

Pūkorokoro Miranda News

Journal of the Pūkorokoro Miranda Naturalists' Trust

February 2024 Issue 131



Editorial – Keith Woodley

This issue offers further illustration of the rich diversity at this place called Pūkorokoro – its events, its people, its biodiversity.

PMNT keeps a watching brief over the area and its wildlife. We are here to advocate, and to make people aware of the natural treasures we have, and how we need to look after them. We generally leave the birds to look after themselves. But sometimes interventions are required. Two examples are featured here. The outcome for terns and gulls attempting to nest at Kaiāua this season was not good; the outcome for some of the Red Knots affected by a suspected toxin in 2020 was astonishingly good.

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We acknowledge a significant event for mana whenua Ngāti Paoa, commemorating a grievous incident that occurred 160 years ago. We look at what a change of government may mean for the environment. There is a further update on the challenges of restoring the Robert Findlay Reserve. And there is the exciting news of an extended role at the Shorebird Centre for Chelsea Ralls.

Meanwhile, the next issue will feature updates on the Piako Roost project, the Tiaki Repo ki Pūkorokoro restoration, and further investigations into the biodiversity of the Findlay Reserve.

From the Chair: How do you grow up?

For some time, the council of PMNT has been trying to understand what the future of our organisation looks like. As we move into the future, as expectations change, as climate changes, the organisation we are now will have to change to ensure we can keep filling our mission, ‘Keep the Birds Coming’, and our vision ‘The Pūkorokoro shorebird coast is host to a thriving shorebird population, inspiring conservation at a local and global scale, and providing wide reaching social and cultural benefits.’

Over the last few years, we have worked through various strategic exercises. What do we want to do? Everything. Education, Research, Land Management, Community Engagement, the list goes on. With limited resources what do we want to do most? We have been asking ourselves these questions for as long as I have been on the Trust Council and, given that everything is changing around us the answers have remained remarkably similar. We want to tell the story of shorebirds, we want to make sure the environment they use is protected, both in New Zealand and across the Flyway, we want to be part of and help build a community that values the natural environment. Over and over that bit is easy, but we get stuck on the how; how to build a structure that allows us to do more and more of that in the long term?

It has always been very important to Council to make sure that financially we don't get ourselves in too deep.

Everything must be funded either through the shop and accommodation takings or through grants and donations. Going far and fast can lead to awesome outcomes, but it also has the potential to break small nonprofit organisations like ours. So, making permanent change is a big deal. Yet it is necessary to enable us to meet our goals.

Of course, making big change is easier when you have a complete faith in the people doing the work. I am delighted to announce that Chelsea Ralls has taken on an expansion of her role. In addition to what she is already doing helping run the Shorebird Centre she is adding two days a week to focus on business development opportunities; working out how we bring in more funds and therefore have the capacity to do more of our work, while still retaining the culture that has allowed us to achieve so much so far. It is quite the challenge. The work Chelsea will be doing will build on a

project we completed with Destination Hauraki Coromandel, which identified several tourism opportunities. Doing everything that was included in that report all at once would mean massive change, but starting some of those initiatives is possible. Chelsea's first project is running organised, paid, guided walks. We have had good interest to start off with and there are a lot of ideas on how we can take that further.

PMNT is not an organisation that has ever stood still for long. Keith Woodley's book, *In Pursuit of Champions* goes through the many stages of the Trust, including the shorebird surveys up and down the flyway, purchasing and then managing land, outreach and education initiatives. Not everything has always worked, and sometimes things only work for a while, or while the funding lasts, but we have learned from all of it. It is quite exciting to see what happens next!

Gillian Vaughan

EVENTS CALENDAR 2024

Sunday 3 March: Farewell to the Birds Open Day – Guest speaker: Subhankar Banerjee, Professor of Ecology and Art, University of New Mexico (See *PMNews* 130)

12 – 14 April: Nature Journaling Course. Still several spaces left.

Sunday 19 May: PMNT AGM

Saturday 17 August: Working Bee/Potluck Dinner

6 – 8 September Printmaking Course.

Please contact admin@shorebirds.org.nz

Chelsea Rails : Shorebird Snippets

I commenced working for the Pūkoro Mirando Naturalists' Trust over six years ago now, still a drop in the bucket compared to many of the other members and supporters, but reflecting back the Trust has been continuously evolving and growing during this time.

More and more people are aware of who we are and what we can offer here. The interest and media attention as we shared the migration stories of the kuaka fitted with transmitters in 2019 significantly widened our net and the awareness continues to grow.

Our systems and processes need to evolve to keep up with ever-growing interest while still holding on to that personal, welcoming, and inclusive atmosphere that we all connect with here. Visitors are also looking for different experiences and it's important to be able to respond and create platforms to share the vision of the Trust and this inspiring whenua.

Since my role became full-time in late November, I have started offering **Guided Tours of the Reserve** twice a week, and the interest and feedback has been enthusiastic. The Centre and Reserve will always be free to visit and explore, and our Shore Guide and volunteers will still be available to talk with visitors. But we also recognised that there is a real interest in having a personal and interactive educational experience here. Just like those passionate teachers we had at school, when we have a knowledgeable guide, their enthusiasm is contagious and the learning process is engaging and memorable. It can go beyond just sharing information, it can inspire curiosity and leave a lasting impact. See the back page for more information on the tours and how to make a booking.

I'm grateful for the support of the Trust and excited about the opportunity to return the favour, by supporting the Trust into the future.

Cover image:
Royal Spoonbills SIMON BUCKELL

First impressions are often informed by what is common. The size of the dark bird flying past my window in mid-December at first suggested Pukeko, but then I registered the long decurved bill. Thus Glossy Ibis joined the list of bird species seen from my sofa. This impressive Australian vagrant had been regularly reported at Pūkoro for the last few months, especially around the Stilt Ponds. A few weeks earlier it had been seen on the edge of Widgery Lake.

There had also been periodic reports of an ibis at Piako, a regular haunt for the species over recent years. This was thought likely to be the same bird, until Tansy, during a visit to Piako, was able to confirm there were at least two ibises in the region. A regular Australian vagrant, the first New Zealand record was near Timaru in 1902. There have been a number of Pūkoro records, including the flock of six at Access Bay reported by Betty Sedoon in November 1987.

The ibis was one of three notable additions to the bird list for Widgery Lake. In late December a Marsh Sandpiper briefly popped in. This Arctic-breeding species is a regular vagrant to New Zealand, and to Pūkoro, although this was the first record for several years. And certainly the first to be seen from within the Shorebird Centre!

On two occasions a Royal Spoonbill also visited the lake; a spectacular feature so close to the Centre kitchen. Spoonbills had, however, been previously seen from the Centre, if not quite so close as this occasion. Most commonly birds have been seen in flight, although as reported in *PMNews 129*, last July I saw seven birds roosting in a paddock behind the cottage. The earliest record was of two birds at Access Bay seen via telescope from the Centre while it was being built in 1990.

Meanwhile, the resident Pukeko population continues to thrive, with chicks appearing at regular intervals since November. There had also been occasional sightings of a Banded Rail, until mid-January when one appeared leading two chicks. A family of rails were also seen immediately behind the Godwit Hide.

There is now a very impressive list for Widgery Lake, given that it was only created as the Centre was being built in 1989. Then it was a shallow scrape bare of vegetation: now it is a well established ecosystem.



Banded Rails at Pūkoro 7 Dec 2023
ALAN TENNYSON

The list of birds seen on or around Widgery Lake: Kawau/Black Shag, Little Black Shag, Kawaupaka/Little Shag, Karuhiruhi/Pied Shag, White-faced Heron, Kotuku, Matuku/Bittern, Pukeko, Moho-pereru/Banded Rail, Kahu/Harrier, Poaka/Pied Stilt, Black-fronted Dotterel, Huahou/Red Knot, Karoro/Black-backed Gull, Wewea/Dabchick, Putangitangi/Paradise Shelduck, Mallard, Kuruwhengi/Shoveler, Black Swan, Tete/Grey Teal, Kotare/Kingfisher, Spotted Dove, Welcome Swallow, Blackbird, Song Thrush, Goldfinch, Piwakwaka/Fantail, Greenfinch, Magpie and Myna. All on a lake that in 1989 did not exist.

At least one leucistic Pied Oystercatcher has regularly featured among the roosting flocks over the last few years. This season a Bar-tailed Godwit, similarly lacking its full pigment quota, was also recorded. Joining the list of oddities was a leucistic Welcome Swallow recorded at Piako by Sean Clancy.



