important for the open sanctuary, as habitat is everything for the wildlife we seek to support. A huge task, well done!

Recently volunteers undertaking weed control got a surprise when a kiwi darted out from its burrow at the base of a large pampas! As our wildlife becomes more abundant, such overlap between different park functions and residents will become more and more common and require careful balancing. Despite offering a warm and dry home for kiwi this pampas and others will be removed. Kiwi typically change roost burrow regularly so we don't expect any negative impact.

Many of you are aware that a substantial amount of research occurs on site, often because of the conditions our pest free status provides. Some research has direct application to the management of the site, while others address general ecological principles. My favourite recent research application across my desk was entitled "*Sex and conflict in giraffe weevils*" and the suggestion that some males fight for mating opportunities, while others choose to 'sneak'. Some genetic analysis results from Shauna Baillie study of Tawharanui bellbirds appears to confirm the founder population size of up to 100 pair, but also implies that there was more than one source population rather than all coming from Hauturu as assumed. It appears that these birds are always on the move to greater or lesser extent, and in the case of Tawharanui the time was right with the removal of predators for a population to establish.

The Sanctuaries of NZ workshop held on Great Barrier Island brought together project staff from various sanctuaries the length and breadth of the country to discuss highlights and issues. It is always staggering to hear the huge conservation gains achieved by mostly community led organisations and partnerships. Collectively some 39,800 hectares of lands are protected by fences, on near shore islands, or by intensive pest control. Despite the many challenges, whether these be social, technical, or financial, the movement remains positive and solution focussed. Thank you to all the volunteers and supporters who make the Tawharanui contribution to this collective effort possible.

This is my final report to the TOSSI newsletter on behalf of the Auckland Regional Council, as the ARC will be dissolved as of 31 October 2010 with all assets and commitments transferring to new Auckland Council. All Parks operational staff and many of our Heritage and Biosecurity staff will transfer to the new organisation. We expect the positive partnership with TOSSI to continue into the future, and would like to acknowledge the successful partnership between TOSSI and ARC 2002 - 2010. Together we have achieved something quite special!

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



Lambs abound across the park in spring time reminding us that Tawharanui is a farm park as well as a park for conservation and recreation.

Tawharanui Marine Park-some early recollections and results of intertidal studies

By Dr. Roger Grace

For many years the foreshores at Tawharanui were pretty inaccessible. On the south side you could reach the pebbly beach at Jones Bay after negotiating a long and winding gravel road. My first visits were around 1962, when the sealed road didn't even make it to Matakana.

From the end of the public road you could see three old rusting hulks sticking out to sea from the middle of Jones Bay. Gravel mining created the large lagoon near the present Park entrance. Barges came alongside the makeshift jetty and gravel was loaded via a leaky slurry pipe, later replaced by an overhead conveyor belt system.

My school mates and I were into spearfishing, and we loaded up my Mum's 1961 Mini with our snorkeling gear and drove up from Auckland whenever we could. We walked along Jones Bay, under the gravel conveyor, crossed the stream and continued along to Scow Point or Tier Rock. One day I found the largest red cray I had ever seen. In only 2 metres of water I caught a 9-and-a-half-pound cray under a ledge. Amazingly two weeks later I came back to the same hole and caught another the same size! I have not seen another cray in that area since.

Scow Point then had obvious remains of the wrecked scow from which it got its name. There were large timbers and twisted steel girders, and a very prominent gear wheel sticking up on a shaft. Underwater there were more timbers and chunks of metal. In about the late 1960's someone smashed the timbers apart to recover thick brass pins and rivets which originally held the wooden ship together. For some time you could still find bits of copper sheeting used to sheath the bottom of the ship and protect it from shipworms. Today it is hard to find any evidence of the wreck.

I spent many hours swimming in the current off the end of Scow Point, waiting for a kingfish to swim past. I was rarely disappointed and often returned to the car with a large dripping kingfish sticking out of the top of my backpack. After numerous spear fishing trips with my mates, my Mum's Mini was never quite the same. Eventually the floor of the boot rusted out!

