

Pūkorooro Miranda News

Journal of the Pūkorooro Miranda Naturalists' Trust

November 2020 Issue 118

Our batty neighbours

Tracking the hundreds of rare Long-tailed Bats
that live in the Hunua Ranges



**Terek
Sandpiper
too rare
to miss**

**Godwit
becomes
social
media star**

**Urgent action
needed on
blocked up
Stilt Ponds**

Action needed to restore flushing of Stilt Ponds



If you've been to the Robert Findlay Wildlife Reserve recently you'll have noticed that the water in Stilt Ponds no longer fluctuates with the tides. The ponds stay full much of the time. As a result waders like godwits and knots no longer fly regularly to the area in front of the Stilt Hides when the tides come in. Instead they mostly crowd together out on the shellbank.

The situation creates other problems. During winter the amount of runoff water pouring into the ponds has caused them to overflow across the boundary into the adjoining Dalton land. In addition the fact that the ponds no longer flush with the tides, and the presence of growing numbers of Black Swans and ducks, increases the likelihood of a botulism outbreak this summer.

The PMNT Council has been wrestling with this situation for some time and has had several reports but there is no simple solution. The basic problem is that the sedimentation that is occurring all round the Firth of Thames, as a result of material washed down the rivers, has blocked up the drains.

The old ditch which once allowed water to flow from the ponds to the culvert under the access road to the car park, is blocked up. And the drain which used to take water from the culvert across the mudflats to the Miranda Stream, is now full of silt and mangroves. Water in the ponds does disperse in hot, dry periods with small tides but only very slowly. All this has been developing for years and has now reached crisis point.

Fixing the physical issues is not the problem. We have had a quote from a local digger operator who can dig out the two drains in a few days for around \$4,000.

The difficulty is that any such work will require approvals from Waikato Regional Council which seen likely to be time-consuming and costly to obtain. PMNT recently held talks with Council staff to see if anything could be done to simplify the process. In response the WRC acknowledged that 'the purpose of this project is for environmental enhancement/restoration of the wetland' but added that 'as the site has significant value, we must ensure that we address all potential adverse effects that may arise from any activity'.

As a result PMNT will be required to obtain a consent for the existing culvert, two consents for the excavation work and two consents for the mangrove removal. In addition the WRC has asked for 'an ecological report setting out the ecological values of the site and the potential effects of the works' and a hydrogeological report 'setting out how the proposed works will effect the hydrology of the wetland'. The Trust is also required to employ a suitably qualified planner to prepare the application 'as there are a number of complex planning matters including the overlapping of plans, QE2 site, Ramsar and Waikato Regional Coastal Plan Area of Significant Conservation Value'.

The cost of that, plus the fees charged by the WRC to consider such applications, is likely to be well into five figures. However, the Trust Council, at its latest meeting, decided the work has to be done as a matter of urgency because the lack of drainage from the ponds is already causing serious problems on several fronts. The lack of roosting space for the thousands of waders which migrate to Pūkoro Miranda each summer could well lead to the birds going somewhere else. The loss of the viewing opportunity from the Stilt Hide is making the reserve a less interesting place for

COVER: This tiny Long-tailed Bat, smaller than a human hand but still a ferocious hunter, was photographed by Colin O'Donnell of the Department of Conservation.

visitors. The water spreading out across the boundary is making our neighbours unhappy. The risk of a botulism outbreak which could kill birds is deeply worrying.

Manager's Roost almost there

Nearly \$40,000 in donations over the past few months has carried the total in the Manager's Roost Appeal to just over \$160,000 which is enough to buy the smallest transportable 3-bedroom cottage produced by Keith Hay Homes.

'We are almost there,' said appeal organizer Ann Buckmaster. 'We need a bit more to pay for longer piles, build a deck and demolish the old cottage. Plus it would be really great if we could get enough to buy a slightly bigger model which would provide a much more comfortable family home.'

Considering the circumstances, she added, the fundraising effort had gone extremely well. 'When we started this appeal donations flowed in and by March we were well on the way. Then Covid-19 appeared on the horizon and everything dried up. But now we've got momentum back, new contributions have come in and we are in sight of our target.'

The fundraising has now reached the point where David Lawrie is working on a planning consent and liaising with a drainage contractor.

Ann appealed to members, when they renew their subscriptions, to consider adding a donation for the Roost Fund. 'However large or small, it will make a difference.' She also pointed out that all donations over \$5 are tax deductible. 'Please mark your donation "Roost" and we will send a receipt.'

Growing members

PMNT's membership has just had a welcome boost. On a recent fine sunny day a longstanding member brought a large group of friends to the Centre to share a lunch and enjoy learning about the birds. As well as socializing and eating there was a little shopping and an up to the moment report from manager Keith Woodley on the Bar-tailed Godwit travel saga. So enchanted were the visitors that no less than 12 joined up as members.

Membership coordinator Wendy Hare says that all the TV, radio and social media news about the godwits has clearly raised public awareness of the Centre and its work and is leading to more people visiting and joining up. 'We need to make the most of the opportunity to keep our membership growing.'



THIS SUMMER there's a new smiling face at the Shorebird Centre. While assistant manager Chelsea is taking a break from (paid) work to spend time with baby Riley, Anne Gummer (above, left) will be filling in. Anne is a new resident to the area, having made the move from Auckland to the Kauaeranga Valley in Thames with her partner and daughter at the beginning of 2020.

Lockdown followed soon after their arrival and provided a welcome chance to dream of transforming their 2ha property from a mynah and magpie hang out to a mini-sanctuary for Tūi, Kererū and Korimako. 'As a first step, we got stuck in clearing Himalayan honeysuckle, gorse, blackberry and Taiwanese cherry trees from the land,' says Anne, 'and I soon realised the adage that conservation in New Zealand is all about killing things, very much applies to plants as well as animals.'

Lockdown also resulted in a dramatic decrease in the number of cars on the local road and, as a former member and employee of Cycle Action Auckland and the Cycling Advocates Network, Anne was thrilled to see the route change so immediately and easily into a walk and cycleway.

Anne previously worked for a number of not-for-profit organisations, most recently the Sustainable Business Network, where she had a fundraising and communications role on the Million Metres Streams Project. The project is all about helping to restore our waterways and wetlands to healthy ecosystems through riparian planting of native plants. 'In that role I was constantly inspired by the passion of volunteers dedicated to looking after the natural environment. I'm thrilled to find that same level of enthusiasm and energy here at the Shorebird Centre.'

Anne's previous job also gave her a good understanding of the importance of wetlands. 'I'm stoked to now be part of efforts to look after the wetland here at Pūkoro Mirānda and to have the opportunity to spend lots of time outside enjoying this stunning landscape and learning about its very cool inhabitants.'

Anne will be with us until March, splitting her days between welcoming visitors to the Centre and out at the hides in the Shorebird Guide role.

Current membership is now 697 thanks to 50 new members having joined in the past three months. We are delighted to welcome: Dee Armstrong, Ron Avery, Sharleen & Bryan Beecher, Dorothy Campbell, Judy Chrystall, Jennie Collins, Jim & Jill Downey, Jan Fernando, Liz Greville, Frederika Harmsen, Paul Heliwell, Pat Henley, Martha Lundmark, John & Sue Maasland, Helen Marieskind, Mary Maxwell, Suzi Phillips, Rose Purchas, Elaine Roberts, Lib Roe, Deborah Shep-

ard, James and Barbara Smith, Yvonne Van Dongen, Maree Wakefield, Diana Wallingford, Pam Watson, Fran Williams, and Barry Wilson.

Wendy was particularly pleased to hear that some of the newcomers had been gifted membership. 'What a fine example to follow if you are looking for that different and extraordinary gift for Christmas!' Anyone with membership promotion ideas can send them to her at admin@shorebirds.org.nz.



FLUSH: A new toilet now stands on a mound alongside the the Limeworks Car Park for use by birders and cyclists.
Photos / Ray Buckmaster

Cycle trail toilet

The Kopu-Kaiaua leg of the Hauraki Cycle Trail still isn't quite finished but the new toilet at the Findlay Reserve is in action and the trail is already attracting not just cyclists by also four-wheel drives, quad bikes, runners, dog walkers and horses.

Manager Keith Woodley says not all the cyclists visit the Centre but a lot do. 'They won't entirely make up for the 40% of visitors we usually get from overseas but they're certainly a big help.'

One-man facelift

Lots of visitors to the Centre probably noticed that the wooden decks and railings had developed a weathered look. Trust member Spencer Drinkwater not only noticed but decided to do something about it. Over the last year he has spent many hours preparing surfaces and painting and them as well providing all the necessary materials. The result has transformed the place, so we owe an immense debt of gratitude to Spencer.

Findlay Reserve restoration

The project to rehabilitate the Findlay Reserve continues to make great progress with most of the 11,000 plants put in the ground by volunteers showing considerable growth.

However, project coordinator Ray Buckmaster warns that the coming summer will be the testing time for how well the plants survive. 'We should expect some losses through summer depending on rainfall. Most species have been planted in a particular contour belt. A dry summer could see losses at the extremes

of these species zones.'

The planting programme was designed after careful research but, as Ray says, 'At the end of the summer we will have an even better idea of the requirements of the different restoration species.'

As well as the planting the project has also involved building bird respect fences around two of the hides with funding from the DOC Community Fund which also paid for most of the plants. These replace the temporary low cordons that have been used in recent years. Visitors that stray into bird sensitive areas can spook the birds which is bad for them and annoying for visitors who do the right thing.



The fencing work was led by Joe de Jong (below) who ordered and delivered the materials, spent two days with Ray putting in the posts and has since strung the wire. Without his time and expertise it wouldn't have happened. The fencing will eventually be camouflaged with restoration plantings some of which are already in place.

Progress toward next year's planting is already underway. Areas of planting have been cordoned off and sprayed with herbicide and there will be follow up sprays as necessary. The hope is that the major weed, *Carex divisa*, not just to die but to rot which will allow for easier planting.

PMNT has ordered restoration plants from two nurseries using the DOC funding. In addition some 4,000 plants are being raised in the Trust's own nursery and we should be able to exceed our 1 hectare planting target again.

The current plan, Stage One, is to continue planting southward toward the carpark and this could take 4-5 years to complete. Stage two will involve planting the paddock north of the head of the Stilt Pond and could take 2-3 years. Stage three would be restoration of the grazing block.

New Ramsar Site

New Zealand has designated Wairarapa Moana Wetland as its newest Ramsar Site. Wairarapa Moana, meaning 'sea of glistening water', is the largest wetland complex on the southern part of the North Island. It contains the the freshwater Lake Wairarapa, plus diverse wetland environments including freshwater swamps and marshes, an estuarine lake, coastal marshes, river and streams, and extensive coastal shore habitats. More than 50 rare and threatened species are found at the site, such as the endangered Black-fronted Tern, endangered New Zealand Longfin Eel and the vulnerable Torrent Fish.

