

Pūkorokoro Miranda News

Journal of the Pūkorokoro Miranda Naturalists' Trust

August 2022 Issue 125



Keith Woodley honoured



**Young Champions
Catch up with the
young godwits**

**Robert Findlay
Wildlife Reserve
restoration
continues**

**Book extract
In Pursuit
of Champions**

Keith Woodley: Member of the New Zealand Order of Merit.

Reading the list of the Queen's Birthday and New Years Honours each year is a reminder how many people go above and beyond in so many areas of society. This year our own Keith Woodley received a New Zealand Order of Merit for services to shorebird conservation. An accolade well deserved.



KEITH WOODLEY on the shellbanks. Photo / ANZ

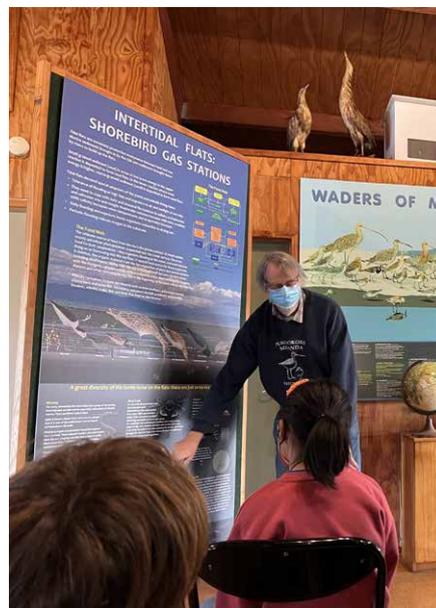
The citation for Keith reads: Mr Keith Woodley has been the Shorebird Centre Manager for the Pūkorokoro Miranda Naturalists' Trust (PMNT) for 28 years.

In that time, Mr Woodley has led an ever-expanding range of Trust activities from various annual courses including Wader Identification, through organising visits of national and international speakers, delivering talks to local schools, ensuring wardens and field staff at the centre are undertaking trapping, and engaging with iwi to address environmental issues while meeting Treaty of Waitangi obligations.

In his time as manager, the Shorebird Centre has grown to be a popular stop for tourists and the largest specialist natural history bookshop in New Zealand. He has published two books, one on godwits in 2009 and another on New Zealand shorebirds in 2012. He has made a significant contribution to the work of PMNT in East Asia, as an integral part of the New Zealand delegation to the East Asian Australasian Flyway Partnership. He has travelled regularly to China, North and South Korea to work on projects and advocate for the protection of key habitats to maintain shorebird migratory patterns to New Zealand, including the signing of an agreement with China in 2016 and an application for World Heritage Status to

protect these habitats. Mr Woodley has been on the Birds New Zealand Council since 2014.

As a summary it skims over the surface of the work that our consummate communicator Keith has done over the last, nearly 30, years. Luckily for us Keith is in the final stages of publishing a book on the history of the PMNT, and his own history, where you will be able to read all the details! The book is due out in November, and an extract from the book is in this issue, starting on page 7. 



Talks continue through 2022!
Photo / Carol Xu

Two new faces Nau mai Haere mai!

At the AGM in May two new members were elected to join the council.

Anne Gummer knows the day-to-day operations of the Shorebird Centre well, having been employed as the Centre Assistant and Shore Guide from Sep 2020 to Sep



2021 while Chelsea was on maternity leave. During that time, Anne's daily commute from the bush clad Kauaeranga Valley in Thames, through the open fields of the Hauraki Plains and across to the Shorebird Centre, reinforced a love of these contrasting places, and especially the unique landscape of Pūkorokoro with its ever-changing colours, light, and feathered friends.

Anne is stoked to be able to contribute to the work of the Council and is particularly looking forward to supporting the development of the new ranger role and the associated partnership with Ngāti Pāoa.

Bob Rigger

is pleased to be elected to the committee and given the opportunity to help with the Shorebird Centre. He has spent a lot of time in the field watching the birds, using the excellent facilities provided, and attending the Field Course and would like to develop his skills and knowledge.



After retiring from farming near Hamilton Bob hopes he can transfer his skills to help maintain and develop the centre into the future. Over the years Bob has worked with other volunteer programs such as Mangatautari/Sanctuary Mountain and offshore islands with DOC handling Kakapo and kiwi.

What's on at the Shorebird Centre

Sunday 30 October Spring Migration Day.

Raewyn Peart Policy Director at the Environmental Defence Society will speak on the state of the Hauraki Gulf and where Seachange is at now.

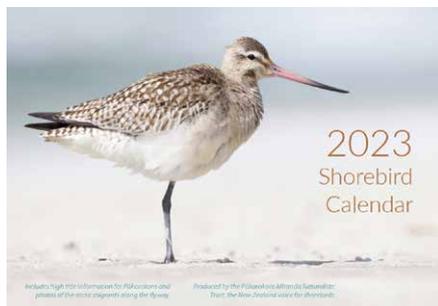
November 11-13 Wader Identification Course.

Spend time in the field and in the classroom learning about waders, ID and ecology.

January 20-26 January 2023 The Field Course,

Topics include anything natural history but with a focus on the local area and shorebirds. This course is currently full but contact the Centre to be on the waiting list.

2023 Calendar
\$15 + postage



Cover Photo

Bittern / Tony Green. This Bittern kept the planting crew motivated through the long days, regularly seen just north of the Stilt Ponds throughout winter.

It has also been a favourite of both birders and photographers in the time since. It is likely to head to a breeding site soon.

Help Wanted - The Editor

If you like to be the spider in the web, have a hankering to be a reporter, or love playing with layout then contact Keith at the Centre to talk about how you might be able to help with some or all of the magazine. We need you! - So what does being involved mean?

Like most roles at with the Trust the role of the editor is a volunteer role. Putting out an issue of the magazine involves:

Reporting

- Writing up short articles on events and occurrences at the Centre
- Reporting on information about shorebirds and the coastal ecology.
- Writing - taking information made available and turning it into an cohesive article.

Commissioning

- Approaching people who have interesting information and asking them to write articles

- Finding great photos to use alongside articles
- Asking staff and volunteers to provide specific items

Production

- Using Indesign (or a program of your choice) do the layout for the magazine
- Engaging with the printer to print and get the finished product to the Centre.
- Getting a pdf version to the Centre for electronic distribution.

The magazine goes out four times a year and its an amazing way to be involved!

Recent sightings at Pūkorokoro

Arctic Migrants

510 Kuaka
Huahou
1 -
Bar-tailed Godwit
Red Knot
Black-tailed Godwit*

NZ Species

2300 Ngutu parore
Tōrea
553 Poaka
4 Moho pererū
42 Kōtuku ngutupapa
470 Tarāpuka
Tara
1 Kōtuku
2 Tūturiwhatu
Taranui
1 Matuku-hūrepo
Wrybill
SI Pied Oystercatcher
Pied Stilt
Banded Rail
Royal Spoonbill
Black-billed Gull
White-fronted tern
White Heron
NZ Dotterel
Caspian Tern
Bittern

**in breeding plumage*

and the regular contingent of waterfowl!

A Bittern brightens the normally quiet winter season

The shape was unmistakable. Silhouetted against the sun sitting low over the Coromandel, the stocky posture with neck partly raised could only be a Bittern. It was standing almost exactly where it had been the day before, just inside the road fence on the edge of the Stilt Ponds northern extension. Indeed, for several weeks it had been an almost daily fixture, much to the excitement of numerous visitors to Pūkoro. And to the birders. Especially the birders.



BITTERN with Eel Photo / Tony Green

Bitterns have a reputation for being rare, scattered, and elusive. While they are large and bulky, they are also cryptic and shy. This is a species which often eludes the foreign birder. I have lost count of conversations with seekers of Bittern. Usually, the best I could do was to direct them to a semi-reliable location in Whangamarino wetland. The prominence and reliability of this bird was remarkable. People helping with the

restoration planting in June were treated to regular views. We hope history may also repeat itself later in the season, for in 2010 Bittern successfully nested nearby.

Kaitiaki ranger appointments

Earlier this year Pūkoro Miranda Naturalists' Trust received a five year grant from Foundation North to fund a Kaitiaki Ranger position based at the Shorebird Centre and working in partnership with Ngāti Pāoa.

We received 20 applications for the role. These were narrowed down to Tansy Bliss or Hera Clark, and after some juggling, we have employed both. Start dates are still being sorted out, however you can expect to see Tansy and Hera out and about from late September. The next issue of the news will include introductions to the new team!