Leucistic Welcome Swallow piako SEAN CLANCY

Keith Thompson 1938 -2023



Through the 1990s and early 2000s students from Waikato University Department of Earth Sciences made annual visits to the Shorebird Centre. Keith Thompson, a softly spoken man with a tangle of hair

spilling below a battered leather hat, was their tutor. There was a quiet authority about him. I looked forward to those visits, and while my role was to give a lecture to the students, I invariably learned a great deal as well. I learned even more when Keith became involved with PMNT, serving on the Trust Council for eight years. He also volunteered as a tutor for several of our field courses; a good example of the high calibre of experts we have been fortunate to have.

You always knew when he was around: his licence plate BOGMAN in the car park being hard to miss. Acquired, as I learned later, from an Invercargill plumber, it was the perfect plate for a peatland specialist.

Keith was born in 1938, in Longhirst, Northumberland, UK. He arrived in New Zealand in the 1970s having worked in Uganda, Congo, and the Czech Republic. He came with a wide knowledge of wetlands. Teaching for 28 years at Waikato University, he made a huge contribution to our knowledge of New Zealand peatlands at a time when they were under increased pressure from agriculture and horticulture development. He was an advisor and Trustee of the National Wetlands Trust. He also served on the Scientific and Technical Review Panel of the Ramsar Convention.

Keith lived a full and adventurous life as a botanist and ecology lecturer and was a passionate advocate for the management and protection of wetlands. His adventures included spells in Australia and the Antarctic. He enjoyed helping people and was very generous in volunteering his time, particularly for science and ecological causes such as the Hamilton Junior Naturalists' Club and PMNT.

He was predeceased by his beloved wife Jean. Our condolences to Pete, Mike, Hilary, and Geoff and Keith's grandchildren.

Keith Woodley



The Class of 2024: L-R back row: Kevin Gaunt, Audrie McKenzie Daly (convenor), Jennifer Neale (caterer), David Melville (tutor) Keith Woodley (tutor), Alex Vos, Amaru Booth, Ben Gordon; third row: Susie Mills, Adrian Riegen (tutor) Gillian Vaughan (tutor); second row: Diane Fraser, Barbara Goodwin, Alana Rodrigues-Birch; front: Natalie Forsdick, Holly Thompson. Photo: LYALL MILLAR

The Pūkorokoro Field Course is 25 years old

It began in January 1999 and has been held every year since – except 2022. We managed to get one in as Covid-19 loomed at the beginning of 2020. We even managed, with some precautionary measures, to complete one in 2021 before further Covid strains wreaked havoc with the country. But in January 2022 the pandemic finally caught up with us. That cancellation means the course completed this year was the 25th.

This flagship event for the Trust has evolved over that time: content has been added or modified, and the duration has expanded from five nights to six. Tutors have come and gone, and in one case returned. But the basic structure of the course remained largely as it was developed by Bev Woolley at the very beginning. It has also remained extremely popular: the twelve spaces available for this year were filled by May 2023.

There are several people such as Stephen Davies and Adrian Riegen who have been involved almost all the way through. But Stephen missed at least one, and Adrian missed several. Which leaves the Centre Manager holding the unique distinction of being involved every one of those 25 years.

Want to use your accounting skills for good?

PMNT's current awesome treasurer has decided it's time to step back and we are looking for someone to take over the task. It's a volunteer role, you will be part of the Council and involved in the work we are doing to 'Keep the Birds Coming!'

Contact Keith at the Centre to find out more.

Public art and the Flyway: a public awareness and advocacy tool?

Trust council member **Trudy Lane** reports on recent travels and some fascinating ideas.

Some questions have been on my mind for quite some time: How could visitors to sites along our Flyway be engaged to better sense and understand the wonder of the shorebirds' global migrations, the importance of their habitats in this story, and our interconnection with the birds and each other? What might it look like to connect people on the East Asian Australasian Flyway (EAAFP) in such a way as to raise awareness and advocacy for our shorebirds?

With a background in the arts, my mind goes to creative, poetic, and fun spaces that could engage on different levels for different people. There is general acknowledgement that creative and/or fun engagements can provide another mode to reach audiences. What might this look like for us at Pūkoro-roko?

In chats with Gillian, Keith, and others, an evolving discussion has been around creating a walk experience that might deepen a visitor's understanding of this place, the shorebirds, and their world. Various ideas discussed have included a 'polychaete pathway' to celebrate the benthic fauna of the tidal flats, and the option of creating a location sensitive audioscape, given this is a medium I've worked in previously with creative collaborator Halsey Burgund in Boston, USA. The latter can be used to create a 'voices in the landscape' kind of experience where various audio layers play on your phone, depending on your current location and other input.

Ideas continued to develop, and along came two weddings – one in Perth, and one in Penang, four weeks apart. To help minimise my carbon creation I barely fly these days, but I felt it was important to go. So, could I make double use of the travel as a creative research trip? Thus, the four weeks became a six-week trip weaving together arts' practise, shorebirds and EAAFP sites, with family events, and online work.

Perfectly timed in the two weeks before the Perth wedding, and perfectly located alongside the shorebird hotspot of Moreton Bay, was the artist residency *Weaving Water @ Yarun*. Could we start to test ideas for the EAAFP flyway by connecting these two sites - Pūkoro-roko and Yarun / Bribie Island on Moreton Bay? For sustainability I took a long-term approach and during the residency focused on building local relationships, with the shorebird group of the Bribie Island Environmental Protection Association (BIEPA), and by speaking with Richard Fuller and others active in shorebird monitoring and research in Brisbane and surrounds. Also handy here was the timing and Brisbane location of the Australian Ornithological Conference 2023, where I also got a glimpse of David Lawrie in his natural habitat as quiet global instigator.

Back on Yarun the lovely Kathleen Catalan of BIEPA was a great partner-in-crime and together we presented the project-in-progress to the residency symposium, talked with Open Day audiences, and ran a creative workshop for kids at the Bribie Island Seaside Museum.



Providing workshop participants with wormie inspiration. TRUDY LANE

For the workshop I was curious to test some playful ideas for utilising Augmented Reality, and so bought some clay, gathered a range of interesting twigs and sticks, and compiled lots of inspiring pictures of polychaetes of the West Australian coast.



A party of creative polychaetes. TRUDY LANE

I basically presented the birds' journeys, all the crazy-looking worms they eat, and said take inspiration and make yourself a worm! They all set to it, and when done each worm was given a name and a little birth certificate.



Liara Winkler shows her worm and its birth certificate. TRUDY LANE

We then scanned their creations using the *Scaniverse* app, placed the scanned 3d object on the floor of the workshop space, scaled it up, and took screen grabs of the kids (both big and small) standing next to their now giant wormie creations. It was amazing to see what people came up with, with such basic materials and some inspiration – lots of fun! And lots of possibilities to further explore here.

RIGHT: Sierra Winkler holds her creation in her hand, while it's 3d scanned, AR view twin lays at her feet.

FAR RIGHT: Liara Winkler with her creation and AR view.



A few steps later in the trip, I was kindly able to meet with the fantastic David Li and lovely staff in the wild green oasis of the Sungei Buloh Nature Reserve - an EAAFP shorebird site in the northwest of Singapore. I was struck by seeing our same shorebird species in very different environments. On Moreton Bay, the shorebirds co-exist alongside turtles, dugongs and sea snakes, as well as flying foxes, cane toads and kangaroos. In Singapore it was mudskippers, more water snakes, monkeys, huge monitor lizards, otters and crocodiles up to five metres in length. Crocs are certainly one public safety concern we don't have to worry about at Pūkoro! It was also noticeable how each site had different human pressures. On Bribie Island it was jet skis, boaters and beachgoers not respecting the areas set aside for the shorebirds, who were being frequently unsettled. In Sungei Buloh it was rubbish piling in from the busy channel, and photographers filling fish with polystyrene to make them float and attract birds to the camera.



Sungei Buloh Wetland Reserve staff with David Li (right), in their natural habitat.