Missing wings

The discovery that PMNT had been robbed of its wings – a serious blow to a shorebird organization – didn't stop the annual spring working bee proving a great success.

It had been planned that the major project on the day would involve a band of intrepid members going into the mangroves alongside the Miranda Stream and recovering the plywood wings to the Kuaka Hide which were swept away by the storm surge two years ago.

A visit by Adrian Riegen and a check on Google Earth indicated that a couple of weeks beforehand the wings were still

in the mangroves. But when the team arrived to extract them there was nothing to be found.

Investigations revealed marks in the mud suggesting that the plywood sheets were probably removed just a few days before the working bee. Presumably the plywood is now being put to good use on a property somewhere in the area.

Still, the team did manage to dig out and replace one sheet of plywood which had been left half-buried in shells and stones alongside the hide. So there is at least a small winglet to screen observers alongside the hide and, hopefully, restrict visitors from walking along the beach.

Lots of other jobs got done including a huge effort to clean the Centre windows, weeding around the Centre, removing pampas on the shell bank, clearing surplus items from the shed, work in the nursery raising plants for the Findlay Reserve restoration and spot spraying at the reserve.

The team that turned up included: Holly and Will Perry, Majorie and Ted Owens, Louise Sinclair, John and Stella Rowe, Jim and Chris Eagles, Sue Frostick, Ann and Ray Buckmaster, Jeannette Sutherland, Deborah Shepard, Gillian Vaughan, Ian Southey, Bruce Postill,



WEATHER-BEATEN

The much-loved wooden godwit sculpture which for the past few years has stood outside the Centre and marked the start of the walkway to the hides has been spending time with sculptor Warren Viscoe (at left) and his son Clovis getting some first aid. It turns out the wood the sculpture is made of isn't intended for outdoor use so there had been a lot of damage over the years. It has now been returned in good shape but with the warning to protect it better.

Photo / Natasha Viscoe

Adrian Riegen, Lyall Millar, Tony Green, Wendy Hare, Anne Gummer and Chris Patterson.

Gateway to the Coromandel

The Shorebird Centre has been acknowl-

edged by Destination Coromandel, the Hauraki Cycle Trail Trust and Hauraki District Council as a significant gateway attraction for visitors to the area and they want it to become even more attractive.

After seeing the dramatic plans for



WORKING BEE: (clockwise from top left) The one remaining wing is restored to its position on the Godwit Hide; straightening up the sagging signpost over the road from the Shorebird Centre; raising plants in the Trust's nursery at Miranda Farm

Photos / Jim Eagles

the Centre developed by students from the Auckland University's School of Architecture (shown in *PM News 117*), Destination Coromandel has organised funding from the Government's Strategic Tourism Assets Protection Programme to pay for a building feasibility study to redevelop the existing Centre.

Manager Keith Woodley told the November Trust Council meeting that the approach was timely because 'the recent growth in visitor numbers and the arrival of the Kaiaua to Kopu section of the Hauraki Rail Trail, indicate we need to expand and refurbish the Shorebird Centre. We need to upgrade essential facilities, including wastewater systems. We envisage more effective interpretation display spaces.'

Keith said the vision was to create 'a showpiece attraction for the Shorebird Coast', where visitors would experience the spectacular shorebird flocks but also gain an understanding of the ways in which those birds link Pūkoro and the Hauraki Gulf with the rest of New Zealand and the East Asian Australasian Flyway, and that the system depends on an interlinked network of intertidal habitats, both here and overseas, which provide the resources to sustain those migrations.

The proposed feasibility study could cost around \$25,000 and it is a condition of the funding that PMNT would need to contribute 10% of that. So for a relatively small amount the Trust should end up with both a plan for future development and a potential pathway for raising the necessary money to make it a reality.

Council members agreed to continue discussions with Destination Coromandel and, in the meantime, to revisit an earlier list of what we'd like to see in a new Centre to see if it should be updated.

Remembering Judy Piesse

Family and friends of the Trust's first secretary, the late Judy Piesse, have raised \$1750 as a contribution to the Centre in her memory. The money has been used to buy a projection microscope which can display the object being examined on a screen and so will be ideal for courses and educational visits.

Saving the knots

Last season's drought-related outbreak of algal poisoning in the Upper Firth of Thames, which affected Red Knots in particular, appears to have sparked serious interest in finding answers.

PMNT has been involved in a meeting with Waikato Regional Council, Hauraki District Council, Fish & Game, the



SAD SIGHT: A juvenile Black-billed Gull inspects the remains of another young gull killed by Norway Rats on their breeding grounds on the Ashley-Rakahuri River.
Photo / Grant Davey

Study finds rats and hawks are the main predators for breeding black-bills

Norway Rats, Harriers and power lines have been identified as the main threats in a three-month study carried out by the Ashley-Rakahuri Rivercare Group into causes of death associated with a large colony of Black-billed Gulls and Black-fronted Terns on the river.

At its peak the colony had over 100 terns and 4,000 gulls making it the largest gull colony seen since the rivercare group was formed in 1999.

Group member Grant Davey said the study located the remains of numerous dead birds – mainly just feathers and a few bones – from which it was clear that 'at least 106 gull chick kills could be attributed to Norway Rats. Despite a network of surrounding traps, Norway Rats are also thought to have taken the eggs from more than half the tern nests, and probably eaten a number of small chicks.'

In addition, the study found that just under 100 young birds were taken by Harriers. Stoats only accounted for

a few losses. Feral cats and Hedgehogs were not a problem, as the birds were on an island with good surrounding flows of water.

Another source of bird deaths were adjacent powerlines which crossed the river not far above the colony. 'Twenty gulls were found dead under the wires,' Grant said, 'and one can only guess at how many others were injured or taken away by predators.'

Also found dead under powerlines were two Royal Spoonbills, which, he said, 'are not often seen up the river so it was a great pity to see them succumb in this way'. No terns were located, probably because they fly lower and slower, but two dead Pied Stilts were found under the lines and it is suspected that Wrybills are similarly killed.

The Rivercare Group intends to increase its predator control around colonies during the next breeding season and to inspect under powerlines on a more regular basis.

Department of Conservation and local iwi, called to discuss the impact of the prolonged drought last summer and how to deal with future events.

At the time of the outbreak a joint investigation was just starting but had to be shelved because of the Covid-19 shutdown. The Trust's priority is to carry out the planned survey of knot foraging areas, especially those along the Piako coast, before it happens again.

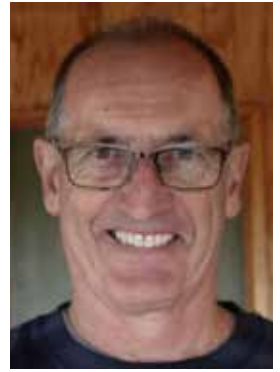
After the meeting Keith reported that what happened last summer 'has woken a lot of people up. A lot of energy is now being put into this.'

What's that bird?

Interest in learning how to identify our waders is booming. PMNT's annual Wader ID course, in November, has been fully booked and a second course, scheduled for December, is also full.

From the Chair

Resolving land use issues with our neighbours



The creation of the new Tiaki Repo ki Pūkorokoro Reserve, across the road from the Robert Findlay Wildlife Reserve, has placed a focus on the differing aspirations of the land owners, in the area, **writes William Perry.**

'Neighbours, everybody needs good neighbours.' Apologies to Tony Hatch and Jackie Trench for pinching their words but they do apply to my thoughts for this issue of *PM News*.

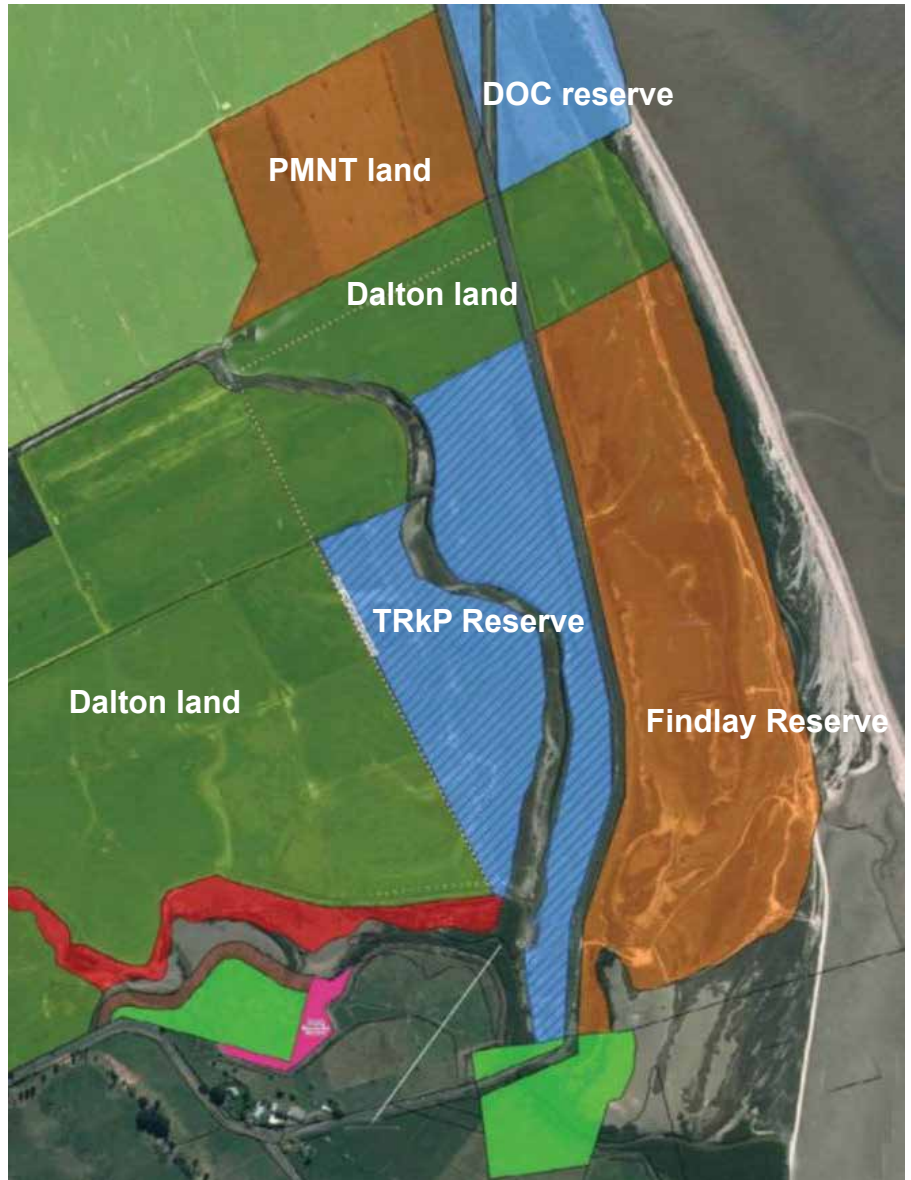
When Gillian Vaughan vacated the chair of Pūkorokoro Miranda Naturalists' Trust (PMNT) she handed to her successor the role of representing the Naturalists' Trust on another emerging Trust, which has now adopted the name TRkP. This acronym stands for Tiaki Repo ki Pūkorokoro, which roughly translates to Guardianship of the Wetland at Pūkorokoro.