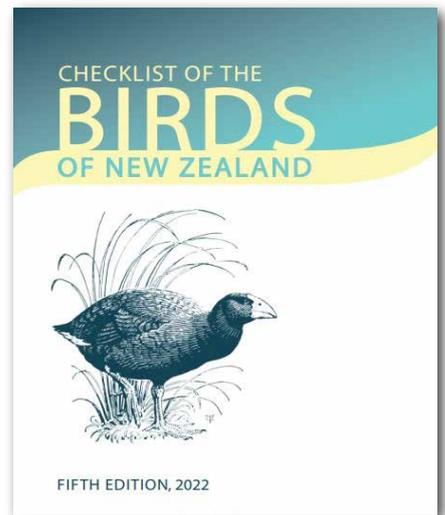
Holding space for the godwits' return

The latest manifestation of "The Flock" landed at the Shorebird Centre recently. A package of wooden birds, painted in the colours of different birds found on the tundra arrived not long after our birds departed and is a gift from students in Hooper Bay Alaska. These special Hooper Bay birds have brought joy to those arriving at the Shorebird Centre in recent months!



ON THE JOURNEY, the appeal of the Flock to a younger audience continues Photo / Gillian Vaughan

The Checklist



In June 2022 Birds New Zealand released an updated version of the Checklist. This is largely an electronic release, and the full details are available from NZ birds online or directly at <https://www.birdsnz.org.nz/society-publications/checklist/> The inclusion of Māori names in the main text will be a very useful addition.

Ambassadors for Nature

Last year NZ ambassador to China Clare



Fearnley held a Friends of the Flyway event, pulling together diplomatic staff to recognise the amazing journey of our shorebirds. This has now been taken further, with the Ambassadors for Nature initiative. Birding Beijing reported that several embassies in Beijing have committed to manage their green spaces in a more friendly way for nature and are

looking to make choices that advance biodiversity.

News from 1929

From the bridge on East Coast Road south of the Centre can be seen the remains of the Miranda wharf. Once navigable by small scows, the stream today is just a narrow channel lined by mangroves. It was clearly very different in 1929, as indicated in this item recently published in the *Valley Profile*.

“While bathing in a tidal creek near the Miranda wharf, Mrs. Foote of Pipiroa and a female companion were attacked by a shark. Mrs. Foote’s friend was bitten first, receiving a nasty bite on the thigh. She screamed for help and Mrs. Foote went to her assistance. As she got closer, she was bitten on the right forearm. Both women lost no time in getting to the shore. Later, the fin of a shark was observed cutting through the water before disappearing.”
Valley Profile June 22, 2022

Kotare

Kotare have always been common at Pūkoro, especially between January and October. There is often one or two keeping the place under scrutiny from the power line above Widgery Lake. Along the trail to the hides, there will usually be several streaking from post to post along the fence line ahead of you. There will be a scattering of them along the shell spit, or out on the tidal flats – a flash of blue-green iridescence darting to land on a ridge of mud or some other object. But how common is common? If asked I would probably have guessed at a few dozen on the Pūkoro coast.



KINGFISHER on the shellbank
Photo / Ian Southey

The scene from the Godwit hide on 29 June therefore came as a surprise. As I idly scanned the shell bank through the spotting scope, there seemed to be one or two distinctively hunched shapes always

in view, whether on the mud inland of the bank, on the bank itself or on the flats beyond. I quickly counted over 20. Randomly checking a section of shell bank further north, they were there too. Swinging south to look at the Pūkoro stream, they were also there. A comprehensive scan starting at the stream and ending on the shell bank north of the Wrybill hide eventually turned up 95.

Kotare are so much part of the normal bird-scape that they seldom get reported. I mentioned what I had seen to people gathered at the Centre for the winter wader census. Several remarked how now that I mention it, they had been seeing a few as well.

Reintroductions

Pirita, the parasitic Green Mistletoe has almost disappeared from the coastal strip since the 2019 storm surge killed most of the plants it had parasitised, including those on Shorebird Centre grounds. DOC has established it on the Rangipo Reserve. In July the volunteer in charge of this project made the first attempt to return this species to both the Shorebird Centre and the Robert Findlay Reserve. The seed to do this was generously donated by the Auckland Botanic Gardens.



WILL IT TAKE? Mistletoe seed.
Photo / Ray Buckmaster

Here a volunteer implants a green mistletoe seed onto a Saltmarsh Ribbonwood which was planted on the reserve in 2020. In nature the fruit would be eaten by a bird and the very sticky seed would be deposited on the host plant of the parasitic mistletoe. Here the seed has been placed safely in the angle of a branch.

Witch's Butter

This is one of the most fascinating organisms on the reserve, but it goes largely unnoticed, unless you make the mistake of stepping on it. It can be remarkably slippery!



WATCH where you step - slippery underfoot. Photo / Ray Buckmaster

It is visible but only because multitudes of microscopic bacteria create the gelatinous matrix in which they live. It is a very ancient organism, belonging to a group that existed around 2.5 billion years ago. The group are known as Cyanobacteria, and this species is *Nostoc commune*.

So, why fascinating? Well, these bacteria are photosynthetic and 2.4 billion years ago were responsible for giving the planet an atmosphere rich in oxygen, making possible the evolution of all the oxygen dependant organisms existing today, including ourselves. Today green plants continue the good work. They capture energy and produce oxygen in structures called chloroplasts thought to have developed from Cyanobacteria.

On the reserve they help to fertilise the soil, capturing nitrogen from the air and making it available to the plant community. Witch's butter is the ultimate survivor. Through the summer it exists as a dried-up skin but can quickly rehydrate when rain arrives. Specimens existing in this form have been restored to life after a hundred years on a museum shelf or enduring -60 degrees Celsius through the Antarctic winter.

Nostoc probably has more to give us. It has an effective UV screen, has pharmacologically active components and is a dietary component in parts of Asia.

Thanks!

PMNT Council is immensely grateful for the relationship we have with everyone at DOC Thames, in recent years we've had a lot of contact with Biodiversity Ranger Mailee Stanbury. She's now moved on from DOC Thames and we just wanted to say thanks for all the support and best of luck with the new role!

Thanks also to Keith Woodley and Ray Buckmaster for your contributions on this page.

Piako Roost

Keith Woodley is keeping a watchful eye on the Piako roost and provides a further update after a visit late July. The roost site at Piako has been transformed. But there is more work to be done.

All the mangroves and most of the farm infrastructure have been removed. The banks around the enclosure are a verdant swathe of lush new grass. At the southeastern corner there sits a brand-new structure – a cycle trail shelter, built in the style of an old railway stop. And there are birds. During a visit in mid-July, I recorded 230 godwits, c.760 oystercatchers, and 46 spoonbills, along with a few shoveler, Mallards and White-faced Herons.

There was water across most of the area, but while there is some seepage of seawater, most of it was from recent rain. For WRC the priority underlining the project is building new floodgates and other infrastructure to protect surrounding farmland. Once the site dries later in the year work on this will recommence. At the same time, work will be done to create raised roosting areas for shorebirds. There are currently two such areas, but they are too small and not configured to be optimal for shorebirds. They are also covered in grass. We have suggested to Council that larger more suitable roosts should be created to a height just below the level of spring tides. The idea is that periodic inundation by saltwater will assist with vegetation control. Once all work is completed the area will be reopened to the tide.

The MOA

July saw the launching of a new China-New Zealand migratory shorebird cooperation mechanism. The meeting was the latest initiative under the Memorandum of Arrangement signed at Pūkoro in 2016. Attending the virtual meeting were NZ's Ambassador to China Claire Fearnley, Chinese government officials, academic researchers, and DOC staff including deputy Director General Sarah Owen. David Melville presented a summary of PMNT's work at Yalu Jiang to date, along with aspirations for future engagement.

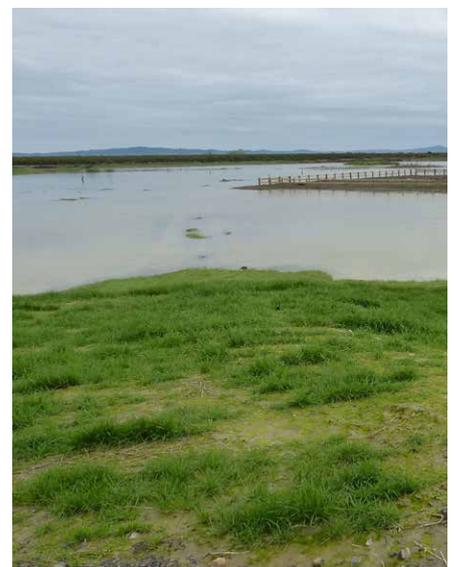
This renewed focus on bilateral shorebird conservation work will deliver joint actions for the benefit of our migratory shorebirds.