The northern side of Tawharanui was inaccessible without a boat. My first visit there was in the late 1960's when I was a resident student at the then very new Marine Laboratory at Goat Island Bay. One day Tony Bullock from Ti Point took fellow student Tony Ayling and myself, and a couple of other students, in his launch to the north side of Tawharanui. The limit number of crayfish for recreational divers was then 10 per person, or 30 for a party of three or more. We got our limit bag from one hole snorkeling in 2 metres of water east of Anchor Bay. For the next week we had dozens of crays in the seawater tanks at the Marine Lab. Very convenient when you wanted a fresh one for dinner!

In 1977 I established my first long-term monitoring sites at Tawharanui. Intertidal sites included several rock pools in which I counted and measured kina. Generally kina numbers stayed fairly stable in the pools. It seemed there were juveniles settling in the pools, usually into gravelly areas, but the larger ones migrated out to join the sub tidal population.

The main intertidal work was on oysters. My technique was to mark each end of a 4-metre transect with small plastic pegs embedded in the rock. Many of those pegs are still there to this day. I laid out a measuring tape between the two pegs and took photographs of 0.5m intervals along the tape. Occasionally the oyster photographs recorded evidence of people removing oysters. The best way to monitor human impact, however, was to visit the sites and look for freshly exposed and sometimes chipped white base shells. There was some seasonal poaching going on, which varied from year to year, but not a large amount.

From the photographs I could also follow growth of individual oysters. But the most interesting result was the arrival of Pacific oysters on Tawharanui shores, and subsequent demise of the native rock oyster. The transects originally went through a dense bed of native rock oysters, but in about 1978 Pacific oysters began to form a bed about half a metre lower than the rock oysters. Over the next few years the Pacific oysters thrived, but the rock oysters gradually disappeared apparently because there was no recruitment of juveniles to replace those gradually dying of old age.

Many of the original oyster transects are now "stranded" with no oysters at all, though there may be a few Pacifics down at a lower level. Pacific oysters were introduced to the Mahurangi Harbour in the mid 1970's and spread north and south from there.

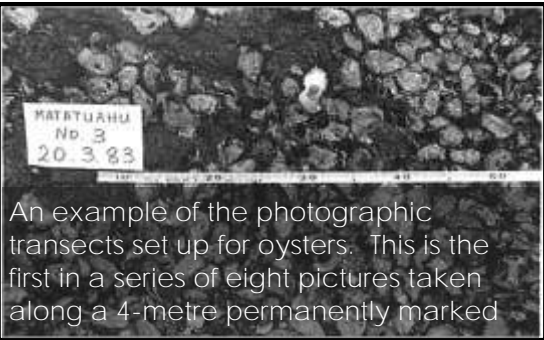
When the big shake-up occurred and the ARA became the ARC, they soon lost interest in the intertidal monitoring and as far as I know there has been no official follow-up at any of the intertidal sites since. Armed with the methods reports and details of station locations presented in early reports anyone could pick up the cause if they were interested. With all the long-term early data there could be some fascinating changes to observe. Next time we will look at some exciting results from the fish and crayfish monitoring.
 Dr. Roger Grace



Crayfish photographed in the Marine park.



Above. A goatfish lights up bright red to make it easier for the little spotty to see parasites which it then picks off for lunch. This 1978 photo was the first record of spotties taking on the role of parasite pickers. This is now known to be widespread.



An example of the photographic transects set up for oysters. This is the first in a series of eight pictures taken along a 4-metre permanently marked

Photo transects were set up at 10 sites around Tawharanui, where the growth and fate of individual oysters could be



Occasionally empty kina shells are left on the shore following a feast. They are usually taken from sub-tidal populations where kina are generally larger than in rock pools



Now rarely seen at Tawharanui, this large blue moki was a feature at Scow Point for several weeks in 1978.



A large blue moki at Scow Point in 1978 stays motionless in the kelp forest as a tiny spotty picks parasites from under its chin.

4 July Sunday in the Park

Although the weather was awful, 23 adults and 3 children attended. We planted 1400 plants and enjoyed a sausage sizzle in the woolshed. Six volunteers returned on the following Wednesday to plant the remaining 300 plants. A big thank you to all those who enthusiastically worked in inclement weather.
Paul Williams.