Tiaki Repo ki Pūkorokoro Trust was established on the initiative of Living Water, which is a collaboration between the Department of Conservation (DOC) and the dairy company, Fonterra. Living Water's stated focus is to find 'game-changing and scalable solutions that will enable farming, fresh water and healthy ecosystems to thrive side-by-side.'

To achieve these aims, Living Water works with 'farmers, scientists, councils, mana whenua and communities to design and test solutions, and then develop a plan to implement regionally and nationally.'

TRkP is one of five projects funded by Living Water; the other four are in Northland, Waikato, Canterbury and Southland. As Living Water's contribution to our neighbourhood, the Crown has purchased a 19.6-hectare block of land which is now being administered and will be developed as a wetland reserve by TRkP. This block is across the road from the Robert Findlay Wildlife Area, on the western side of East Coast Road, and it has also been gazetted as a reserve.

As current Chairperson, I represent PMNT on TRkP and this gives me the opportunity to meet some of our neighbours, including dairy farmers, sheep and beef farmers, representatives from Ngāti Paoa and Ecoquest, and a Commu-



NEIGHBOURHOOD: The map shows the area of the Tiaki Repo ki Pūkorokoro Reserve and some of the neighbours involved in land use discussions.

nity Representative. This last one is our own Trudy Lane, also on PMNT Council and wearing a slightly different hat. We collectively share trusteeship of TRkP: farmers, conservationists, birders, mana whenua, community.

Shorebird Centre Manager, Keith Woodley also attends meetings of TRkP, which are usually held in the Wrybill Room at the Shorebird Centre on the

third Wednesday of each month.

Inevitably there are aspects of establishing wetland reserves in which the aspirations of conservationists/birders conflict with those of farmers/other landowners. TRkP is no exception and we have been having some interesting and passionate discussions around the table at our monthly meetings.

However, thanks to Living Water's

representatives (Tim Brandenburg, Dion Patterson and Rose Graham) and the various signatories, we have a document called a Mana Enhancing Agreement. The philosophy of this document is that we treat one another with respect even when we disagree, and it seems to be working well. Even so, some of the detail around management of the new reserve has led to some disagreement within TRkP. As a result, Living Water procured a facilitator in the form of the Kerry Topp Collective.

A special meeting took place in the Wrybill Room on 29 September, facilitated by the Kerry Topp Collective, for discussion of issues around drainage, flood protection and allocation of parcels of land above and below the high-water mark.

The farmers want to be able to drain their land to allow for the growth of crops or grass for pasture and to protect that land from flooding and tidal surges.

The shorebird conservationists want to allow controlled flooding of some pieces of land and, especially, to create high-tide roosting sites for the shorebirds, particularly now that many traditional roosting sites have disappeared under a forest of mangroves (which, in turn, have grown out of control as a consequence of too much nourishment flowing into the Firth of Thames).

This dichotomy is the essence of Living Water philosophy and we are currently grappling with it. We all want to get it sorted. The farmers want to secure the future of their businesses; we want to ensure that the birds keep coming to our tidal mudflats and that they have safe high-tide roosts.

For me, the meeting on 29 September served to confirm the detail of the conflicting aspirations. Even though we did not reach an agreed conclusion, we all understand the issues better after that day's meeting.

There will be more discussion of these issues on both sides and there will be further meetings between the parties concerned.

I hope to be able to report a positive outcome in the next issue of *PM News*. Either way, we continue to regard our neighbours with respect and we hope that one day we can find the perfect blend. *'That's when neighbours become good friends.'*

Kia atawhai, kia manawanui.
William Perry



Pūkorokoro Miranda Naturalists' Trust Calendar of Events for 2021

10-16 January
Miranda Field Course

Sunday 7 March

Migration Day. 14:30 High tide

11:00 Speaker: Dr Oksana Borowik completed her PhD on Calidridine sandpipers. From there her career took off as a science educator through documentary filmmaking primarily for the Discovery Channel and teaching. She is also a commercial beekeeper on the Coromandel Peninsula specializing in manuka honey. Join Oksana as she highlights the conservation and science of Birds and Bees.

Sunday 16 May

10:00 High tide

11am Annual General Meeting of Pūkorokoro Miranda Naturalists' Trust. Speaker: Lynn Miller from Bird Rescue, Green Bay, who recently returned to New Zealand after several years in the US and Canada. She has formidable qualifications and experience as a bird vet and is proving a huge asset to local bird rescue work.

4-7 June

Birds NZ Conference in Thames

Sunday 20 June

Firth of Thames June Wader census. 15:03 High tide

Contact Tony Habraken at 09 2385284 or aahabraken@gmail.com

Saturday 14 August

9:00 Working Bee

11:15 High tide

18:00 Mid-Winter Pot Luck Dinner followed by Team Quiz

31 August - 2 September

Dotterel Management Course

Sunday 10 October

Migration Day. 11:00 High tide

12:00 Speaker TBA

Sunday 7 November

November wader Census. 09:58 High tide.

Keep this page, or photocopy it, if you want a permanent calendar of events. Other events will be announced through the year. Check *PM News*, our eNewsletter, Facebook and the Shorebird Centre Website.



PHOTO BOMBER: This Kotuku or White Heron has popped up in countless photos this season. Photos / Jim Eagles

Photogenic Kotuku upstages godwit record-breaker

On the Alaskan tundra this year one suspects some birds were not just concerned with breeding: Bar-tailed Godwits have clearly been liaising with Pacific Golden Plovers on ways to thwart humans and their projects.

Thus, the four godwits in our international tracking programme that arrived on the Firth over four separate days, always contrived to do so after dark. The fifth that was expected to arrive late afternoon, decided to make a stopover on the Kaipara instead.

The opportunity to witness individual known birds either arriving, or at least seeing them immediately after arrival, to assess their condition was tantalizing. Tony Habraken in particular, spent many hours on the shell bank in pursuit of that goal. But it was not to be. Nevertheless, he did gather much useful information along with many photographs of birds, in some cases within 12 hours of arrival.

Meanwhile the project itself was going – if one can still use the expression – viral. The arrival of 4BBRW on 27 September, having flown just over 12,000 km nonstop to get here, made headlines around the world. The BBC and UK press covered it, as did Al Jazeera and many outlets in Europe, the US and Canada.

Many stories had key facts wrong – such as having the bird flying 11 days rather than 9.3 days, which is a significant discrepancy if your story concerns a potential world record.

Then in mid-October there arrived an opportunity to correct the record. We received a request from the *Guinness Book of Records* to furnish more details. This I forwarded with considerable satisfaction to Jesse Conklin and Phil Battley for fur-

ther action.

As the godwits arrived through September and October, along with a trickle of PGPs, they were often upstaged by a local. A Kotuku was a frequent presence on the Findlay Reserve posing, in close proximity, to our many visitors. If not beside the track into the carpark, it would be just off the trail to the Godwit Hide or on its roof. Several times it was on the edge of Widgery Lake. Wherever it was, it was busy exhausting camera batteries.

The Royal Spoonbill population continues to increase. The record last year was 85 birds: this year I viewed footage from a visiting Thai photographer which showed 100 birds on or around the shell bank. For many visitors to the hide these improbable creatures are second only to godwits as objects of fascination.

The two Far Eastern Curlews that were often hanging around the shell bank would probably attract similar interest – if they could be persuaded to come closer, which, given their extreme wariness, remains most unlikely.

The local Pukekos are now embedded in the landscape around the Centre. The sight of a blue and black object clambering over the thick foliage around Widgery Lake, with a flick of white tail or flash of red bill, has become commonplace. Of particular interest to some visitors in late October were the first appearance of two chicks.

Meanwhile, the two White-faced Herons that lurked around the building during lockdown, remain in the neighbourhood. It is not unusual, if the building is unoccupied, to see one or both roosting on the railing of the front deck.

Keith Woodley

Recent sightings at Pūkorokoro

Arctic Migrants

4500 Bar-tailed Godwit
800 Red Knot
6 Turnstone
30 Pacific Golden Plover
1 Hudsonian Godwit
1 Lesser Sand Plover
2 Far Eastern Curlew

NZ Species

c500 SI Pied Oystercatcher
75 Wrybill
Pied Stilt
Hybrid Black Stilt
57 Caspian Tern
100 Royal Spoonbill
300 White-fronted Tern
12 Banded Dotterel
Variable Oystercatcher
NZ Dotterel
Australasian Shoveler
1 Banded Rail
1 Bittern

Kuaka battle adverse winds to break records

The amazing Bar-tailed Godwits tagged as part of the New Zealand-based international tracking programme gave us all plenty of excitement, provided valuable knowledge and cracked a couple of endurance records along the way, writes **Adrian Riegen**.

Back in May, in *PM News 116*, we watched the satellite-tagged godwits as they made their way north to Asia and then by a variety of routes to Alaska. After which, we settled back and imagined the male godwits strutting their stuff as they did their best to attract a mate to their favourite patch of tundra and hoped they would all breed successfully.

Without being there we could not of course be sure if they did breed. But we do know that they usually time their departure from the breeding grounds and move to the Kuskokwim Shoals to prepare for the flight back to New Zealand sooner if the nest fails than if the chicks fledge. Unfortunately this year too many were gathering on the Shoals without having had time to breed successfully this year.

We left the story in *PM News 117* with the tagged birds gathering on the Shoals where they would prepare for their Trans-Pacific flights.

By the last week of August departure south was imminent and 10 of our 20 tags were still operating, so with fingers crossed we watched and waited. The first to depart was 4BBWY on 27 August but he was soon caught up in strong adverse winds, which drove him back to the northwest, across the Aleutian Islands and toward Siberia (see map).