ABOVE Rain floods the old paddock. The gap to the river is still closed
BELOW Spoonbills Return Photos / Keith Woodley

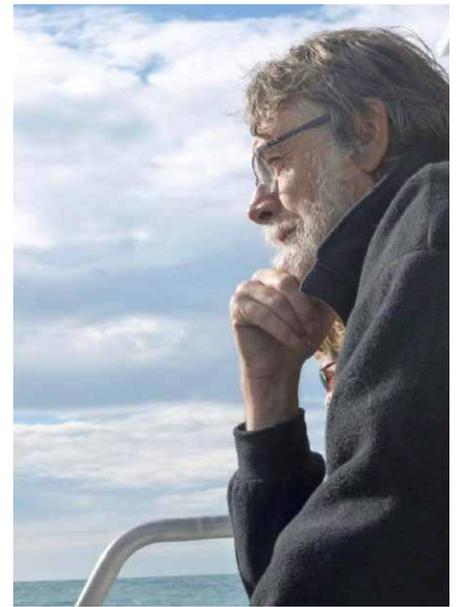
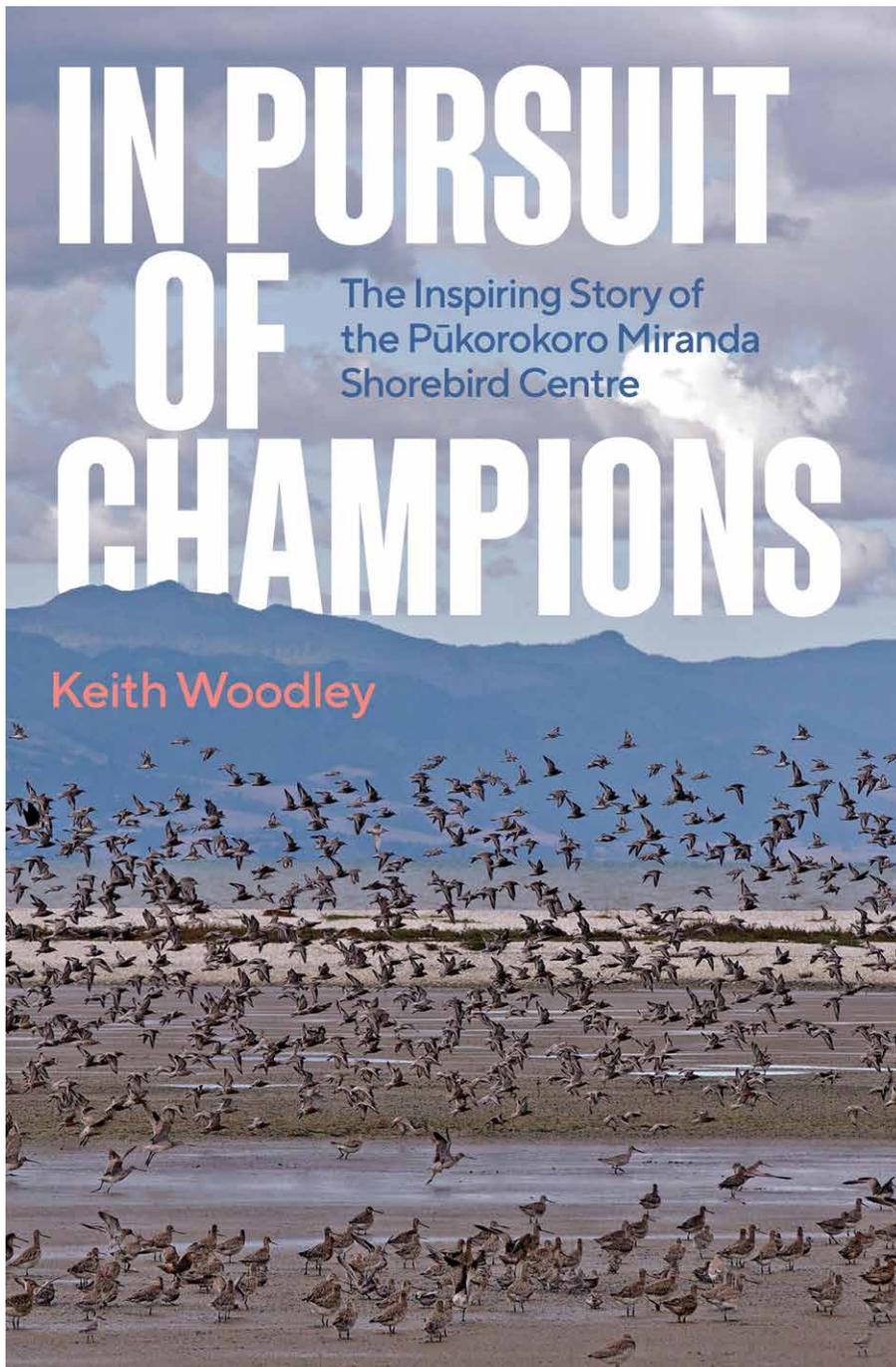


ABOVE Cycle Trail Shelter. BELOW Views of the area. Photos / K Woodley



In Pursuit of Champions - Keith Woodley

Following on from his books *Godwits - Long haul Champions* and *Shorebirds - Sharing the Margins* Keith Woodley has been at work documenting the inspiring story of the Pūkorooro Shorebird Centre, Here he shares some extracts from *In Pursuit of Champions*, due to be published in October.



Keith Woodley. Photo / Jo Jo Doyle

A multi-gun salute marked my arrival. On Friday the train from Wellington had deposited me in Ngaruawahia where I'd stayed overnight with a friend. There, next morning, Folkert Nieuwland collected me for the drive to Pūkorooro Miranda. As we passed through the misty meadows of north Waikato, I wondered what lay ahead. Folkert gave me some background to the Trust, and his involvement, but we mainly talked birds. Over the past few years, I'd gained sufficient experience for this to be a modest comfort zone, but a sense of the unknown also loomed.

The mist had thickened by the time we reached the coastal plain and turned in through the gate, to the popping of shotguns all around the district. The first day of May 1993 was a Saturday, hence the opening of duck-shooting season.

The Shorebird Centre sat 400m back from the shoreline, separated from it by East Coast Road and a mixed strip of saltmarsh and farm pasture. Once the mist lifted the long, jagged ridges of the Coromandel Peninsula emerged along the eastern horizon. The bulky slopes of the Hunua Ranges lay to the west and

north. The place was very much a work in progress. Raised on concrete-block foundations, the long wooden building with high-pitched roof dominated what until very recently had been farmland. Immediately in front was Widgery Lake, a narrow, curving pond newly excavated. The grounds were largely bare of vegetation, although some plantings were beginning to establish.

Since its opening in 1990 with a pōwhiri and blessing led by mana whenua Ngāti Pāoa, the centre has been a special place. Walking into the building that day in May induced a sense of warmth that has never left me. There is something pleasing about the long sweep of the main room, its wood beams, pale pine cladding and wooden floor, and the tall, generous windows offering wide views onto the pond and native plantings in the foreground, the coastal strip beyond the road, and the Coromandel across the bay. This interior ambience is something countless visitors have remarked on over the years. Coinciding with my arrival, a Trust council meeting presented an opportunity for mutual scrutiny of employers and employee. Most I had met before, mainly at Ornithological Society functions. A warmth and informality were quickly evident and have remained hallmarks of the Trust and its people.

The job description was brief: live on site, keep the place open and act as host to



1992, the Centre and grounds as they were shortly before Keiths' arrival, the bunkrooms and Sandpiper unit had recently been completed

visitors. Up until my arrival the building had been available for short stays on an occasional basis only. For two periods of a few months each, in 1992 and early 1993, an honorary manager was in residence; otherwise, the centre was only open if volunteers were available, or if members collected a key from the store at Kaiarau, seven kilometres up the coast. Now it was to be open seven days a week. The stage was set. I would soon find the job description expanding into something much more extensive, marked by a high degree of fluidity.

A troop of Brownies happened to be visiting. Would it be possible to hear a talk? Given the purpose of the centre and its objectives, talking to visitors was always going to be part of the role. Unprepared for this contingency arising so quickly, I merely asked for questions. The ease with which those enquiring young minds

pumped dry my modest knowledge of birds, botany and marine biology was staggering. My experience of shorebirds was limited and relatively recent. Just eighteen months earlier, on a visit to Waikanae estuary with OSNZ Wellington member Hugh Robertson, I had watched a pair of Variable Oystercatchers more closely than would have been the case in earlier years. A few months later an excursion to Foxton Beach brought my first real suite of waders — a few Wrybills, a Far Eastern Curlew and a dozen or so Kuaka Bar-tailed Godwits. There had been few encounters with shorebirds since. Although the centre featured rudimentary displays of bird photos and accompanying text there had been no time to consult these before I was put on the spot. As the expectations of my young audience were not particularly high on that occasion, I got away with it;



ON ARRIVAL- "There is something pleasing about the long sweep of the main room" Photo / Jim Hague

an audience of serious birders could have been embarrassingly different.

