

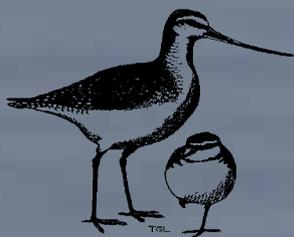
# Pukorokoro Miranda **News**

Journal of the Pukorokoro Miranda Naturalists' Trust

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## **Better news for world's most endangered gull**

**First full national census finds Black-billed  
Gull numbers are better than expected**



**Will Perry  
elected as  
Trust's  
new chair**

**The inside  
story of the  
North Korean  
documentary**

**How the  
Limeworks  
shaped our  
landscape**

# Will Perry completes his 18-year apprenticeship

For 18 years Will Perry has been taking the minutes at meetings of the Pukorokoro Miranda Naturalists' Trust's Council. Now he is going to run those meetings.

At the Trust's 43rd Annual General Meeting Will stood instead for the Council. That allowed the subsequent Council meeting to elect him as its new chair in succession to Gillian Vaughan, who retired after leading the Trust for eight years.

At the AGM, Keith Woodley paid tribute to Gillian's excellent work over so many years, and made a presentation to her on behalf of the Trust. Peter Thompson then proposed a vote of thanks to Gillian for her leadership which was carried unanimously.

New chair Will was raised in Pembroke-shire, Wales, and after qualifying in haematology, emigrated to New Zealand in 1990 (becoming sufficiently kiwi to support the All Blacks 'except when they are playing Wales').

An interest in natural history developed early, thanks initially to his parents who were keen amateur botanists, then to friends of theirs who were more interested in birds. Will joined the Trust soon after arriving in New Zealand, became a member of the Council in 1995, and was elected Secretary in 1999.

Still a passionate birder, he says his favourite bird is the Wrybill; his best bird record is of a Little Bittern at Sandy Haven Pill, Pembrokeshire, in 1969; and his best recent birding experience was seeing a pair of Dunlin with a juvenile on the Isle of Sky in July this year.

Will works for Waitemata District Health Board as a medical laboratory scientist and lives in Ellerslie with wife Holly ('a non-birder but understands how important it is') and grown-up son Emlyn ('who is discovering birds through photography'). Apart from birds his main interest is singing with the Auckland Welsh Choir.

## New secretary

Trish Wells, probably best known to members for spending two months as shoreguide during the summer of 2014-15, was elected unopposed as



CHANGEOVER: Gillian Vaughan congratulates Will Perry after he was elected to succeed her as the chair of PMNT. Photo / Jim Eagles

the new secretary.

Trish credits her love of wildlife to early exposure to Auckland Zoo. 'As a child I loved the Zoo; as an adult I love the Zoo; when I could no longer persuade my nieces, nephews or anyone else to go there I became a Zoo Volunteer. The Zoo introduced me to Tiritiri Island, where I became a guide in 2010 and was Supporters of Tiritiri Matangi Secretary in 2011 and 2012.

'The Zoo also introduced me to Pukorokoro Miranda. My first visit was to a cannon netting experience. We arrived at the shell bank to be told that the group of people hiding amongst the mangroves had been there since before dawn.



Seriously? Who would do that?

Trish (at left) got the answer to that question when she did the 2012 Field Course where 'a highlight was the day that started before dawn hiding in the mangroves!'

These days she works for Auckland Council 'and the rest of the time I can be found tracking my chickens, hoping to find a hidden stash of eggs.'

Trish is now 'looking forward to

having a more active part in PMNT as your secretary, seeing again the members I know and meeting those that I don't know yet.'

Also at the AGM, Kevin Vaughan was elected to his second term as treasurer. There were 12 nominations for the Council all of whom were elected: David Lawrie, Adrian Riegen, Gillian Vaughan (Immediate Past Chairperson), Wendy Hare, Estella Lee, Trudy Lane, Ray Buckmaster, Ann Buckmaster, Bruce Postill, Jim Eagles, Peter Maddison, William Perry.

## Subcommittees

In an effort to spread the burden of work more evenly the Council is setting up a series of subcommittees.

These will initially be: Banding (including research on the birds); Marketing and Membership (increasing membership, raising our online presence and campaigns like Bird of the Year); Shorebird Centre (maintenance, design improvements); Lands (redevelopment of the Centre grounds, Findlay Reserve and adjoining coastal strip); Education (supporting the work of the educator). The hope is to include members from outside the Council who would like to get more involved in the Trust. If you are interested in joining a subcommittee please get in touch with Keith.



**Educator appointed**  
Our new educator is Alex Eagles-Tully (at left) who has spent many years telling children

about environmental and social issues.

‘Encouraging others to learn and care about the natural environment is one of my greatest passions,’ she says, ‘so working as the educator for the Shorebird Centre is my dream job.’

Alex has had a strong interest in the natural environment since she was a child, and this led her to complete an MSc majoring in marine studies.

‘Through being involved with The Flock project and the Godfrey Godwit pages in *PM News* I have an appreciation of the natural history of the shorebirds of New Zealand and the work done by PMNT which I am very keen to share with others.’

Alex is currently working with schools in the Bay of Plenty to develop projects which allow pupils to help needy people. She has previously had several jobs involving educating children about the environment, written an award-winning environmental column for the *Bay of Plenty Times* and edited the *Coastal News* magazine for the NZ Coastal Society.

As well as doing the children’s page for the magazine – which her father, Jim, edits – she has created shorebird colouring sheets for children to use when visiting the Centre, taken part in banding sessions and enjoyed watching the birds at the Findlay Reserve.

Alex lives in Tauranga with her husband Dean, head of the marine studies programme at Toi Ohomai Institute of Technology, and two sons, aged 12 and 14, who have also enjoyed participating in PMNT activities over the years.

**Grants received**

The Trust has received two generous grants towards its general operations from funding organisations. Foundation North is providing \$20,000 and Trust Waikato \$5000 which will be a huge boost to our work to protect shorebirds. The Trust has also been advised of a \$10,000 bequest from a long-distance supporter, Stella Wel-ford, who lived in Oxford, England.