Before reaching Siberia he managed to turn south again but continuing unfavourable winds were pushing him constantly westwards and eventually after just over 8 days and at least 10,300km he landed on Dyual Island, a small forested island off the coast of New Ireland in Papua New Guinea. There he stayed in what looked like an unsuitable clearing in the forest. We expected him to move on to a more suitable site fairly quickly but he appeared to stay put, or was the transmitter playing tricks on us. Then to our relief on 11 October he started moving again, so transmitter and bird were alive and working. But after around 1,050km he stopped on the PNG island of Sudest. He stayed there until 16 October when he flew a further 1,100km to Hitchinbrook Island between Cairns and Townsville in Queensland, where as I write, he still is.

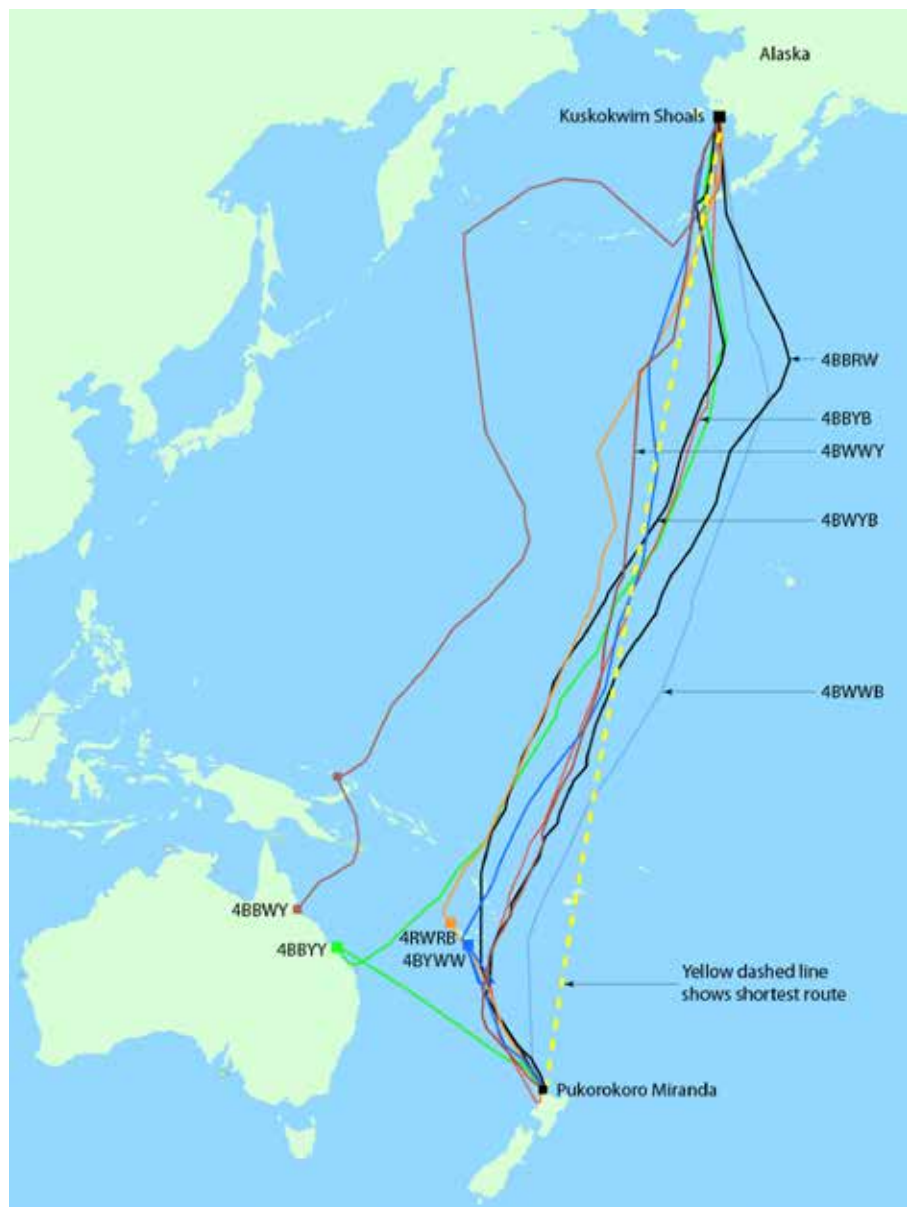
Four birds departed Alaska on 18 September, 4BYWB, 4BBRW, 4BBYB and 4BBYY. They left over a five hour period

in presumably four different flocks and headed south but around the Aleutian Islands they also hit adverse winds. It looked like one or two may have regretted their decision and looked to turn back to the north, but in the end all four fought through the head winds and eventually set out southward, leaving any chance of landing behind them as they entered the vast empty expanse of the North Pacific. The strong easterly winds, which have prevailed this season, pushed them westwards from the direct route to New Zealand. Over the next few days their paths spread out so much so, that at times they were 500km or more apart. They looked to be heading for Vanuatu and New Caledonia but as they approached

those islands, three of them turned south and headed for Cape Reinga.

4BBRW flew off the east coast of Northland and down the Firth of Thames to Pūkoro Mirānda arriving around 21:30 on 27 September having flown at least 12,050 km in about 9 days 7 hours and in the process eclipsed the famous E7's (RIP) record for the longest confirmed non-stop flight of 11,680km by any land bird. 4BBRW will not be as easy to remember as E7 but he deserves the record because his flight lasted at least a day longer than E7's. The great circle route (shortest distance) between the Shoals and Pūkoro Mirānda is just over 10,900 km, shown as a dashed yellow line on the map.

Rather than celebrate a distance record



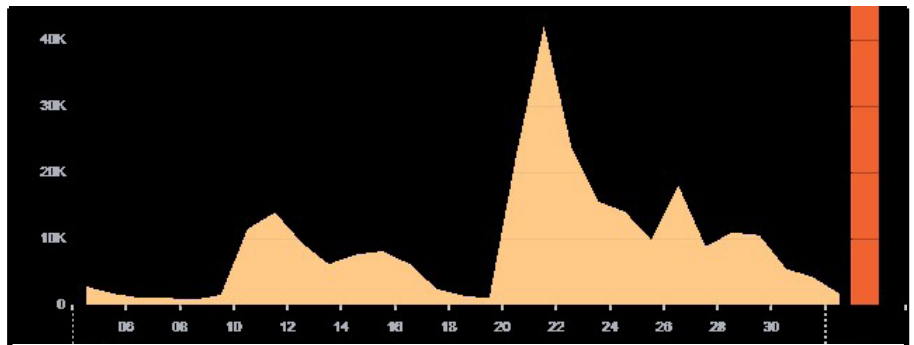
holder, perhaps we should celebrate the time endurance record. After all a bird with a good tailwind could complete the flight using less energy and fewer wing beats. If we did the endurance record should go to 4BWYB. Although he sent erratic signals as he flew down over Northland, he probably arrived back at Pūkoro Mirando on 28 September at around 22:00, which would make his flight at least 11,800 km and 10 days 12 hours and therefore the endurance record holder.

Meanwhile, 4BBYY split from the others north of New Caledonia and continued towards Australia, with a possible stop in Moreton Bay near Brisbane on the cards, where wader watchers were ready to track him down. But 4BBYY had other ideas and swung north to land on a remote but good looking part of the Queensland coast, near Nowhere . . . a common enough place in Australia. He stayed there until 29 October and then flew the last 3,000km straight back to Pūkoro Mirando, arriving at around 20:30 on 31 October, possibly calling to Tony Habraken as he flew overhead while Tony was heading home after spending hours searching for newly arrived birds.

Sometimes a transmitter will fall off the bird and just be lying on the ground and if the solar panel is facing skyward then it will keep sending signals but because of the various signal qualities it may appear to be moving around. Such was the case of 4BBRB that reached Okinawa on 1 April and continued to transmit until 28 August. Had the bird died or just given up and decided Okinawa was as good a place as any to spend the summer? Or was the transmitter lying on a beach sunny side up? Quite possibly the latter, as the last transmission came when Typhoon Hagibis hit the islands and presumably buried the transmitter. As yet 4BBRB has not been seen back in New Zealand but we hope she is still alive.

4BBYB flew further west, heading down the Tasman Sea before turning east towards Taranaki. Then, perhaps knowing he had overshot, he headed northeast across Kawhia Harbour, where he may have stopped briefly, and on to Pūkoro Mirando, arriving back in the early hours of 27 September, also just over 9 days and 11,600 km. That 4BBYB made the turn near Taranaki to arrive back at Pūkoro Mirando from the southwest, not a usual direction to come from, surely confirms godwits know where their New Zealand 'home' is.

Keeping tabs on all the activity has



REACH: Facebook graph of our posts.

Social media stars

When the Bar-tailed Godwit 4BBWR (shown top right) arrived at Pūkoro on 27 September – setting a new world record for a non-stop flight by a land bird of at least 12,050km in 9.3 days – 111,628 people from around the world tuned into the Shorebird Centre Facebook page.

That was our largest-ever audience (shown in the huge spike in the graph above) and 14,221 of the viewers were what Facebook calls 'engaged', meaning they either 'liked' it or made a comment. It was the high point of a terrific social media success for godwits and the Centre as a result of the New Zealand-based international project to track godwits using solar-powered satellite tags.

From 11 September to 1 October – and from time to time afterwards – Adrian Riegen (bottom right) wrote illustrated daily posts on the southward leg of the godwits' journey. As well as explaining what was happening he produced tracking maps for individual birds, including one showing 4BBRW's entire journey, and where possible provided photos.

Ann Buckmaster, who runs our Facebook page, said the interest was 'quite astonishing. We got a huge following from around the world with great enthusiasm for the birds and their incredible journey. Thanks to that our page has jumped in popularity and now has 6,173 page likes and 6,569 followers.' In addition, Ann said, 'Adrian has become something of a social media star with lots of great comments each day. Thanks to him many more people now know the story of the godwit migration and have a new respect for the birds. Also more folk know about PMNT too.'

David Lawrie continued the message on his Twitter feed and saw the number of followers increase by 200 in a single week to 1,136. In addition there were stories on Radio NZ, TV1 and media around the world. The publicity about godwits and the Centre resulted in a big increase in numbers of visitors to Pūkoro and our annual Migration Day event which was packed out.


It also produced some very encouraging comments on Facebook, such as:

- Thank you so much for sharing their stories. It's been a highlight of my day, every day. These beautiful creatures are incredible. PM is top of my places to visit.
- Thanks for the daily updates. Has been inspiring and uplifting.
- It is such a joy to be able to follow the journey of these astonishing birds.
- Your excitement comes through in the words of the story and I'm feeling it too.
- Thank you Adrian for the updates. Amazing. We took our mokopuna to PM the day after the arrival of the first Kuaka, spotted a White Heron and had a great time.



been challenging but it is enthralling to watch as these birds tackle in their own different ways the crossing of the Pacific from Alaska to New Zealand. What remarkable birds they are and with such extraordinary navigational skills. All birds we were tracking (except 4BBWY) have made it back to Pūkoro Mirando and

it seems that they know where they are and where they need to be at any time.

