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Season's Greetings

Mark the date

February 2

Sunday in the Park
work day. All welcome.

March 2

Sunday in the Park
work day. All welcome.

Support TOSSI

To volunteer, join and/or
make a donation, go to
<https://www.tossi.org.nz/>

From the Chair

I'm writing this from just north of New York City, where I'm visiting my son and his family. It's quite a different scene from what you would be experiencing — lots of oak trees have lost their leaves so the lawns are brown and leafy. It snowed briefly last week and turned everything white for a day — a different sight for me in November. Also I saw a coyote yesterday, quite a thrill as I'd not seen one before. Travel broadens the mind, I'm sure, and since I'm here for Thanksgiving, I'm thinking about how fortunate we are to live in Aotearoa New Zealand, with special ties to Tāwharanui.



I look back on the year at the Park and again want to thank volunteers for the work they all do. The Park wouldn't be the same without you, whatever your contribution is. I hope you enjoyed the Christmas luncheon on Sunday and I was really sorry that I couldn't be there.

Next year promises to be another busy one. There will be another kiwi translocation to Mt Tamahunga. We will be launching the new wetlands project (read more on page 2). We will continue with our education programme (read more on page 7) and perhaps beef it up a little. Our usual work days at the beginning of each month will continue, which is such a positive way to give back, to contribute to something worthwhile, but also to meet new people, to socialise with like-minded volunteers and friends, to get some exercise and to just enjoy a day out.

Remember that we are looking for new volunteers and that the committee is also keen to increase its numbers. If you'd like to join us, contact our Secretary: secretary@tossi.org.nz

I hope this finds you healthy and happy and as we look towards the end of yet another year, I wish you Meri Kirihimete, Merry Christmas or Happy Hanukkah.

Have a great summer and enjoy the Park when you can.

Sally Richardson

Tāwharanui Open Sanctuary is a joint project with Auckland Council



Open Sanctuary Senior Ranger Update

The year has had wins and losses in the pest incursion ledger. The ranger team supported by contractors and volunteers have been hard at it chasing a litter of stoats from last summer and, as genetic analyses have revealed, a few new arrivals. This is mentally and emotionally challenging for all involved. We focus on controlling our actions, detecting 'hot' zones where we can target these pests, implementing and improving tools both tried and true and novel. We can't control how the stoats choose to interact with these, but we can hope to learn and improve from each encounter. One great win has been the 'London Bridge' trap wall on the Lagoon boardwalk. Cameras showed stoat activity there and we have picked off three individuals at this location. Hazing – in the form of shade cloth barriers – providing physical guides to direct pest movements, also proved effective (see example on page 8).



A low density but stubborn ship rat population in the mid-west of the Sanctuary had been a focus for a long time, as with a similar Norway rat population at very low numbers but never quite zero at Tokatū Point. I am delighted to report that at time of writing we cannot find any sign of either. Zero is the hardest number to count but we'll continue to monitor and respond as needed.

Pests within the Sanctuary are not without impact. Our tieke population particularly has been reduced and we consider the stoat activity the key cause. Fortunately other species are getting on with it. Tūturiwhātu (NZ dotterel) have this year chosen to get underway early and have hatched and fledged chicks already, long before the summer influx of visitors and maybe seasonal storms make their life hard. Seabirds too are underway with good numbers of grey-faced petrels and fluttering shearwaters laying and hatching eggs.

The TOSSI Nursery production continues apace and we thank all those who propagate and plant trees (read more on page 6). The sheer volume of land retired from grazing is truly impressive. This land is now in native plants with a closed canopy and hosting wildlife. If you've been involved for a while, do take a chance to step back and see what you have been part of. If you're newer to TOSSI and the Sanctuary, it is easy to note the work of those who have gone before you and a clear indicator of what your efforts result in.

With summer and the festive season upon us, I wish you all the best and extend our heartfelt thanks for your considerable efforts. We truly appreciate and value the volunteers who contribute so much to the environment and social fabric of the Sanctuary. I hope you take time to visit the Sanctuary and enjoy it as visitors. Show it off with pride to friends and family because you, as TOSSI supporters, are instrumental in making Tāwharanui the incredible resource it has become.

Happy summer to you all!

