

Pūkorooro Miranda News

Journal of the Pūkorooro Miranda Naturalists' Trust

November 2021 Issue 122

How we saved the Northern NZ Dotterel and why we might lose it again

Media agog at
gobsmacking
godwits

Ambassador's
diplomatic
coup for birds

Funding
found for
Shoreguide

Manager's
roost gets
go-ahead



Media agog over our gobsmacking godwits

This year's epic migration of Bar-tailed Godwits/Kuaka from Alaska to New Zealand and eastern Australia attracted amazing publicity for PMNT's work.

Adrian Riegen's reports on Facebook about the godwits' progress drew a huge global audience.

The reports were also picked up by other social media like Twitter, as well as traditional media, like newspapers, magazines, radio and television, around

the globe, some of which you can see on these pages.

As this season's southern migration drew to an end, PMNT organised a webinar where Adrian, supported by Council members, told the compelling inside story of the migration. It had a live audience of 408, many from overseas, and has since been seen on YouTube by a futher 1,252.

Promotional emails and Facebook messages were posted before and after

the event and helped attract \$1,055 in general donations and \$1,842 towards further bird tracking work, as well as selling 20 copies of Keith's *Godwits* book, 10 calendars, 10 tea towels and six memberships. In addition, the mailing list for our eNewsletter jumped by around 500.

The only disappointment is that, as Keith Woodley put it, 'Normally with this amount of publicity we'd be deluged with visitors. But they're not allowed to come.'

On our webinar

The inside story of the Gobsmacking Godwits, presented by Adrian Riegen with support from Council members, is still available. You can reach it by clicking [youtube link](#).



On Radio

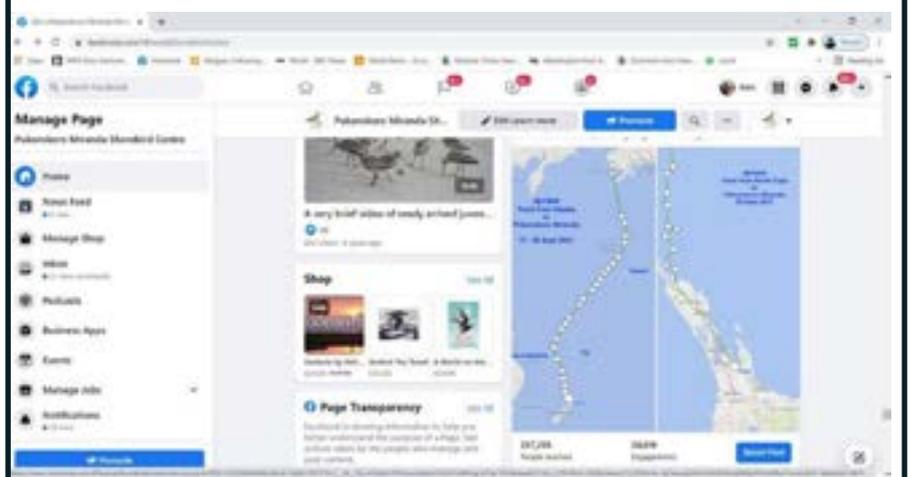
Keith Woodley in a Podcast on RNZ's The Detail.



Keith also appeared on Waikato Breeze and Newshub while Adrian did interviews for a couple of New Zealand stations and Audubon in New York.

On Facebook

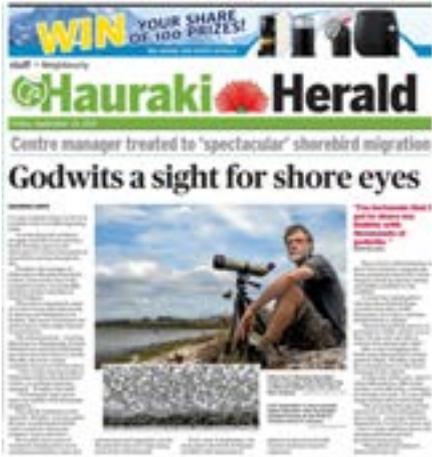
Shorebird Centre page (Ann Buckmaster). We now have 9,433 followers. This post reached 237,255 and 24,619 responded.



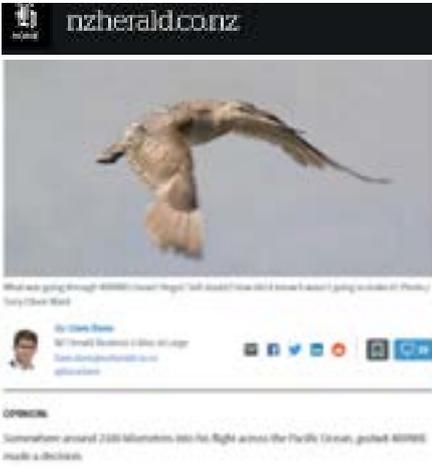
COVER: Photo of Northern NZ Dotterel and nest taken at Opoutere by Joke Baars.

In Print

Hauraki Herald, Waikato Times and on the Stuff website.



In the NZ Herald as an example of good decisionmaking



On Twitter

Clarke Gayford, Jacinda Ardern's partner. 37,500 followers



Miranda Trust (David Lawrie) 2,904 followers



On Television

Keith Woodley was interviewed on TV1's Breakfast programme. The godwits and Keith also appeared on TV1's 7-Sharp.



Phil Battley was on Newshub's TV3 AM Show.



Phil Battley on The AM Show. Credits: Video - The AM Show, Images - Getty Images/The AM Show

Most of us at some point or another have left the house, only to turn back 'cause the weather turned bad.

But it's unlikely any of us made the call after already travelling 2100km. That's just what a godwit tracked by the Department of Conservation did last week, abandoning 33 hours' of progress across the Pacific Ocean after hitting strong winds.

Most godwits breed in Alaska, but fly right across the Pacific in September to the warmer climes of New Zealand for summer - specifically the Firth of Thames. One of them, known to scientists as 4BRWB, is very good at telling the time - he left Alaska's Yukon-Kuskokwim delta this year on September 11. The event came as he did in 2020.

What's on at the Shorebird Centre

Sunday 6 March: Autumn Migration Day

Join us in farewelling our migrant visitors as they start heading back to the Arctic. 10.51am high tide for good birdwatching. 11.30am Puppet show: *The Boy Who Had Wings*, by Birdlife Productions, set against a background of birdwatchers and godwits. More details in the February issue of *PM News*. 12.30pm lunch. 2 pm Guest speaker, to be announced.

Diplomats join in support of feathered migrants

Efforts to get increased international co-operation on migratory birds have taken a huge step forward with New Zealand Ambassador to China, Clare Fearnley, convening an initial meeting of diplomats and Chinese officials under the banner of a Friends of the Flyway group.

The meeting, at the New Zealand Embassy in Beijing, was highly successful, with ambassadors or senior diplomats from many countries, including Australia, Russia, United States, Singapore and Japan attending. Also present were several top Chinese officials, among them the deputy head of the National Forest and Grassland Administration, a senior diplomat from the Ministry of Foreign Affairs and the deputy mayor of Dandong (home to Yalu Jiang), plus senior academics from Beijing universities.

Lots of ideas came out of the event, including a potential ambassadors' trip to the Hebei coast next spring to witness the migration and an initiative to nominate embassy grounds as 'ecological spaces' and make them more friendly for wildlife. Other ambassadors could potentially host the Friends of the Flyway on a rotational basis.

Terry Townsend, of Birding Beijing and the Global Flyway Network, afterwards described the meeting as a wonderful initiative. 'We are mightily impressed to see someone of Clare's stature using her position to deliver a positive message on shorebirds and their conservation.'

PMNT's international liaison representative David Lawrie said the gathering was an important development. 'On our trips to China we have tried to not only gather the interest of the people living around the important Shorebird sites but also raise awareness among the government officials,' he said. 'However, it is very hard to gain the ear of high ranking government people in China because of the highly structured hierarchy that mere visitors can not penetrate.'

David said the Ambassador 'operates at a level with officials in China that we can not hope to accomplish on our own.'

'The fact that she is raising the issue among other Ambassadors generates a level of interest among the Chinese officials that they cannot ignore. Her goal is to get the other Ambassadors involved on an ongoing basis which should provide a whole avenue of support that will complement our work.'



FLYING HIGH: New Zealand Ambassador to China, Clare Fearnley, addresses the inaugural meeting of the Friends of the Flyway at the New Zealand Embassy in Beijing. Photo / NZ Embassy

Manager's Roost gets go-ahead



The new cottage for the Shorebird Centre manager has finally got all the necessary approvals. The finished house (shown above) has been sitting in a Keith Hay Homes yard in Drury for months. But the final building consent from Hauraki District didn't arrive until the end of October. Now we just have to get permission to ship it across the covid boundary with Auckland. David Lawrie, who has been dealing with the paperwork, is hopeful that will happen in the first half of November.