These stories must spur us on to ensure the godwits have a safe clear healthy environment to live in while in New Zealand and at their staging sites. Pūkoro Mirando Naturalists' Trust will endeavour to see that is the case. 

Five more tags to try to track the elusive Kuriri

Kuriri have arrived in good numbers on the Firth of Thames and now tag manufacturer Lotek has supplied us five more tags to try to track their migration route, writes **Jim Eagles**.

When I rang Adrian Riegen to report on the outcome of my Skype discussion with the avian director of Lotek, who produced the satellite tags for our Kuriri project, I told him: ‘There’s good news and bad news. Which do you want first?’

Adrian didn’t have to think: ‘Give me the good news.’ ‘Well,’ I said, ‘the good news is the bad news. They’re going to supply us with five new tags to use this summer.’

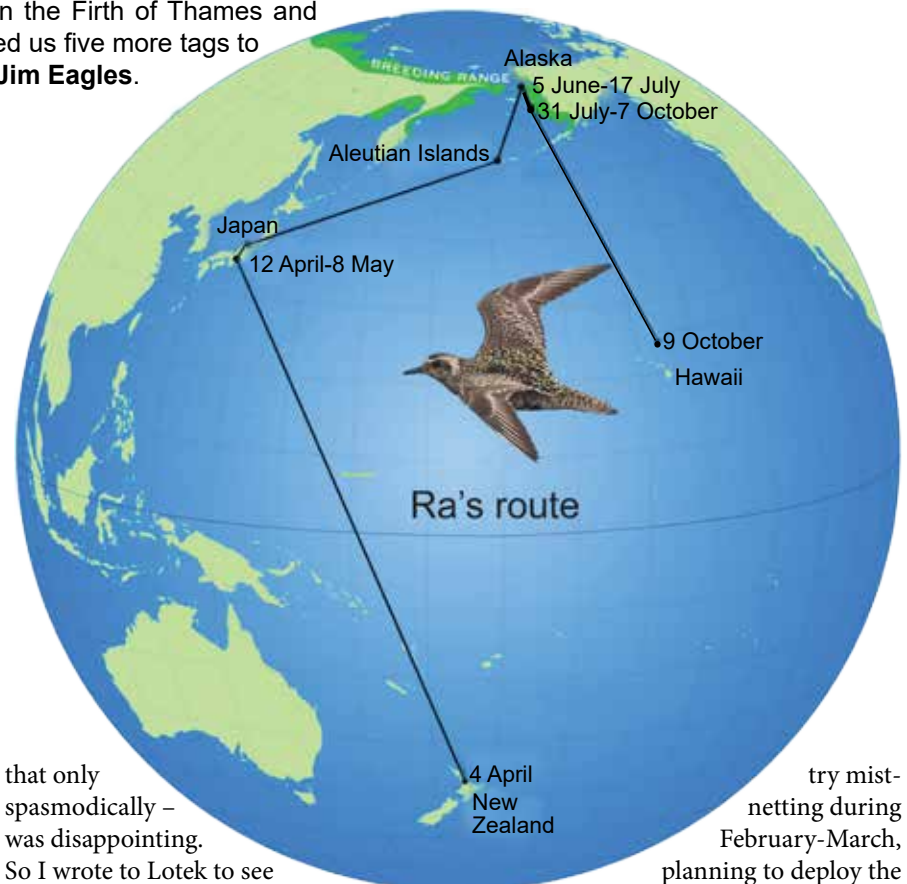
There was a pause while Adrian thought about the frustrations we had faced trying to catch 10 of these clever, wary, unpredictable, beautiful birds over the past two summers, and how we were all looking forward to only dealing with normal, reliable birds like godwits and knots this summer. Then his usual enthusiasm kicked in and he started thinking about how to catch them.

I felt the same and so, it seemed, did the other members of our Kuriri Katchers because they all put their hands up to try again. But you could hardly have blamed anyone for not wanting to bother with those annoying birds ever again.

The first season, remember, we spent endless long days in the field but were only able to catch and fit tags to three of them. JoJo and Amanda flew straight to Japan and then on to Alaska while my wayward namesake, Wee Jimmy, travelled via Guam, Okinawa, China and Siberia to join them. Unfortunately Amanda and Jimmy’s tags stopped broadcasting just as they were about to return south. But JoJo’s allowed us to follow her to Kiribati and Tonga – where her battery finally ran out of juice – and then there was much celebration when JoJo Doyle spotted her on our Stilt Ponds on 15 March.

The second season we caught six Kuriri, despite more mishaps, and watched happily while their tags broadcast from around the Firth. But after the birds departed on migration in early April we heard nothing from five of them. The sixth, Ra, (whose route is shown on the map) reported intermittently from Japan and Alaska and then went quiet. So it was with great excitement that on 9 October we got a signal indicating that she was about 1,000km north of Hawaii and heading south. Since then, she’s gone silent again.

We thought that for only one of our six tags to provide any migration data – and



that only spasmodically – was disappointing.

So I wrote to Lotek to see if they had any thoughts about what might have gone wrong. Which is why I ended by having a chat with the director of their avian section Sean Walls.

Sean, who tracks buzzards and raptors himself, said he understood our disappointment and was puzzled as to what the problem might be. But he did point out there were plenty of things that can go wrong with a tagging programme: birds can die, tags can fall off, get damaged or fail, and we might have mishandled them.

However, he also appreciated that raising the money to buy 10 tags was a big investment for a small volunteer group and, as a gesture of goodwill, Lotek offered to give us five new ones. There were, however, a couple of strings attached. First, Sean wanted the tags to be deployed as soon as possible after being manufactured so they would be delivered in two tranches: three late this year and two early next year. Second, Lotek wanted to give our team some extra training to ensure we knew what we were doing.


That sounded fine to us, so the plan is to get the key members of the team trained up in late November. Then we’ll try cannon-netting in the first two weeks of December in the hope of deploying three tags programmed to report primarily on the northward leg of migration from New Zealand via Asia to the Arctic. Then we’ll

try mist-netting during February-March, planning to deploy the other two new tags, plus our remaining old one, and programming them to report primarily on the southward migration from Alaska to the South Pacific.

Meanwhile, with our key Kuriri observers from last season not available – JoJo Doyle stuck in the US because of Covid restrictions, and Amanda Hunt monitoring Fairy Terns for DOC – we could do with a few volunteers to help with this season’s monitoring. At the time of writing there look to be about 60 Pacific Golden Plovers in the area with numbers divided roughly evenly between the Findlay Reserve and the Piako Roost.

The birds at Piako have generally arrived on the flooded paddock which makes up the roost two to three hours before high tide, later moving a short distance to a recently ploughed paddock just across the cycle trail.

The birds at the Reserve have also been arriving in from the mudflats two to three hours before high tide and mostly headed for the Sarcocornia at the Limeworks and the Sea Beet patch south of the Kuaka Hide. But, true to their previous form, they don’t appear at all.

With a reasonable number of birds around we’re hopeful of being able to spot at least one of the nine PGPs we’ve tagged and banded over the past two years but so far there has been no sign. 



DISTINCTIVE: The long up-curved bill and orange legs make the Terek Sandpiper stand out in a crowd.

Photos / Ron Knight, Stephen Garth, Birdlife Photography Australia

Birders rush to see Terek Sandpiper

Terek Sandpipers were once so common in New Zealand that birders mostly didn't bother reporting them. But today, writes **Jim Eagles**, the appearance of one at Mangere sparked a stampede to see it.

When Noel Ward (at right) spotted a Terek Sandpiper at Mangere, on the Manukau Harbour, on 19 January this year and reported it on the BirdingNZ forum he started



something of a birder stampede. It was the first public report of this increasingly rare migrant for four years and the first in Auckland since 2007. So excited birders rushed to the hide at Ambury Regional Park in the hope of adding it to their lifetime lists.

In fact, Noel initially saw the bird at one of his favourite spots, across the water from the hide, near the traffic lights on Island Road, which he likes because of the way the tide pushes the birds into convenient places for viewing.

It was, he recalls after checking his notes, 'around 4.30pm, so getting towards the end of the day, and the tide had pushed the birds in quite close. There were about 300 Wrybills and they were in the shallowest water, in the front line with the biggest waders behind them. They were quite active feeding, jumping around, and

I noticed this wader who was even more active. It was up in front, moving in and out among them, along the foreshore.'

Noel, who started birding back in 1966 while he was still at primary school, put his telescope on the energetic outsider 'and I knew straight away what it was because I've seen them before - though not in New Zealand - with that upturned bill, which always reminds me of a female weta's ovipositors because they've got a very similar shape, and also those brightly coloured legs. It was pretty amazing viewing to see that bird because I've been wanting to see one in New Zealand. I'd sort of assumed I'd probably come across one some time and there it was.'

As the tide pushed in further, all the Wrybills finally took off, the Terek with them. Noel didn't see where it went but he wasn't worried because 'I know where the Wrybills go at high tide, the bird hide shellbank at Ambury. So I headed round there and, amazingly, found it again.

'I would have missed it, because it was in the middle of the Wrybills and they're about the same colour, and I couldn't see its bill. But then it stood up and I got a good view of the orange legs and I knew it was the Terek because there's no other bird

that fits that description. So I was pretty lucky to see it twice in one day... though I can only presume it was the same bird.'

Noel - and a lot of other birders inspired by his report - visited the Ambury hide several times over the next few weeks and he saw it again on 2 February once more in the middle of masses of Wrybills - 1,400 according to his count that day - much to his delight. 'They're a beautiful little bird and it's really sad that they don't come here any more. It's appalling the way the numbers of birds are dropping off.'

In some ways Noel's sighting was quite similar to the first ever New Zealand record of a Terek Sandpiper made by Ross McKenzie at Miranda on 22 November in 1951, because Ross also knew straight away what he was seeing.

In his report in *Notornis* the following year he said, 'I was scanning some small waders when I saw a sandpiper flying with some Wrybill. The party settled on the mud near the tide line and I immediately focussed with my binoculars to ascertain the species of the odd bird. At once I saw the bright orange legs and then the long dark upturned bill.

'RB Sibson has long maintained



UP NORTH: A Terek Sandpiper in Lapland. Photo / Koskikara, Wikimedia

that we should see in New Zealand any migrant birds which visit Australia. Acting upon this theory I have studied the descriptions of such birds so had no trouble in recognising this one, which has such distinctive features.’