Once everyone had departed at the end of that first weekend, Pūkoro was a largely solitary place. It remained so for much of the next few weeks, broken only by the occasional visitor and even more occasional overnight guest. Mornings were often foggy and passing traffic intermittent — a splash of red in the grey murk as the mail van trundled by about the only regular daily event. One morning it brought a touching letter of welcome and support from Trust founder Dick Sibson, for whom the main room of the centre is named. Yet it was not entirely quiet. There was the loud piping of oystercatchers passing over the building as they commuted to the tidal flats on the falling tide. Although unseen in the mist, they distributed a cheerful note upon the world.

There was also, late one morning shortly after my arrival, the sound of a large truck braking and turning in at the gate. Trust chair Stuart Chambers and his wife Alison had been visiting and were about to leave. 'What's that?' Stuart asked. 'That will be my gear,' I said. Sometime later Stuart confessed to initially having thought I might last only a few weeks or, at the most, a few months before moving on. I gather he was not alone in that opinion: given I had arrived with only a backpack, I can quite understand. Even I had no idea just how long I would remain. Now, dwarfed by the otherwise empty truck, there sat my modest pile of possessions: some cartons, an easel, a couple of suitcases and a bicycle. Writing twenty years later, Stuart commented, 'How Keith managed after our departure that afternoon I never found out, but a single person, with numerous cartons to unravel, with little apparent food and just a bike to get him to the shop . . . did not seem to be a homecoming that many would aspire to.'

Joining OSNZ in 1990 had brought me into contact with PMNT and some of its key members such as Folkert. Eventually it had led me to make a visit to the Shorebird Centre.

The first five years of my life were spent in Wellington, before my family moved to Invercargill. Growing up at the other end of the country, my direct knowledge of much of the North Island was sparse. A lifelong interest in geography and maps,

however, brought familiarity with land masses, shapes, and layout. The Firth of Thames was that distinctive rectangle stuck between Auckland and the fabled Coromandel. Two or three family visits to Wellington and Taranaki had given me a degree of familiarity with those regions. More extensive explorations did not come until 1978, hitchhiking around Northland, the Coromandel, and East Cape, which I look back on as my first OE.

I recall at least two early bird experiences on that expedition. On a three-day sailing and camping trip with Brigid and Kane Glass on the southern Kaipara Harbour I was introduced to noisy flocks of oystercatchers and stilts: I lay in my tent on Shelly Beach listening to them through what seemed like most of the night. Later, along all the roads of Northland, there were exotic birds with yellow masks and large white wing patches. These were, of course, Mynas — something of a pest species familiar to anyone living north of Whanganui, which has long remained the southern limit of their range. For anyone from the South Island they were starkly foreign. I vividly remember these occasions, but they did not light the birding spark: that was to come a few years later.

The closest I came to the Pūkoro Miramira coast on that trip was a ride on the back of a stranger's motorbike across the Hauraki Plains to Thames, of which I remember almost nothing. It was not until November 1991 that I visited the Shorebird Centre, spending four days there. In the visitor book I recorded the comment: 'First of many visits.' As it turned out I was to visit just three times: the third one has yet to end.

Once I was established, I began to investigate the birdlife of Pūkoro Miramira.

I was spending as much time as I could building familiarity with the coast and its birdlife. There were regular excursions to the hide, often with visitors or just as often alone, and walks north across the paddocks to the mouth of Taramaire Creek, where flocks of terns and gulls and oystercatchers roosted. I was observing the common birds — the oystercatchers, stilts and Wrybills, godwits, and knots — and learning where they liked to be. That season there were also a few Arctic visitors: seven Far Eastern Curlews and a Whimbrel, the first I had ever seen. A member of the curlew family,

with its down-curved bill, dark crown bisected by a white strip, and its spangled plumage, the Whimbrel has become one of my favourite shorebirds. In October I spent my birthday at the hide with a packed lunch and 10,000 shorebirds in attendance. Cycling to Kaiarau for supplies could turn into a long process, with stops at Taramaire and the beach to the north, and at Kaiarau itself — unearthing birds at all those places and areas in between. Or birds would come to me.

One afternoon in August there arrived a couple of people from Auckland Bird Rescue. They had been caring for a Southern Skua that was now ready for release. These are formidable birds that breed primarily in the subantarctic islands. Superficially similar in shape but larger than black-backed gulls, they are fierce predators and scavengers. We took the skua to the beach at Taramaire, where it liberated itself from its box. It remained on the beach through the next day, enduring harassment from gulls, Caspian Terns and harriers. Local birds generally do not take well to oddities in the neighbourhood, and this skua was certainly that. Perhaps they connected it with one of its cousins, the Arctic Skua, which is a regular visitor to the Firth, where it harasses mainly terns but will put everything else to flight as well — especially northern migrants that know it as a potent predator on the tundra.

I returned to the beach four times that day and threw strips of meat to the bird — which it snapped up. On the high tide that evening it was standing on the end of the spit at the creek mouth. This was where pied oystercatchers normally roosted, and flocks of them were arriving in the fading light, only to discover an unwelcome presence. They wheeled and scurried northwards, showing no wish to land near the skua. I watched as it took off and circled me, flying strongly, and showing its distinctive white wing bars. Overnight a squally northerly brought rain, and next morning there was no sign of it.

A few days later other newcomers began fluttering down along the shores of the Firth. The appearance on Sunday 5 September 1993 of three Curlew Sandpipers was noteworthy: these were almost certainly new arrivals, at the end of their long migration from the High Arctic. A week later, among the expanded godwit flocks were two birds with leg flags: one banded in Queensland and one from New

Zealand. An orange-flagged Red Knot from Victoria also joined the line-up.

Then in October I had my first experience of cannon netting, with a catch of sixty-eight godwits and six Ruddy Turnstones. This is a spectacular and complex operation which, if all goes well, can capture many birds at once. There was a ripple of excitement when one of the turnstones was found to have a New Zealand band. This was raised a notch or two when we noted a green flag as well, collected just two weeks earlier when the bird passed through Queensland.

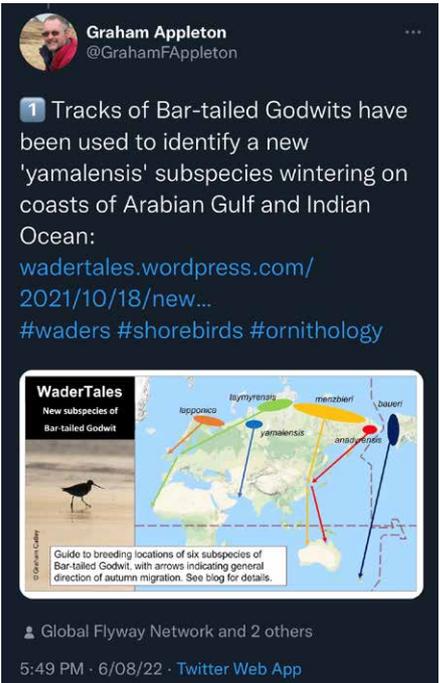
For me, these many new arrivals marked the beginning of what was to become a long and stimulating connection with the East Asian–Australasian Flyway—the network of sites used by migratory birds between Australasia and the Arctic — and my first direct glimpse into the marvels of shorebird migration. I had found a home, with many creatures to share it with me. 

Always learning!

New discoveries are coming through all the time. Read a great summary of a 2021 paper on godwit subspecies at wadertales!

<https://wadertales.wordpress.com/2021/10/18/new-bar-tailed-godwit-subspecies/>

Satellite tracking has helped separate populations of godwits and a new subspecies is proposed.



Graham Appleton @GrahamFAppleton

1 Tracks of Bar-tailed Godwits have been used to identify a new 'yamalensis' subspecies wintering on coasts of Arabian Gulf and Indian Ocean: wadertales.wordpress.com/2021/10/18/new... #wadertales #shorebirds #ornithology

WaderTales
New subspecies of Bar-tailed Godwit

Guide to breeding locations of six subspecies of Bar-tailed Godwit, with arrows indicating general direction of autumn migration. See blog for details.

Global Flyway Network and 2 others

5:49 PM · 6/08/22 · Twitter Web App

Young Champions

Following the daily exploits of the young godwits has become a way of life for **Adrian Riegen**. While the satellite tracking sometimes confirms our expectations other moments come suddenly as a surprise. As the number of working tags is slowly declining we are getting more and more attached to those that are still reporting in.

There has been a great deal of activity with the satellite tagged godwits since my last update in PM News but probably many of you have been following the exploits of the young godwits on Facebook. For those who haven't or want a brief summary here we go.