Meet the volunteers  
**Emma Salmon has a love of the sea and its creatures**



A new and enthusiastic volunteer is **Emma Salmon** who, as well as helping out at the Centre, has already joined in planting the grounds and is keen to work as a shore guide and tell visitors about the shorebirds.

Emma says she has ‘always had a love of the sea and the creatures that inhabit the marine space. I became interested in conservation at the age of 13, having had an enthusiastic teacher who was part of the trust on Motuihe Island. My family also had a bach for 25 years near Tawharanui Regional Park, so I spent half my life exploring the park and the surrounding marine environment with snorkeling, kayaking and trips to Kawau Island on a friend’s boat. Throughout school I was heavily involved in conservation on the island and around Auckland.’

Since then she has volunteered at places like Pukaha/Mount Bruce, Matiu-Somes Island, Zealandia and on Flat Holm Island in Wales where she lived for seven months. Emma has also worked for DOC, most recently as a Biodiversity Ranger in Whanganui.

‘I am interested in conservation as I believe that a symbiotic relationship can be formed between humans and the environment. I have a particular interest in marine conservation because there is still a lot we do not know about the ocean and the species that rely on it.’

Emma attended this year’s Miranda Field Course and thoroughly enjoyed it. ‘This course for me wasn’t just a way to extend my knowledge of shorebirds, it was my make it or break it for considering study again. Fortunately, it was a make it, partly due to the enthusiasm and excellent teaching of the tutors. This summer I will start studying at Massey University to become a marine ecologist. The future goal is to work with communities and teach them about marine conservation.’

**Operation Feeding Table**

The emergency appeal to replenish food supplies at the crucial stopover site of Yalu Jiang saw more than 250 tonnes of commercial shellfish spread out on the mudflats where it was eagerly gobbled up by thousands of migratory birds such as Great Knots and Bar-tailed Godwits.

A collapse in shellfish numbers was reported by researchers from Fudan University who have been doing longterm monitoring. This sparked a

fundraising appeal that was launched by PMNT, WaderQuest in England, Birdlife Australia and the SEE Foundation in China which raised more than \$250,000. The funds were used to buy commercial clams which were distributed by boat on the high tide and quickly discovered by the birds with more than 13,000 counted at one time.

**Stilt Pond drainage**

PMNT has had to abandon the plan to improve drainage of the Stilt Ponds,

**What’s on at the Shorebird Centre**

**18 August, Winter Potluck Dinner and Working bee**

10am Working bee. 12.20pm High tide, 6pm Potluck dinner followed by a birding trivia quiz with quizmasters Keith Woodley and Jim Eagles.

**7-9 September, Photography course with Neil Fitzgerald**

**18-20 September, NZ Dotterel management course**

**28 October, Welcome to the Birds**

11am Guest speaker John Tregidga, former chair of the Hauraki Gulf Forum.

**11 November, Firth of Thames Wader Census**

High tide 10.50am. Contact Tony Habraken at 09 238 5284 for details.

where water levels are now consistently higher than they used to be, by digging a second outlet into the stream beside the Wrybill Hide.

Unfortunately it turned out the ponds are actually lower than the stream bed so any water would have flowed the wrong way.

The Trust is now looking at clearing the channel just south of the car park culvert which seems to have silted up impeding flows into the Pukorokoro Stream. This will require a detailed engineering assessment as well as a Resource Consent so is likely to be fairly costly and time-consuming.

### Cheesy chicks



If you fancy having a touch of wader with your cheese then keep an eye out for the award-winning efforts by Karikaas Cheeses which (see above) come in braided river bird boxes with some of the proceeds going to BRaid.

### Walkway repaired

The walkway from the car park to the hides at the Findlay Reserve has been repaired following the damage done by the 5 January storm. The repairs were done by contractors working for the Living Water partnership between the Department of Conservation and Fonterra. Living Water also paid for the walkway upgrade in the first place.

### New email address

As part of a general upgrade of the IT system at the Centre the Trust has changed its domain name from Miranda-shorebird to shorebirds. As a result the main email address is now admin@shorebirds.org.nz. However, The old email addresses still work.

### Coastal planting

The long-awaited programme to rehabilitate the coastal strip of land owned by the Department of Conservation is now underway. As a first step volunteers and DOC staff have started planting the block opposite the Centre.

The aim is to restore the whole strip from the Findlay Reserve most of the way to Kaiaua.



EXOTIC VISITOR: A Northern Shoveler (at right) relaxing on the Stilt Ponds with some of its more common cousins. Photo / Jim Eagles

## Two more birding mysteries to solve

In October last year a male Northern Shoveler turned up at Pukorokoro Miranda. This was quite an event as there were, until then, less than a dozen New Zealand records for this species of Northern Hemisphere duck (*PM News* 106).

Then a few months ago another one (or perhaps it was the same bird that had been wandering elsewhere) was seen. Remarkably, it was later joined by a second bird. Even more remarkably there appear to be at least five of these vagrants in the country this year.

The closest breeding population is in North East China and the Russian Far East, so how they came to be here is an interesting question. Regardless of the explanation, it was certainly appreciated by the many birders who visited to add this vagrant to their lists.

A second bird mystery occurred in the results of the annual Firth of Thames winter census. The Pukorokoro Miranda coastal count of Wrybills was 2700 – an increase on the 2000-2200 we usually get.

Then Tony Habraken returned from his count site on the Piako River with a tally of 950 birds, resulting in a total count for the Firth of 3650. Normally we expect to host around 40% of the world population through the nonbreeding season with a further 40% or more on the Manukau Harbour. So why this sudden increase?

The answer may be quite simple as only 1200 Wrybills were counted during the Manukau census this year, suggesting many had moved to the Firth. Just why they may have done so remains a mystery.