Travelling between EAAFP sites highlights how each group has similar conservation, education, and research goals for shorebird species: habitat protection, population monitoring, advocacy, visitor education and engagement. So much in common, alongside so many interesting differences. I started to think about how visitor resources shared across the network could give these contexts - adding to the story of the birds' mad journeys, while building an appreciation of local ecosystems. Also, whether shared workshop formats for kids and visitors could provide visitor engagement options for busy flyway site staff utilising limited time/financial resources. It would also be possible for such resources to build a creative visitor experience, such as an audioscape or a visual installation, in a way that is by and for that local community.

Now, on arriving home, comes the fun challenge of wrangling ideas into reality through further discussion locally, with the potential site partners, and I also welcome any members to also get in touch with me at trudy@shorebirds.org.nz if you would like to find out more or join the fun!



Local hazard warnings at Sungei Buloh.

Each year, Sungei Buloh sees 100,000 plus visitors. That this 130-ha space was gazetted for protection and then subsequently increased, is a triumph given the population and development pressures. Something that the Ramsar designated Moreton Bay is not free of, with the current battle against development of 3,600 apartments on the wetland site next to Toondah Harbour.



Pōwhiri - view of mana whenua Photo: NGATI PAOA

Pūkorokoro Rā Maumahara

Preva Jackson and Lisa Tauroa report on a highly important commemoration at Pūkorokoro.

Friday 3 November 2023 marked 160 years since the shelling, devastation, and atrocities inflicted upon upon, and that continue to impact, the iwi (tribe) of Ngāti Paoa.

Let us take you back 160 years to 1863 where the people of Ngāti Paoa lived peacefully within their papakainga (villages) upon their own traditional whenua (land) within their well-established infrastructures. Within these infrastructures Ngāti Paoa was well situated with its locality, own education systems, spiritual belief systems, sustainable practices, communication systems, transport systems, relationships, economic systems, and environmental systems just to name a few. In fact, life for the iwi of Ngāti Paoa was good!

However, due to the government of the day needing more land to extend its colony for its settlers, war came uninvited to Ngāti Paoa. This war, led by the British, forced its way into the tribal territories by land and sea devastating Ngāti Paoa. Crippling its infrastructures while killing men, women, and children. The war although labelled a skirmish in military terms forced the remainder of Ngāti Paoa into hiding rendering them landless and scarred for life by a system that was supposed to be their treaty partner.

Returning to the year 2023, Friday November 3rd saw Ngāti Paoa commemorate this significant event by holding a “Rā Maumahara” on the beach you may know as “Rays Rest” with its original name being Pūkorokoro.

This Rā Maumahara was held to firstly honour and remember our tupuna on this significant date and secondly to acknowledge the atrocities that were inflicted upon our people. In doing so Ngāti Paoa aimed to shed light, inform, and educate the local communities including local schools. This event immensely supported the members of Ngāti Paoa whom many directly descend

from those tupuna (ancestors) heal and enable us to forgive and move forward. We the descendants of those Ngāti Paoa tupuna who lived and died in that context, pay homage to those tupuna that survived to tell our story.

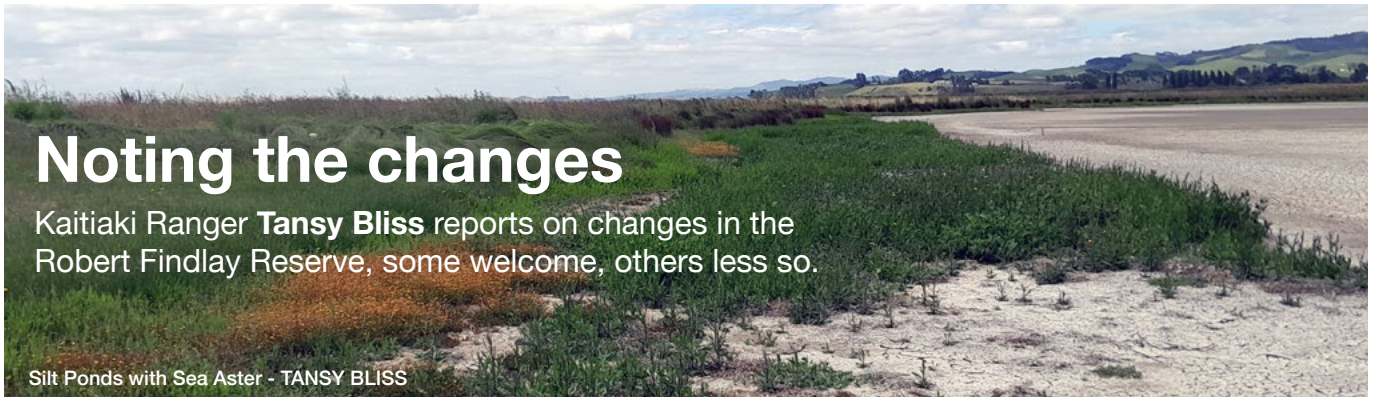
Ngaa maramara oo raatou maa, kei konei tonu, kei te ora tonu.

Us the descendants of those tupuna, we are still here, we are still alive.

Ngāti Paoa would like to acknowledge the generosity of our long-time friend Trudy Lane and the Pūkorokoro Miranda Shorebird Centre for their tau-toko (support) towards our event.



The Shorebird Centre hosted about 250 people for breakfast WENDY HARE



Noting the changes

Kaitiaki Ranger Tansy Bliss reports on changes in the Robert Findlay Reserve, some welcome, others less so.

Silt Ponds with Sea Aster - TANSY BLISS

Restoration work is not just about planting natives and removing weeds or exotic species. It is also about observing the changes that come with the chosen management regimes and sometimes making a judgement call on whether it is what we want to happen.

In the Robert Findlay Wildlife Reserve, we are at a stage where over 38,000 native plants have been put in the ground since 2019. This has broken up the uniform blanket of Divided Sedge in the wetter areas and replaced pasture grasses and Fennel on the ridges. However, it is hard to see our plantings, that often struggle to survive amongst the dense tapestry of exotic flowering plants we tend to think of as weeds. Their airy, often wind-borne seeds sometimes take advantage of any new bare ground. Pre-planting chemical spraying that removed the dense layer of existing vegetation, and dropping water levels after draining the Stilt Ponds, has left an uninhabited muddy margin, perfect for plant colonization.

The most dramatic change has been the exponential growth of Sea Aster, thickly carpeting the exposed margins of the Stilt Ponds and finding a foothold within the saltmarsh itself, pushing up through the native Glasswort. This would be wonderful if it wasn't for the fact that this Sea Aster is an invasive species, *Symphotrichum subulatum*. It is native to the eastern and Gulf Coast areas of the United States and became naturalised in New Zealand in 1896. It grows almost 2m tall, becomes woody and can persist from one year to the next. It has small but numerous daisy-like flowers and is capable of sending millions of lightly haired seeds drifting into the wind, and out across the Reserve.

In 2022 it completely obscured the plantings along the southern arms of the Stilt Ponds. This year it will take over potential foraging areas for the migratory sandpipers and make viewing any birds that do arrive, almost impossible. It could affect the regrowth of Glasswort and rare Māori Musk that we hope will recolonise these habitats.

Sea Aster seed has probably been drifting around Pūkorokoro for some years, but our recent management choices, along with the current weather conditions, have created an opportunity for it to flourish. While observing what is happening on the wider scale and in adjacent habitats, we have implemented some local scale control. View shafts from the Stilt Hide will be kept open by cutting the Sea Aster back to ground level on a regular basis. This will also allow us to see if it eventually dies from repeated cutting. Where feasible, individual plants will be hand pulled from the saltmarsh Glasswort beds, to stop it flowering and seeding in this unique habitat.

A new occurrence for the Reserve has been Ragwort, suddenly shooting over a metre tall and sporting a flourish of bright yellow flowers before being noticed. Tony Steer, one of our visiting moth researchers, drew it to my attention. It is a host plant for a couple of daytime flying moths. Indeed, when I went to search for the Ragwort, I first spotted a large dark moth on the wing, heading towards a tall, yellow-flowered plant. It was so obvious, I wondered why I had not noticed it earlier. I collected some of the caterpillars that were already eating the leaves, to identify later, and promptly pulled the Ragwort out. I have since removed over a dozen plants, including one on the outer shell bank.

The caterpillars were the larvae of the Australian Magpie Moth, with a couple of forward projecting hairs on the thorax distinguishing it from our native Magpie Moth larvae.