The young birds have just turned three years old and are close in age to what we would consider adults to be. Already they have shown us remarkable things, some of which we could barely imagine and they have certainly shown us what a diverse

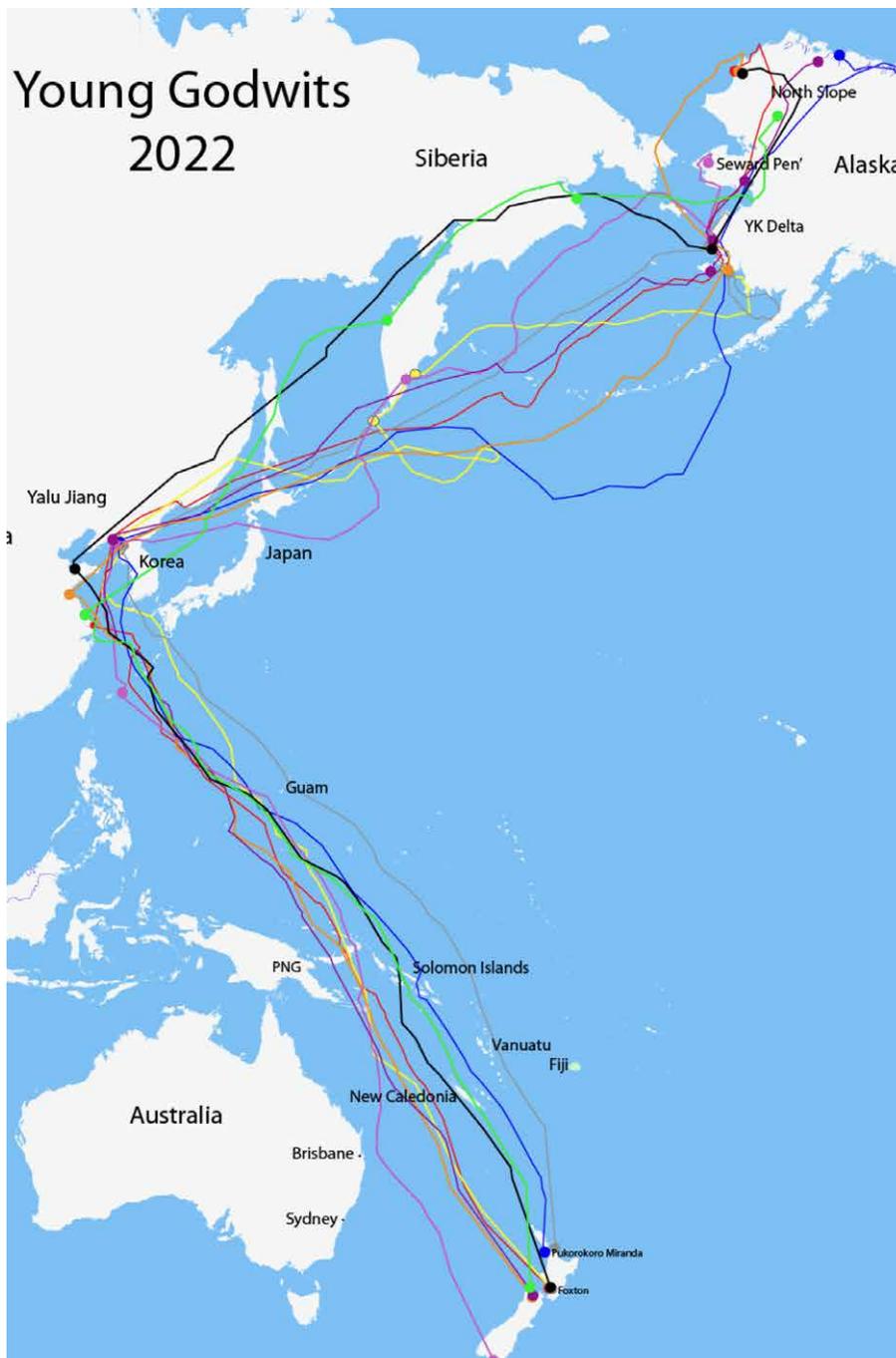
range of strategies they have. We started with 40 juveniles carrying transmitters in November 2019 but the number still operating has gradually diminished until, as I write this, there are ten or possibly eleven still working. Some are about to complete their second round trip migration to and from Alaska when they take off in a few weeks time for the trans-Pacific odyssey that is the nonstop flight from the Kuskokwim Shoals to New Zealand. Will any set a distance record to rival the adult male 4BBRW? Will some be diverted to Australia by the weather or stop in New

Caledonia? Only time and still operating transmitters will tell.

Where and what have these remarkable adventurers been up to since my last report? Well **4BWWW** returned to Pūkorokoro Miranda on 29 March this year, after departing on 22 March and having flown at least 5,600km but getting only as far as Vanuatu before turning back. She is now seen at PM on a regular basis. Why did she turn back? The weather was not looking too shabby and she was certainly familiar with the route having flown to the North Slope of Alaska via the Yellow Sea and eastern Siberia in 2021. On her return journey last year she stopped in north Queensland, just south of Townsville before eventually making her way back to Pūkorokoro Miranda via a circuitous route that took her east of NZ before she doubled back to the East Cape, Bay of Plenty and eventually the Firth of Thames.

I also reported that **4RYRY** was still in the Northern Territory, having been hanging around the Limmen River since 2 December 2021. She went on a two-day sortie, 450km southeast along the Gulf of Carpentaria in July but returned to the Limmen River two days later and has remained there. Similarly **4RBBY** has been living on the south coast of New Guinea mostly in West Papua, close to the PNG border where she has been since 25 March this year. She was on track for the Yellow Sea and well north of New Guinea before turning south towards the West Papua coast but instead of stopping on the coast she flew on over the 3-4,000m high mountains that run along the spine of New Guinea and the vast godwit unfriendly rainforests to land on the south coast. On 12 August **4RBBY** took off on a possibly short flight, a couple of days later it was clear she was heading home and 16 August she was working her way through a storm system and should arrive somewhere in NZ on 17 August.

4RRBR arrived on the YKD then flew to the North Slope and ventured further east than any of the other tagged godwits, she spent twelve hours on the arctic coast of Canada before returning to Alaska. Godwits don't breed in Canada so she was outside the known range while there.





“One of Adrian’s girls” 4BWWW at Pūkorokoro Miranda. PHOTO / Tony Green GRAPHICS / Adrian Riegen

Earlier in the season **4RBBB** backtracked to the Kuril Islands off the southern coast of Kamchatka after she encountered adverse winds while heading from the Yellow Sea to Alaska over the North Pacific. After four days she set off again but stopped on the Kamchatka Peninsula for twelve days and then took a pretty straight flight to the YKD, arriving there on 18 June where she has been ever since.

All birds flying north from New Zealand stayed within a narrow corridor across the New Guinea and Solomon Islands on their way to the Yellow Sea but from there to Alaska they followed a much broader path some dipping down into the Pacific while other flew northeast over Siberia. The only exception was **4RBWB**, who left for Asia from Awarua Bay near Invercargill and flew further west up the Tasman coming quite close to Australia in the process but after that she veered back towards the more traditional route between the New Guinea and the Solomon Islands. We had hoped she would fly non-stop all the way to the Yellow Sea but she stopped near Okinawa in Japan, before heading on to the Yellow Sea and eventually Alaska. After a brief stop on the YKD she flew to the Seward Peninsula and stayed there from 11 June to 14 July. At least she dispelled the view held by some that godwits from the South Island move to the North Island before departing. We have also seen this direct flight from the Catlins Lake area by birds carrying geolocators.

In the end six of the tagged birds reached the North Slope with three stopping close

to the village of Point Lay and two more heading further north. None were on the breeding grounds long enough to breed and indeed they may not have even tried. Just preparing for next year maybe?

The eighth bird stopped transmitting on 12 June whilst heading north. Since then it sent one signal on 8 July from the same location. Has the transmitter fallen off or is the bird dead? We will have to hope some of these birds no longer transmitting are seen back in New Zealand in the summer.

Whether any of the young birds attempted to breed is hard to determine. It is usually thought they don’t breed until at least three or four years old but in reality this is not known for certain. To know at what age a godwit first breeds, a bird must to be tagged as a chick and then found breeding at a later stage. This is a very small needle in a very large haystack scenario and may never be determined. One thing that does seem to be clear is that should a breeding bird fail for whatever reason they tend to leave the breeding grounds and head to the YKD where there is exceptionally good feeding and they stay there, particularly on the southern YKD on what are known as the Kuskokwim Shoals until departing for New Zealand and Australia. From arrival on the breeding grounds the process of courtship, egg laying, incubating and raising chicks to fledging takes around 60 days. Therefore, any bird that spends less than that time on the breeding ground probably failed to breed suc-

cessfully. In 2022 all the young birds left the breeding grounds long before 60 days and so it is probably safe to assume they were not successful breeders. **4BWWR** went for a two-day jaunt from the YKD to the Alaska Peninsula, before returning to the YKD having clocked up another 1,100km in the process.

We mustn’t forget the 20 adult godwits with transmitters. Only three of the tags are still working and **4BBRW** and **4BWWB** are both on the Kuskokwim Shoals preparing for southward migration. **4BBRW** was on the Seward Peninsula for 49 days between 20 May and 8 July 49 so unlikely to have been successful. **4BWWB** was on the North Slope for 41 days from 25 May to 5 July so another failure.