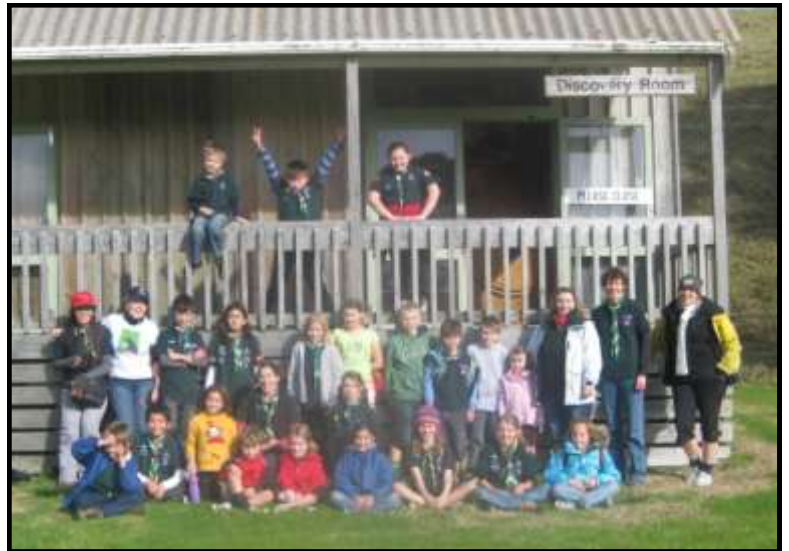
8 July Warkworth Cub Scouts visit Tawharanui

Warkworth Cubs and Scouts, with leader Jackie Niccolls, met at the Information Hut for a day at Tawharanui. The morning session **began with a question.....why are we called an open sanctuary and progressed** from the pests that were once present to the birds that returned naturally and those that were reintroduced. A discussion about the importance of habitat, seed dispersal by birds and re-vegetation by TOSSI volunteers, followed.

The afternoon session took place in the field and various methods of trapping, baiting and tracking tunnels were explored. Bark rubbing of kauri, totara, and tanekaha (celery pine) were traced. The different stages in the lancewood's growth received a lot of attention and the old puriri tree by the bridge was a source of fascination. Eric, the eel, did not grace us with his presence along the stream, but we did see kokopu. The scouts had sheets with photos of birds and they wrote the names beneath the pictures and checked off NZ dotterel, oystercatcher, black backed-gull, red billed-gull, tui, NI robin, harrier, white-head, kaka, pateke, wood pigeon, house sparrow, paradise shell duck, mallard, pukeko, fantail, and saw and heard the lovely singing bellbird, a good start for the junior birders life list.
Sharon Kast



Sharon Kast speaks to the cubs in the info hut.



Warkworth cubs and scouts outside the info hut.

1 August Sunday in the Park

What a turnout! And what a result! Not deterred by a dire forecast of strong winds and heavy rain, 74 adults and 37 children planted 4,000 plants on Sunday 1 August in Twin Hills. Both are some of the highest totals ever achieved on a TOSSI/ARC combined public Planting Day at Tawharanui Open Sanctuary.

Locals and quite a number from Auckland made the trip to the Sanctuary in unpromising weather and strode up to the planting site in a colourful array of parkas, gumboots and hats. By early afternoon the plants, carefully laid out by the nursery group, ARC Rangers, Unitec students and members of the Taratahi Trust the previous two days, were upright in the ground. A hillside formerly pasture had been transformed to a colourful mix of waving native plants of varying leaf shape, size and colour. Just imagine how much better it will look even in a year's time.

First time tree planters from around the Auckland area, visitors from Europe, members of the Rotary Club of St Johns, SOSSI and Hibiscus Coast Forest and Bird, regular TOSSI volunteers and a large number of children, together made up an energetic and efficient planting group.

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Literally as the rain began splashing down the tired but successful planters trooped down to the ARC marquee to enjoy a barbecue lunch provided by ARC expertly cooked by Recreational Services who donated the catering truck and crew. Platefuls of sausages, hash browns, onions, coleslaw, green salad and sliced bread, were consumed by volunteers sheltering in the marquee as a fitting and nourishing reward for a great effort.