Tall Sea Aster TANSY BLISS



Ragwort in flower TANSY BLISS



Australian Magpie moth larvae TANSY BLISS

Also utilizing this plant is the Cinnabar Moth, which was introduced from Britain in 1926 to control Ragwort. It was hoped it would breed successfully and its larvae eat enough ragwort leaves to kill the plant. This has not happened, and the small populations of Cinnabar Moth scattered throughout the country have little impact on heavy infestations of Ragwort.

Ragwort has unpalatable leaves that are poisonous to stock, particularly cattle. They usually avoid eating it, allowing it to flower and seed freely which reduces pasture quality. Being mindful of our neighbours, we do not want Ragwort flourishing in our Reserve.

Both the Cinnabar Moth, which was caught in December 2023 at the Shorebird Centre and the Australian Magpie Moth are polyphagous and their larvae also eat other plants in the Asteraceae family. Removing the Ragwort will not be the end of these moths!

Much more subtle and harder to detect has been the increase in the exotic Umbrella Sedge. Superficially it looks very similar to our native Giant Umbrella Sedge, but a closer examination gives it away as an invader. Instead of the dark oval seed heads of the Giant Umbrella Sedge, it has pale green to light brown rounded umbel seed heads.

Both grow in similar habitats and the Umbrella Sedge is readily seen along roadside margins, in drains and is sometimes used in garden plantings. It seeds prolifically and spreads easily. When not flowering or seeding, the flat yellow-green leaves are hard to distinguish from the longer leaved, sharp edged and central ribbed Giant Umbrella Sedge leaves. It is possible that the exotic Umbrella Sedge was introduced into the Reserve during planting. When small, any rogue immature plants growing in the nursery would have been impossible to distinguish from the native Giant Umbrella Sedge being grown for restoration. Umbrella Sedge has now spread within the Reserve and is found both within our native plantings and along the tracks. The latest finds were thanks to the lizard survey work organised by Chelsea Ralls, (see Lizard article page 10). We were striding through the long vegetation in places I don't normally walk, putting out tracking cards on a transect, when the tell-tale round seedheads caught my eye. I quickly snipped off the ripening seedheads and went back later to remove the whole plant and search for others.

A more welcome change since the draining of the Stilt Ponds has been the increased variation in roost site preferences for our migrant waders. Answering the question of 'where will the birds be when...', has become a complete guessing game. None of our shorebird guides have been able to discern any pattern to the birds' movements. Sometimes they group in front of the Kuaka Godwit Hide, other days they choose the mud in front of the Poaka Stilt Hide. Occasionally the flock is split, perhaps operating a rotation between the two sites. Even within their chosen location for the high tide, the exact roosting place varies - sometimes to the northern end, sometimes bunched up further south, occasionally evenly spread across the entire space, but usually with segregation between the species. It seems our management choice to drain the Stilt Ponds has given the birds more options and with that, much greater viewing and flag-reading possibilities for our staff, guides, volunteers, and visitors. This is a welcome change worth noting.



Cinnabar moth, introduced to control Ragwort TANSY BLISS



The photo shows Umbrella Sedge (left) held beside Giant Umbrella Sedge for contrast TANSY BLISS

Plant and moth names mentioned in the text

English/Māori	Scientific
Divided sedge	<i>Carex divisa</i>
Glasswort	<i>Sarcocornia quinquefolia</i>
Sea Aster	<i>Symphotrichum subulatum</i> . Formerly known as <i>Aster subulatus</i>
Māori Musk	<i>Thyridia repens</i>
Ragwort	<i>Jacobaea vulgaris</i>
Umbrella Sedge	<i>Cyperus eragrostis</i>
Giant Umbrella Sedge/ Cutty Grass	<i>Cyperus ustulatus</i>
Australian Magpie Moth	<i>Nyctemera amicus</i>
Cinnabar Moth	<i>Tyria jacobaeae</i>
Magpie Moth	<i>Nyctemera annulata</i>

[www.citscihub.nz/Phil_Bendle_Collection:Symphotrichum_subulatum_\(Sea_aster\)](http://www.citscihub.nz/Phil_Bendle_Collection:Symphotrichum_subulatum_(Sea_aster))

Tracking the Fauna of the Reserve

We know a lot about the shorebirds frequenting the Robert Findlay Reserve, and as reported in previous issues, we are learning about the moths. But what of other wildlife? **Chelsea Ralls** reports on filling another gap.

I've known Doug Ashby since my days as a student at Paeroa College, but more recently our paths have crossed in the local community and at conservation events where he and his wife Jane speak with public groups about Aotearoa's native reptiles.

I reached out to Doug to see if he would be interested in helping me learn more about the skink species here on the Robert Findlay Wildlife Reserve and he enlisted Moniqua Nelson-Tunley, from the Coastal Restoration Trust of New Zealand and Waikato Regional Council. Both are members of the New Zealand Herpetological Society and passionate enthusiasts. Moniqua has developed a guide for monitoring pest mammals and small native animals in narrow coastal habitats using tracking tunnels.

As Tansy reported in *Pūkoro Mirando News 128*, there are numerous Plague Skinks (*Lampropholis delicata*) seen on the reserve and we have confirmed sightings of Shore Skinks (*Oligosoma smithi*). But is that the extent of the species we have here? What about Copper Skinks (*Oligosoma aeneum*) that were seen at Whakatiwai in 2012 or the Moko Skink (*Oligosoma moco*) that is fond of coastal grasslands? Perhaps tracking tunnels could help detect presence and abundance of any shy native species that may be here.



Doug Ashby, Moniqua Nelson-Tunley, Tansy Bliss JANE ASHBY



Moniqua Nelson-Tunley, Chelsea Ralls, Doug Ashby and Sarah Manser investigating skink habitat JANE ASHBY

Four transects, with five tracking tunnels in each, were laid out in various grassland and chenier/shell habitats. First they were set out for one week without any lure, then replaced and set again for 24 hours with a lure to target predators.

The tracking tunnel results were fascinating for me. With only theoretical knowledge of their use and the singular focus on skinks to initiate the survey, it was quickly evident there was much to learn and interpret from just a week of field observations.

The contrast of the jet-black ink section with the bright white tracking area meant it was easy to glance at a card and dismiss it as blank. But with a closer look, the faint patterns of spiders, insects and beetles wound their way across the card. Dark stippled tracks of mice, detailed lamella patterns from skink palms – some with a tail swish or heavier tread and belly-drag from a gravid (egg carrying) female. One blotchy, seemingly random shape became the outline of a Green Bell Frog (*Ranoidea aurea*).

Moniqua's report on the tracking tunnels was very encouraging. There were "no major predators (e.g. no rats, hedgehogs, possums, or mustelids). Two mice were recorded across 19 cards, giving an overall mouse percentage of around 10%. This is very good for a site without specific mouse control."

As we continue to build our understanding and knowledge of the reserve and its ecosystem, we can expand the predator control to include mouse traps at the hides and carparks. Targeting areas where there is shelter and perhaps food could prevent further spread and population growth throughout the reserve.

There were seven skink card records in total, two of which showed multiple individuals, and one likely revealing different species. The lack of palm print on one indicates a plague skink and the shape of the palm and toes and, considering the habitat, indicates a Shore Skink on another. "Some of the tracks did not closely resemble reference cards for either of these species, so further work is required to identify the species" reports Moniqua.

The Shorebird Centre will continue to undertake more tracking tunnel surveys to create a greater baseline of tracks for comparison and, with Doug's expertise, investigate options to visually identify species present here. Moniqua will source tracks of captive representatives of likely lizard species for comparison.

This summer Moniquea has plans to conduct monitoring with another group in the Coromandel, to hopefully find and identify native skink species on our shorelines.

We may see skinks hastily retreating from a distance, making it difficult to identify and learn about species occurring in our coastal areas. It's natural then, not to consider them when developing our plans for protecting the local environment.

Protecting ground-nesting and threatened bird species and their eggs and chicks is an obvious way to educate the public on the need for trapping programs through the summer breeding seasons. Fences and signs are a common sight on

beaches around Coromandel and Auckland and most people would have at least some awareness of their purpose in protecting Tūturiwhatu Northern New Zealand Dotterel or Tōrea pango Variable Oystercatchers.

But over the winter months it may be remiss to relax those trapping efforts when there are other native species, including skinks, that need protection throughout the year. By enlisting community groups, such as PMNT and other trapping groups in coastal areas to carry out tracking tunnel surveys, and understanding the diversity of native fauna in the ecosystem, we can see the importance of remaining vigilant against predators throughout the year.