Alerted by Ross, several other early Miranda birders also saw the Terek, including the following March when it was seen sharing a cultivated paddock three miles down the coast with a flock of 500 Wrybill. The following year Dick Sibson published a note recording that two Tereks – he assumed one was the bird recorded earlier – had spent the winter in Miranda. Over the next few years *Notornis* also recorded Tereks at Kaipara in 1960, Gisborne in 1965, Manawatu in 1966 and a first South Island sighting at Kaikoura also in 1966.

They were clearly known to birders at that time but were neither common enough to be regularly picked up by the Wader Census counts, nor rare enough for sightings to be reported to the OSNZ, so records are extremely patchy.

The Wader Census, which started on the Manukau Harbour and the Firth of Thames in 1960 and was expanded to include the Kaipara Harbour in 1983, averaged one Terek a year up until 2011, since when none have been recorded.

A survey of the Classified Summarised Notes from birders around the country, which used to run fairly regularly in *Notornis*, indicates that for most of the 50s and 60s one or two Tereks were reported annually. In the 70s, 80s and 90s numbers

averaged six a year and the biggest total recorded was 15 in the 1984 season. From around 2000 on the numbers reported drop to one or two every few years.

Unfortunately the coverage of those notes is fairly patchy but longterm personal records, such as those kept by David Lawrie at Kidd’s on the Manukau Harbour and at Miranda, also point to

Wrong Place

The Terek Sandpiper (*Tringa Cinerea*) gets its name from the Terek River, which flows through Georgia and Russia into the Caspian Sea, after one was seen there around 1774 by the German naturalist Johan Guldenstadt, though they never visit there these days.

Tereks breed in the snow forests that stretch across the top of Eurasia from the Baltic Sea to the Bering Strait. In the non-breeding season they disperse to coastal areas throughout much of Africa, Arabia, southern India, South-East Asia, Indonesia and Australasia.

Happily for birders their large up-curved bills and bright yellow legs make them relatively easy to distinguish from other sandpipers and waders in general. They also feed in a distinctive and very active way, chasing insects and other mobile prey like crabs, then sometimes running to the water’s edge to wash their catch.

an intermittent and declining presence. David saw Tereks at Miranda – on one occasion four of them together – in four years of the 70s, one year of the 80s, four years of the 90s, and five of the 00s, but none since. At Kidd’s he recorded two Tereks in 1965, two more in 1986, then saw at least one in seven years of the 90s and five years of the 00s, but again none since.

There are also individual reports of as many as eight at one time. Tony Habraken saw eight at Karaka in 1980. Adrian Riegen and Stephen Davies sighted eight at Jordan’s Farm on the Kaipara in 1986.

Adrian can also boast of presiding over the only reported banding of a Terek in New Zealand, on 5 April 1992, ‘with a three cannon big mesh net on the south side of the Taramaire Creek. With it were five Red Knots and 118 Wrybills. But that’s all I can remember of the day.’

Summing up on the subject of Terek numbers, NZ Birds OnLine says: ‘They were regular visitors in low numbers through to the 1980s, with up to eight at a time occurring at favoured sites (especially Kaipara Harbour, Miranda and the Manukau Harbour). . . Terek Sandpipers are now a much rarer bird in New Zealand, and probably no longer reach New Zealand every year.’

So why might this be happening? Unfortunately, as with so many other migratory birds whose numbers are declining but not yet calamitously, there seems to be little specific research as to why. In 2016 the International Union for the Conservation of Nature assessed the Terek as Of Least Concern because the bird’s huge range and large population - estimated at between 160,000 and 1.2m globally with 50,000 in the East Asian-Australasian Flyway – meant it did not yet meet the criteria for being declared Vulnerable.

However, research published in *Nature Communications* that same year estimated that 40 percent of the EAAF’s Terek population relied on the vanishing Yellow Sea mudflats during migration. And a 2012 IUCN situation analysis on impact of the large-scale destruction on that habitat made particular mention of the Terek.

It noted that ‘at least 50 species of migratory shorebirds and 21 migratory gulls and terns in the Flyway are strongly dependent on intertidal habitats. Twenty-two migratory species, including the Endangered Nordmann’s Greenshank and the Critically Endangered Chinese Crested Tern, have their entire global population in the Flyway. These two and

ten more migrants are globally threatened, and nine others (eg Terek Sandpiper) have strongly declining populations and are under consideration to be red-listed.'

As with other migratory species it seems that this decline is being felt most at the extreme end of the Terek Sandpiper's range. It is notable that the Australian Government has declared the Terek to be Vulnerable in the big southern state of New South Wales but Secure further north.

In New Zealand the Terek is now classified as Vagrant. That is a rating confirmed by the most recent sightings reported on eBird which suggest the species is now only seen every few years.

In the past 20 years they have been reported in the Kaipara (2001-2), at the mouth of the Waihou River in the Firth of Thames (2002), Maketu (2003), in the Kaipara, at Miranda and at Kidd's (2007), Waikanae Estuary (2008), Miranda again (2011), Awarua Bay in Southland (2012-13-14), at Caitlins Lake, Otago (2014), Motueke Sandspit (2014), Foxton Beach (2016) and at Ambury Park this year.

On the other hand, despite the effort being made by Birds NZ to encourage birders to report their sightings, the records for Tereks remain patchy.

For instance, on 25 October 2019, experienced British birders David and



Joanne Hicklin (at left) visited Pūkoro in the course of a motorhome birding tour of the country and while viewing from the Kuaka Hide

noted a curlew, a Marsh Sandpiper, three Red-necked Stints and a Terek Sandpiper among 'vast amounts of knots and godwits'. David says that at the time they 'didn't realise that the Terek Sandpiper was so unusual for the location' so didn't record it on eBird, post on BirdingNZ or do anything beyond mentioning it at the Shorebird Centre where the sighting was duly recorded.

Similarly, Tony Habraken saw a Terek at the Clifton Road roost in Whitford on 1 January 2020 but he didn't broadcast the discovery either. Were these two sightings of the same bird Noel Ward saw at Mangere soon after? Almost certainly.

To get a feel for just how rare the Terek Sandpiper now is in New Zealand, and how much it means to see one, consider this account by Fraser Gurney (at right) who was among the many birders who flocked to Ambury after reading Noel



ON ITS OWN: In 1992 this bird became the only Terek Sandpiper banded in New Zealand. Photo / Adrian Regen

Ward's post on the BirdingNZ forum. 'I was pretty excited. The Terek Sandpiper was a life bird for me and one that was very high up my most wanted list.

'Oscar Thomas and I met at high tide that morning at the bird hide and quickly realised just how difficult locating the Terek among the thousand or so Wrybill that roost near the hide was going to be. Terek Sandpipers and Wrybill are roughly the same size and colour: small and grey. There are two obvious differences between the two: Tereks have a disproportionately large, upturned beak and bright orange legs while Wrybill have a beak bent to the side and black legs. This may sound relatively easy but when the birds in question are all sitting down with their beaks tucked away it's like looking for a needle in a haystack.

'Despite this difficulty Oscar and I had the kind of nervous excitement that only birdwatchers chasing a rarity can have. But after several hours of scanning the Wrybill flock without luck our excitement had begun to fade and the birds had begun to disperse to feed on the falling tide. With slightly dampened spirits we decided to call it a day and resume the search when the birds congregated again for the next morning's high tide. A very thorough search the next morning brought similar failure and we dejectedly concluded that the Terek must have moved on.

'However, two weeks later we were kicking ourselves as Noel had found the Terek Sandpiper again. This time I couldn't rush out to the Ambury Park bird hide to search for it as I was out of town on a fortnight-long work trip. Of course while I was away Oscar and




several others managed to find the Terek, turning me slowly green with envy as I read their triumphant posts on the BirdingNZ forum.

'On my return to Auckland I made two more fruitless attempts at picking out the Terek among the Wrybill before I moved to Christchurch thinking I'd missed my chance. Who knows how many years I'd have to wait for the next Terek Sandpiper to find its way all the way from the Arctic to reach New Zealand? This had been the first one for four years.

'Two months later I was back in Auckland visiting friends and had a spare day to fill. With no more than faint hope I made the now familiar pilgrimage to the Ambury Regional Park bird hide. Half an hour in and I was resigned to the fact that I was going to miss out on seeing the bird again when a Harrier flew overhead.

'All the birds in view took to the sky and when they came back to earth, still unsettled, one bird stood out on the near edge of the flock. Upturned beak. Orange legs. Terek Sandpiper! You beauty! Joy and relief in equal measure. A new bird for me and almost certainly the one I've had to put the most effort in to see. With their oversized beaks and brightly coloured legs, this species has got to be up there as one of the most charismatic waders to make it to New Zealand shores.

'But as I left, grinning from ear to ear, I couldn't help but feel a twinge of sadness. Of all the birds I've seen in New Zealand the Terek Sandpiper is one it is most likely I'll never see here again. Their coastal habitat in Asia is under severe threat from land reclamation and pollution, so much so that a bird that was once taken for granted as a summer migrant to our shores is now a very rare visitor. The now scarcity of this species makes sightings like this all the more special.' 



AT HOME IN THE DARK: A Long-tailed Bat wearing a band heads out in search of prey.

Photo / Chris Hillock

The secretive rulers of our night skies

The Shorebird Centre's focus is, naturally enough, on the birds that roost along Shorebird Coast. But there are other significant winged species here too, reports EcoQuest lecturer **David Clarke**. Students from EcoQuest, which is based just up the coast at Whakatawai, have been conducting research into the native bats or pekapeka which, almost unknown and largely unseen, have been flying these skies for countless centuries.

Bats rule the night skies across much of the world. There are over 1,400 species of them, comprising 20% of all living mammals, and they are widely feared as omens of darkness and evil. Except, you could be forgiven for thinking, in this country, where attention is focussed on the creatures that fly in the daytime.

Tragically, one of best kept secrets in Aotearoa today is that there are in fact two species of native, endemic bats, the only native, wholly terrestrial mammals found here. These are Long-tailed Bats and Short-tailed Bats. Both are cryptic, elusive and rarely seen by people today, a fact that has not helped their conservation status or their visibility in the public eye as a species needing protection.

Their fate mirrors that of too many other native species, suffering catastrophic population declines in recent decades. The reasons for this are as straightforward for bats as for so many other species: continued habitat loss and the onslaught of mammalian predators including possums, rats and stoats.

New Zealand bats roost in cavities that usually occur in mature, native trees found in the most undisturbed forested areas within the landscape. Long-tailed

Bats (*Chalinolobus tuberculatus*) are the more ubiquitous of the two species, being slightly more adaptable and therefore having a more widespread distribution across the country. Short-tailed bats (*Mystacina tuberculata aoupourica*), on the other hand, are much more specific, requiring old trees located in the interior areas of well established, old growth forest, of which there is far less available. Both species are insectivorous, spending much of their active time foraging on flying insects after dusk.