Membership success

In the 14 months since Council member Wendy Hare took up responsibility for the Trust's membership it has climbed by 17% to 700. The lockdown has resulted

in a drop in overseas members. But that has been more than offset by a 22% rise in New Zealand members, which Wendy describes as 'fantastic'. However, now the global economy is starting to open up she needs to head offshore to resume work as a tour guide. So someone else is now needed to keep the ball rolling.

Lotteries grant

PMNT has received a \$7,848 grant from the Lotteries Grants Board for a steriliser for the kitchen and ovens for the Centre flats.

Planting with Pāoa

A few PMNT stalwarts, including Council members Ray and Ann Buckmaster and Trudy Lane, joined Ngati Pāoa in a native tree planting project in the Waharau and Whakatiwai Regional Parks. Ray said the Trust's involvement was a gesture of thanks to the local community for its support for our own planting on the Findlay Reserve. Some 12,500 plants were planted over three days.

Still making a surplus

In spite of the impact of the lockdowns PMNT has managed to keep its head above water financially. Treasurer Kevin Vaughan told last month's Council meeting – held via Zoom – that for the year to the end of September the Trust made a surplus of \$12,854. This was helped by the Government's covid wage subsidy.

Good turnout for mid-winter working bee

An enthusiastic team turned out for the mid-winter working bee ahead of the potluck dinner. The highlight was the construction of a new seat midway along the trail from the car park to the hide. But the Centre and grounds also got a thorough spring-cleaning. Photos / Jim Eagles, Ray Buckmaster

Funding for Shoreguide

PMNT will definitely be able to employ a fulltime Shoreguide to tell visitors about the birds this summer thanks to two successful applications to fund the position.

Last summer, the financial losses in recent years plus the fall in income due to covid, meant we couldn't afford to pay a guide fulltime. However, it was possible to provide reasonable coverage thanks to acting-centre assistant Anne Gummer and a team of volunteers.

The trust is now finalising arrangements with the two potential funding sources

Manager Keith Woodley said the plan was to again employ Anne – who is no longer working at the centre due to the return of Chelsea Ralls from maternity leave – plus the team of volunteers.

A training course for additional volunteer guides had been organised but had to be postponed due to the lockdown.



Stilt Pond drainage

An application has been made to Hauraki District Council for a grant to help with the cost of the planned Stilt Pond drainage scheme. The Trust's initial submission has identified three options for funding: the Significant Sites Fund, General Fund and Ward Discretionary Fund.

Covid disruption

Several Shorebird Centre events have been disrupted by the covid lockdowns. The Autumn Migration Day and the Dotterel Management Course had to be cancelled. The Nature Journalling Course and the first of a planned series of courses to help people deal with birds affected by algal poisoning had to be re-scheduled. The Summer Wader Census had to be organised around split regional boundaries, without prior meetings and done by individuals or people in bubbles.

Golden Plover honoured

The European Golden Plover has just been voted as the first Nordic Bird of the Year. All the more reason to continue our research into why fewer of their cousins, Pacific Golden Plover/Kuriri, now migrate to New Zealand.

The first Kuriri of this season have started arriving at Pūkorokoro and – if covid allows – we're all set to fit a few more with satellite tags and track them.

Our Wildlife Act and Animal Ethics permits should be renewed shortly. Our four tags have been kept charged over winter and will shortly be tested.



CHAMPIONS: The quiz held after the potluck dinner was won by the team of (from left) Bruce Postill, Stella and John Rowe, Chris Eagles and Ian Southey.

Adrian Riegen originally identified 4-11 November and 3-11 December as good for catching. But it seems likely we'll still be locked down then, so we're now hoping to catch in the New Year. Lock-downs are also making it hard to observe kuriri movements. However, Centre assistant Chelsea Ralls has a spreadsheet to record any details, so, if you are lucky enough to visit the Findlay Reserve, please let the Centre know what you see.

Clive Minton Centre



The huge contribution to Australasian birding made by Dr Clive Minton, who died in 2019, has been acknowledged by naming the new interpretation center at the Broome Bird Observatory after him. Clive trained and inspired many of New Zealand's leading birders including Adrian Riegen.

Birders zoom around

International borders may be largely closed due to covid but, like the migratory birds, the birders that study them have continued to meet. PMNT's international liaison representative, past chair David Lawrie, has been involved in two series of international meetings via Zoom

One is working to enhance sister site arrangements in the East Asian-Australasian Flyway Partnership. David says 'Miranda is considered a lead on this because we have the long running sister site arrangement with Yalu Jiang in China and, the most unusual, our agreement with North Korea.'

The second is the Communication, Education, Participation and Awareness working party (CEPA) which David has been involved since its inception 10 years ago. The work PMNT has done in this area has been fed into a CEPA action plan which will become part of the overall EAAFP strategic plan.

In search of the latest world record holder . . . plus a Bittern and a birder

Keith Woodley goes searching for a world champion Kaka/Bar-tailed Godwit and finds, among other things, a godwit he last saw in North Korea, a dedicated birder temporarily freed by the loosening of the lockdown to resume his place on the shellbank, a Bittern/Matuku listening to frogs and some different perspectives on long-distance flying records.

On a Sunday in late September, the tidal flats gleamed in the early morning light. Birds along the tidal edge were dense clusters of silhouettes. And Tony Habraken was back in his natural habitat, seated on the shell bank soon to be surrounded by shorebirds.

In front of us were over 3,000 godwits, a hubbub of jostling, restless creatures. Most had arrived within the last two weeks; some just that morning. It showed: skinny birds with wings held stiffly, having done nothing but fly for the past eight days.

Metres behind us was an even noisier clamour, as hundreds of Black-billed Gulls/Tarāpuka went about their courtship. Perhaps they were also happy to see Tony, who over the years has spent many hours here studying these birds.

For the last six weeks he had been absent, locked away with the rest of greater Auckland battling an outbreak of Covid 19. While the metropolis had been at Alert Level 4, Pūkoro had moved to Level 2. Until three local people tested positive for Covid.

The communities of North Hauraki found ourselves in a bespoke level 4 lockdown, a status bestowed on no one else in the country. 'How posh', texted an old friend of mine. Effectively we had been joined to Auckland.

Several days later all changed to Level 3 which gave Tony an opportunity to venture to Pūkoro. Managing to talk his way through the police cordon at the end of East Coast Road, he was now back in action with his spotting scope.

There was a particular drawcard for us both. Just over eight days ago, a female godwit colour banded Blue Yellow/White White (4BYWW) had taken off from the coast of western Alaska, heading for Pūkoro. In November 2019 she had been fitted with a satellite tag. Now she was about to give researchers a second year of migration data.

The night before, she had been tracked over Northland and was expected to have landed on the Firth of Thames next morning. In doing so she had become the

new long-distance champion. In 2020 a male bird 4BBRW tracked between Alaska and Pūkoro had been shifted westward of his optimal course by a succession of weather systems. By the time he landed he had flown for 12,000 km in just over nine days.

4BYWW had broken that record with a 12,200 km flight in 8.7 days. What does a bird that has just flown that distance look like on arrival? Our mission was to find her among the bustling mass of feathers before us.

It was not easy. A couple of squally showers temporarily inhibited the use of optics. Inevitably it was Tony who saw her first. Huddled amidst the flock, its band combination and antenna showed clearly. We both agreed she looked in remarkably good shape considering the length of her journey. I managed to get a photo, cropped from a zoomed-up image so very poor quality.

There were also other birds that were of interest. Among the leg flags I had managed to read several days earlier, was BDA which Adrian Riegen later informed me I had seen on Sindo in North Korea in April 2018. I thought there was something familiar about it!

Then there was YCA banded as an adult at Pūkoro in October 2000, so now at least 24.3 years old. We also saw two juvenile godwits, first of the season and slightly early. Two days later I recorded a third one.

These godwits continue to confound us. Late afternoon on Monday 27 September I received a call from Radio NZ. They recorded a brief conversation which was broadcast the next day. I declared that 4BYWW was the new champion, having eclipsed the distance set by 4BBRW in 2020.

As that conversation was being recorded, 4BBRW was shortly to land on the coast of northern NSW, having clocked up a new record of 13,050 km. Adding to the evidence that this is an impressive bird, 4BBRW only stopped in Australia for 18 days before carrying on south, and a few days later I saw him



BACK WHERE THEY BELONG: BYWW (her bands circled) back on the shellbank, having completed what was briefly a world record flight, watched by Tony Habraken, briefly freed from lockdown. Photos / Keith Woodley

back at Pūkoro.

The world is in turmoil: pandemic, famine, science deniers, increasingly frequent and intensifying extreme weather events. Covid has disrupted all our lives. No one is untouched by it.

So, there is something reassuring about these astonishing birds. Part of a system which, for the moment, continues to work: the pulse and rhythms of godwit migrations proceeding regardless.

The Dark Side

Godwit expert Phil Battley, associate professor at Massey University, had a different take on 4BBRW's exploits. In an email with the subject line 'The Darker Side of Fame' Phil observed:

'With all the focus on 4BBRW's exploits, we shouldn't be afraid to address the elephant in the room - his ego, his competitiveness, and his inability to let others shine. Two anecdotes should suffice:

'2020, E7's record has stood for 13 years, until the magnificent 4BBYB swung back up the Waikato coast overnight and landed just after 6 am on Sunday 27 September, setting a new distance record. We all celebrated, as rightly we should. Not so 4BBRW. 9:11 pm that same day, he stole the record and broke the 12,000km barrier.