The most intriguing tag is the one put on **4BBYB**. This is either on the back of a dead bird on the side of the Colville river in Alaska or it fell off but is laying on the tundra with its solar panel facing the sky as it stopped transmitting in early October 2021 when presumably the tag was covered in snow and it resumed transmitting on 12 May 2022 when we assume the snow melted and it has been transmitting reliably ever since. Maybe we shall be able to determine the day the snow covers it again this year.

Very soon the young and adult birds will be winging their way south, lets hope the remaining tags on these amazing birds keep going long enough to show us at least one more migration.

What going on in your backyard?

Daria Erastova has been studying the impacts of feeding sugar water to your backyard birds for three years. She points out that there is still a lot to learn, but what she's found is that in general its not great for birds. Feeding increases disease transmission and competition, but there are some ways to do it better. Here **Gillian Vaughan** summarises some of the highlights from her study. The infographics are from Daria Erastova.

This study contained a few parts - a survey, a study of 16 backyards where birds were fed were in Auckland and Dunedin and the establishment of 14 new experimental feeders in Auckland gardens. The experimental gardens were used to assess the effects of low (10%) vs. high (20%) sugar concentrations. In addition to observations and catching to assess body condition, birds were counted in the experimental gardens to test changes in bird numbers before and after the instalment of the feeders.

The survey showed that we like to feed birds, and the most commonly used sugar feeder in New Zealand was the commercial Tui Nectar Feeder™.

Key findings to be aware of for those looking to establish feeding to increase the number of natives in their yards are

- neither feeder presence nor sugar concentration affected native nectarivorous bird numbers in residential backyards.
- Overall, birds had better body condition in non-feeding gardens compared to feeding ones.

1. If you are going to feed sugar water then choose a commercially available feeder designed for honeyeaters.

The research found that the feeder type used for sugar water feeding plays a vital role in which species have access to this supplementary food. Honeyeater-designed feeders, such as Tui Nectar Feeder™, Topflite Nectar Nutra feeder™, and PekaPeka feeders, physically restrict access to sugar water for other species.

New Zealand honeyeaters (Korimako, Tūi) have long slender bills and, most importantly, long tongues, feathery at the tip. These specialised tongues enable honeyeaters to use capillary force to access nectar from flowers. A similar principle is used in specifically designed feeders: a bird has to push a little plastic or metal gaiter with its narrow bill and then protrude its tongue under the feeder's cover to consume sugar water. It appears non-nectarivorous introduced birds (e.g., House Sparrow) do not have the ability to access such feeders.

Therefore, using generalist feeders like open dishes is contrary to the aim of attracting just native species.

This will also minimise the risk of pathogen transmission from the introduced birds and mammalian pests.

2. Sugar water should only be provided in winter.

Bird body condition was lowest in winter and the time birds spent at feeders was maximum in winter. The research found that, in gardens with pre-existing feeders, birds consumed sugar water most often in winter. Likewise, the time birds spent at feeders was maximum in winter.

In winter, birds not only used feeders more often, they spent longer foraging for sugar water, and they interacted more aggressively. This result

confirms previous observations of Tūi seasonal visitation patterns in suburban parks: the number of sugar water feeder visits in winter was ten times higher than in summer. There is a suggestion that high feeder visitation in winter ensured survival during cold months when natural food supplies appeared to be limiting.

Daria advises stopping feeding during the spring and summer to let birds use natural food sources, pollinate native plants, and minimise the risk of bacterial growth at high ambient temperatures.

3. For winter feeding, use high sugar concentration solutions (1 cup per L) as they were linked to better bird body condition.

The experiment comparing the effects of sugar concentrations in Auckland showed that, although Tūi spent more time foraging at low concentration feeders, they demonstrated more aggression at high concentration feeders.

Interestingly overall, Tauhou (Silvereye) used feeders with higher sugar concentrations more often, but these birds also had higher feather lice abundance than tauhou at low concentration feeders. Lice are transmitted from living birds or shed feathers through direct contact. In this study, Tauhou congregating in groups at high concentration feeders was linked with increased direct aggression with higher lice abundance. However, despite this bird body condition was better in winter if birds used feeders with high sugar concentrations.

It is possible that a high sugar concentration solution contains more calories and thus covers birds' energetic needs faster. That may reduce foraging time in favour of self-maintenance, including feather preening, which helps birds reduce parasite load by removing lice mechanically.

4. All structures used in feeding need to be thoroughly cleaned at least weekly as sugar water feeding is associated with coccidia infection.



Tui at feeder PHOTO Daria Erastova

In this study birds were tested for lethal pathogens, *Salmonella* and *Chlamydia* as well as for pox, lice and coccidia infections. These disease were chosen as they are reported for birds at bread and seed feeders in urban areas.

No *Chlamydia* or *Salmonella* were found in any tested individual or on any of the sugar water feeders but the probability of coccidia infection in Tauhou was higher in the feeding gardens.

Coccidia is an internal parasite that is spread through contact with infected faeces or dust or surfaces that have been in contact with infected faeces.

5. All feeding stations should be predator-proof to minimise bird predation by invasive predators.

If you are attempting to attract more birds to your backyard you owe it to the birds to make it a safe space for them. Engaging in backyard trapping will help support both bird and human welfare.

Auckland vs Dunedin

For those interested in the differences between Auckland and Dunedin

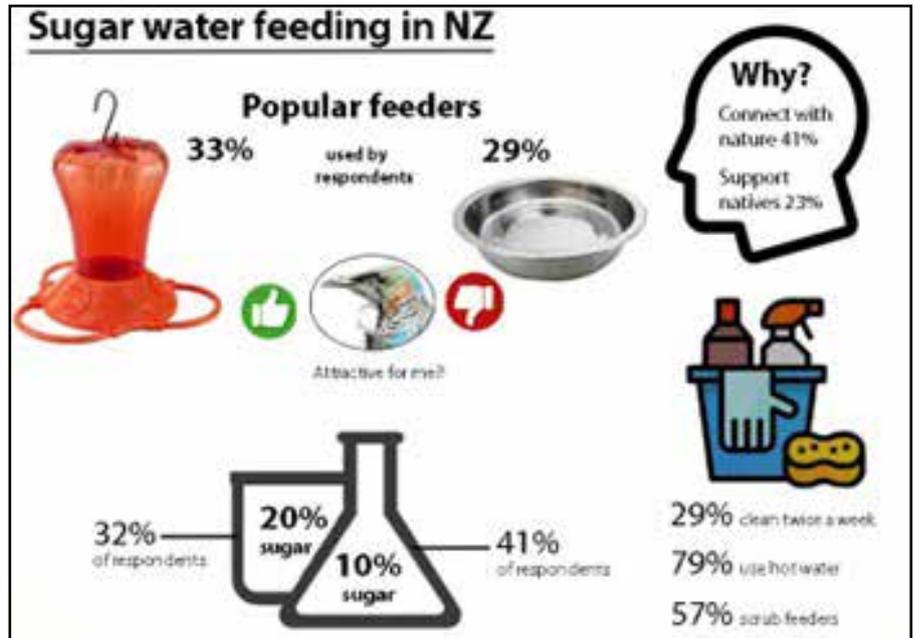
- in gardens with feeders, birds had better body condition in Auckland than Dunedin,
- Both in summer and winter, there were more feeder visits in Dunedin. In both cities, birds' aggression grew proportionally to the increase in sugar concentration, but birds were more aggressive in Dunedin.
- Dunedin has Koromiko /Bellbirds as well as Tui and Tauhou /Silvereye!

Alternatives to feeding

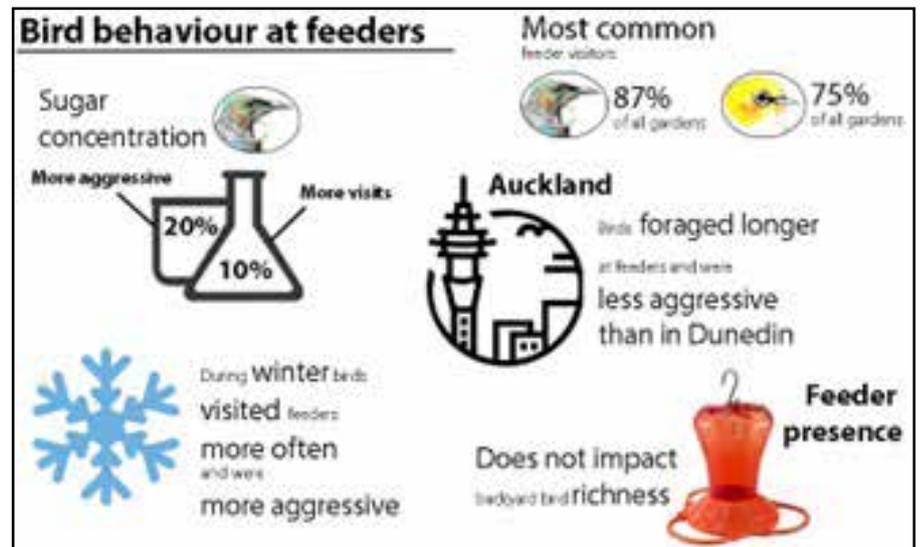
Providing birds with supplementary food is an affordable and appealing way to interact with avian wildlife. However, artificial feeding is a doubtful and unreliable solution for urban populations.