Tracking Tunnel Line	General Habitat	Skink Results	Other species
1	Grassland / Native planting	None	Mouse, spider, insect, beetle, snail
2	Grassland / Native planting	2 records - 1 with multiple skink species	Mouse, slug, insect
3	Shell / Chenier ridge	3 records – Multiple individuals on one card, 1 native skink with belly drag	Mouse, spider, insect
4	Shell / Chenier ridge	2 records	Mouse, spider, insect, beetle



ALAN TENNYSON NZbirdsonline

Prominent, spectacular, even downright odd – such are the spoonbills. Their numbers at Pūkorokoro have been increasing for many years. But is that the same elsewhere in the country? **Mary Thompson**, Survey Coordinator for Birds New Zealand, reports on plans to find out.

Those of you who visit Pūkorokoro Miranda regularly will have spotted Kōtuku Ngutupapa/Royal Spoonbill, the large white wading birds with distinctive long black spoon-shaped bills. They are classed as native, as they arrived naturally from Australia about 100 years ago and began breeding in New Zealand. They have become a spectacular and enjoyable addition to our estuary bird life.

Birds New Zealand has been studying Royal Spoonbills for many decades. In 1979 only 26 were found in the whole of the country. Since then, their numbers have dramatically increased and in the 2012 nationwide census, 2361 were counted. Another will be done again in winter 2024 to see if the population is still increasing. These counts are a rare opportunity to accurately document the increase in population of this comparatively recent coloniser.

Royal Spoonbills move north from their breeding grounds in the South Island for winter rest and recreation. Many move as far north as Pārengarenga but some hang out around Auckland and the Firth of Thames. It will be important to include the spoonbills that spend the winter in the Firth of Thames in our nationwide count, which will be held in July. If you would like to be involved contact either your local Birds NZ representative, Keith Woodley (keith@shorebirds.org.nz), or the survey coordinator nzmaryt@gmail.com.



Macrocarpa Spoonbills KEITH WOODLEY
Spoonbills regularly roosted in this macrocarpa opposite the Stilt Ponds. They no longer do so, probably because there are now too many of them to fit.

Is rehabilitation of waders following toxin poisoning worthwhile?

In early 2020 a major outbreak of botulism, along with a suspected toxic algal bloom, impacted birds at Pūkoro. Trust member and volunteer **Wendy Pilkington** reports on some interesting outcomes to the event.

The local duck population bore the brunt of the January/February 2020 botulism and toxic algal bloom event in the southern Firth of Thames; however, a few waders were also impacted. Staff and volunteers of the Pūkoro Miranda Naturalist Trust (PMNT) were involved in burying deceased birds and rescuing distressed waders in the vicinity of the Trust monitored area (bird hides and shell bank).

Nineteen dead Red Knots were recorded, and 62 live but distressed ones (suffering a degree of paralysis), along with two live Bar-tailed Godwits were rescued. All live birds were transferred to one of five care/rehabilitation facilities. An unknown number of ducks as well as three Banded Dotterel, and an individual New Zealand Dotterel, Caspian Tern, Wrybill, and Red-billed Gull were also retrieved, however these were assumed to have been deceased at the time of retrieval or shortly thereafter as there are no data on their release.

Unfortunately, individual birds were not uniquely identified at the time of rescue, and therefore neither the length of time each bird spent in care, nor the severity of its illness is known. Nor is it known whether a standardized approach was taken to the acute care and rehabilitation of the birds.

Before release, birds were uniquely identified with a standard New Zealand banding scheme numbered metal band and a coloured engraved leg flag (ELF) to enable subsequent identification of the birds in the field. Most of the birds were mature adults at the time of banding (see Table Two).

Data are available for 51 of the knots and one of the godwits that were released at Pūkoro/Miranda following acute care and rehabilitation. It is therefore assumed that 11 (17.7%) of the rescued knots and one of the godwits did not survive the acute care/rehabilitation period.

Table One: Care/Rehabilitation Facilities

Facility	Number Birds Released	Survival Known 1 Month Post Release
Auckland Zoo	4	4
Hamilton Zoo	4	1
Gordonton Bird Rescue	17	6
Thames Bird Rescue	19	5
Thames Bird Rescue with Transfer to Bird Care Aotearoa	7	6
Total	51	22

Table Two: Age of Red Knots at time of Banding and Release

Age (years)	1	2	3+	Unknown	Total
Number of Birds	2	11	24	14	51

Table Three: Release Dates

Release Dates 2020	Number Released	Number Not Resighted As At January 2023
21 February	4	
23 February	18	5
3 March	2	2
11 March	1	
17 March	5	5
18 March	6	2
20 March	13	9
24 March	2	
Total	51	23

Table Four: Migration Status of Red Knots Released in 2020 and known to be Alive in Stated Year

Year	2020 Migration			2021 Migration			2022 Migration		
	Yes	No	Not Known	Yes	No	Not Known	Yes	No	Not Known
1		1							
2	1	1	3	1		2			
3+	5	4	5	2		2			3
Unknown		1	1			1			

Table Five: 2020 Migration Attempt

Bird ELF	Release Date 2020	2020 Migration Resighting	Resighting Location
EHX	21 February	25 May	Bohai Bay, China
EKB	23 February	5 June	Bohai Bay, China
EKC	23 February	5 June	Bohai Bay, China
EKJ	23 February	12 May	Bohai Bay, China
EJD	20 March	16 May	Bohai Bay, China
EKM	23 February	9 October	Queensland, Australia



Tony Habraken, Amanda Hunt and David Lawrie banding rehab knots ALAN PILKINGTON.



The flagged bird obscured at the back, (flag showing against the light) is EKB that was subsequently seen in China. ALAN PILKINGTON

Red Knots were released on eight separate occasions (Table Three). The release date for the Bar-tailed Godwit is not known.

Although regular monitoring of released birds was made difficult by Covid-19 related travel restrictions, at least 22 (43.1%) of the knots and the godwit were confirmed to be alive (i.e. sighted) one month after release. Twenty-three (45.1%; one first year, three second year, 12 third year and seven unknown ages at time of banding) of the knots have not been sighted since their release and it is not known whether they are alive.

At least nine knots are known to have migrated since their recovery from the bio-toxin event: six in 2020 (five were sighted in Bohai Bay, China on their northward leg and one was sighted in Queensland, Australia in October, presumably on the southward leg); two of those that didn't migrate in 2020 were sighted in Bohai Bay China or Taiwan (ELU, ELX) in 2021; and a further bird (EHZ) whose migration status in 2020 was unknown was sighted in Hangu,

China in 2021. One bird (EKC) aged as a second year was sighted in Bohai Bay on 5 June 2020. This seems similar to Bar-tailed Godwits which, previously, were thought not to migrate until they reach breeding age of at least three years old. However, some of the juvenile godwits banded at Pūkoro and Foxton in 2019, subsequently migrated when just two years old, although it is thought they did not breed.

None of the 14 knots of unknown age are known to have migrated in 2020. Five of the knots that did migrate were aged 3+. Four knots aged 3+ were seen locally (Firth of Thames and/or Manukau Harbour) during the months they would have been absent if they had migrated. There were no migration route re-sightings for 2022. Three knots (EHW, EHX, EHZ) were resighted at Pūkoro/Miranda in 2023.

Only one bird (EJD) released after 23 February migrated. It is not known whether any of the six birds completed a full migration journey. It may be that they turned southward

after spending time resting and feeding in Bohai Bay. If they were seen back in New Zealand, then they completed a migration regardless of whether or not they went to Siberia.

Bar-tailed Godwit ZUZ when originally banded in October 2017 was aged at 3+ years. This bird has been resighted at Pūkoro numerous times in each subsequent year but never between early March and early September, suggesting that it embarked on a migration each year since at least 2018. It is not known which care facility ZUZ was taken to nor when it was released. However, sightings of this bird since September 2020 follow its previous pattern, in that it has not been seen between early March and early September. It is possible, therefore, that it migrated in 2020 and each year thereafter. The last recorded sighting for ZUZ was on 11 January 2024.

Conclusion

There are insufficient data to determine the cost effectiveness of acute care and rehabilitation of waders (specifically Red Knot) following a bio-toxin event such as the one experienced in the Firth of Thames in 2020. However, it can be said that 82.3% of the rescued knots survived the trauma of being taken into care and at least 17.6% of these survivors migrated in 2020 or later. Many more birds may well have resumed an annual migration pattern only haven't been seen doing so!