Keith Woodley

## Recent sightings at Pukorokoro

### Arctic Migrants

- 110 Bar-tailed Godwit
- 7 Black-tailed Godwit
- 7 Red Knot
- 3 Ruddy Turnstone
- 1 Pacific Golden Plover
- 2 Northern Shoveler
- 1 Eastern Curlew
- 1 Whimbrel

### New Zealand species

- 2700 Wrybill
- 45 Banded Dotterel
- 1630 Sl Pied Oystercatcher
- 63 Royal Spoonbill
- 590 Black-billed Gull
- 4 Variable Oystercatcher
- Australasian Shoveler
- 130 Caspian Tern
- Hybrid Black Stilt
- New Zealand Dotterel
- Pied Stilts
- Spur-winged Plover
- 1 Kotuku (White Heron)

# Amazing working bee cleans up flood damage



An amazing working bee which saw a couple of dozen volunteers put in an estimated 150 hours of hard labour has seen the Shorebird Centre grounds largely restored after the damage done by the 5 January flood. The working bee was organised by Council member Ray Buckmaster after seeing plants in the grounds keel over due to being drowned in salt water. In addition debris from the huge storm surge across the road was scattered everywhere making for an insightfully mess. Cleaning that up resulted in a massive bonfire pile of dead plants and flood debris. As one participant suggested, 'When we light it the flames will be visible from outer space.' The working bee also did repairs to the Centre and hides, re-installed displaced signs and cleaned up the garage. Ray said afterwards, 'I cannot believe how much was accomplished. The members who turned up were amazing and the results were remarkable.' The big effort was boosted by lots of home baking, including cheese scones, sausage rolls, pink lamingtons and chocolate chip cookies, for morning tea which sent everyone back to work with renewed energy. A few weeks later Ray arranged the final stage of the restoration by spraying along the fenceline and then, assisted by wife Ann and some volunteers, planted 332 native plants along the fenceline and around the grounds. 🐦

# Join the hunt for the Pacific's golden birds

PMNT's latest project, to find out where our Pacific Golden Plovers come from and why their numbers have collapsed, offers a rare chance for members to take part in an important piece of international research into Arctic migrants. **Jim Eagles** explains how the project will work and what volunteers can do to help.

When National Wader Counts commenced in the 1980s around a thousand Pacific Golden Plover were recorded in New Zealand annually. Now we are lucky to find 200. Why this sharp decline? We have no idea.

Experience with Bar-tailed Godwits and Red Knots suggests it may well have something to do with developments along the East Asian-Australasian Flyway. But we don't know what routes our PGPs follow during their annual migratory round trip. We don't even know exactly where they come from.

That seems remarkable considering that these are officially recognized as New Zealand native birds and they are still the fourth most common of the Arctic migrants which visit us during the southern summer.

PGPs are of particular importance to Pukorokoro Miranda because this area, along with the Manukau, is consistently a major roost for the birds. But here, too, the numbers are falling. True, last summer at one stage there were 129 of them at the Findlay Reserve. But sadly that is the exception rather than the rule.

The oldest continuous wader figures are from the unpublished Birds NZ census records for the Manukau Harbour and Firth of Thames. The records for the Firth show that in the first 10 years of the census, 1960-69, an average of just over 46 PGPs was recorded annually. In the most recent 10 years, 2008-2017, there was an average of just under 18. That indicates a calamitous but unexplained downward trend.

Of course, until relatively recently the situation was much the same with respect to our most common migrants, the godwits and knots. But research has identified the routes they travel, most of their key stopover sites and



**BONDED:** Scientist Wally Johnson checks out a Pacific Golden Plover fitted with a GPS PinPoint. Photos / Wally Johnson

where they breed. As a result there has been a reasonably successful campaign to persuade the authorities, particularly in China, to protect their habitats.

So what do we know about Pacific Golden Plovers? Because they are such elusive birds the global population is uncertain. But it is thought to be c200,000, and is generally considered to be declining, as numbers visiting New Zealand would indicate.

We also know that they breed on the Arctic tundra in Siberia and Alaska then head south in August-September to a broad arc of Asia and the Pacific. In March-April they head north again to complete a journey of over 27,000km.

Recent research by Dr Wally Johnson, from Montana State University, has found that PGPs from Saipan, the Philippines and Asia, as well as one seen in Darwin, travel home to Siberia via Japan. Those from Fiji, the Cook Islands and Samoa go via Japan or Taiwan to Alaska. Hawaiian birds fly direct to Alaska.

So what do our birds, at the very edge of the PGP's range, do? Do they breed in Alaska or Siberia? Do they fly

home via Japan or Hawaii?

To answer those questions PMNT is teaming up with Dr Johnson next summer for a research project. The plan is to catch 10 Pacific Golden Plover while they are in the Pukorokoro Miranda area and fit them with new lightweight GPS PinPoint transmitters in order to track where they go.

Because PGPs behave differently in New Zealand this will not be easy. In other Pacific Islands they are gregarious birds often found in parks, golf courses and suburban gardens. But in New Zealand they are very shy and usually stay far out on the mudflats or on farm paddocks further inland.

To overcome this, as soon as the birds arrive in September this year, PMNT is aiming to have a team of volunteer birders recording what they do in order to build up a detailed picture of their movements, particularly where they roost at high tide. We've also asked Ngati Paoa to join the project and, closer to the time, we'll be appealing to local residents to report any sightings of the birds.

Dr Johnson with 5-6 scientists and senior students from Brigham



TREASURE: This Pacific Golden Plover with its geolocator was recaptured near Nome allowing valuable data to be recovered.

Young University Hawaii will arrive in February-March 2019. They will be joined by our own team of netters and banders led by Adrian Riegen.

Using the data gathered by the volunteer observers, and various catching techniques, including cannon-netting and mist-netting, they will endeavor to catch sufficient PGPs for the project. This is a vastly experienced team, which has caught and banded thousands of birds over the years from

Southland to Alaska, so we are confident of success.