Matt Maitland

Senior Ranger, Open Sanctuaries

I can be contacted at matt.maitland@aucklandcouncil.govt.nz

New Wetland Restoration Project

Save the Date: *World Wetlands Day*, Sunday 2 February 2025

This coming *World Wetlands Day*, join other TOSSI members in celebrating Tāwharanui's wetland habitats. On Sunday 2nd February 2025, we're launching an exciting wetland restoration project to increase the Park's biodiversity and provide crucial habitat for native wetland species. As valued TOSSI members who have already contributed so much to our Open Sanctuary, you'll be the first to learn about our plans and how you can play a part in this exciting project. Mark your calendars for a special *Sunday in the Park* where we'll share our plans, volunteer opportunities and ways to support this important addition to Tāwharanui's conservation story.



Wetland birds include spotless crakes (left), shovellers and shags (right).

Photos: Alison Stanes





Wetland Analysis

TOSSI volunteers, Lyn Hamilton-Hunter and Karyn Hoksbergen, recently carried out an environmental DNA (eDNA) analysis in the Mangatawhiri wetland (above). Water samples were collected from various parts of the wetland and the water was forced through filters. This was done 12 times in total. A preservative was added to the filtered sample which was then sent off to the laboratory.

A comprehensive analysis showed the presence of fish, plants, insects, birds, micro-organisms, macro invertebrates, algae, bacteria and fungus.

Fish species were: inanga, banded kokopu, tuna (short fin eel) and gambusia (pest fish).

Main plants present were: kauri, raupō, kahikatea and harakeke.

Birds included: pāteke, buff banded rail and kiwi.

Macro invertebrates identified were: micro caddis fly, red damsel fly, and the left-handed sinistral snail.



Water samples were collected from the fish passage (above left) which runs under the predator-proof fence, allowing fish to move freely between two parts of the wetland. Samples were also taken from various other areas. Via a syringe (left) they were put into sealed vessels and into a bag, on which was recorded details of the collection point (right).





Activities in The Park

Docking lambs in late spring is a reminder that Tāwharanui is still a working farm. Left, the sheep dog team can rest after the lambs have been corralled in the mobile yards, where the farm staff, rangers and volunteers do the docking of their tails.



Every year, the *Experiencing Marine Reserves* event takes place at either Anchor Bay or Jones Bay, depending on the sea conditions, such as visibility and swells. It is a free event for the public to snorkel under the supervision of experienced snorkelling instructors.

Wet suits, flippers, masks and snorkels are supplied (above).

TOSSI's education trailer was on site to provide information about the relationship between land and sea.



Left, track clearing was one of the December *Sunday in the Park* tasks. It was followed by a special early Christmas lunch (below), delicious as always, provided by the TOSSI catering team.



Birds of a Feather

Matuku Muster

TOSSI and Takatu Landcare volunteers participated in the first *National Matuku Muster*.

We listened out for the matuku-hūrepo/Australasian bittern's 'boom' — which is what its call sounds like — at Baddeleys Beach, Christian Bay and in Tāwharanui Sanctuary.

On 19 October two of the distinctive birds were heard in Mangatawhiri wetland and video footage of one was recorded in Christian Bay. On 16 November, we had one distinct call in Mangatawhiri and two distinct calls in Christian Bay.

The matuku-hūrepo is a very rare and elusive bird. The population has declined drastically due to habitat loss. It has been hard to count the actual population, which is likely under 1000 birds nationally. Having a national, cohesive monitoring programme is the best way to establish a truer picture of its population.

It is a privilege to think that they can find sanctuary on the Tāwharanui Peninsula, and hopefully breed here too.



Lyn Hamilton-Hunter
TOSSI Volunteer and Takatu Landcare Community Coordinator

Foreign Visitors

It's not unusual for Tāwharanui to be visited by bird species which have been either introduced or have migrated to Aotearoa from other countries.

Below left, a royal spoonbill enjoys a mangrove swamp in the Park. Spoonbills, originally from Australia, are regularly seen in the shallow water of low tide at nearby Snell's Beach.

Right, also from Australia, a kookaburra, which would have originally been living on Kawau Island, off-shore from Tāwharanui.

Photos: Alison Stanes



Nursery Report

Spring is the busiest time of the year for the Nursery at Tāwharanui. In two sessions we pricked out 5,500 kanuka plugs from Nga Rakau. We had sent them our kanuka seeds and they germinated them and produced the individual plugs that look like little rubber stoppers. These are very easy to put into T28s without

disturbing the delicate roots of the kanuka seedling. We have also pricked out manuka, ti kouka/cabbage tree, harakeke, mahoe and karamu seedlings that we raised in our new tunnel house.

Since the tunnel house has been built we have needed to experiment with and adjust its watering regime. We have found that inside the plastic house is too hot so we have covered it with shade cloth (below left) and generally leave the doors open. When a pukeko was discovered on one of the benches, plucking out seedlings, a temporary barrier was devised to keep such unwanted visitors out.