During lunch, Steve Palmer described the plants varieties, all grown in the TOSSI nursery, that had been planted, namely: manuka, kanuka, kahikatea, cabbage, flax, mahoe, coprosma, whau, olearia, hange-hange, kawakawa, putaputaweta and pohutukawa. Matt Maitland, Tawharanui Open Sanctuary Co-ordinator, explained why the plantings were so important to Tawharanui Open Sanctuary.

A particularly hardworking and friendly group of people had achieved a mighty effort, helping TOSSI to a total of about 15,500 trees planted so far in this planting season. Only 5,000 to go to beat last year's record! We will do it!

Comments on August Sunday in the Park

I would like to mention how enjoyable the planting day was and what a good spirit people had, and also how well organised it was (as always), but it was a real pleasure. It was great to see whiteheads at the car-park when we were setting out for a walk later, and also to see kaka screeching and wheeling when we were in the ecology bush. A real treat.

Thanks again

Councilor Christine Rose



September planters at work on Twin Hills.



While others take time to have a chat!

5 September Sunday in the Park

Over 60 people planted the remainder of the 20,000 trees for this year in the Twin Hills area of the park, on a fine morning. A BBQ lunch and salads prepared by Steve and Elizabeth Harrison, and Sharon Kaast was enjoyed by all.

Christine Rose, Deputy Chairperson, ARC Parks & Heritage Committee then spoke about the successes and benefits of the partnerships between the Council and public groups, particularly TOSSI.

We held the eighth TOSSI annual general meeting in the Woolshed.

The programme was completed with a fascinating talk by Shauna Baillie, a PhD candidate with Massey University and Victoria University's Allan Wilson Centre for molecular ecology and evolution. Shauna told us about her work, with bellbirds in particular.

Joe Crandle.

20,000 plants from the TOSSI nursery were planted on the Twin Hills slopes this season.



ARC/TOSSI plant day. Sunday 1 August. The biggest plant day to date. 4000 trees were planted.



Volunteers in the park.



On a wet day Conservation Volunteers New Zealand (CVNZ) move to plan B and assemble trap boxes in the pest shed.



Bone seed is a weed shrub taking over coastal NZ. A team of ARC, TOSSI volunteers and CVNZ had a big day removing it from north coast and Tokatu Point.



Volunteers gear up for attacking bone seed.



Can you spot the team working on the north coast?



At lunchtime this group of bone seed exterminators watched five orcas feeding in the waters below Elephant Point.



On July 7 and August 4 volunteers braved the cold and dark to monitor grey-faced petrel calls. This team is relieved to be back in the warmth of the vol hole.

Outside Help

During the week of 16th of August TOSSI was fortunate to have the help of two outside groups who came for separate planting days.

The first group was the Outdoor Pursuits Group (WOPS), a group of ageless women who clearly enjoy outdoor activities and believe in repaying for their enjoyment by making efforts to enhance the outdoors. TOSSI was very fortunate to be able to harness their energies within the Tawharanui Open Sanctuary. It was an enjoyable day being surrounded by energetic and enthusiastic workers. My only complaint was their acronym as the male equivalent must be MOPS and as I am bald and domestically untrained it doesn't seem appropriate.

The second group later in the week was a corporate group from Nokia Siemens Networks who also proved to be enthusiastic and energetic but with a different gender balance. Given their city origins I underestimated their staying power and regretted that we hadn't put out more plants. They generously invited us to their spit roast lunch and I am now worried that our nursery volunteers who had helped with plant placement are expecting the same standard on other days.

In all 2700 plants were planted by these two groups and we now are able to achieve our year's goal of 20000 with a relatively light planting on the 5th of September. We would welcome back either group at any time. If you know of other groups that would be interested in planting we can arrange a separate day complete with sausage sizzle as long as there are 20 or more in the group. Again thank you to the nursery volunteers who not only raise the plants but also slave away putting out the plants before planting days.
Steve Palmer



Nokia Siemens Networks have lunch in the woolshed after planting 1000 trees. Later they took a walk through Ecology Bush.



17 August a team of thirty from Woman's Outdoor pursuits planted another 1700 plants on the Twin Hills slopes. This was followed by sausage sizzle with a shared lunch in the woolshed.

The TOSSI Committee



Outgoing chairman, Paul Williams, opens the AGM Sunday 5 September 2010.