Those birds which are fitted with pinpoints will be tracked by satellite so we can follow their progress back to their breeding grounds. In charge of the tracking will be Lee Tibbitts, of the Alaska Science Centre, who also tracked our most famous Bar-tailed Godwit, E7, during her world record flight from Alaska to New Zealand in 2007.

It is planned to set up a website providing tracking information so that people can keep up to date with the migration route and share in the excitement of discovery.

However, GPS PinPoints are not cheap. A quote from Sirtrack, which makes the new breed of tiny geolocators, indicates that buying the 10 we need, along with the ancillary charging and interfacing equipment, will cost around \$25,000.

Fundraiser Alister Harlow has already begun submitting requests to funding bodies. An initial grant of close to \$5000 – enough to buy the first two pinpoints – has been received from the Ron and Edna Greenwood Environmental Trust. Further applications are in the pipeline. If necessary we may also appeal to members to help us pay for the required 10.

If you're interested in supporting the project by joining the volunteers who help us find out where the Pacific Golden Plovers roost while they are at Pukorokoro, or if you might be willing to contribute towards buying the pinpoints, please send an email to [jimeagles45@gmail.com](mailto:jimeagles45@gmail.com). 

## The birds that link the Pacific

Pacific Golden Plovers are the most widely distributed Arctic migrants in the Pacific and have great cultural significance.

From their Arctic breeding grounds they fly south to a great swathe of ocean stretching from China and Korea on the western shores, through Taiwan, Japan and the Philippines, on to Australia and the islands of the Pacific, as far east as French Polynesia (where the first recorded specimen was collected on

Captain James Cook's second voyage) and as far south as New Zealand.

In Samoa they are called Tuli o Tagaloa and are linked to the local creation myth. In Hawaii, Pacific Golden Plovers are often credited with pointing Polynesian seafarers towards the Hawaiian islands (as illustrated in this postage stamp). Other islands have their own stories.





WE'RE REALLY THERE: In the great square of Sinuiju (from left), Keith Woodley, Louisa Cleave, Mark Crysell, Adrian Riegen, David Melville and Martin Anderson. All photos / TVNZ Sunday

## The inside story of the DPRK documentary

The *Sunday* programme's documentary on PMNT's work in the Democratic People's Republic of Korea created a huge reaction worldwide. **Jim Eagles** reports on how the programme came to be made.

For Louisa Cleave, the highly experienced journalist who produced the documentary for TVNZ on PMNT's work in North Korea, 'This was the story of my career.'

For the Trust it would probably come second to the coverage of E7's epic 2007 flight which proved that Bartailed Godwits really do fly 12,000km non-stop all the way from Alaska to New Zealand.

But the screening of *Secret Stopover* by the *Sunday* programme on 28 May certainly created an incredible reaction in New Zealand and around the world.

Sending a team to North Korea is, as we well know, not cheap, but TVNZ got a grant of nearly \$10,000 from the Asia New Zealand Foundation which helped a lot. However, it was also seen as a risky place. Reporter Mark Crysell noted afterwards that, 'TVNZ was very concerned about our safety before we went.'

As a result, at one point TVNZ wanted to pull the plug. But impassioned pleas from Louisa and Mark about what an amazing story it would provide obviously convincing. Instead of pulling the plug TVNZ

pulled out all the stops to publicise it. As well major promotional advertising there were television and radio interviews and Mark wrote a feature story for the *Sunday Star-Times* which appeared on the day of the programme.

The result was a huge audience, 440,000 in the 5+ age bracket, and a 31% share of New Zealanders watching television at the time. 'The news executives responded well to the story and tell us they're happy with the ratings,' Louisa told us afterwards.

'We've had extraordinary feedback on the birds and the work you're doing in DPRK. I think New Zealanders love to see our people doing great conservation work, and the birds of course did all the right things with their magnificent displays. Not bad for a bunch of bearded birders, eh?'

There are no figures on how many more people subsequently watched *Secret Stopover* online – where, incidentally, it is still available – but there were a lot of them, especially overseas, because there was a global torrent of congratulatory emails.

A few days after it screened I sent Adrian Riegen an email asking for

some information. When he belatedly replied he added, 'Apologies for the delay. My head has just been expanding after reading another bunch of emails regarding the *Sunday* programme. I imagine within a week the whole world wader community will have watched it.'

We'll look at some of those emails later. But first let's rewind a little. How did the TVNZ team manage to make this programme in the notoriously wary DPRK. That really goes back to 2007 when Winston Peters last held the post of Minister of Foreign Affairs. As he recalled recently, he was part of an international delegation which hoped to persuade the DPRK to give up its nuclear programme in exchange for economic aid. That went nowhere.

But Winston was also carrying with him a request from PMNT for a small team of New Zealand birders to be allowed to carry out a survey of shorebirds on the country's Yellow Sea coastline. To everyone's surprise the North Koreans found that quite interesting and eventually agreed.

In 2009 Adrian led the first team to the DPRK and he has now been there



WHERE CAN WE GO? (from left) Louisa Cleave, Mark Crysell (obscured) and Adrian Riegen discuss travel plans with acting-director of the Nature Conservation Union of Korea Ri Song Il.

six times, covering all but one section of the coast, seeing vast numbers of waders and identifying at least 10 sites of international importance. When they heard about this the *Sunday* team thought not only would it make an interesting story, it might also give them a way to see inside this little-known country.

Always keen to publicise anything to do with birds, Adrian agreed to sound out the Koreans on the *Sunday* programme's behalf. 'I approached them about it, thinking the answer would be immediately "there's no chance",' he recalls, 'but they were very excited and said this would be a good idea.'

But that doesn't mean it was easy-peasy to make the arrangements. Looking back afterwards Adrian commented, 'It was by far the toughest thing I've done in many years, getting the TV crew in to NK. It really was a massive effort with a good many sleepless nights. The project almost fell over several times. But in the end it worked pretty well.'