Short-tailed Bats also have the distinction of being the world's only ground dwelling bat. In addition to feeding on flying insects, it spends much of its time on the forest floor using its folded wings to scuttle along like a little cross country skier on its belly in search of food, relying on its refined sense of smell to sniff out beetles and to feast on the sweet nectar of particular plants on the ground. This unique trait has undoubtedly contributed to its demise, unwittingly offering itself as an easy target for rats and Stoats.

Surviving populations of both species are most likely only a fraction of what they once were, having reportedly been observed in the 19th century in what

one record described as congregating in the hollows of dead trees in 'hundreds or thousands'. Yet despite all of the odds stacked against them, bats have persisted in many areas.

Like other native species in retreat, the main strongholds for bats are the largest, and least spoiled tracts of native forest left. Fiordland National Park and Kahurangi National Park are perhaps the best known and most studied areas of the South Island, while Pureora Forest is one of the most notable areas of the North Island that is home to both Short-tailed Bats and Long-tailed Bats.

Long-tailed Bats exist in most large areas of native forest in the North Island but knowledge of these populations is very limited, more akin to a patchwork quilt of presence/absence records across the country. Although this is better than not knowing where bats are, not understanding populations to the extent that is possible presents a dire conservation outlook.

Just recently, the Department of Conservation made a projection that without action, bat populations in New Zealand will continue to decline by as much as 70% below their current levels in as little as three generations time.



BATS: (from top) Long-tailed Bat with its wings spread; female Short-tailed Bat on the forest floor; EcoQuest students setting up the microphone for an Automatic Bat Monitor.

Photos / Shellie Evans; Colin O'Donnell; EcoQuest.

Although their presence is unknown to many, encounters between people and bats are more common than one might think. When we embarked on our journey to research Long-tailed Bats in our locality, accounts of meetings between local people and bats came to the surface. Connie Wootton, who lives on a farm backing onto the Hūnua Ranges Regional Park, recalls sitting out enjoying a warm summer evening and seeing something whizzing back and forth by the candlelight on her table, grabbing the moths that had been dancing around the candle's glow. She was convinced that this was a bat, since the described activity occurred well after sunset.

Our research soon confirmed her claims. We placed an Automatic Bat Monitor (ABM) at her property for a few nights, which recorded the presence of a single long-tailed bat as it passed by.

Enthusied by this finding, we expanded the research effort to learn more about the bats in our region. Since Long-tailed Bats generally roost in well established tracts of native bush, Connie's bat most likely ventured out from the Hūnua Ranges. If there was one there, it was likely there were more. A flurry of questions began to develop. Where are they? How many are there? Where do they typically forage? Where do they roost?

To find out more we contacted Auckland Council, which controls all environmental work carried out in the Ranges. The council informed us that bat activity was indeed known in parts of the Hūnua Ranges, as it had commissioned some





RESEARCH: (clockwise from top left) EcoQuest students setting up harp traps on a track through the Hunuas; a bat caught in a trap falls gently into a soft bag; fitting a captured bat with a transmitter; checking the bat before release; using a radio direction finder to track the tagged bats. Photos / David Clarke, Taiga Shirai, Max Akey and EcoQuest.

monitoring studies to be carried out some years before. To our delight the council was keen to advance this work, since many areas still had not been surveyed and no information on the whereabouts of possible roost trees was available.

Buoyed by this support, EcoQuest students, who come from universities based in the United States, conducted an acoustic survey of bats in the Hūnua Ranges in November 2017. Surveys consist of using a device with a microphone which records sounds in the ultrasonic spectrum, far above the hearing range of humans. Long-tailed Bat echolocation pulses, which occur around the 40kHz frequency, are automatically recorded when a bat is within a range of approximately 50m.

The devices enable the collection of detailed information on bats' activity, indicating time of activity, proximity of their flight paths to the monitor and foraging activity, which can be distinguished on the recorded spectrograms from normal flying and searching activity.

This initial survey was a huge success. In addition to the data aligning well with previous Auckland Council surveys, we obtained new information on bat activity in several parts of the Hūnua Ranges that had previously been unsurveyed. Subsequent surveys on private land in the locality have revealed that bats are active all over the region to some extent, from the Miranda coastline to the northern areas of the Regional Park close to Clevedon.

This has been wonderful to discover,

but still does not address many of the critical questions around bat population dynamics in an area, namely how many bats there are, or where they roost. Answers to these questions are critical when considering measures to protect the bats from mammalian predators, since targeted predator control in roost areas in conjunction with habitat management is the only way to ensure that they are effectively protected.

The acoustic surveys we conducted acted as a catalyst to advance the research effort in the Hūnua Ranges. In 2018, we secured a three-year grant from Auckland Council to attempt to find the location of bat roosts in the area. We formed a partnership with Ecology New Zealand, an environmental consultancy with specialist knowledge and experience in conducting bat surveys all over the country, and initiated the first ever catching and tracking program of Long-tailed Bats in the Hūnuas.

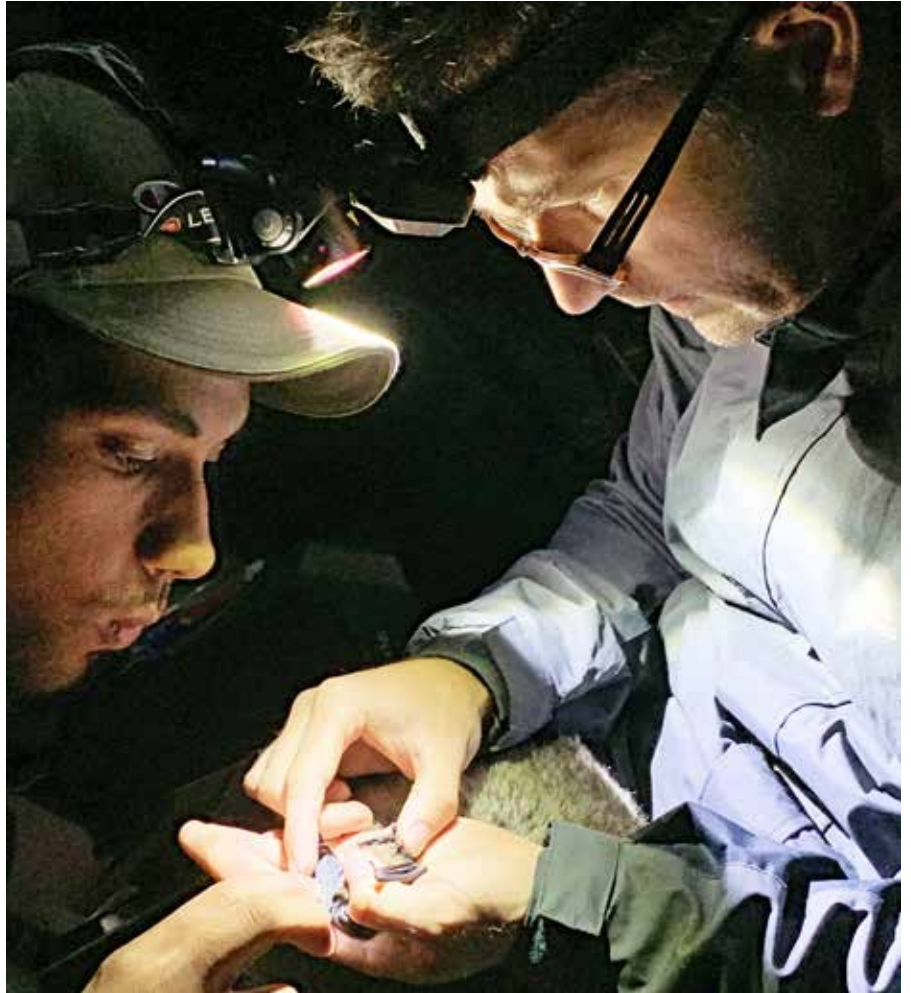
Bats are caught in structures known as harp traps, which are placed in strategic locations along a likely flyway. They are constructed of telescopic aluminium poles, which are extended vertically to tighten two layers of transparent monofilament line, resulting in a rectangular contraption that looks similar to the face of the harp. When in flight, bats cannot detect the very fine monofilament line with their echolocation. As a result, they fly through what they think is a clear path of airspace only to be stopped in their

tracks by the lines, after which they slide harmlessly down into a collection bag until retrieval.

Once retrieved the bats are weighed, sexed and banded on their forewing with a unique identifier code. If the bats are of a sufficient weight (more than 10g), they are fitted with tiny radio-transmitters. These last for about three weeks before falling off. During this time, they can be tracked using telemetry equipment to their daily roosts. This is key to determining the general area and even the individual trees that bats use for roosting in.

Through this work, we have to date uncovered the location of over a dozen roosts. Interestingly, all of these have been located in the Kōkako Management Area, which constitutes the oldest forest in the entire Regional Park. The area is also managed through a very intensive predator control regime to help protect over 100 breeding pairs of kōkako that reside there. This demonstrates that maintaining quality habitat and a sustained level of predator control is crucial to the survival of all indigenous biodiversity, including the resident bats.


For EcoQuest students who have participated in the project, the experience has been overwhelmingly positive. According to Nick Barbera, a student who took part in the 2018 survey, the experience left a lasting impression on him. He recently told me that not a day goes by that he doesn't think about the bat research and that he hopes that 'it will continue on for



decades, and that the long-tailed bat will forever be a part of New Zealand's vast biodiversity'.

Camilla Lizundia, who was on the student bat team during the 2019 survey, highlighted the value of 'conducting research alongside community members, Ecology New Zealand and several Auckland Council staff members' as well as presenting her research findings to the Whakatiwai/Kaiāua whānau. For these students and many others like them, the chance to be part of this new discovery of knowledge on Pekapeka in our region has been special. They have been instrumental in gathering and processing quality data on the nature of bats in the Hūnua Ranges, which hopefully, as echoed in their sentiments, will continue for years to come.

We are very proud of the work that we have achieved to date. Little by little, a picture of the ecology of bats in our area is forming, connecting people with Pekapeka and renewing an interest in and appreciation of them.

However, in order for Pekapeka to have a bright future in our region, and indeed all across Aotearoa, they need our help. Predator control is the most critical management approach, as well as maintaining all of the available habitat left and, in the long-term, creating new habitat where possible. Knowledge is key, and knowledge in all of its forms, is valid. Art, science, stories, and songs all help to promote awareness, to enable action and to keep the spirit of Pekapeka alive in our forests and in our night skies. 