The new committee. Alison Stanes, Steve Palmer Chair, Joe Crandle Treasurer, Pat Williams, James Ross Deputy chair, Sharon Kast, Steve Harrison, and David Stone secretary.

New Committee Member

Hi, I'm Pat e (Patti) Williams and am delighted to be nominated for the TOSSI Committee.

Having been a Volunteer since 'forever', another opportunity came in 2002 when I was asked to join committees, involving the possible pest proof fencing of Maungatautari – the large forested mountain just south of Cambridge. So I joined many like-minded people and became very interested in ecology and the restoration of an ancient native forest. It wasn't long before I found myself leading the planting team on Maungatautari, then the weeding team and then the landscaping team, creating a small fenced area for the future tuatara release.

In 2008, once these tasks had been completed, I decided to form another group of volunteers, to plant up riparian zones alongside streams running off the mountain - and so W.E.T. (Waterways Ecology Team) was established. Finding that our native birdlife was returning to the forest it seemed sensible to help them find their way down planted corridors and into the town gardens. Today in Cambridge, we can enjoy the delightful bird calls not heard for hundreds of years. Working with local dairy farmers has been interesting. Since I managed to gain sponsorship for them through Fonterra, W.E.T. has been inundated with work! This has meant nurturing thousands of native plants.



In 2005 I asked a local farmer if he could spare a shed and so we commenced our small nursery there. By eco sourcing seeds, growing our own native seedlings, then planting trees for farmers as well as attending markets regularly in Cambridge, it has all been a busy time. All funding collected is given as donations to the Maungatautari Trust for maintenance on the now 'Ecological Island'.

Having a family beach house at Algies Bay, in 2005 my husband Roger, and I found our way to Tawharanui, to join and so become volunteers. We both love the work and camaraderie there and come up as often as our busy schedules will allow. We have two adult daughters. Our 8 year old twin granddaughters, Hannah and Olivia also enjoy Tawharanui, especially working on the Twin Hills!

As we have now bought a section in Warkworth, we are planning to build a house there over summer!

I look forward to meeting you all, one day soon.
Pat Williams

Pateke and pukeko interaction research



Pateke back off as pukeko, the more dominant species, move in to feed from the pateke supplementary feed stations.



Pukeko feeding from the pateke supplementary feed station.



Rogue pukeko, generally working in pairs, are known to predate ducklings. However this has not been observed at Tawharanui.



These five pateke ducklings fledged during the winter season from Ecology Stream



A community of pukeko will share nest sites as well as laying eggs in **the same nest**. This site was photographed in Hayter's wetland beside the road to the camp ground.

Pukeko research at Tawharanui

Although they are common in New Zealand, the pukeko (*Porphyrio porphyrio melanotus*) is an extremely unique and interesting bird. Pukeko show a rare type of social and mating behaviour; unrelated birds will form large social groups and work together to protect territories, and all group members cooperate to raise the young. This is particularly interesting because within the group, there are both breeding individuals, and non-breeding helpers. This type of breeding system is known as polygynandrous (meaning males and females mate promiscuously within their group) cooperative breeding. Cooperative breeding is interesting because it presents an apparent evolutionary paradox. Why would a non-breeding helper forgo its own reproduction to assist in the reproduction of another?



Pukeko are also interesting because in some groups two or three females will lay eggs in the same nest. This can result in a clutch of up to 15 eggs and is known as joint-nesting. There are only about 15 species of bird worldwide that are known to joint-nest, and even purple swamphen in Australia do not show this behaviour. Large clutches (as a result of joint-nesting) are typically prone to low hatching rates relative to smaller clutches laid by a single female. This begs the question, why would one female pukeko allow another female to lay in her nest if it lowers her own egg's hatching success and has no apparent benefit? I have travelled to Tawharanui from Canada to study these intriguing facets of pukeko breeding. My research is aimed at understanding the costs and benefits that this mating system provides to each member of a pukeko social group, as well as understanding the potential role that reproductive conflict plays in shaping pukeko society.

On a more applied basis, I am also interested in how pukeko interact with other native fauna in Tawharanui park. While the diet of pukeko consists primarily of vegetation, they are also known to take animal foods including insects, frogs and even small birds.