Planting native flowering and fruiting trees will serve as natural nectar and fruit sources for native birds, attract invertebrates and provide birds with shelter, perching, preening, and nesting sites.

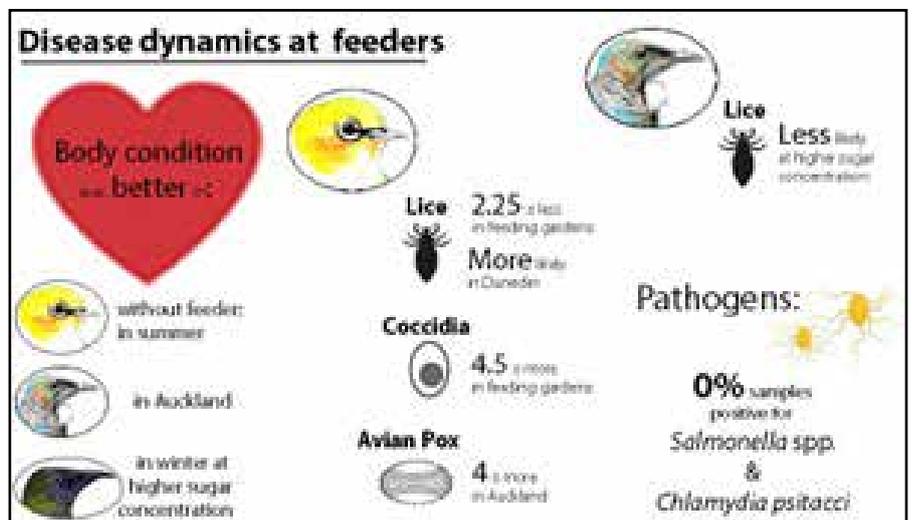
So, if you are feeding birds then make sure you plant some long term food sources.



Key findings from the survey on existing sugar water feeding practices in New Zealand.



Key findings from this study of the effects of sugar water feeding on behaviour of native New Zealand birds.



Key findings from this study of the effects of sugar water feeding on health response of native New Zealand birds.

Four Seasons in one Day

or Four Seasons in one month, is how **Ann Buckmaster** best describes June 2022, the most recent planting effort at Pūkoro Mirānda.

Ray and I moved into the Shorebird Centre at the beginning of June to start the annual planting programme on the Robert Findlay Reserve. Our car became a plant carrier bringing trays of plants, that we had tended for a year, down from the nursery at the Miranda Farmshop/Café/Gallery to the planting areas on the Reserve. Thousands of holes were drilled by volunteers although we did need to use some contractors to tackle the difficult areas in the dead Carex sedge.

Each morning saw Ray and I down on the Reserve. Some days we started by scraping ice of the windscreen, a few days began in pouring rain, others in thick fog with headlights on (we managed to flatten the battery on one of those!) but the best began with a brilliant sunrise start to a summery day.

We were seldom alone, people appeared dressed for action, it was heartening to have such great support. Folk came from Wellington, Taranaki, Bay of Plenty, Waikato, Auckland and beyond as well as from our local neighbourhood. Some came for a few hours, others for a few days and between us all we got over 10,000 plants in the ground. Thank you! Spending day after day walking the Reserve we got to know some of its inhabitants. Pulling dead Carex to clear areas for drilling revealed families of black native cockroaches. (Photo from Landcare Research-What is this bug?)

On sunny days we disturbed many skinks. We didn't have time to look



Planting under the rainbow and in the fog



LEFT Black native cockroach, PHOTO / Landcare Research What is this bug? Below. Bird-dropping Spider, eggs and female.



Robert Findlay Reserve Restoration passes its tipping point

Ray Buckmaster fills in the details!

The ecological restoration of the reserve has been gathering momentum over the past four planting seasons. Happily, the recent appointment of a Kaitiaki/Ranger has made the process virtually unstoppable.

Getting to this point has involved a few setbacks as we come to better understand the testing physical environment of the reserve and the requirements of the restoration species we are using. Unlike our shorebirds our plants can't migrate if we plant them in the wrong location. When we do so they often thrive for a while only to be undone by a lack of water through a summer drought, or too much water as excessive winter rains raise the water table.

The Trust has been very fortunate in obtaining financial support for this restoration. Initially from the DOC Community Fund, consistently from the Valder Trust, and, more recently, from the World Wildlife Fund through the Tindall Foundation, and member donations.

The incredible support from members and many volunteers helps us make a good case when we apply for grant money. For the year up to the Matariki planting weekend, volunteers contributed 1196 volunteer hours. The value of our nursery raised plants after costs, were more than \$14,000. Add all of that together and volunteers have contributed work valued at \$43,000. It is largely because of our huge volunteer contribution that we are successful in fund raising and are now able to employ a Kaitiaki/Ranger for the next five years.

So, thanks to all those folk who have given their time and expertise so freely. We are beginning to see the impact of all your efforts. In five more years, the results will be amazing.

closely enough to identify them but most were probably Rainbow Skinks aka Plague skinks. An introduced species which has become a pest, threatening the native ones. (Diagram Department of Conservation)

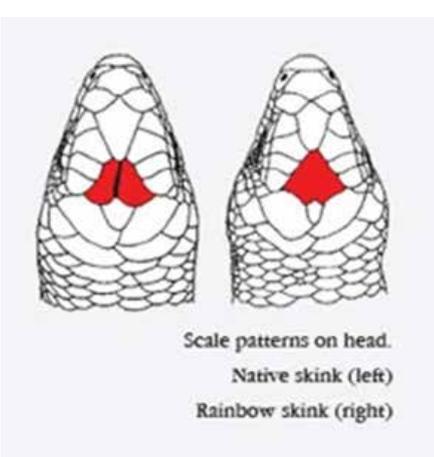
When working on the west side of the Stilt Pond we found this strange collection of "balls" suspended from the middle gate. It turns out they are cocoons containing the eggs of the "Bird Dropping Spider" The female (second photo) lays eggs in cocoons which look like bird droppings. She also produces a pheromone which attracts male moths, a good food source. Two deceptions which seem to work well.

If you have ever wondered who makes all the holes through the dead Carex I can tell you it is mice. They often popped out as we disturbed them walking by.

We were serenaded by skylarks, enjoyed the wonderful aerobic displays of Wrybill and close flyovers from hundreds of South Island Pied Oystercatchers.

It was fitting that the big community planting weekend coincided with Matariki. We had an enthusiastic crowd to get the last plants in the ground and an enjoyable social lunch together. After that it was pack up time for us and home for a long rest before we start to think of potting up the seedlings for next year.

TOP Rainbow Skink showing slim body and long toes, Skink diagram, Dept of Conservation BELOW Wrybills over the shellbank. PHOTOS / Ann Buckmaster unless otherwise stated.



Boisterous stilts may be older than they sound

In November 2021 **Jim Eagles** wrote the following article for *Kaiaua Compass*. It contains his usual combination of insight, humour and strong research.

If you've ever spent much time watching or listening to the Pied Stilts/Poaka that hang out in their dozens on the Shorebird Coast you could be forgiven for thinking they are all juveniles.

If you're lying awake at night listening to them yapping noisily as they fly overhead on their way back from some gathering they sound just like a bunch of slightly boozy teenagers.

And during the day when they hang out in bunches along the shoreline, shouting and arguing, they're very similar to kids who've been in the classroom too long when they burst into the playground.

In fact, of course, most of them are mature adults. But the question of exactly how old they are, how long they live, is not an easy one to answer.

So I thought I might tell you the story of one stilt, and how we worked out how old it was, because it gives an interesting idea of some of the work we do at the Shorebird Centre.

The key to researching birds is being able to recognise, and therefore record, individuals which is mostly done by catching them and putting coloured bands or lettered flags on their legs. Back in 1989 birders around New Zealand joined in a national project to catch and band as many stilts as possible to find out how much they move around the country and if possible to get an idea on longevity.

This particular stilt was caught in 1991 as a chick by two of our most experience birders, David Lawrie and Tony Habraken, and fitted with white over yellow bands on the left leg and blue over green on the right (so it was known as WY-BG).

It was caught in a swamp near Meremere and recorded a few times over the years around the Manukau Harbour. On 12 August 2010 photographer Ian Southey got a picture of the bird in a big flock on the Manukau. As you can see, the bands have been worn with age, but are still recognisably white over yellow and blue over green.