Given that the world-wide population of Red Knot is in decline, and its conservation status in New Zealand is 'Nationally Vulnerable,' any effort to ensure survivability of the species is valuable. What is also clear is that the only way to judge the success or otherwise, of care and rehabilitation of sick and injured birds is to band and or flag birds as soon after their capture as possible. Banding such birds should be seen as essential.

References

- Hunt A, 2020: Data collected and collated during the 2020 bio-toxin event at PMNT.
- Riegen A, 2024: Data retrieved from the National database and supplied to the author on 10 January 2024

Terns and gulls attempting to breed in Kaiaua

Keith Woodley reports on the failure of a large gull and tern colony in the centre of Kaiaua

A noisy, bustling colony of nesting Black-billed Gulls and White-fronted Terns was, for many years, a feature of the shell spit at Pūkoro. Most years there was activity, even if breeding success was variable from season to season, depending on events, such as storms and tidal surges, or predation. But there was a regularity to it all. Then for some reason, the site lost its attraction to the birds.

In November 2023 birds were seen prospecting at Kaiaua. Beside the boating club there was a huge pile of tailings from where the boat channel had been dredged. The site must have seemed ideal to them - open barren spaces, high and dry from spring tides and tidal surges. Its location on an urban seafront made it less likely to attract attention from Harriers who are known to take chicks. Tony Habraken, who has studied terns and gulls on this coast for decades, considered that two thirds of the colony was 'basically very safe from being inundated by spring tides and storm surges. The most at-risk area will be the birds on the bench/channel/creek and lower slopes.'

On 19 November Tony found gulls on nests, the first breeding attempt by this species on the western shore of the Firth for several years. By 2 December there were 1185 pairs/nests of White-fronted Terns and 162 pairs/nests of Black-billed Gulls.



Kaiaua terns and gulls TONY HABRAKEN

But for us, and the long-term future of the colony, the location was problematic. The topography – rough ground already well vegetated, meant the colony would be difficult to monitor. But a far greater problem potentially, was the location on the beachfront of a seaside village on the eve of the holiday season. Its proximity to the town and associated activities, meant the potential for disturbances from people getting too close to the colony, or from boats using the creek to access the boat ramp. That it also gave easy access for ground-based predators in the populated neighbourhood, especially cats, was soon confirmed with several dead birds found near the colony.



Kaiaua tern predation TONY HABRAKEN

Concerned local community members reached out to Pūkoro Shorebird Centre for advice. They wanted to reduce disturbances to the birds, learn about what was happening and what behaviour around the colony was acceptable. Certainly not disturbing massed birds into flight for the benefit of cameras, which was observed on occasion. We approached Department of Conservation and Hauraki District Council who were both supportive of protection measures. The Council organised signs which alerted people to the nesting colony and to keep their distance. These were erected with community support and assistance. While some predator traps were installed by the Department of Conservation, the location and configuration of the colony made effective trapping measures very difficult.

By 3 January there were indications that the colony was in serious trouble. By this time there should have been one-week old chicks, but none were seen. That same evening all birds were seen leaving the colony and heading out to sea, not returning until daybreak the next day. This behaviour continued over the following weeks and is highly unusual for a nesting colony. The prolonged chilling of eggs overnight gradually killed the embryos and no chicks hatched.

Investigations to determine the cause of this overnight desertion are ongoing with fireworks, drones, predators, fishermen, or other people all possibilities. However, there is evidence the problem was most likely a four-legged one and that overnight predation (probably by cats, but possibly also rats) was likely the cause of the overnight desertion and subsequent failure to hatch and fledge chicks.

Tony points out that near the time the nocturnal abandonment was observed, a cache of wings from predated birds was found near the colony. That this was not added to subsequently suggests the predator/s halted activities as they were deprived of live prey. Which further suggests a nighttime operator being responsible.

One thing is certain, however, says Tony. 'Whatever it was that caused these nighttime departures, it was a 'significant' event, especially for the birds not to return to normal nesting duties after more than 40 days!

The failure of this colony is a devastating blow for the population of both species in the Firth. Under conservation threat rankings both are listed as declining. The failure to have any productivity from this large colony highlights just how sensitive these birds are to predation and the importance of giving them as much protection as possible by keeping predators away from these sites.

Going backwards – policy and protection of wildlife and habitat

What does the change of government mean for environmental policy and wildlife protection? **Pip Wallace** investigates.

The environmental rollbacks have started and there are more on the horizon. Plenty of interest groups, property owners and resource users are cheering on the walking back of environmental law and policy in Aotearoa New Zealand. Goodbye red tape, compliance costs and hassle, hello streamlined resource use and management.

For wildlife protection there is no cheering. The rolling back of environmental protection seems counter-intuitive at a time when human induced climate change deepens the biodiversity crisis and ecosystem degradation and failure.

Reporting on the latest figures the Ministry for the Environment & Stats NZ (2023) (environment.govt.nz/assets/publications/Environmental-Reporting/Our-atmosphere-and-climate-2023.pdf) identify that the “Impacts of climate change are cascading through ecosystems and compounding other threats such as invasive species and human disturbances”. In addition, habitat loss and climate change interact to exacerbate population decline and extreme weather events have direct and damaging impacts on our ecosystems, as well as people. The report identifies

a series of losses to habitat and species including the risk to Tara iti (Fairy Tern) of losing its breeding habitat to storm surges, and the wiping out of an entire breeding season of Kororā (Little Penguin) on Otata Island and the growing spectre of wildfires.

Faced with deepening problems for wildlife, any potential reduction in protection is disquieting for all those invested in the protection of taonga species and habitat. The new (and now repealed) Natural and Built Environment Act 2023 (NBEA) provided valuable reshaping of approaches to protection, including greater incorporation of Te Ao Māori approaches, which in turn underpin protection for the natural environment. The law was intended to be supported by streamlining of local authority functions, fewer resource plans and stronger spatial planning at the regional level. These measures (amongst others) support better planning and protection, which we will explain in context shortly. But with a lifespan of 123 days the new law was gone by lunchtime, forcing a reversion back to the Resource Management Act 1991 (RMA).

This regulatory ping pong is accompanied by government commitment to review the National Policy Statement for Indigenous Biodiversity 2023 (NPSIB) and the National Policy Statement for Freshwater Management

2020 (NPSFW). The NPSIB is an extreme example of wildlife protection policy subject to the vagaries of political preference. Way back in the deep recesses of the early 2000s an National Policy Statement was proposed and finally introduced as a draft in 2010. Politically contested, it finally saw policy daylight in 2023. Criticism has been levelled at the lack of central government direction under the RMA, for which, the NPSIB with its tortured history, must surely be the poster child.

Underlying this slow progress are the social, cultural, and economic contests which arise in relation to environmental management. Concepts such as property rights, economic efficiency, and reduction in regulatory red tape feature heavily in the debates related to protection of biodiversity on private land. The identification, mapping, and protection of Significant Natural Areas (SNA) – the policy vehicle developed to secure habitat and species protection – have been loudly decried by landowners and interest groups. In addition, Iwi, with a history of land loss and confiscation, have concerns related to infringement of rights guaranteed under the treaty. Accordingly, there has been significant push back against the provisions of the NPSIB which extend the identification and restrictions that may apply to land classed as an SNA. Policymakers have paid careful attention to these concerns as evidenced by the detailed provisions in the NPSIB, for instance, by developing policy exceptions for classes of land or resource users. But for many this is not enough; the lobbying has been loud and the NPSIB may also soon be “gone by lunchtime”.



Wader flocks at the Limeworks KEITH WOODLEY



Wrybill6341 BEVAN WALKER

We seem to have come to the thin edge of the wedge – caught between a deepening environmental crisis and landowners and resource users struggling with the increasing burden of amending practices to limit harm to the environment. Due to climate change, times are changing and faster than we apprehend. The science tells us we need to build greater resilience into our systems and yet the cost of this is unacceptable to many.

To account for this, in certain international and domestic policy regimes, the principle of non-regression of environmental law is applied. The point of this principle is that when environmental protection is secured through law and policy, the ability to weaken or “walk back” the law should be limited. In this manner, the environment has the benefit of a steady and progressive approach and in addition trading parties have a degree of security that the regulatory backdrop is on a level playing field.