'2021, 4BYWW lands in the Firth of Thames, eagerly awaited by our keen local observers. It's just broken 4BBRW's record. Again, what an achievement.

That's 26 September, in the early morning. Word reaches the media, and 4BYWW is feted. What does 4BBRW do? 27 September, having intentionally changed direction to a longer course, pitches up in another country altogether, with a new world record. The bastard.

'There is a pattern here. Stochastic chance, or something more sinister? You be the judge. But to all aspiring migrants, be wary of that bird. He's not your friend.'

Golfing godwits

Bob Gill, the Alaskan scientist who first tracked godwits flying from

New Zealand to Alaska and then directly back again, found this golf-ball featuring migrating godwits

for sale on a website called Zazzle for US\$17.95.



Fine dining

Finally, back at the Centre, another special experience awaited: I listened to a very LOUD chorus of bell frogs around Widgery Lake, while a Bittern stood on the water edge listening intently to the lunch menu.....



Recent sightings at Pūkoro

Arctic Migrants

- 4500 Bar-tailed Godwit
- 1 Black-tailed Godwit
- 1600 Red Knot
- 14 Pacific Golden Plover
- 4 Turnstone
- 6 Whimbrel *
- 1 Sharp-tailed Sandpiper
- 1 Pectoral Sandpiper *
- 1 Curlew Sandpiper
- 1 Grey-tailed Tattler

NZ Species

- 130 Wrybill
- 400 SI Pied Oystercatcher
- 7 NZ Dotterel
- 21 Royal Spoonbill
- 84 Caspian Tern
- 23 Cattle Egret *
- NZ Bittern

* At Piako Roost



LONG-DISTANCE CHAMPION: The current world-record holder for non-stop long-distance flight by a bird, 4BBRW, photographed in Tweed Head not long after completing his 13,050km migration from Alaska. The same bird set a long-distance flight record of 12,000km for his 2020 migration from Alaska to Pūkoro. Photo / ©Geoff White

The undisputed long-haul champions

The name of the bird that holds the record for a long-distance flight will change from time to time - it changed twice in a couple of hours last month - but the species won't, writes Adrian Riegen, because as the latest tracking programme has again confirmed, Bar-tailed Godwits are the undisputed long-haul champions.

When E7 arrived back at Piako on 7 September 2007 and proved to all the non-believers, of which there were many, that Bar-tailed Godwits could and did fly non-stop from Alaska to New Zealand, I remember feeling a great sense of satisfaction seeing that satellite generated line traced right across the Pacific from the Kuskokwim Shoals to the mangroves at the head of the Firth of Thames.

But that feeling was followed shortly after by a sense of sadness. Sadness that after years of speculating about their southward migration and proving with circumstantial evidence that they did indeed fly non-stop from Alaska to New Zealand, well before E7 proved it beyond doubt, that we had learnt all we could about godwit migration.

In reality of course this could not have been further from the truth and

with colour bands, engraved flags, geolocators and now more satellite tags, not a year has gone by without some new and fascinating insight into these extraordinary birds being revealed.

I for one can't begin to imagine why the Bar-tailed Godwit is not Forest & Bird's Bird of the Year every year, let alone having it beaten by a bat! Given what has happened I shall propose a new competition next year, Mammal of the Year, and I will nominate the Tuatara, which is a closer relative of birds than the bat.

As you will know, if you're one of the thousands of people who have been watching this year's migration via our Facebook page, the satellites reports have revealed more amazing stories.

There was 4BYWW, which landed at Pūkoro after a flight of 12,200km, to be hailed by the media as the new cham-

pion.

Then shortly afterwards the holder of the old record, 4BBRW, claimed the title back, landing at Tweed Head in New South Wales following a 13,050km journey (after a brief rest he left Australia for the greater charms of Pūkoro). Amazingly, five hours after 4BBRW arrived in NSW, local photographer Geoff White had found him and taken some beautiful photos, one illustrating this story.

Meanwhile we have the editor of this magazine, Jim Eagles, arguing that neither of them should be declared champion and the title is still held by the redoubtable E7.

'I'm still puzzled,' he says, 'by the thought that with birds - unlike people - it seems it is the competitor that makes the worst calls on timing, course and



FIRST AND FASTEST: The history-making E7, the first godwit to be tracked flying non-stop from Alaska to New Zealand, still holds the record for the fastest recorded migratory flight. This photo was taken while she was living in retirement at Maketu, having lost a leg but still proudly wearing her famous flag. Photo / Paul Gibson

weather, and follows the longest route, that is considered the champion. It's like the round-the-world yacht race being won by the boat that takes the most roundabout course and reaches port last.'

Well, if you look at the table below, you can see that E7 still holds the record for the fastest recorded migratory flight, flying at least 11,680km in 192 hours at an average speed of 60kph.

But 4BBRW's is clearly the longest, taking 239 hours and flying at an average speed of 54kph for his 13,050km journey.

The comparison with yacht races serves to highlight the incredible achievements of these birds. The skipper of a round-the-world yacht has a vast array of satellites, computers, observers and information networks to help him plot his journey. He can see what the weather is doing on the other side of the planet in real time.

How much knowledge does a godwit have of the weather in the South Pacific as it opens its wings over the Kuskokwim Shoals, lifts into the sky and sets course

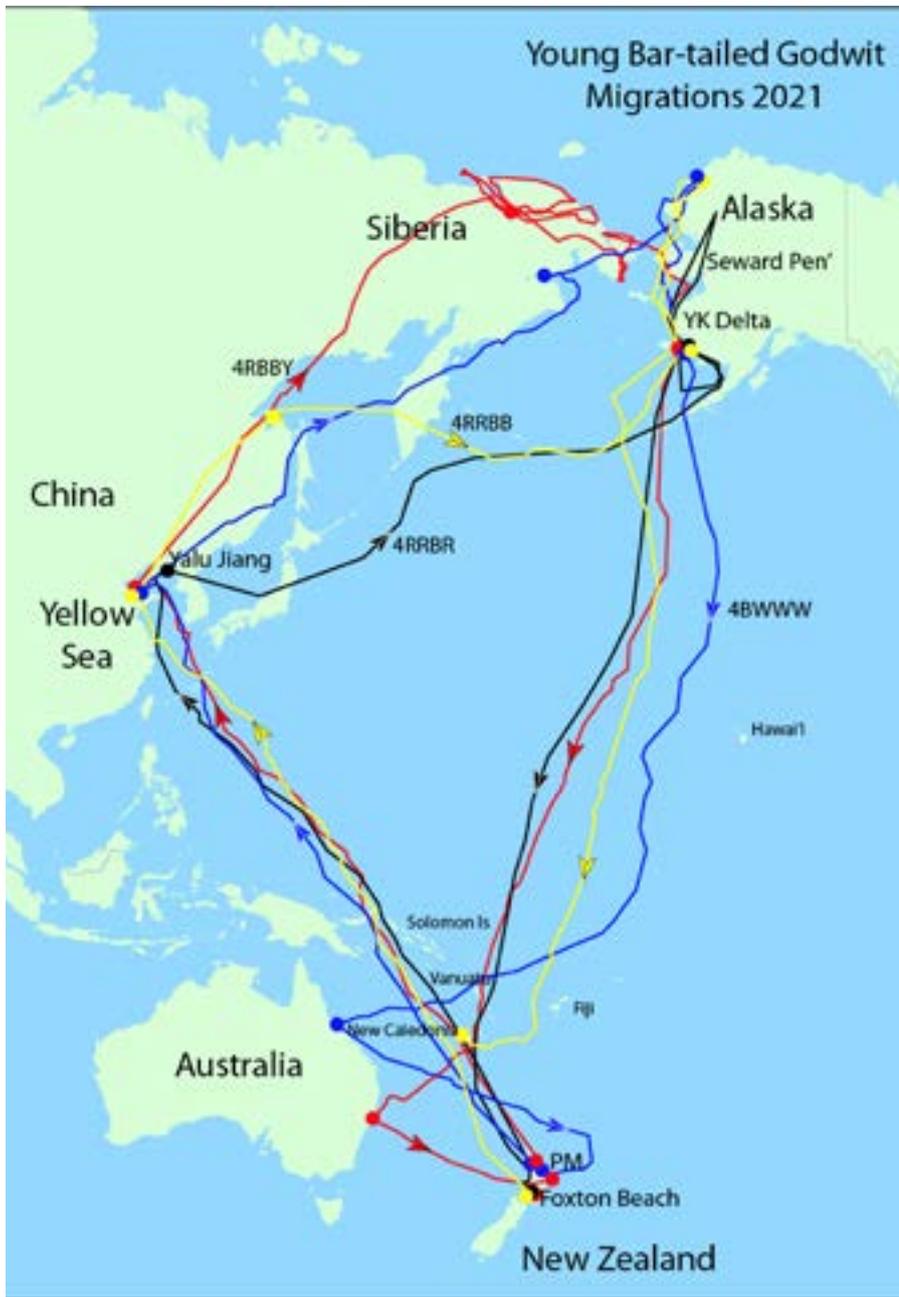
for a tiny mudflat a third of the way round the Earth? It is probably just good fortune if they are able to take the shortest possible course and with a tail wind to record the shortest time.