The end result of many months of negotiation was that producer Louisa, reporter Mark and cameraman Martin Anderson duly received an official invitation from the Nature Conservation Union of Korea (NCUK) to join this year's PMNT team of Adrian, Keith Woodley and David Melville on the

latest leg of the survey which, as luck would have it, covered highly sensitive areas on the border with China.

Why did this notoriously secretive regime agree to grant access, first to a team of birders, and now a camera crew? Reporter Mark commented in his *Sunday Star-Times* article: 'This is unprecedented in a country that feels it is under siege from the outside world. We're able to film in places no foreigners have ever been. It's access that can only be granted at the highest government level.'

We can really only speculate but, as PMNT has felt for some time, it does suggest that somewhere in the top level of the DPRK there is an interest in the environment and probably also a feeling that something like shore-bird conservation offers a safe way of developing tentative contacts with the outside world. And, as Mark also said in his article, 'The work of the Miranda team has shown the North Koreans that they can trust foreigners.'

Whatever the reason, the *Sunday* team was extremely excited at getting permission to visit what Louisa called 'probably the hardest country in the world for media to get into'. But there was also nervousness. After all, not long before their visit, a young American, Otto Warmbier, was sent home in a coma after serving time for stealing a propaganda poster in Pyongyang.

In addition the Ministry of Foreign Affairs advised against going. In an interview, Mark had asked Foreign Minister Peters, 'What can you do for us if something goes wrong?' 'Very little,' was his reply.

'I will never forget,' recalls Mark, 'the anticipation, trepidation and excitement we felt when we boarded the train and crossed over the Yalu River from China into North Korea. Martin, Louisa and I looked at each other and thought "this is it, there's no turning back now".'

In addition to fears about entering a country with a fearsome reputation, there were worries about just how tough living conditions might be. Louisa recalls, 'We had some trepidation about what it would be like inside the DPRK and were warned that we might suffer some hardship in terms of accommodation, a lack of hot water and uncomfortable travel around the countryside.'

The warnings about hot water proved justified. 'The hot water promised between 6 and 8am never eventuated,' she says, 'but we made do with boiled jugs and basins, or a cold splash here and there.'

Otherwise, 'I don't know if it was adrenaline or exhaustion, but we slept well. And I don't think I've eaten so much on an assignment. For the most part the food was plentiful, diverse and



CONFINED TO BARRACKS: Louisa Cleave and Martin Anderson holed up in their hotel room.

tasty. The pickings were a bit slimmer on Sindo Island, but this just gave me more ammunition to persuade Adrian to try the tofu!

Perhaps the biggest issue for the *Sunday* team was just how strictly the rules of their visit were policed. In his newspaper article he mentions that early on he took a quick snap of pictures of the DPRK leaders in the lobby of their Pyongyang hotel, ‘and 15 minutes later I am confronted by our minders, who’d been told by the hotel staff that my photo may be offensive’. In the event the photo was ruled to be quite acceptable.

They weren’t allowed to take pictures of soldiers or villages or the people who live there. ‘Essentially nothing that doesn’t match the image North Korea wants the world to see . . . and the reality is that much of the North Korea we saw was very poor. The infrastructure is basic, bumpy dirt roads, intermittent power, and horrific famines have taken their toll.’ But, he acknowledges, ‘we didn’t see starving people. I’ve seen far worse poverty in India and Africa. Totalitarianism is also clean and tidy.’

They travelled with a big entourage of scientists, conservationists, journalists and soldiers. ‘About half of them, we reckon, are who they say they are. It’s a given that we’re being watched and probably listened to. . .

‘We’re kept in our hotels when we’re not looking for shorebirds and can’t leave without supervision. Once inside there is no contact with the outside world. You accept all that as a condition of entry to the hermit kingdom, but after 10 days you feel claustrophobic and paranoid.’

Fortunately they discovered that, as Louisa put it, ‘The birders were great travelling companions who filled our long breakfasts and dinners (we mainly had to dine together in a room out of sight of locals) with fascinating stories of their interesting lives and travels. And I couldn’t believe Keith’s trapdoor mind: he can recall a 1970s song lyric or film quote like he heard it the day before.’

The journalists also took the same view as the PMNT team, that such hassles were worth putting up with for the privilege of being able to visit the DPRK, see what it is really like and find all those shorebirds. As Mark said, ‘We

had real adventures going where no foreigners have been before, of the type that I will be boring people at dinner parties for years to come.’

Mark was particularly fascinated by how well the birders got on with the locals. ‘They had the most extraordinary working relationship with the Koreans. They understand the sensibilities, a breach of which could land you in serious trouble, but despite that had built strong bonds over shorebird conservation.

‘What surprised me was how bolshie Adrian could be with the Koreans. He would push very hard to get to certain spots despite the fact that they were on sensitive borders with a large army presence. The Koreans took it in their stride and made it happen.

‘Both sets of eyes were always on the prize, everything was endurable for the shorebirds. What they’ve achieved is extraordinary and against the odds. We feel very fortunate to be able to tag along and tell their story.’

Of course for PMNT the biggest fear was whether the documentary might upset someone in the DPRK and disrupt plans for next year’s survey; and the greatest hope was that it would help spread the message about waders to a wider audience.

The fear largely faded few weeks after the programme screened when Adrian got an email from Kim Song Nam, vice-president of the NCUK, which said: ‘All the members in NCUK are pleasure to hear the news that not only PMNT including you but also NZTV had achieved success in Sindo joint survey of migratory birds this time.

‘On behalf of NCUK I express my deep thanks to PMNT contributing to Sindo joint survey of migratory birds this time. We did our best to fulfill the contracts between NCUK and PMNT last four years and will do so in the future. I wish you also will continue to try to do your best to the joint survey of migratory birds with NCUK in the future. Thank you very much for your efforts to invite four members of NCUK to New Zealand in January next year. I hope this will be realized surely.’

As to the hope for spreading the message, that certainly occurred and weeks later it still continues. Keith, who as

Centre manager is the main interface with the public, says the impact has been 'prodigious'.