Walking back environmental protection will produce fewer beneficial outcomes for threatened habitats and species in the Miranda Pūkoro area. The area is currently subject to a raft of conflicting and confusing policy instruments because of incremental legislative effort and spatially bound agency mandates. A more consistently protective approach to habitat and species protection is required. The integrated regional approach to planning established by the NBEA provided a key opportunity to deliver more consistent outcomes for biodiversity protection, backed up by spatial planning enabled by the Spatial Planning Act 2023.

Currently approaches to demarcation of Significant Natural Areas (protected under s 6(c) RMA) can be

a bit hit and miss. In Pūkoro, a portion of the area is identified and mapped by one Council as an SNA, but this protection stops abruptly due to agency boundaries. Same area, same vegetation, same species but different territorial authority. This demonstrates a lack of horizontal consistency between agencies. Vertical inconsistency is also apparent. For instance, there is a controversy brewing in relation to a development in Matarangi, Coromandel, where a site has been cleared which was identified by the Waikato Regional Council as an SNA in a desktop exercise, but not included in the local District Plan. As this matter is currently before the courts, we cannot examine further, but it is certainly one to watch. Our environments would benefit from a more consistently protective approach. [SEE SIDEBAR PMNT submission to WRC Coastal Plan]

Wildlife mobility is a confounding issue for consistent protection. Threatened birds and bats range (and often widely) as part of their life cycle and levels of protection may alter depending upon their whereabouts. Attaching protection to the threatened species in addition to significant habitat is a more consistently protective mechanism. The NPSIB introduced policy protection for highly mobile species which is progressive and would support extended protection of many species currently found at Pūkoro Miranda. Of the forty-nine bird and bat species named as highly mobile in Appendix 2 of the NPSIB over half inhabit the Miranda Pūkoro area. These include Ngutu parore Wrybill, Huahou Red Knot, Kuaka Bar-tailed Godwit, Pohowera Banded Dotterel,

Tārapukā Black-billed Gull, Tara/White-fronted Tern, Moho-pererū Banded Rail and Matuku/Bittern.

The NPSIB provides stronger wildlife protection by strengthening provision for identifying, mapping, and protecting SNAs, making agency responsibility clear and providing for protection of highly mobile fauna areas outside of SNAs. These hard-won policy gains for wildlife were overdue but will now be reviewed by the government.

In any review it is likely that strong claims related to property rights, practicality and legitimacy will be raised in opposition to SNAs. These require careful consideration and examination in context. At the same time, it must be remembered that with rights come duties, of which we would argue, protection of wildlife is one. The extinction profile for biodiversity is very different in Aotearoa than in many other countries. We have unusually high numbers of threatened and at-risk species and many of these are found on private land. In the Pūkoro Miranda area threatened and at-risk species move daily between protected areas such as the Ramsar site, the Robert Finlay Reserve (QE II covenant), Department of Conservation wildlife reserve, and unprotected coastal marine areas as well as unprotected terrestrial and wetland areas on private land.

Where private land is subject to an SNA, protection of biodiversity is elevated in situations where adverse effects will be caused to biodiversity, for instance from new subdivision and development. Under the RMA any development that requires a resource consent, will be required to identify threatened and at-risk habitat and species as part of the Assessment of Effects process set out in Schedule 4, regardless of whether it is an SNA. But the importance of notation as an SNA is that the owner of the property and the relevant agencies will be put on notice as to the values at the site. This avoids issues such as clearance of sites where threatened species subsist but are cryptic or not recognised as such.

A better approach to wholesale dismantling of much needed SNA protection is to locate opportunities to support and incentivise landowners to be kaitiaki guardians of the land, water, and biodiversity, and to work



Pūkoro Coast looking south from Ray's Rest **BRUCE HAYWARD**
 We are seeking greater protection for the coastline south of Taramaire Stream (Centre) to beyond the Pūkoro Stream mouth. The area is subject to incursions from motor bikes and other vehicles, posing a substantial risk to wildlife.

in conjunction with agencies and local interest groups to produce gains for all. Across the catchment there are many fine example of resource users, iwi and community groups taking significant steps to restore and enhance the environment. Supporting and enabling extension of these efforts is to be encouraged. In the Pūkoro area

this includes the work of the Tiaki Repo ki Pūkoro Trust and the Western Firth Catchment Group.

In addition to reviewing the NPSIB, the Government will replace the National Policy Statement for Freshwater Management 2020 and the National Environmental Standards for Freshwater to better reflect the interests

of all water users. This focus on commercial water users, again looks grim for ecosystems, habitat, and species. The State of the Gulf reports issued by the Hauraki Gulf Forum chart a steady deterioration in water quality in the Firth, largely resulting from activities in the catchment.

Following on the heels of these changes the Government Coalition Agreements state the intention to replace the Resource Management Act 1991 with new resource management laws premised on the enjoyment of property rights as a guiding principle. This bald statement has been softened in subsequent press releases with reference to the low bar of 'while ensuring good environmental outcomes'.

We do not have space to unpack this here, but to say that ensuring 'good environmental outcomes' inevitably involves placing limits on the exercise of property rights. Further that the bare focus on 'rights' obscures consideration of responsibilities. To face the climate challenge and deepening biodiversity crisis, careful consideration of the shaping of these responsibilities is required to support environmental resilience and sustainability. Finally, property rights are simply one subset of a wider set of 'rights' evident in modern systems of environmental law. In Aotearoa New Zealand we have additional rights including those defined by Te Tiriti and rights afforded to nature through the concept of legal personhood.

WAIKATO REGIONAL COASTAL PLAN

Regional coastal plans are prepared by regional councils and unitary authorities for the coastal marine area of a region. Their purpose is to assist these councils in achieving the sustainable management of their coastal environment. The plans include objectives, policies and rules that govern what activities the councils will allow, control, or prohibit in the coastal environment. The plans are a tool used to manage any actual or potential effects from the use, development, or protection of the coastal marine area. Here is part of the PMNT submission lodged with council in November 2023.

This submission seeks to highlight significant issues we face in managing shorebird habitats and species decline at Pūkoro and ways in which the policy framework could influence better biodiversity outcomes. We apprehend that due to jurisdictional issues the proposed Coastal Plan cannot address all issues but nevertheless, we frame this submission in terms of our interests in the site (and the wider environs) across the terrestrial habitat, coastal margins, and the coastal marine area (CMA).

Integrated management

Effective conservation management requires an integrated

approach whereby consistent protection and management capture the territory occupied by species. Shorebirds at the site inhabit the tidal flats, where most find their food, but also adjoining terrestrial margins, much of which fall outside the CMA and thus outside the immediate jurisdiction of the council. During high tides birds are pushed from the tidal flats to terrestrial roosting sites. These sites are just as essential for shorebirds as the intertidal foraging areas. Without both, the carrying capacity of the Firth will diminish.

The thousands of birds gathered at roost sites need to be secure from unnatural disturbance. (This becomes especially critical at times when birds are storing reserves in preparation for migration.) Roosting birds can be negatively impacted by human activities in the coastal space. This also applies to those species that nest in coastal areas where they are vulnerable to negative pressures such as predation and disturbance.

Ecologically, therefore, it is essential to see shorebird habitats as contiguous with both regional and district council boundaries. This is challenging in view of the various responsibilities of multiple agencies. For example, the

Pūkoro-ro Coast is of particular interest to PMNT. The CMA is covered in the Waikato Regional Coastal Plan while integrated management of the catchment is the responsibility of the Regional Council and managed through the Regional Policy Statement and Regional Plan. It also falls within the responsibility of Hauraki District Council and Waikato District Council through their District Plans. Department of Conservation also has responsibilities, pursuant to the Wildlife Act 1953 and the Conservation Act 1987. In addition, the Hauraki Gulf Marine Park Act 2000 provides for special recognition of the area, and the Hauraki Gulf Forum is tasked with managing the gulf and its catchments. A consequence of this management patchwork is that biodiversity protection of the coast is fragmented, inconsistent and difficult to operate within. Through this submission and development of related policy we request that an integrated approach to species and habitat protection in the area be taken.

We strongly support designation of the Firth of Thames as a SIBA-A site (Appendix 7), but we believe critical habitats outside of, but contiguous with, the CMA, especially the area between Pūkoro-ro Stream and Taramaire Stream, should be recognised as a wider Significant Natural Area (SNA).