Bear in mind, as this story unfolds, that the closest Kuskokwim Shoal to the Godwit Hide at Pūkorokoro Miranda is 10,903.28km distant, so any godwit doing less than that presumably has a better grasp of the String Theory, Worm Holes or some other theory than I do.

Conditions are probably never per-

Ten nonstop flights from Alaska to New Zealand and Australia
(subject to the figures being verified)

Year	Age	Bird	Time	Hours	Distance	Speed	Destination
2007	Adult	E7	8d	192	11,680	60kph	Pūkorokoro Miranda
2021	Young	4RBBY	8d 6h	198	11,930	60kph	Manning Point NSW
2020	Adult	4BBYB	8d 10h	202	11,800	58kph	Pūkorokoro Miranda
2021	Adult	4BWWB	9d 3h	219	11,100	51kph	Rangaunu, Far North
2020	Adult	4BBRW	9d 5h	221	12,000	54kph	Pūkorokoro Miranda
2020	Adult	4BWWB	9d 8h	224	11,220	50kph	Kaipara Harbour
2021	Young	4RRBR	9d 9h	225	12,250	54kph	Foxton Beach
2020	Adult	4BWWY	9d 13h	229	11,570	50kph	Pūkorokoro Miranda
2021	Adult	4BBRW	9d 23h	239	13,050	54kph	Tweed Head
2020	Adult	4BWYB	10d 1h	241	11,780	49kph	Pūkorokoro Miranda



WELCOME BACK: Of seven juvenile godwits tracked to Alaska earlier this year, four tags were still working for the southern migration. Three have made it back to New Zealand, one flying direct, and the fourth continues to report from New Caledonia.
Map / Adrian Riegen

fect for a fast short flight, so if that's a godwit's best shot, they will soon fail the survival test. It then stands to reason that a godwit with the ability to withstand being pushed around by adverse winds, cyclonic weather and driven well off course but still able to reach its chosen destination has to be the winner no matter how many hours and kilometres it has travelled.

A wonderful example is the young godwit 4BWWW, who departed from Wunjunga, 100km south of Townsville in north Queensland on 24 October, where she had been since arriving from Alaska on 27 September. For the first day she was flying on a direct path to

Pūkoro Mirando 3,200km away but then she changed her heading, which was to take her 450km north of Cape Reinga and on into the South Pacific with the southern tip of South America or the Antarctic Peninsula the next land on that heading but 9,000km away.

When she was 600km northeast of East Cape she presumably realised her error and made an abrupt right turn and headed south before curving back toward East Cape. She didn't stop at the first beach but instead overflew the Cape to land briefly at Ohiwa Harbour, then Little Waihi and Maketu before finally stopping in Tauranga Harbour, having flown close to 5,000km. Is there no limit

to a godwit's ability to reach its intended destination no matter what happens along the way?

The last two years have seen the tagged adult godwits do pretty much what they were expected to do. Fly to the Yellow Sea in March, refuel and fly to Alaska in early May, attempt to breed, hopefully successfully, then move to the Kuskokwim Shoals and when the weather was favourable and the fuel load sufficient, strike out across the Pacific for New Zealand, arriving there nine to ten days later, job done and another 30,000km round trip under their wings.

The juveniles, now two years old, have told quite another story which is worth another look, particularly those that made it to Alaska in 2021.

Seven young birds were tracked to Alaska this year (*PM News 121*) when they were too young to breed (as far as we know) and all arrived far too late to breed successfully anyway, so what was the purpose of their journey?

Complete folly, or was it a test run so that when they do it for real next year or the year after, they will know exactly what to do and when, which would give them a fighting chance of breeding successfully. We can only speculate as to their motives but as long as they make it back south at the end of the northern summer I suppose there is no harm done.

Of those seven juveniles, four tags were still working for the southward migration, and as I write this (31 October) the third of them has just arrived back in New Zealand after stopping in NSW for 23 days en route.

Only one made it back direct, 4RRBR, which left from the Manukau Harbour in March but returned to Foxton Beach, where she was banded in 2019.

She flew at least 33,600km on her way to the Yellow Sea then to the Yukon Kuskokwim Delta, followed by a brief foray to the North Slope before returning to the Delta.

On her way south she was travelling quite slowly at times and it looked like she would stop in Vanuatu or New Caledonia but she kept going all the way to Foxton Beach, a flight of around 12,250km in nine days and nine hours. The other young bird still transmitting is 4RRBB who has been in New Caledonia for a month.

What more will these wonderful birds tell us? Phil Battley hopes to deploy some more tags this summer if Covid restrictions allow and so the story will be continued. Watch this space. 🐦



GOOD AS GOLD: Dr John Dowding checks a New Zealand dotterel.

Photo / Graeme Brown

The saving of the NZ Dotterel

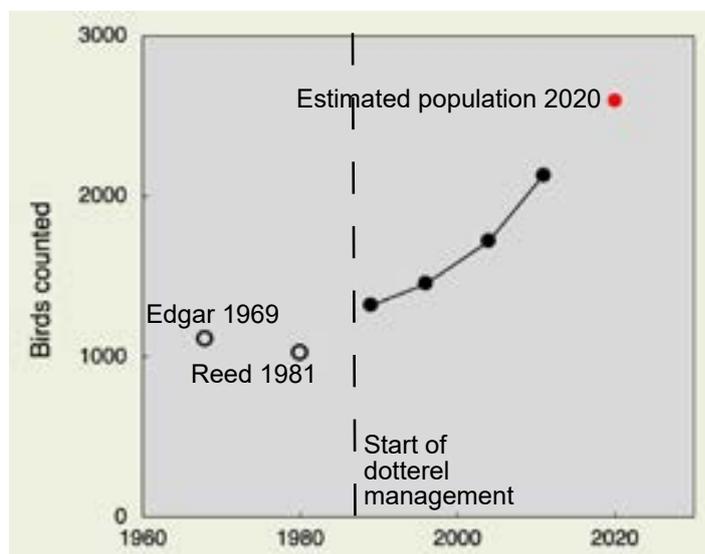
The management programme for the Northern New Zealand Dotterel/Tūturiwhatu, which has seen the population go from a steady decline to almost doubling in 30 years, is one of our greatest conservation successes. That triumph is due to the work of scores of community volunteers, the enthusiasm of a few dedicated wildlife rangers and the strategy devised by Dr John Dowding, writes **Jim Eagles**.

One of the particular challenges when it comes to the Northern New Zealand Dotterel is getting an accurate idea of population size – and whether it is changing – because the birds are so widely dispersed.

Early details about the species are extremely sparse. There are hints the NNZD may once have been scattered thinly around most of the North Island and possibly even parts of the South. In one of the few early reports, Walter Buller wrote in 1888 that the species was ‘dispersed along the whole of our shores’ but was ‘nowhere very plentiful’.

In a paper on NNZD written for the recent special wader issue of *Notornis*, dotterel researcher Dr John Dowding concluded, ‘Its range before the end of the 19th century is not clear, but in the 20th century and until about 1950 its breeding range was apparently confined to northern areas from North Cape south to the Waikato Coast in the west and southern Coromandel Peninsula in the east. . . The population may never have been large.’

The first attempt to estimate numbers did not come until the late 1960s when AT Edgar recorded 1,114 birds but con-



TRACKING A RECOVERY: The graph records the amazing increase in the northern dotterel population since the management programme began. Graph/ John Dowding

sidered this was probably an underestimate. About 20 years later Sylvia Reed did another count and reached a total of 1,024, commenting, ‘Allowing for birds missed from counting and areas not surveyed the population appears fairly static.’ She added, ‘A species with a total population of fewer than 1,400 is surely entitled to be classed as “endangered”’.

By the 1970s and 1980s, observations of NNZD at individual sites indicated

that the numbers were declining, due to their vulnerability to predators, flooding of nests, coastal development and disturbance from humans and dogs.

This led to dotterel protection work starting in several areas, especially around the Coromandel Peninsula and Auckland, involving a mix of community groups. Forest & Bird, the Ornithological Society (OSNZ), the Wildlife Service and its successor the Department of Conservation.



FEISTY CHARACTERS: Dotterels have a range of techniques for defending their nests, including pretending to be injured, challenging intruders and, if all else fails, attacking them. Photos / Martin Sanders

In 1991 DOC set up a recovery group with John Dowding as its scientific adviser. In 1993 a five-year recovery plan, written by John, was formally adopted. In several areas the department appointed rangers to coordinate dotterel work and some regional councils did the same.