'Since the documentary screened it has been the single biggest reason people have given for visiting the Centre and that's true even now. In the last couple of days we've had people still coming in and talking about a programme they saw on TV. Some of them even recognised me . . . though some didn't. Some people have driven down here specially for the first time as a result of seeing the programme. Others have been coming past and said, "that's the place we saw on that documentary" and popped in. And still others who have been here before have been nudged into coming again. It's had a huge impact.'

The other big indicator of the programme's impact has come with the avalanche of emails like these:

**Eminent ecologist Theunis Piersma from the Netherlands** – Very well done! Thanks for what I hope will be another great contribution of what may be the avoidance of some real extinctions!

**Ken Gosbell, former chair of the Australasian Wader Studies Group** - A few days ago I watched that amazing presentation shown on TVNZ about your work in DPRK. Just a wonderful film which was a demonstration of the tireless work that you and your team in New Zealand have put into this vitally important region. To be able not only get entry to these areas but with a film crew as well was just amazing. And of course finding all those shorebirds in the area we have always suspected was so important was a real coup. I recall seeing those vast flocks from the Yalu River some 10 years ago and wondering how anyone would ever find out what it was really like on the ground. Well, you have. Congratulations all for such a wonderful contribution.

**Former PMNT chair Stuart Chambers** - A very good programme indeed. You not only deserve the Nobel Prize for Conservation but, who knows, you may also get it for Peace. Most exciting that the birds were there and such a great sight. I could have watched them for ages. Also great what Winston did. He got you started.

**New Zealand marine biologist Rob Schuckard** - This was an outstanding report where conservation is building bridges far beyond Dandong. Well done on your carefully worded interviews which were respectful and made everybody a humble winner . . . including the shorebirds.

**Bob Gill from the Alaska Science Centre** – Fantastic job, boys. Bravo all!

**Jo Scott from Belmont Primary School** - I have just watched the doco of you in North Korea with the godwits. How absolutely fantastic. I think the godwit study we did at school is the most memorable topic I've covered. Well done on getting into North Korea. Just wanted to let you know that someone out there gets the enormity of it.

Perhaps the most delightful emails were from building colleagues of Adrian who didn't know how he spends his time when not banging in nails, like this: 'Awesome story on telly, well done! (PS Can't believe that old nail gun got in on the act). - Jarrad.'

After reading this Jim Eagles suggested PMNT take up a collection to buy a new nail gun and put the old one into a Shorebird Museum. Adrian's response was: 'Absolutely nothing wrong with my nail gun. It's American after all. Its drawback is it needs a compressor and air hose. But it will have driven a million or more nails in the past 25 years and that's 1000km of nails.'



TREPIDATION? Mark Crysell heads by train through the DPRK.



A REAL ADVENTURE: The Sunday team in Pyongyang.



GOOD CATCH: A Black-billed Gull plucks a fish out of the sea.

Photo / Kathy Reid

## Encouraging news for our rarest gull

The first national census in 20 years of our endemic Black-billed Gull, or Tarapuka, suggests that the number of breeding pairs may be larger than previously thought and, far from collapsing as feared, the population appears to have at least stabilised, reports **Jim Eagles**.

When visitors to the Findlay Reserve are introduced to Black-billed Gulls they are often pleasantly surprised to learn that they are not just any common old gull but a unique species found only in New Zealand and then saddened to hear that they have the unwanted distinction of being the most endangered gull in the world.

These gulls have always lived life on the edge, choosing to breed mostly in the braided rivers of the South Island, where even before the arrival of rats, stoats and quad bikes their nests were at risk of being swept away by floods.

This risky pattern has also been followed by the small local breeding colony that was first spotted at Taramaire by Ross McKenzie and Dick Sibson in the 1960s and has since grown in size to about 100 breeding pairs and moved around various sites including Kaiaua, Taramaire and now the shellbank at the reserve. Two years ago most of the eggs and chicks were

destroyed by a storm that sent huge waves sweeping across the shellbank. Fortunately this season's storm surge came a bit later and most of the chicks were just big enough to escape.

The gulls have always been difficult to count because, for obvious reasons, they spend a minimum amount of time at their precarious nesting sites before dispersing across the land. However, regular surveys were begun in Southland, where the majority of the birds breed, in the 1970s, and over a 30 year period these indicated the population had fallen by more than 80 percent. As a result, in 2013 the gull's status was changed from Nationally Endangered to Nationally Critical, with an associated analysis predicting a further decline of 70 percent over three generations.

But what are the real numbers? The only previous attempt to conduct a National Census was carried out by the Ornithological Society of New Zealand

(now Birds NZ) in the 1995/96, 1996/7 and 1997/8 seasons. It estimated there were 48,000 nests, or 96,000 breeding birds, but there appear to have been gaps in its coverage and the precise survey methods are unclear.

The latest national census was organised by Claudia Mischler, of the University of Otago, in the 2014/15, 2015/16 and 2016/17 seasons.

A keen seabird ornithologist, she studied initially in Canada and has been working with various seabird species around the world for the past 10 years. Since coming to New Zealand in 2012, she has taken a special interest in the Black-Billed Gulls, initially monitoring colonies in Marlborough and Tasman, then coordinating surveys for Marlborough, Tasman, Canterbury and the West Coast, and most recently leading the national census.

For the census, the small North Island population, including the



SURVIVORS: Black-billed Gull and two chicks.

Photo / Rebecca Bowater

nesting sites at Pukorokoro Miranda, Mataitai Pt near Kawakawa Bay and the well-known colony at Sulphur Pt on Lake Rotorua, was recorded by independent observers. In the 2016/17 census, which was the most complete, 992 nests were counted, indicating 1984 breeding birds.

In the South Island, where the population is much larger, the census was done primarily by air, with overflights to locate all the colonies followed by aerial photography to record the number of nests. In addition, 16 sites were counted by pairs of observers to check the accuracy of the photographic counts and come up with a correction factor.