Once all the pricking out is completed in the next few weeks, some of our seedlings will be ready to be re-potted from tubes to PB3s.

At this time of year, as the heat increases, the watering system needs to be constantly checked so that the plants don't dry out. We don't want to lose any of our valuable little plants that will become the trees for next winter's planting.

Susan Gibbings

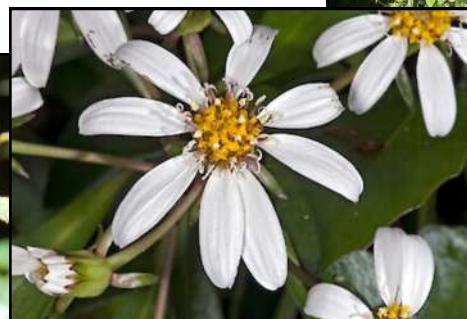


A nursery volunteer, Mark Atkinson, has an interest in rare plants and has found a number of them at Tāwharanui. He has been out in the Park with ranger Evan, to record their locations with GPS.

These plants are all endemic to Aotearoa. However one is nationally threatened, Kirk's tree daisy. It has been propagated by TOSSI from an original mother plant in the bush that has since disappeared. They are all taonga and hidden away at Tāwharanui.

Clockwise from top right: Green Mistletoe (*Illeostylus Micranthus*), *Helichrysum Lanceolatum*, *Gloxinia (Rhabdothamnus Solandri)*.
Centre: Kirk's Tree Daisy (*Brachyglottis Kirkii*).

Photos: Lyn Hamilton-Hunter



Education in the Park

TOSSI has for many years had an *Education and Awareness Strategy*. It was created from the understanding that TOSSI has an important role in raising awareness about the threats to the environment and endemic species. However, raising awareness has little impact or outcomes without providing an opportunity to learn about what can be done to eliminate or at least minimise those threats.

Many schools from Auckland use the Park for their outdoor education activities or science topics. Tertiary students also run field trips there to support their studies. When schools make inquiries with Auckland Council to use the Park for these purposes, they are directed to TOSSI to find out what we can contribute to enhance their learning experiences.

TOSSI is fortunate to have among its volunteers, several retired teachers to provide an informative learning programme to school groups visiting Tāwharanui on a day trip or staying for a few days in the campground. The volunteer educators give talks on the birdlife found in the Sanctuary, the various habitats they live in, the predator control required to protect them, and the revegetation being done to improve their food sources and nesting capacity. The TOSSI Education Trailer (shown below left) is an excellent interactive resource for engaging students, giving them visual and auditory examples of what can be seen and heard. A display of taxidermied predators gets a lot of interest, as does a demonstration of the traps used to kill them!

These interactions are also an opportunity to teach young people about the importance of 'giving back' through service by volunteering. The hope is that some will be inspired to return to the Park, perhaps with their families, to join a public planting day. Potentially, students might extend their interest into related careers. They may even one day become a TOSSI volunteer, and then the circle will be complete.

If you're interested in joining the education team (you don't need to be a retired teacher, just be passionate about sharing the wonders of Tāwharanui) contact me at mbvkgg@gmail.com

Marguerite Vanderkolk
Education Coordinator



Students from St Kentigern College in Auckland had an opportunity to get a hands-on understanding of what being of service means, while on their school camp at Tāwharanui. They helped distribute a huge pile of mulch around pohutukawa trees in the campground, under the supervision of Karyn Hoksbergen (far right in the photo below right). At the same time they learned about why trees need mulching to protect them from increasing temperatures due to climate change.



Odds and Ends



One of the many bonuses of being a TOSSI volunteer, is having an 'office' that has stunning scenery.

Left, Mark Atkinson, works on the beach access tracks at Anchor Bay with Hauturu/Little Barrier Island and the Spirit of New Zealand as the backdrop to his 'office'.

There are also bonuses for Park staff who work at Tāwharanui. Right, ranger Sam and his fiancée, Hannah, recently planted a kowhai in Ecology Bush to celebrate their engagement and up-coming wedding.



In the Spring issue of this newsletter, the predator control update included the intensive efforts being made to catch an elusive feral cat (above) which had been living in the Sanctuary for many months. Good news! It was finally caught recently, using a similar trapping strategy to that which had been successful for catching stoats in the Park. A 'wall' of baited cage traps and shade cloth netting (shown right) was set up near the end of the predator-proof fence at Jones Bay, where the cat had been seen on trail cameras regularly entering/exiting the Park. Unable to find a way around the barrier, the cat chose to go through one of the six traps (marked with a red X). A fatal mistake!