Recently, wildlife managers have become concerned that pukeko might prey on pateke ducklings, a threatened waterfowl that has been reintroduced at Tawharanui. The predation threat that pukeko present to pateke could be exacerbated at supplemental feeding stations that are often used during pateke relocations. As such, I will be conducting a study with Jenny Rickett (DoC and Massey University) to understand how pukeko (and other non-target species) interact with pateke at pateke feeding stations. Hopefully, this study will lead to a better understanding of how to manage a supplementary feeding regime for pateke relocations, and will aid in the national pateke recovery effort.

If you spot me around the park (which isn't too hard), don't hesitate to say hi! I would love to answer any questions you have about my research, or just to chat. I would also be very interested to hear about any notable observations regarding pukeko or pateke, or if you see any nests or chicks of either species.

Cody Dey deycj@mcmaster.ca



JAFFA Bonus?

The committee is very aware of the number of volunteers who travel independently from Auckland to attend planting days. In the past car pooling attempts were half hearted and failed. One suggestion has been to provide a TOSSI sponsored bus as a trial on one of the planting days. It would probably have to leave from one location such as the Albany bus station and not make stops on the way. For this to be viable, we would need a strong indication that it would be used as we would not want to sponsor such a bus if it arrived half full. Let us have your feed back if you are interested, e-mail secretary@tossi.org.nz.

Steve Palmer

Bird News

Kakariki. These birds have been sighted in Possum Gully, Ecology bush, and the valley in the Ngaio Bay. Any kakariki observations should be recorded in the diary in the vol hole please. It is not known at this time if any are breeding.

Grey-faced petrel. There are seven active burrows on the park, one with a chick that squeaks when monitors check the site.

NZ dotterel. Eight pairs of New Zealand dotterel have arrived back on site, all in handsome breeding plumage ready for the season. Those who have good territories returned early in order to guard them from other prospecting birds. Territory squabbles have been observed. One pair have a nest with three eggs. As the season progresses we expect more pairs to return.

North Island variable oystercatcher. Five pairs have been sighted on the park plus numerous juveniles. Juveniles take seven years before they breed so it is difficult at this time to tell how many are serious! An adult pair have nested in the dry root area of a pohutukawa tree on the lagoon lawn. This pair like to nest in dry sheltered areas, as they normally nest behind a screen of kikuyu hanging over the banks of the lagoon. This year the shelf providing that shelter has been washed away so they have chosen a pohutukawa, unfortunately where human activity may cause disturbance.

Pateke. A clutch of five ducklings fledged during the winter and another clutch of five ducklings can be seen on Ecology Stream at the moment.

North Island robins. Out of twelve pairs, nine pairs are nesting, and some already have chicks.

North Island brown kiwi. The two kiwi with transmitters have been incubating for over a month now. With an 80 day incubation period they still have a little way to go!

Kaka. There are regular sightings in Ecology Bush and Possum Gully. Behaviour suggests that some may have staked out nesting trees and may be about to lay.

Whitehead. A recent survey across the park by Adrien Lambrechts (a French volunteer) showed whiteheads to be wide spread and quite abundant. Males are now singing from tree top making them quite conspicuous. We still have a group of birds at the Anchor Bay Car park.

Pied stilt. Last year there were two pairs of pied stilts on site but this year there are four. Two pairs nested on the lagoon rather close to the spring tide high water and unfortunately one nest was flooded. It is likely that they will re-nest soon.



A pied stilt sits on a nest as the spring tide inches closer.

Alison Stanes

Tawharanui Camp Host

Want to spend more time camping at Tawharanui this summer? Auckland Regional Council seek to extend the period during which Camp Hosts are present at Tawharanui Regional Park. Camp Hosts are volunteers who greet campers upon arrival and support the Ranger staff by being our eyes and ears on the ground. This position is available in the shoulder periods outside the school holidays. Camp Hosts are resident in the campground and provide their own camp/tent/motorhome. Camp fees are waived. ARC will consider any length of stay between Labour Day and Easter inclusive.