In the key regions of Canterbury and Southland, in particular, the number of colonies found was up on previous counts. In Canterbury, the 1996/97 census found 17 colonies but in 2016/17 there were 27. In Southland, 12 colonies were counted in 1996/97, 24 in 2006/7 and 43 in 2016/17.

In her report, which has just been published in *Notornis*, Claudia acknowledges there were some gaps in coverage in the first two counts, with the 2016/17 being the only complete



CLAUDIA MISCHLER.

national census, and it identified a total of 60,256 nests or 120,512 breeding birds, a 25 percent increase on the national census 20 years before.

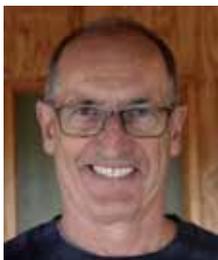
This is obviously an encouraging outcome, but in her discussion of the results Claudia said the gaps in the coverage of the 1995-98 national census – which included the omission of the West Coast and incomplete coverage of significant rivers such as the Whitestone, Eyre, Rangitata and Waimakariri – suggested that it ‘likely

underestimated the the total national breeding population’.

On the other side of the coin, analysis of the methods used for the initial Southland counts indicated that they ‘probably vastly over-estimated the population between the 1960s and 1980s’.

That combination of inflated historical numbers and a likely underestimate in the first national census 20 years ago meant it was extremely difficult to assess longterm population trends for the Black-billed Gull and made it all the more important that a further census, using identical methodologies, be carried out in 10 years time.

Overall,’ she concluded, ‘the 2016/17 national census showed positive results in regards to the black-billed gull population. The number of breeding birds is higher than expected, and the trend since the 1990s does not fit the predicted decline of >70% over three generations which had warranted the Nationally Critical threat assessment. . . ‘In summary, it is likely that the Black-billed Gull numbers are stable; however, another census in 10 years is needed to assess the long-term population trends.’ 



From the Chair

# Council faces up to key issues

In his first report as the new chair of the PMNT Council **Will Perry** explains steps being taken to identify the Trust's priorities so it can focus the available resources on them in the years ahead.

Our Annual General Meeting on 20 May saw some changes on the Council with Trish Wells elected as the new secretary and I was honoured by being chosen as the new chair to succeed Gillian Vaughan.

We are fortunate that we will be able to retain Gillian's abilities and knowledge as she will remain on the Council along with another former chair in David Lawrie.

The other members of this new Council all have strong credentials within PMNT and bring their own strengths and skills to the Trust. We are fortunate to have an organization and a Council that is devoted to a common purpose, namely that the migratory shorebirds that matter so much to us keep coming to the special places in New Zealand that matter so much to them.

The new Council faces a number of issues that have been developing over recent months and years. 'Keep the birds coming' is our Mission Statement and it is the mantra that we use to guide us in all our deliberations. It is easy to say and easy to understand and consistent with our Constitution.

What is not so easy is to develop the vision to plan for the future. It is also difficult to decide what actions and activities take priority over other actions and activities in order to achieve our objectives.

With this in mind, the Council is planning a special meeting that will focus on our plans for the future. We have already established a working group (led by Jim Eagles) that is preparing the ground for this special meeting to consider our priorities.

We expect it will consider various issues such as land ownership, development of the land that is already our responsibility, buildings, staffing, membership, research, advocacy, education, publicity, relationships with other organisations and individuals.

We shall not change our fundamental values but we do seek to establish priorities and to decide how to target our resources in the next



**A JOB WELL DONE:** Outgoing chair Gillian Vaughan receives a presentation from manager Keith Woodley as a gesture of thanks for her great work over many years. Photo / Jim Eagles

period of 10 to 25 years.

One issue that has been a bit controversial in recent times has been our relationship with Living Water, a joint venture between the Department of Conservation and the dairy company Fonterra.

Living Water's stated aim is to find 'game-changing and scalable solutions that will enable farming, freshwater and healthy ecosystems to thrive side-by-side.' To that end it works 'with farmers, scientists, councils, mana whenua and communities to design and test solutions, and then develop a plan to implement regionally and nationally.'

Our work to enhance shorebird habitat, create wetlands and improve water quality, which was already well known to DOC, meant Living Water decided to offer us funding for several projects which coincided with its own aims.

We thought carefully about such offers and concluded that the funding was offered in good faith, came with

no strings attached and would enable us to implement projects that would otherwise have been difficult to fund and we decided to accept.

Projects such as the board walk and trail to the hides on the shell-bank, planning for the restoration of the Robert Findlay Wildlife Reserve and our delegations of shorebird census people to the Yellow Sea have all been helped by funding from Living Water and we remain grateful for this generosity.

Living Water has now shifted its primary focus in the area to improving water quality affected by dairying in the Pukorokoro Miranda. We thank them for the funding and we also move on.

The next meeting of the PMNT Council is scheduled for Sunday 19 August. We take seriously our responsibilities as executive members of PMNT Council. We also welcome comments and feedback from the membership. So please feel free to contact us at any time. 

# Flyway work faces many challenges

The continuing effort to protect shorebird habitat faces many challenges – ranging from dramatic changes in the organisations we work with in China to the need to set our own house in order back home – members who attended PMNT’s AGM were told by guest speaker Bruce McKinlay.

A massive restructuring of the Chinese Government – including the agencies involved in conservation – is one of many issues facing those involved in helping migratory shorebirds, according to Bruce McKinlay, who represents New Zealand at the East Asian-Australasian Flyway Partnership.

Bruce, who works for the Department of Conservation, said changes approved by the 13th National People’s Congress were likely to result in:

- A new Ministry of Natural Resources with responsibility over urban planning plus management of water, grasslands, forests, wetlands and maritime resources.

- A National Bureau of Forestry and Grassland, probably within the new ministry, replacing the State Forestry Administration, which is the principal body we have been dealing with.