The management techniques, which were regularly tweaked in the light of experience, basically involved marking off dotterel nesting sites with fences and signs, having volunteer minders nearby to persuade people and dogs not to disturb the birds and carrying out predator control. Many of the volunteers attended the Dotterel Management Courses the Shorebird Centre has run since 2003 and which have trained about 300 people. It is now estimated that the programme covers about 30% of the NNZD population.

From the outset, local counts indicated that bird numbers were increasing in the areas under management, but it was difficult to be sure of the overall impact. To get more solid evidence, in 1989, 1996, 2004 and 2011, special NNZD censuses were organised as a joint project of OSNZ and the Department of Conservation.

They were held in October, when the birds tend to stay put, and held as far as possible on a single weekend and within two hours of high tide. Counts were done at sites known from past records and at other areas with suitable habitat. If a site was missed or the count was widely different to previous figures a follow up was organised as soon as possible afterwards. Over the years the number of sites counted increased, mainly due to population growth pushing birds into new areas.

John's paper for *Notornis* reported that the four censuses showed a consistent and significant population increase. Between the 1989 and 1996 censuses the number of birds counted rose by 10.3%; between 1996 and 2004 by 18.2%; and



COMMUNITY ART: One of the delightful by-products of the community work to save the dotterel is the range of attractive signs, many by local children. Photos / John Dowding

between 2004 and 2011 by 23.7%. Over all, during the 22-year period of the census the number of birds actually counted rose from about 1,320 to about 2,130, an increase of about 60%, and in the Coromandel by an amazing 254%.

Taking into account the fact that the number of sites being counted was increasing, it was calculated that between 1989 and 2011 the NNZD population rose by almost 50%.

Needless to say, doing a total count of a very widely dispersed bird like the NNZD was not easy, but by the end of the period John felt sufficient knowledge had accumulated to conclude that 'the two most recent counts are believed to be very close to complete and to provide a good estimate of the population size'.

In addition, he observed, if the rate of increase recorded between the 2004 and 2011 censuses continued, by last year the population would have reached 2,600 birds. The long-term goal of the 2007 dotterel management plan was for a population of at least 2,200 by 2030, meaning that 'the recovery plan target has almost certainly been well exceeded already'.

John also concluded, that the census data 'provides compelling evidence for the effectiveness of the management prescription at a regional scale and over more than two decades.'

As well as the overall increase in numbers, the censuses showed that:

*The highest growth in dotterel numbers was recorded in Auckland and Coromandel which are also the two regions with the highest proportion of pairs under management.

*Using data from the Edgar and Reed counts it was found that between 1967 and 2011 the proportion of the population on

the west coast declined from 38% to 15%, while that in the more highly managed east coast rose from 62% to 85%.

*Population pressure is resulting in the northern dotterel expanding its range southwards down the east coast into Hawke's Bay and Wairarapa, and on the west coast into Taranaki. 'The expansion of range down the east coast in such a short time has been amazing,' says John. 'and NNZD are now breeding close to Cook Strait. I find it exciting that the species could soon leap the strait and start breeding in the South Island for the first time in over a century.'

Summing up the success of the dotterel programme, John says there are two particularly significant features. 'The first is that it was achieved on the mainland. Many of our conservation successes have been on islands free of predators and with few or no people, but this one was carried off in the face of a full suite of predators and high levels of disturbance from people, dogs, and vehicles.

'The second is that in the past 15-20 years the on-the-ground work has been undertaken almost entirely by the community. Not all species are amenable to community management, but this one clearly is.'

Unfortunately, there are now growing doubts about whether that amazing story will be able to continue into the future, because it seems the programme has become the victim of its own success.

Because of the population recovery, the northern dotterel's threat level has been dropped from Threatened to an At-Risk category, meaning the bird is no longer a high priority. In 2006 the New Zealand Dotterel Recovery Group, which had guided the protection work, was disbanded. In 2014 the latest dotterel

recovery plan expired, and DOC decided not to proceed with a new one.

As a result, instead of ending on a triumphant note, John Dowding's paper finishes with a warning. 'It is important to note . . . that the NNZD remains Conservation Dependent. Management needs to be maintained in core areas, increased in some areas on the west coast, and established at sites in newly colonised regions.'

Privately he adds, 'The Department does still provide support to community groups at a local level in some areas (particularly Coromandel) with traps, fencing materials, signs and advice. What DOC is no longer doing is coordinating research and management at a national level and planning for the future. I worry that there's no longer any overall direction. When circumstances change, who will take charge of the response?'

Finally, the paper noted, there were fresh hazards facing the northern dotterel. The east coast between Cape Reinga and East Cape, where 81% of the dotterels now live, is 'experiencing increasing development and increasing levels of recreational use. Both have the potential to degrade dotterel habitat. . .

'In addition, climate change is bringing rising sea levels and a higher frequency of storm events, and these are likely to have direct and indirect negative impacts on coastal bird species.'

In other words, there is a risk that in the absence of continued national support the gains made in northern dotterel numbers could gradually be lost. Indeed, John Dowding says, 'modelling shows that the NNZD population would decline by about 1% a year without any management.'

Learning how to save the dotterel

In the past 30 years a conservation programme largely powered by volunteers has seen the population of Northern New Zealand Dotterel/Tūturiwhatu double in size and the risk rating go from Endangered to At Risk (Recovering). **Jim Eagles** talked with Bev Woolley, one of first of the hundreds of volunteers who made that happen, about how it all came about.

It may have been 36 years ago, but Bev Woolley still clearly remembers the incident which sparked her interest in shorebirds and led to her playing an important part in the establishment of the incredibly successful Northern New Zealand Dotterel/Tūturiwhatu protection programme.

In 1985 Bev and husband Bryan were holidaying at a friend's place in Opoutere 'and we walked through the dunes and out on to the beach. This bird - I didn't know what it was, I didn't even know if it was a New Zealand bird - ran in front of us displaying, getting very agitated, I'd never seen anything like it before.

I happened to look down and there were two eggs in a slight depression in the sand about a foot in front of me and I realised it was protecting its nest. So that got me started because I realised how vulnerable the nest was. I went home and did some research and discovered that it was a New Zealand Dotterel.'

Bev also discovered that the bird whose nest she nearly stood on was officially classified as endangered, with a total population probably as low as 1,300.

That made it all the more exciting when Bev and Bryan started watching the birds and found there were actually quite a few dotterels on the Opoutere Spit and some even had coloured leg bands. Inquiries revealed that the banding was being done by rangers from the Wildlife Service (the precursor to the Department of Conservation) Phil Thomson and Rick Thorpe.

As a result Bev was very interested when Phil attended a Forest & Bird committee meeting, to discuss the possibility of members volunteering to mind the dotterels on the spit over the Christmas period, and she agreed to organise the roster.

'That started with Forest & Bird and OSNZ members going there, usually at the weekends, which were the busiest times. We'd just sit there - being absolutely chewed to death by midges - and if we saw anyone going to walk through the spit where the nests were we'd just approach them and say "please keep away" or "go the other way because there's birds nesting".

'We'd point out the birds and the nests and most people were pretty appreciative because, like me originally, they had no idea that's what was happening there.'

Bev's involvement took another step forward in 1987 when she and Bryan



ENDANGERED: Bev Woolley's photo of the dotterel nest at Opoutere she nearly stepped on which inspired her to help such vulnerable birds.



AT RISK: Dotterel sitting on eggs at Opoutere.

Photo / Joke Baars, NZ Birds Online



VULNERABLE: Dotterel chick trying to blend in at the bottom of the nest.

Photo / Adrian Riegen

were again holidaying at Opoutere and Phil came over to band some chicks. 'I got him to show me how to band and started banding chicks myself.'

By this time, Bev says, she 'had got really interested in the birds and when the chicks fledged and started to disperse I wanted to find out where they had gone.

'So I started looking for them on other beaches. That started me travelling round the Coromandel on a fairly regular basis and I found there were flocks at Whangamata, Matarangi and Colville... and then it all started to grow.

'Often people would come up to me on the beach when I was sitting there with my binoculars and ask me what I was doing. Several of them were quite interested and I eventually had people on quite a few of the local beaches who recorded what they were seeing and reported to me.'

About this time she became aware that the project she was working on was being run by pioneering conservation scientist John Dowding so she passed the reports on to him and became more aware of the wider research work going on.

Another big development in 1987 was the formation of the Department of Conservation which moved quickly to support the dotterel work at Opoutere, appointing a student as ranger for two weeks over Christmas and New Year to help the volunteers. 'Because we were holidaying there I'd go down and sit with him.'

However, it soon became apparent that the birds needed protection for much more than two weeks. 'The earliest nest I recorded was found at the end of August,' Bev says, 'and many early nests were lost with the huge influx of beachgoers over school holidays and Labour weekends.' So wardens began being appointed for longer periods each year.

About this time DOC also started providing waratah standards, rope and signs so the nesting sites could be marked off which made it easier to keep intruders at bay.

But Bev does recall one occasion when 'a man who had a dog with him refused to stop and talk with me and just walked off. His wife stopped and did chat with me and said he knew what he was doing. I said, "Well he shouldn't have the dog here and please ask him to take it away." But they didn't take any notice.