For enquiries please contact Sue Hill sue.hill@arc.govt.nz 09 426 1200

Volunteers Needed for Trap Lines

A crucial component of maintaining the Open Sanctuary is to detect and intercept pest animals before they become a problem. To achieve this a series of trap and bait lines have been established in key areas within the park and adjoining areas. We are looking for new volunteers to be responsible for maintaining these lines on a monthly basis.

This is an opportunity for everyone: the trap lines are of various lengths from about two hours to several hours, while some are through challenging terrain others are a "walk in the park". Some lines involve handling chemical baits but most are based on traps loaded with fresh eggs. Lines would suit either individuals or pairs. Training will be provided.

If you are interested in being a part of this important program please contact:

James Ross at jameross@paradise.net.nz or
Maurice Puckett maurice.puckett@arc.govt.nz

Art in the Woolshed 2012

Alison Stanes is considering co-ordinating a special art exhibition with a "Nature Abounds" theme to celebrate ten years of Tawharanui Open Sanctuary. She needs to acquire support to present the idea to the committee. Any one interested in assisting please contact alison.purple@xtra.co.nz

A big thank you to sponsors who make the Tawharanui Open Sanctuary project possible.

Rodney District Council
Pub Charities
Lion Foundation
Southern Paprika
ASB charitable Trust
A K Franks Charitable Trust
Action Bio Community
World Wild Life fund
Scottwood Trust
Bell Investment Trust
David and Genevieve Becroft Foundation
Endeavour Trust
Perry foundation
West Auckland District tramping Club
NZ Parks and Conservation Foundation
BNZ Save the Kiwi trust
Ransom Wines
Ducks Unlimited
Matakana Hardware
Environment Initiatives Fund
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TOSSI COMMITTEE

| | | |
|------------|----------------|-------------|
| Chair | Steve Palmer | 09 422 6441 |
| Vice Chair | James Ross | 09 422 6760 |
| Secretary | David Stone | 09 528 5712 |
| Treasurer | Joe Crandle | 09 425 8573 |
| Editor | Alison Stanes | 09 524 0291 |
| | Sharon Kast | 09 422 9990 |
| | Steve Harrison | 09 425 8500 |
| | Pat Williams | 07 823 4627 |

Correspondence Chairperson
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:

☐ Planting/workdays ☐ Bird Counts
☐ Fund raising ☐ Administration
☐ Monitoring Pests ☐ Nursery
☐ Predator fence monitoring
☐ Environmental educational
☐ Publicity/promotion
☐ Art in the Woolshed
☐ Other _____

Membership fee:

\$20 single membership \$ _____

\$30 Family membership \$ _____

Additional contribution (optional) \$ _____

Donations over \$5 are tax deductible

Gift Membership:

Please send membership to

Name: _____

Address: _____

Amount of Gift membership(as above)\$ _____

Total amount enclosed \$ _____

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

TOSSI Membership Secretary
P.O.Box 112
Matakana 0948

Can you spot the nest?

Ground nesting birds in New Zealand evolved over millions of years by protecting themselves from avian predators. They did this either by camouflage or by retreating into burrows. Fortunately researchers and ornithologists have added the advantage of watching parent behaviour near nest sites or using telemetry equipment!

Have some fun and see if you can find the nests and burrows.



NZ dotterel nest



Pukeko nest



Variable oystercatcher



NZ dotterel nest



Variable oystercatcher



Pied stilt nest



Grey-faced petrel burrow



Grey-faced petrel chick



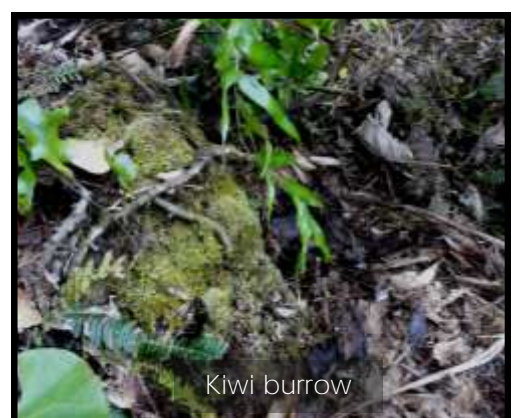
NZ dotterel nest



Kiwi burrow



NZ dotterel chicks



Kiwi burrow