New Zealand's oldest recorded Pied Stilt was probably 19 when this photo was taken and lived at least 21 years. Photo / Ian Southey.

Then in 2012 David saw it on 24 June during the biennial census of shorebirds on the Manukau and shortly afterwards, on 7 July, David and Tony got a partial sighting which they are sure was the same bird.

That would have made it at least 20 years 8 months and 18 days old making it one of the oldest Pied Stilts ever recorded.

David says, 'It has not been reported again so it is probably deceased. But it could be still out there just waiting for somebody to see it again.'

Pied Stilts are found all round the world and were once thought to be a single population. But it is now thought to be divided into 2-4 sub-species.

The name Pied Stilt was originally used globally but is now reserved for the New Zealand and Australian sub-species with the term Black-winged Stilt used elsewhere. They are thought to be fairly recent arrivals in New Zealand having probably crossed the Tasman in the early 1800s.

The oldest recorded stilt in Australia, banded and recovered at Roebuck Bay near Broome, lived to at least 21 years, 8 months and 18 days. Which tends to indicate that birds of around 20 years are probably not too uncommon.

So, whatever those squabbling black and white birds near you may sound like . . . most of them are probably middle-aged at least and some are likely to be senior citizens with two decades under their belts and deserving of respect.

GODWIT TIMES

with Emma Salmon



Tēna kōutou
Welcome back to the Godwit Times!

I hope you humans have been staying warm this winter!

This Godwit Times is all about my friend, the Poaka or Pied Stilt. Did you know my long-legged friends also are found in Australia? They came here by themselves in the 1870's! That is when your great-great-great-great-grandma was probably born!

Have a go at the word find below and the underlined text in the story on the left. You will find out where they live, what they eat and more! Give it a go e hoa 😊

Don't forget if you have been on any birding adventures or have a cool story/artwork about birds, just send Godfrey an email godfreygodwit@shorebirds.org.nz 😊

See you at PūkoroKoro!

Nga mihi,
Godfrey



Godfrey's Word Find

The poaka is a black and white bird that has very long red legs. It is found in wetlands and along the coast of Aotearoa.

Poaka are shy of humans and fly away yapping if we get too close.

Poaka have three to four eggs which both adults look after. They like to stay in groups and fly with my other siblings and friends, the torea and kuaka.

Poaka eat worms, water and land insects. They catch their food by spotting them with their eyes. Sometimes they may stick their bills in the mud to feel for food.



Ted Kirk

by Keith Woodley

All too often funerals are where you learn new things about those who have gone. Things you now wish you had been able to talk to them about. I recently attended a service in Waihi that elevated that situation to a whole new level.

Ted Kirk was a very private man. Every couple of weeks or so he would arrive at the centre to volunteer on grounds maintenance. Parking just inside the gate, he would quietly get busy clearing flax from the trail behind Widgery Lake, then depart again without coming into the building. On the occasions I went out for a chat, he would be modestly unassuming about his efforts. But also evident, behind his polite reserve, was a sharp mind and a keen wit. I knew he was a life member of PMNT and that he lived in Waihi. And little else. Except that he was also generous, of which more later.

Ted died in late May aged 86. He had no immediate family; his only brother had died in the 1970s. In attendance at the service were several cousins and other acquaintances, several of whom Ted had grown up with in the Waihi area. Also present was Professor Jon Huxley, Dean of Veterinary Sciences at Massey University, Palmerston North, where Ted was on the faculty teaching Veterinary

Anatomy, from 1965 until his retirement in 2002. He was part of an innovative team that extended the curriculum to include marine mammals, fish, reptiles, and zoo animals.

Jon Huxley told us that news of Ted's passing had drawn a huge response from former students and colleagues. As he relayed to us some of their tributes, there emerged a portrait of an able and popular teacher, very highly respected by both peers and students. Said one:

"His quiet self-deprecating approach did little to hide a fierce and wide-ranging intellect. He often seemed to be looking at things obliquely, but more often was simply seeing things that others had missed. His ability to explain complex concepts was unmatched, deploying everything from the classical elegance of chalk and duster, through props of wire and baguettes, [or a loaf of raisin bread to represent the brain and a series of brightly coloured connected towels to represent the intestines] to embracing the digital age towards the end of his career."

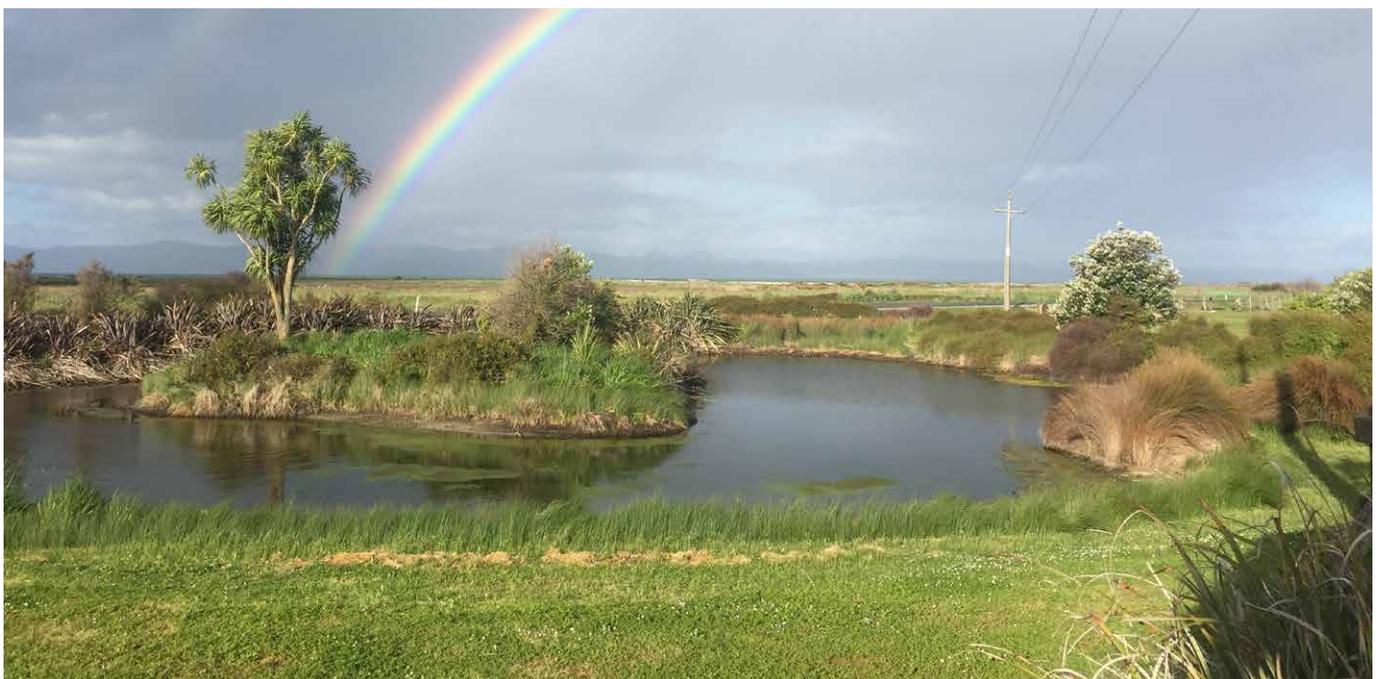
His connections with Wellington Zoo proved bizarrely beneficial to the veterinary school, in the form of donations of exotic animals for Anatomy teaching. These included 'a giraffe, a

tiger, monkey of different species, a chimpanzee, various species of antelope and a hippopotamus! The appearance of these exotic specimens added a definite wow factor to the otherwise routine study of Anatomy.'

One of the founders of the Wildlife Society of the NZ Veterinary Association, he served as its secretary for nearly 30 years. He worked tirelessly, establishing contact with community groups and governmental organisations, and in this way was able to strengthen veterinary involvement in wildlife issues and provide a NZVA perspective on controversial topics such as myxomatosis and whale strandings.

That Ted Kirk was a very private man was confirmed at the service, as it became abundantly clear that virtually all the above was news to almost everyone present.

Always a strong supporter of the Trust, Ted made generous donations to the Roost Fund. Typically, he wished it to be anonymous. In late April during what turned out to be one of his last visits, (the last was just two weeks before his death) I was able to show him around the new house. I shall always be grateful I had that opportunity.



Rainbow over Widgery Lake
Photo / Chelsea Ralls

Pūkorokoro Miranda Naturalists' Trust



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Bruce Postill, Bob Rigger.

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.

Editor (temporary): Gillian Vaughan
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See the birds

Situated on the Firth of Thames between Kaiaua and the Miranda Hot Pools, the Pūkorokoro 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 Pūkorokoro Miranda 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