'The dog went into the area we had

fenced off with signs around it so I found out who he was and reported him. That went to court and he was fined for taking his dog through the dotterel nesting area. It was a pity in a way but it also helped us by making people more aware of the importance of leaving the nesting areas alone.'

The incident also emphasised the importance of providing protection for dotterel nesting sites in other parts of the Coromandel so Bev began coordinating the growing network of local volunteers which sprang into action every nesting season to put up fences and signs.

She also continued banding chicks and just recently got an intriguing reminder of that work. Wendy Hare and Nigel Milius reported a bird banded RY-?? at Matarangi, which John Dowding said was very likely RY-YW, banded by Bev at Opoutere in 1994. 'This one has bred at Otama for many years now and visits the Matarangi flock annually,' he said. 'Originally banded as a chick at Opoutere in November 1994, so approaching 27 years old. Definitely one of the oldest banded birds left.'

Of course all this took up a lot of time, especially as she and Bryan were living in Hamilton, making for a long commute. 'I was lucky that I had friends who had a house at Opoutere and they let me use it for nothing because I was doing dotterel work. Our family had a section at Matarangi with a little utilities block, which had a shower and toilet on one side and a kitchen on the other, and I could just fit on the kitchen floor to sleep. Then I had some other friends who had a holiday place up at Port Charles and I slept in their garage a couple of times.'

Bev particularly recalls one night when DOC allowed her to use its big old house at Waikawau Bay and she went to bed early because there was no power. 'Then all of a sudden there was this terrible noise. I didn't know what it was so I just hunkered down in my sleeping bag and hoped it wasn't people trying to break in. But in the morning I heard all these turkeys gobbling and found they had roosted on the roof for the night.'

A further crucial development in the fledgling protecting programme came when some Opoutere locals who had taken an interest in the dotterels started trapping for predators. 'They had found a couple of chewed corpses during their walk through the pines to the spit and they were also troubled by wild cats at home so decided to do something about it,' says Bev. 'They set some traps and caught 13!'

That led to the realisation that predator control was the most crucial aspect of any protection programme. 'Thereafter DOC employed someone to trap the Opoutere pines area on a yearly basis



BANDING: (top and bottom) Bev Woolley banding two dotterel chicks in the early days at Opoutere.
Photos / Bev and Bryan Woolley.



PROTECTION: (above) A fenced off dotterel area helps keep nesting dotterel safe.
Photo / John Dowding



SAFE: Behind a fence a dotterel sits on its eggs relatively safe from disturbance by humans and dogs.
Photo / Tony Whitehead



PHOTOGENIC: Northern New Zealand Dotterel are particularly attractive birds and delightful to watch.
Photo / Adrian Riegen

and cats, stoats, hedgehogs and rats were caught. Subsequently traps were also set at other beaches where there were significant numbers of dotterels.’

The protection work had an immediate impact on dotterel nesting success. In the 1980s the number of breeding pairs at Opoutere averaged eight but by the 1990s and 2000s the average number of pairs rose to 13. Similarly, the average number of chicks fledged per pair rose from zero in the early 1980s to 1.18 in the late 1980s. It slid back to 0.62 in the 2000s but was still comfortably over the figure of 0.32 considered necessary for a stable population.

Of course the constant growth of the programme meant the work load for Bev kept expanding. But fortunately help was at hand. First one of the volunteers who lived at Matarangi, Susan Bryant, got increasingly involved and began taking some of the weight off her shoulders.

Then in 1995 financial support arrived from the unlikely source of Newmont Waihi Mining which ran the Martha Mine in Waihi. Workers at the mine saw some birds – one of them banded - nesting on the tailings site and manager, Sandy Miller, took Bev up there to check them out.’

I talked to him about the need to protect the nesting site and the work we were doing elsewhere on the Coromandel,’ says Bev, ‘and he got very interested and offered to sponsor our work.

‘When I approached DOC Wellington “about it they refused to have anything to do with a mining company and so nothing happened. But when I later mentioned it to John Gaukrodger in the DOC Thames office he bypassed Wellington and accepted the offer.’

In 1995 the company signed an agreement to provide around \$45,000 a year for a New Zealand Dotterel Watch programme on the Coromandel. This covered the salary of a part-time ranger to coordinate the volunteer work, a signpainted vehicle, temporary fencing material and signage. The sponsorship continued for 20 years.

This funding put the dotterel programme on a firm footing and Bev decided the time was right for her to step aside and let Susan take over. ‘The job had grown to a size I certainly never expected. But also Bryan and I wanted to do other things, to go travelling and things like that, and didn’t want to be tied down right through every summer.’

But she did find the time to help Waikato University masters student Andrea Lord research a thesis on *Effects of human approaches to nests of northern New Zealand dotterels*. The two of them travelled all round the Coromandel and down the coast as far as Opotiki ‘looking at dotterels and what reaction they had

to people and dogs – we took a little dog with us – and it provided clear evidence that people and especially dogs do affect their breeding.’

Andrea’s subsequent thesis concluded that, ‘Results of the present study suggest that disruption of incubation would be greatly minimised if dogs were banned within a 100m radius of dotterel nesting sites. Human access should be prevented within a 50m radius on busy beaches, and 70m on remote beaches. More generous distances would probably be prudent, as it is likely that energetically costly hormonal and nervous responses to potential predators are elicited at greater distances than are flush responses.’

Those findings added further scientific weight to the argument that the only way to safeguard the future of the Tūturiwhatu was to protect the nesting sites from blundering humans, inquisitive dogs and hungry predators.

Of course Bev wasn’t the only person involved in safeguarding the dotterels. The old Wildlife Service carried out work at dotterel breeding sites at Ruakaka, Waipu, Mangawhai and South Kaipara Head in 1983.

Volunteer groups, mostly involving members of OSNZ or Forest & Bird, started forming at other key dotterel nesting sites in Northland, Auckland and the Bay of Plenty. But John Dowding notes in several of his dotterel reports that, ‘Effective management of the taxon began at Opoutere Peninsula, Coromandel, in 1986.’

Another huge step forward came in 1991 when DOC established a recovery group for the dotterel – of which Bev was a member – to monitor progress. Then in 1993 a five-year recovery plan, written by John, was adopted and, she recalls, ‘things really got going’.

In several areas the department appointed rangers to coordinate dotterel work and some regional councils did the same. The number of volunteer dotterel watch groups exploded, especially along the east coast between Cape Reinga and East Cape, until some 30% of the dotterel population was being managed.

John Dowding’s latest report on dotterel numbers indicates that since the late 1980s Northern New Zealand Dotterel numbers may well have doubled, almost certainly as a result of the management programme.

Bev, who watched this with delight, says there were several factors involved in the expansion of the dotterel work. ‘There were a few newspaper stories. Birders began to talk about it. I think Andrea’s thesis helped quite a bit. It was discussed at OSNZ conferences where I think John might have spoken a couple of times. DOC got more involved.’

‘People found out what I was doing



READY FOR ACTION: Young researcher Andrea Lord and, the dog she used to monitor the impact of disturbance on dotterels, in the field and looking for data. Photo / Bev Woolley

and would contact me and say, ‘We’ve got dotterels on our beach, what can we do?’ and I would tell them what I’d done. And now there are dozens of groups doing the same thing and numbers are rising everywhere. It’s wonderful.’

Bev also continued to help train people for the work. It was her idea for the Centre to begin its Field Courses in 1999. She also suggested the Dotterel Management Courses which began in 2003 and for the first few years was the course convener.

These days Bev, who recently retired to Cambridge with Bryan, is unsure whether the wonderful growth in the

dotterel populations will be able to continue following DOC’s decision, in the light of the dramatic population increase, to transfer resources to birds which are more immediately threatened. ‘Unfortunately I think it’s already happening,’ she says. ‘From what the people who still keep in touch tell me, things are already going backwards.’

‘But it doesn’t have to be like that. We now have a good idea what needs to be done to save the New Zealand Dotterel so if volunteers keep coming forward and they continue to get support from DOC and the regional councils we can keep the population growing.’ 🐾

Helping dotterel survive in the heart of the big city



Philip Moll (above) has spent years nudging local bodies and talking with locals to get steps taken to allow native bird species like the Northern New Zealand Dotterel/Tūturiwhatu to live and nest on the shores of an estuary in the middle of the urban sprawl of Auckland. He's had some successes - including seeing the first dotterel chick hatched in the area for many years - but conditions are still far from ideal.

It's an ongoing challenge to protect the wildlife habitats of Shoal/Oneoneora and Ngataranga estuaries on the Waitemata Harbour. The area is targeted for increased infill housing that brings further risks of sediment from development into shorebird feeding areas, plus a growing population, increasing recreational watercraft activities and the odd miscreants driving onto shellbanks. There is also the problem that this is not a reserve where you can close the gates at night or have the benefit of patrolling rangers keeping an eye on wildlife areas.