BACK AGAIN: John and Stella Rowe helping out at another working bee last month, this time clearing out the garage. Photo / Jim Eagles

John and Stella Rowe: still going strong 40 years on

When John and Stella Rowe sold the motorhome which for many years brought them to working bees and events at the Centre, there was concern they might not visit so often. So, as a gesture of thanks for all their work, PMNT recently offered them free accommodation whenever they wanted to visit. **Keith Woodley** looks back on their years of service.

At the time of my arrival in the mid-1990s, PMNT was the regular beneficiary of a remarkable group of people. For the most part comprised of passionate and energetic retirees, the Waikato branch of OSNZ was then the most active in the country. They were also frequently at Pūkoro and during the completion and fitting out of the building made significant contributions. Serving on Council at the time, Betty Seddon and Folkert Nieuwland, were both complicit in my being here. Another of Betty's legacies also endures to this day, in the continued involvement of Stella and John Rowe.

'I was brought here by Betty Seddon, who was then the Society's Regional Representative and my earliest mentor in looking at shorebirds, and Betty seemed to know them all,' says Stella, describing her first visit to Pūkoro Miranda in the 1980s. They were soon visiting regularly.

As the building took shape, they were among the first to spend a night under its roof. 'Stella and I decided to stay the night as the place wasn't locked up,' recalls John. 'We camped on the floor – we had sleeping mats in our tramping days – and checked the place out.'

Core members of the Waikato group, the Rowes ran a pharmacy business before embarking upon an extremely active retirement. Much revered and respected among their many circles – Birds NZ, Forest & Bird, Botanical Society, Alpine and Tramping Clubs – their contribution to the Shorebird Centre over the years has been enormous. For one thing they know every inch of the building.


Adept at maintenance tasks, John spent days up a ladder. 'I am the sort of person who loves working with my hands and I really enjoy painting away and repairing and replacing,' he says. He has repainted the building three times and water blasted the roof twice. While Stella often assisted with these tasks, she spent more time staffing the Centre, something that was particularly beneficial to me.

By the late 1990s the Centre had evolved into a substantial operation, which stretched the capacity of a sole fulltime manager. Until then I had often worked seven days and rarely left the premises. More often than not, this was no great burden: indeed it was most stimulating and enjoyable. But it soon became unsustainable. Periods of absence

from the Centre became more and more necessary, requiring volunteers to staff the Centre. John and Stella were often in that role, sometimes for weeks on end.

It was, though, a two way street, as they have derived considerable satisfaction from their connection with Pūkoro. 'We all came for the birds,' says Stella. 'But the people here had such a lot of knowledge and it was a wonderful part of Miranda to be able to join in with people in this building.'

Adds John: 'it was a wonderfully varied group of people who came through the door. When we were relieving here there were some very interesting people. A lot of very serious birders coming through and we found it very enlightening.'

Their long-time involvement also gives them a perspective on the Trust itself. They see a consistency of purpose that has served us well, noting 'Whether it is the love of birds they seem to be a very harmonious group who get on, agree on a course of action and follow it through. And the whole thing has grown from just a group of people getting together with a common aim.' Stella and John have been key contributors to that culture. 

Anthea Goodwin 1931-2020: an early stalwart

Anthea Goodwin, who died in Mangonui in September, aged 89, was an early stalwart of PMNT. She served on the Trust council for nine years, three as Secretary. She also coordinated the initial plantings around the Centre grounds.

She was part of the South Auckland nexus – from Clarks Beach on the Manukau to Papakura and Clevedon – where many figures in the early history of the Trust lived. Soon after moving to Clevedon as a 14-year old, she perhaps inevitably fell under the sway of Ross Mackenzie. She recalled standing by her rural mailbox one morning, watching Mackenzie as he pointed his long stick up a scrub covered bank, directing a local boy towards a Yellowhammer nest. It was the beginning of a long association with Mackenzie and birds, and there followed many expeditions to Miranda in his old Chevrolet.

For the rest of her life she remained highly active in OSNZ/Birds New Zealand, participating in all activities and projects, from wader censuses to bird translocations.

I first encountered Anthea one hot March afternoon in Wanaka, in the pages of a book. In *Totorore Voyage*, Gerry Clark's remarkable tale of three years voyaging the great Southern Oceans in a rather small boat, there is a photo captioned: 'Anthea Goodwin ascending to camp on Cape Horn'. It was a magnificent image which remained with me long afterwards. During my inaugural visit to Pūkoro Mirānda two years later, she was one of the first people I met.

Slender and wiry, she looked as if a puff of wind could knock her over, an image belied by her background, including sailing out from England with her father as a young girl. As a result of a lifetime of close observation she had a comprehensive knowledge of birds that she readily shared. She also had green fingers.

When I arrived, Anthea was coordinating the planting of the Centre's grounds, in which she was greatly assisted by Norah Peachman and Esther Burgess. Their long hours of toil created the pleasing environment in which the Centre sits today. In his vision for the site, architect Paul Smits emphasised the flat, open, and exposed environment in which the building must sit. This of course is not how it turned out, and it is now difficult to conceive of the Centre without the substantial plantings by Anthea and her team.



Anthea Goodwin (kneeling) and her good friend Isabella Godbert doing a beach patrol on 90-Mile Beach.

In the late 1990s Anthea moved from Clevedon to Kohumaru near Mangonui. Her energy and enthusiasm remained directed at ornithological and environmental interests, but now it was to the benefit of the Far North and its birdlife, including Project Island Song, seeking to create a wildlife sanctuary on pest-free islands in the Bay of Islands.

In 2012 she received a Far North District Council Citizen's Award for her long involvement in environmental causes. The citation noted that she had covenanted part of her property, set aside land at Berghan Point and the Tokerau dunes for conservation, planted trees at Cooper's Beach, recorded dotterels, trapped possums and helped reintroduce Saddlebacks to Urupukapuka and Moturua Islands.

Friends of Rangikapiti is a group restoring a 33ha coastal forest between Mangonui and Coopers Beach. In 2018 Chairman John Haines said Anthea 'was helping there in whatever way she could and at every opportunity, including trundling into the reserve with buckets of water in the dry season, and helping to plant native species that would bring beauty and

fragrance to visitors for generations to come.' It is an image I can readily visualise.

I recall one murky winter afternoon during my second year at Pūkoro Mirānda when Anthea was working in the grounds. I quite forgot she was there and, at dusk I was going to put the Closed sign on the gate, when out of the mist emerged this diminutive figure behind a venerable wooden wheelbarrow. It is an enduring image of energy, commitment, and stamina used for the benefit of the natural world, and the birds that dwell there.

Modest and self-deprecating to a fault, she was uncomfortable with any fuss being made about her. Rather she would always seek to deflect such attention towards supporting and encouraging others. At the news of her passing I began thinking of heading north for the funeral. However, in lieu of a service it was recommended that people and groups who knew Anthea, should plant a Pohutukawa in their local patch in her memory. Those who knew Anthea got it straight away: How appropriate that no one has to go to the bother of travelling any distance for her! Good oh, as she would say. **Keith Woodley**

GODWIT TIMES

with Emma Salmon

Tēnā Koutou

Welcome to the final edition of Godwit Times for 2020.

Wow! This has been a crazy year. Not just for all you humans, but for my fellow Kuaka too. Have you been following our travels from Alaska over the past few months? My amazing Kuaka cousin 4BBRW has broken the non-stop long-distance flight record for a bird! He flew at least 12,050km non-stop from Alaska to Pūkorokoro in just over 9 days. What an incredible effort.

Ngā mihi
Godfrey

PS Check out your knowledge of Kuaka with the questions below. If you get them all right you can consider yourself an honorary godwit. If you are unsure ask your parents if they have any books on godwits or search on the web at NZ Birds Online.

What months do kuaka depart New Zealand?

Why are the number of kuaka decreasing?

Name a country with the initials NK that kuaka visit

How many kuaka come to NZ?

How many eggs do kuaka lay?

How do scientists track the migration of kuaka?

What months do kuaka start arriving in New Zealand?

How much do kuaka weigh?

What is the conservation status of kuaka?

What is the significance of the kuaka to Māori?



Colour me in and hang me on your Christmas tree!

PS See if you can work out the colours of the bands BBRW and draw them on my legs.

Pūkoro-koro Miranda Naturalists' Trust



The Shorebird Centre

283 East Coast Road
RD 3 Pokeno 2473
phone (09) 232 2781
admin@shorebirds.org.nz
www.shorebirds.org.nz
www.facebook.com/
MirandaShorebirdCentre

Manager: Keith Woodley
Centre Assistant: Chelsea Ralls
Educator: In abeyance
Shoreguide: In abeyance

Pūkoro-koro Miranda Naturalists' Trust Council

Chair: William Perry
home 09 525 2771
wncperry@outlook.com
Deputy Chair and Banding
Convenor: Adrian Riegen
riegen@xtra.co.nz
09 814 9741
Secretary: Trish Wells
Trishwells1@gmail.com
0272 688 057
Treasurer: Kevin Vaughan
kandjvaughan@gmail.com
09 817 9262

Council members: Gillian Vaughan (Immediate Past Chair), David Lawrie, Wendy Hare, Bruce Postill, Trudy Lane, Ann and Ray Buckmaster, Jim Eagles.

Magazine

Pūkoro-koro Miranda Naturalists' Trust publishes Pūkoro-koro Miranda News four times a year 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.

Editor: Jim Eagles
jimeagles45@gmail.com
(09) 445 2444 or 021 0231 6033

See the birds

Situated on the Firth of Thames between Kaiāua and the Miranda Hot Pools, the Pūkoro-koro Miranda 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 Miranda high tide is 30 minutes before the Auckland (Waitemata) 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 \$130 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. Life memberships are \$2500 for those under 65 and \$1000 for those 65 and over.

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 decisionmaking through the annual meeting.

You can join at the Centre or by going to our webpage (www.shorebirds.org.nz) and paying a subscription via Paypal, by direct credit or by posting a cheque. Contact admin@shorebirds.org.nz for further information.

Bequests

Remember the Pūkoro-koro 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 with 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 have a chat with Keith or Chelsea at the Centre to see what will best suit you.

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



Share a bit of shorebird magic this Christmas



Try a shorebird T-shirt in striking new colours
\$29.90



Add excitement to dish-drying with a godwit tea towel

\$15

See our great range of nature books



Children love our special bird stories and toys



Noisy native critters \$18.90


Give the gift of membership
Only \$50
Comes with a special godwit Christmas card

The Shorebird Centre shop is open for business every day except Christmas Day. If you can't get down to Pūkorokoro Miranda you can always contact us with your Christmas orders at shop@shorebirds.org.nz or ring 09 232 2781.