We request that holistic recognition and protection of the area be considered during the preparation of the Regional Biodiversity Strategy and that this extends to include areas outside the terrestrial environment, including the coastal marine area and water bodies to achieve an integrated approach. Particularly we note the vital importance of supporting the Firth of Thames Ramsar site so that the critical role of contiguous terrestrial habitat is protected.

We therefore strongly support recognition of cross-boundary and cross-resource integration: which recognises activities can have effects across the line of Mean High Water Springs between the CMA and the land and that activities can affect many different resources, directly and indirectly, such as seabed, water, air, ecosystems, and natural physical processes.

We strongly support managing cumulative stresses upon the area as well as cross-agency integration: which acknowledges that the management of coastal activities is shared between many parties, including tangata whenua, statutory authorities, and community organisations, and involves many different pieces of legislation and planning documents.

To provide better biodiversity outcomes in the area we request that the Regional Council takes a leading role in integrating protection and management by applying policy overlays through the Regional Policy Statement and the Waikato Biodiversity Strategy which operate across the CMA and terrestrial areas.

11ECO Ecosystems and indigenous biodiversity Te mauri o te taiao me te rerenga rauropi

We strongly support policy that protects habitat and species in the coastal marine area. We consider that avoidance of effects to significant biodiversity is vital to the continued health of habitat and species in the areas managed by PMNT and within the wider coastal environment. PMNT has been involved in extensive monitoring of the environs for decades. Our efforts reveal persistent species declines and a deterioration of environmental quality. We therefore support strong and robust approaches to protection of the area, including recognition by way of SIBA-A scheduling, avoidance of adverse effects and limitation of exceptions to these rules. We request that policies of prevention and precaution be applied where threatened species and degraded habitat are concerned.



Dotterel JAP from Karekare ANDREW GRAY

A banding conundrum

For a few days in October a pair of New Zealand Dotterels frequented an area just metres south of the Godwit Hide. They were observed nest scrapping on multiple occasions. A third bird was often also present but was sometimes chased off.

On 27 October Andrew Gray took this image of one of the birds. It was sent to Adrian Riegen who had banded the bird on the Auckland west coast. However, as Adrian wrote to Andrew, there was a complication.

‘This bird was banded on the West Auckland Beaches of Karekare 05.02.23 or Wigmore Bay, Bethells Beach 23.11.22. The reason for the two options is that two flags with JAP were made and it was only after the second one was used at Karekare that the error was spotted. My plan was to go back in a day or so to recapture the Karekare bird and change the flag. Alas, cyclone Gabrielle had other plans destroying the road and all tracks to the beach before I could get back, and once the bird had fledged the chances of capturing it again were gone.

However, the good news is that this is a bird still less than a year old that has moved to the east coast which is very interesting as one of the reasons we are marking these birds on Auckland’s west coast is to find out if they move about or stay out west. The population out there is not really growing so we assumed the young were either moving away or not surviving. So, your sighting does indeed help our research and I appreciate you sharing the information.’

Recent sightings at Pūkoro-ro

c.6,000 Bartailed Godwit	1 March Sandpiper
c.4000 red Knots	1 Glossy Ibis
11 Turnstone	C.1,800 Wrybill
42 Pacific Golden Plover	
1 Red-necked Stint	

Pūkorokoro Miranda Naturalists' Trust



The Shorebird Centre

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Pūkorokoro Shorebird Centre
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Centre Assistant: **Chelsea Ralls**
Kaitiaki Ranger: **Tansy Bliss**
Assistant Kaitiaki Ranger: **Hera Clark**

Pūkorokoro Miranda Naturalists' Trust Council

Chair: **Gillian Vaughan**
Deputy Chair and Banding Convenor:
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09 817 9262
Council members: **Wendy Hare,**
Trudy Lane, David Lawrie,
Bruce Postill, Bob Rigter, Stuart
Laurenson and Olga Brochner

Magazine

Pūkorokoro Miranda Naturalists' Trust publishes *Pūkorokoro Miranda News* four times a year, in print and digital editions, to keep members in touch and provide news of events at the Shorebird Centre, the Hauraki Gulf and the East Asian-Australasian Flyway. No material may be reproduced without permission.

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Layout and production: **Bernie Cornford**

See the birds

Situated on the Firth of Thames south of Kaiaua, the Pūkorokoro Shorebird Centre provides a base for birders right where the birds are. The best time to see the birds is two to three hours either side of high tide, especially around new and full moons. The Pūkorokoro high tide is 30 minutes before the Auckland (Waitematā) tide. Drop in to investigate, or come and stay a night or two.

Budget accommodation

The Shorebird Centre has bunkrooms for hire and two self-contained units: Bunks cost \$20 per night for members and \$35 for non-members. Self-contained units are \$90 for members and \$135 for non-members. For further information contact the Shorebird Centre.

Become a member

Membership of the Trust costs \$50 a year for individuals, \$60 for families and \$75 for those living overseas.

As well as supporting the work of the Trust, members get four issues of PMNT News a year, discounts on accommodation, invitations to events and the opportunity to join in decision making through the annual meeting.

You can join at the Centre, pay via our webpage (www.shorebirds.org.nz), by direct credit to bank account 02-0290-0056853-00 or call the Centre with your credit card details. Contact admin@shorebirds.org.nz for further information.

Bequests

Remember the Pūkorokoro Miranda Naturalists' Trust in your will and assist its vital work for migratory shorebirds. For further information contact the Shorebird Centre.

Become a Volunteer

There's always a need for volunteers to do a variety of jobs including helping in the shop, guiding school groups, meeting visitors at the hide, working in the Centre garden, joining in the restoration project at the Findlay Reserve, helping with the Shorebird Census and lots more. If you're interested chat with the team at the Centre to see what will best suit you.

PMNT's work is made possible by the generous support of our sponsors



Sean and Annie Wilson's
Miranda Farm
Shop • Cafe • Gallery



Ron & Edna
Greenwood
Environmental
Trust





Join our knowledgeable guide on a captivating journey along the unique Shorebird Coast.

We will peer into the often-overlooked ecosystem within an estuary and gaze across the geology that has created this sanctuary. Let us introduce you to the world of the manu/shorebirds that live in these areas, their incredible migrations and the challenges they face.

Whether you're a bird enthusiast, nature lover, or someone passionate about conservation, this tour promises a memorable and educational experience in the heart of one of New Zealand's coastal ecosystems.

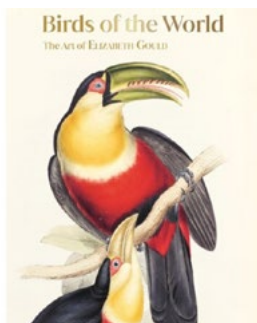
Highlights

- Use a telescope to see thousands of shorebirds in their natural habitat
- Explore an internationally significant wetland
- Learn about the incredible migration of the kuaka
- Support an organisation committed to conservation
- *'Keep the birds coming'*

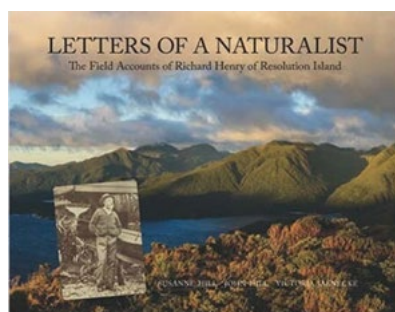
\$50 Adults | \$30 Children

Visit shorebirds.org.nz and the Visit Us page to plan a visit and make a booking.

Great Reads from the Shorebird Centre Shop



Birds of the World - the Art of Elizabeth Gould
Andrea Hart and Ann Datta \$120



Letters of a Naturalist - the Field Accounts of Richard Henry of Resolution Island
Susanne Hill, John Hill and Victoria Jaenecke \$120



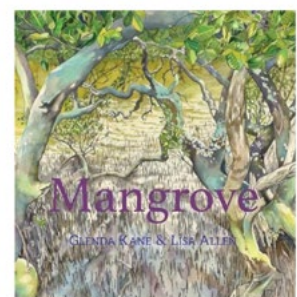
New Zealand's Wild Weather
Explained by the experts at MetService \$45



Explore the Ocean
Anne Ameri-Siemens \$55



The Beach Activity Book
Rachel Haydon \$35



Mangroves
Glenda Kane \$25

If you can't make it to the Shorebird Centre shop, visit our amazing online shop at www.shop.shorebirds.org.nz/
 Send an email to shop@shorebirds.org.nz. Ring 09 232 2781 and chat to the friendly team
We'll be happy to help