Natural threats are perhaps an even bigger challenge for shorebirds, including our Northern New Zealand Dotterels. Wind-driven high tides seem to arrive just at the crucial time when eggs have been laid. It's sometimes possible to move nests a metre or two, but these shellbanks are far too narrow for that. Black-backed Gulls and particularly Australasian Harriers/Kahu pose a major challenge as they patrol the shellbanks relentlessly, targeting vulnerable nesting sites. You can almost set your watch by their visits to Shoal Bay at high tide.

Last year I had a nail-biting experi-

ence watching a pair of resident Variable Oystercatchers helped by a Caspian Tern drive away a persistent young hawk. Nearby a solitary dotterel chick was led away by a parent bird to the cover of mangroves for protection. This is a regular occurrence and most often the hawks win, devouring the contents of nests, eggs or chicks, before moving on. We are considering chick and nest shelters, designed to be unobtrusive, to avoid attracting inquisitive passing kayakers to land and disturb these sites.

So, what can we do to keep the estuaries safe for dotterels and other shorebirds? In 2015 following submissions by Forest and Bird and with support from the then Biodiversity team at Auckland Council, the 2012 dog bylaw was updated to keep some of the estuary shellbanks safe for wildlife with a 'No dogs' ruling. The decision to allow dogs on leashes had just not worked.

To back up the new ruling, interpretive educational signage was installed around the estuary and, as an Auckland Council dotterel minder, I install a taped fence with an 'I need my space' sign attached across the shell bank at the be-

ginning of August each year, and it stays until April the following year.

This has really made a difference. Previously many people would walk their dogs, always off-leash running ahead of their owners, and some folk even took mountain bikes along the shellbanks, ignoring the Council 'No dogs' signage at the access to the shell banks. But now they do not venture beyond this fence. In addition, the signage reinforces the message that this is a sensitive habitat.

This has reduced disturbance to the point that an additional pair of oystercatchers have become resident along the shellbank and, along with with Pied Stilt and dotterel, attempt to nest. The Variable Oystercatcher and Pied Stilt have been successful, and dotterel have laid eggs and even produced a chick, but unfortunately the presence of hawks meant it didn't fledge.

These species show amazing site fidelity especially when disturbance to their chosen habitat is reduced. I have watched one pair of oystercatchers since 2012 settled on one shellbank. Thanks to John Dowding we know that Oystercatcher and NZ Dotterel leg band re-

cords in Shoal show that some individual birds have been residing in the area for 15 years and longer.

Last year a dotterel recorded in Ngataringa Bay with the leg bands M-WKO (Metal-White Black Orange) was confirmed by John to have been banded as an adult female in October 1999 in Shoal Bay. As dotterel usually first breed at two years, John estimated that M-WKO would be a minimum of 22 years old.

Since 2016 a group of dedicated volunteers has run a pest control project around the estuary edges, with the aim being of reducing the number of predators that might swim out to nesting areas.

I've also visited local schools, to engage with students, to share and listen to stories about their wildlife encounters and to promote the message about not disturbing roosting and feeding birds. Hopefully this lesson will be remembered during future holidays in Northland and the Coromandel when Aucklanders are again able head to their favorite beaches.

Our annual 'Welcome to the Godwits' event, usually held in October on the Shoal Bay estuary edge, is another opportunity to engage with the community and share ways in which these sensitive habitats can be protected.

So, what of the future for these habitats? Unlike the Pūkoro Mirānda shell banks our smaller Chenier shell barrier banks are not accruing shells due to shellfish being depleted locally.

The shell banks are designated under the Auckland Unitary plan as Special Ecological Area Marine 1 sites. It's not easy to get a definitive understanding as to what that means for their protection. It would certainly restrict volunteers raising the shell banks artificially to protect against tides. Vehicles have been driven on them in the past and it hasn't exactly initiated a rapid response by Council to adequately fence-off access.

Most of the mudflats of Shoal and Ngataringa have an SEA Marine 2 designation, but this has not stopped a boardwalk being consented to push through Banded Rail territory in one of the upper inlets of Shoal.

Recent development has destroyed a significant long time dotterel roost site overlooking Shoal estuary at Akoranga Drive and more development projects are in the pipeline. It seems that until the authorities appreciate how these precious habitats fully function, especially since there is a very real threat of climate driving higher tides pushing wildlife nearer the hard edges of the estuary, the challenges of defending safe habitat will only increase. 🐦



HELP WANTED: (from the top) Dotterels on a Shoal Bay shellbank; the signs that help create the space they need to breed; the problem of intruders.

Photos / Philip Moll, Jim Eagles

'If you are even remotely interested in bird migrations, you really need this illuminating, enjoyable and accessible book'

– Keith Woodley

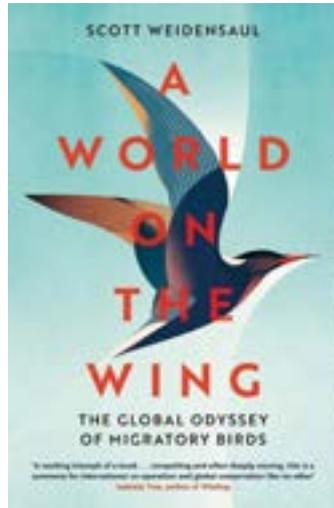
The local population of Canada Geese have featured loudly at Pūkoro over recent winters, especially in the morning. A honking skein of a hundred or so of these impressive creatures is a not uncommon wake-up call as they pass over the Centre. Introduced to this country, these are not migrants, merely commuters within the neighbourhood in which they reside all year. Yet for me they evoke the Northern Hemisphere. And within their natural range, they are indeed a potent image of migration, embedded in the biological and cultural landscape of North America.

American writer Scott Weidensaul writes of growing up in eastern Pennsylvania, observing the autumn and spring passages of geese which 'in the 1960s and early '70s (before nonmigratory flocks overspread every suburban office campus, city lake, and farm pond in the East) were still an electrifying benchmark of the changing season. Most years there would be a single morning - exactly when depended on the severity of the winter, but it usually fell in early March - when we would wake up to the sound of geese.... Racing outside to the first truly mild morning of the year, craning our necks up at a sky layered with chevrons of geese plowing north against the bleached denim sky. It was, and remains, one of the most thrilling moments of the natural year for me, and each winter as the days lengthened and the snow melted, we looked forward to "Big Goose Day" as the singular pivot in the seasonal round.'

A further migration milestone occurred, at the age of 12, on Hawk Mountain, a topographical hotspot for migratory raptors. The conditions were ideal: a powerful cold front dragging strong northwest winds over Pennsylvania aided the southward-bound hawks.

'The skies... were peppered with sleek, predatory shapes... I tucked myself in among the gray boulders, sheltering from the wind as best I could, eyes wide and excited. The silhouettes in the air looked nothing at all like the tiny drawings I had studied in my field guide. But it did not matter. Hundreds of raptors glided down the ridge that day, surfing the invisible waves of air, and I stared hungrily through my cheap binoculars, as each passing hawk dragged my eyes along with it.'

Such experiences set him on a path. Consulting books and atlases to investigate where the hawks were coming from, and where they were going, cemented a lifelong passion. That some had come



A World on the Wing: The Global Odyssey of Migratory Birds
by Scott Weidensaul, Picador, \$54.90

from Greenland or Labrador and were heading for Mexico, or Colombia or even Patagonia 'seemed impossibly exotic to a kid growing up on the edge of Pennsylvania coal country.'

A newspaper reporter, he wrangled an assignment covering bird banding at Hawk Mountain. Soon he had his own banding permit and was running a banding station. 'Without really meaning to, I slid further from observer to participant. While my day job was (and remains) writing about the natural world, field research has occupied an ever larger and increasingly satisfying part of my life, even though I lack an academic degree in science. *Fortunately, ornithology has a long tradition of welcoming experienced amateurs like me into the fold.*' [my italics]

There followed a successful career as a writer, and an impressive list of publications, including *Return to Wild America: A Yearlong Search for the Continent's Natural Soul* (2005), and *Of a Feather: A brief History of American Birding*, (2007.). But foremost, and inspirational for me, was *Living on the Wind: Across the Hemisphere with Migratory Birds*. (1998), a beautifully crafted account of bird migration within the America's. *The Ghost with Trembling Wings: Science, Wishful Thinking, and the Search for Lost Species*. 2002 cast a wider net, recounting quests to find species believed to be extinct, taking him outside America to the UK and Tasmania.

His latest book takes a fully global perspective: from California's central valley to the Yellow Sea, from the St Lawrence Seaway to Argentina, from Russia's

Taymr Peninsula to northeast India. Featured birds include Spoon-billed Sandpipers in China, Swainson's Hawks in Patagonia, Amur Falcons in India, and various migrants running the gauntlet of hunters in Cyprus.

Publication of science research is dispersed over many journals, many accessible only by subscription. There is a lot of it, and even specialists in their fields may struggle to keep up. Which is where writers like Weidensaul perform a grand service for us. If you want to know where migration studies have got to thus far, this book is what you need. And you will be in extremely good hands. Referring to that initial raptor experience on Hawk Mountain he writes: 'I didn't have the words, at the time, to articulate why I was so moved, why I found the sight so spellbinding.' The contemporary reader can be assured all that has changed. *A World on the Wing* is a synthesis of some of the most recent published research, blended with accounts of his direct field experience, all crafted by a consummate storyteller.

A question I am often asked is do birds sleep during migration flights? Tiny EEG sensors and GPS locators attached to frigatebirds in the Galapagos revealed birds made 1,800-mile foraging trips to feed their young, during which they slept for just 42 minutes in each 24-hour period. These were trips over the ocean by birds that cannot land on the water. Studies of Pectoral Sandpipers on their Arctic breeding grounds turned up a male that was awake for 95% of the time for 19 straight days. This did not appear to inhibit breeding success.

Another perennial question is the role of magnetic fields in bird navigation. Entering the realm of quantum physics, Weidensaul relates how a concept that made Einstein uneasy, has been shown to work for birds. That they can 'see' magnetic fields by way of a linkage, or entanglement, of electrons in their eyes. That this comes about when a photon that may have left a distant star billions of years ago enters a bird's eye is certainly challenging for a non-physicist like me to understand. But Weidensaul makes a valiant attempt. 'Such entangled particles are joined regardless of distance, defying classical physics and common sense.'

There is a fascinating chapter on how the advent of eBird has led to massive advances in migration studies, and become a potent tool for conservation. Though developed and based at Cornell University, it too has now gone global. Millions of individual observations by citizen scientists help build an incredibly detailed portrait of bird populations and movements. Started in 2002 it is now an enormous, and growing, database. It took 10 years to reach 100 million observations. Six years later there were 590 million with data on almost all the worlds' 10,300 bird species.

And for New Zealand there are accounts of a bird closer to home. Sitting on the banks of the Keoklevik River at Old Chevak, Weidensaul ponders what lies ahead for a juvenile godwit, crossing the Pacific on its first outing. 'Is there doubt, deep in the long nights as the unfamiliar stars of the Southern Hemisphere wheel overhead? Is there fear? Is there any emotion that can penetrate what I can only assume must be absolute and numbing exhaustion? Or does the young godwit feel only certainty, a sense that it is doing merely what it must at this moment, drawn toward some unseen place by a biological magnetism?'

As we enjoy the amazing revelations of the current godwit tracking project, as those birds continue to confound and surprise us, we are reminded there is still much to learn. And much work still to be done. 'Yet however much I may like to think otherwise, in truth I remain very much an outsider – as is every human who tries to penetrate the inner workings of this phenomenon. The best we can do is scratch at the margins of this majestic global pageant, to try to comprehend the sheer physicality of the migratory feats going on all around us, and to understand the natural systems on which they depend... Birds are sentinels and bellwethers. The victims of our follies – but also, if we are heedful of their needs, guides to a more sustainable future for ourselves as well.'

If you are even remotely interested in bird migrations, you really need this illuminating, enjoyable and accessible book.

– Keith Woodley

Report from the Chair

PMNT is a lot more than a 'Bird Club'

When our treasurer was reviewing our insurance policies recently, he discovered that our insurer categorises Pūkorokoro Miranda Naturalists' Trust as a 'Bird Club'.

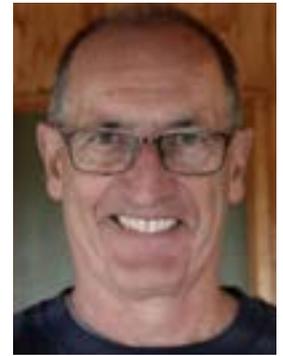
This description initially sparked some indignation. How many 'Bird Clubs' conduct scientific studies of migration? How many 'Bird Clubs' are involved in restoration, management and conservation of land, public education, international advocacy, publicity, operating a visitor centre and a shop? Surely there is more to PMNT than is suggested by this simple moniker.

At least this title indicates that we are not being mistaken for nudists. We are interested in more than just birds, but we are particularly focused on birds. Also, we have a special interest in avian trans-equatorial migrants, but we do not expect to be classified as an avian trans-equatorial migrant study group. Perish the thought.

Yes, we are a charitable trust, but we do have a membership and we do value our members and we do want to increase our membership.

You, our members, are the foundation of our organisation. Your membership fees and donations make possible the various activities that set us apart from the mere bird club.

Your memberships also underpin our ability to raise additional funds from other charitable trusts and funding



agencies for the education, research, advocacy, conservation, everything we do. So, the more of you there are, the merrier we shall be.

Putting us in a pigeonhole as a 'Bird Club' does not necessarily mean that anybody will mistake us for pigeon fanciers.

As long as everybody understands that it is this little bird club that is largely responsible for telling the astonishing godwit migration stories that have been so prominent in the media recently, we don't mind.

At the time of writing, nearly all our godwits have completed their southward migration for this year, and we are about to enjoy Adrian Riegen's webinar with a broader view of the story that he has been telling us from the satellite tracking data.

Adrian and the others of the New Zealand Wader Study Group made this happen and that group is part of PMNT and so we may all bask in the reflected glory from the success of this project.

So, it is about the birds, and we are members of a club. But 'Bird Club'? No – there's much more to us than that!

The Auckland outbreak of Covid-19 Delta variant caused the cancellation of our Welcome to the Birds on 10 October. Fingers crossed that we shall be able to meet again for the Autumn Migration Day on 6 March.

Ngā mihi, **William Perry**



PRIME MINISTERIAL VISIT: Not Bad for a 'Bird Club'.

GODWIT TIMES

with Emma Salmon



Tēnā koutou

Welcome back to the Godwit Times!

Have you been following my teina (siblings) the Kuaka or Bar-tailed Godwits on their long journey back from Alaska to Pūkorokoro Miranda?

This magazine has lots of stories about my friends, the Northern NZ Dotterel or Tūturiwhatu (do you like the painting of of my ehoa Tutu above?). Northern NZ Dotterels are pretty awesome, but are having a really hard time. This is because their nests are being damaged, eggs and chicks being eaten and the high tide getting higher.

If you fill in the gaps below, you will learn how to help my friends when you are exploring the beach this summer.

Don't forget if you have been on any adventures, just send Godfrey an email godfreygodwit@shorebirds.org.nz and you might appear in this magazine.

Ngā mihi,
Godfrey

Fill in the gaps

If you are on the beach always:

- Walk, run or ride your horse below the _____-_____ mark on beaches where _____ are breeding.
- Please stay _____ the fenced areas with '_____ nesting' signs.
- If you see a _____ pretending to be injured, or come across _____ or chicks, please _____ them alone.
- Please do not take your _____ on beaches.
- Keep your _____ on a leash at all times.
- The New Zealand _____ is an endangered species found only in _____.
- New Zealand dotterels breed on _____ spits, sandy _____, shell banks, dunes, tidal estuaries and _____ mouths.
- A dotterel chick eats _____hoppers, _____ fish and crabs.
- If an adult dotterel leaves her nest, her eggs get _____ or overheat in the _____.

Pūkoro-roko Miranda Naturalists' Trust



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Buckmaster, Jim Eagles.

Magazine

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

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See the birds

Situated on the Firth of Thames between Kaiāua and the Miranda Hot Pools, the Pūkoro-roko 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 \$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. 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, sign up right now by clicking on [membership](#), pay 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 Pūkoro-roko 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

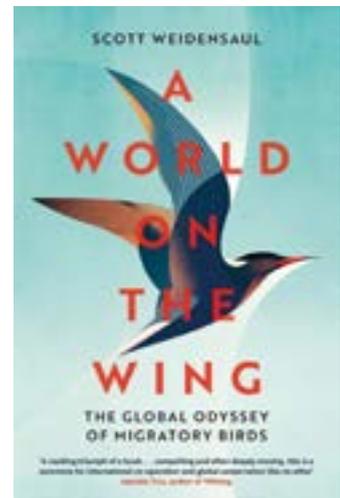


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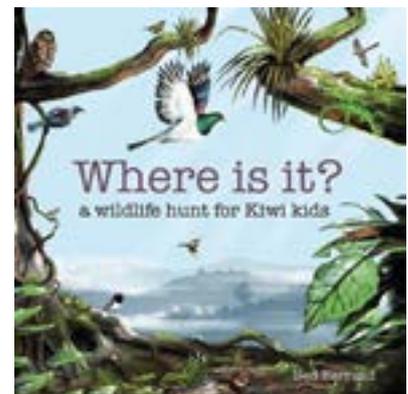


The marvel of bird migration

\$59.90

See book review page 20

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Don't miss out on our 2022 Shorebird Calendar

- Stunning photos of our favourite birds
- A big calendar block with lots of room for notes
- High tides for Pūkorokoro and the dates of our events

Only \$15 (plus \$5 post if required)

You can buy a calendar right now by clicking on [calendar](#) and linking to our online shop

They're also on sale at our wonderful Centre shop.

Or, if you can't visit, give us a ring on 09 232 2781, or send an email to shop@shorebirds.org.nz

Our friendly team is always happy to help



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\$44.90

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