- The probable inclusion in the new ministry of the State Oceanic Administration which made a major announcement earlier this year about stopping coastal reclamation.

- A new Ministry for Ecology and Environment which will take over responsibility for climate change and greenhouse emissions policies.

Among other things, Bruce said, those changes have implications for implementing the Memorandum of Agreement on safeguarding shorebird habitat which DOC signed with China’s State Forestry Administration at the Shorebird Centre in 2016.

DOC Director-General Lou Sanson has invited the Chinese here to start developing the joint work programme on migratory shorebird conservation and wetland protection set out in the MoA. There has so far been no response, probably because of the restructuring, he said, but ‘we are still hopeful that this invitation will be accepted.’

In that and other areas, ‘I think DOC will have to commit to a period of rebuilding knowledge of where in the new ministries the key contacts are and build relationships with them.’

The restructuring will be replicated in provincial government departments, including Hebei Province, which includes the key Red Knot site at Nanpu,



BRUCE MCKINLAY at the AGM.

where it is hoped to create a nature reserve, and the key Bar-tailed Godwit site in at Yalu Jiang.

Basically, Bruce said, ‘nothing is certain yet’ and ‘how long things will take to settle down is unknown. . . We will in the short term need to ensure our engagement with the EAAFP is maintained or increased so that we can receive information so as to be able to respond to these changes.’

The key godwit site at Yalu Jiang National Nature Reserve – where, Bruce noted, relations are currently ‘problematic’ – will also be affected by the restructuring. ‘Maybe we should take the opportunity, while projects are not happening, to reflect on our objectives?’

Other Flyway issues he raised were:

- A restructuring of the EAAFP governance structure so the chair and management committee provide greater guidance to the secretariat.

- The establishment of a Technical Committee of the EAAFP to which PMNT has nominated David Melville.

- An almost complete turnover of staff at the EAAFP secretariat.

- Moves by Australia to include Frigatebirds, Gannets, Boobies and Tropicbirds in the EAAFP which ‘will distract effort away from the habitat issues that we face in East Asia and make the meetings of flyway partners even more complicated.’

- The need to consider the impacts of climate change on the Flyway where

‘changes in nesting behaviour are already being reported.’

- The accession to the Flyway Partnership and the Ramsar convention of the Democratic People’s Republic of Korea which creates an opportunity for further cooperation.

On the domestic front, Bruce said, ‘some housekeeping’ was required for us ‘to be credible in engaging with China and other partners in the EAAFP.’

For instance, ‘how we protect estuaries is still a complex question with multiple accountabilities. The development of cycleways in Christchurch and Motueka is apparently acceptable without taking account of the impact on roosting shorebirds. The role of dogs, and jet skis and other disturbances on beaches is still a big issue.’

Similarly, those involved with shorebirds had so far been unable to engage with strategic planning in Auckland to ‘ensure recognition of Manukau as the most significant shorebird habitat in New Zealand.’

Furthermore, much as we might look askance at China’s management of coastal areas, he pointed out, we still don’t have unanimity over what should happen with regard to mangroves.

On a positive note, Bruce said good progress was finally being made in getting Flyway Network Status for New Zealand’s priority sites for migratory shorebirds, including the Firth of Thames, Farewell Spit, Awarua Bay and Avon-Heathcote. ‘I’ve also started to scope out how to approach the Manukau Harbour and expect to make progress on this this year.’

In conclusion Bruce noted that ‘threatened migratory shorebirds, godwits and knots, inextricably link New Zealand and China and the DPRK, and these links require us to work together for their conservation, in particular through protecting coastal wetlands.’

At home ‘we have been successful in organising civil society, iwi and government to be on the same songsheet.’ But ‘efforts to conserve migratory shorebirds in one country can only be effective with cooperation and complementary actions in all countries that shorebirds visit.’ 



INDUSTRIAL POWERHOUSE: The Limeworks in its heyday.

## How the Limeworks operation transformed our coastal landscape

The old Miranda Limeworks, which once stood beside today's Findlay Reserve carpark, was a massive operation which for about 25 years processed vast quantities of shell and brought a steady stream of cargo ships to the wharf at the mouth of the Pukorokoro Stream, reports **Ray Buckmaster**.

The hand of man lies heavily on the Robert Findlay Wildlife Reserve and the adjacent land. Discovering this past human impact is a bit like assembling a jigsaw puzzle lacking some significant pieces. Detective work will get you so far but then guesswork is the only recourse. So, what follows is largely factual but some of the inferences are, at best, mere speculation.

At the beginning of the 20th century the main means of travel to and from the area was by boat. There were wharves at the mouth of the Pukorokoro Stream and at New Brighton which is better known today as Kaiāua. A regular supply run from Shortland, today's Thames, transported goods, animals and people around the Firth. The wharf at Kaiāua is long gone but there are remnants of the Miranda wharf still to be seen at the current finishing point of the Kopu to Kaiāua Cycle Trail.

The Pukorokoro Stream, alongside the old wharf, was once able to accommodate quite large vessels but today it is just 3-4m wide, having been encroached upon by mangroves which impede water flow and contribute to upstream flooding.

This is not a new problem. In 1959 it was proposed to widen the stream from 12m to 90m due to flooding of low-lying farm land. Stream flow was impeded, not by mud, but the movement of shell into the mouth from further north. The mud was to come much later from drainage work in the Hauraki Plains.

Flooding seems to have been a continuing problem because in September 1968 it was proposed to remove 750,000 cubic metres of material from the stream mouth. Interestingly, an additional reason for doing this was to aid navigation, suggesting that boat access was still possible.

However, the wharf was not in use at that time. It was reportedly in bad condition back in 1913 after being damaged by a severe storm that also took out 21m of approach road. Improvements in road transport reduced its utility and in 1946 it was reported not to have been used in years.

Despite the 1959 widening proposal, the Pukorokoro Stream mouth has not received the attention given to the Taramaire Stream, which is cleaned out every couple of years.

The ease with which the farmland

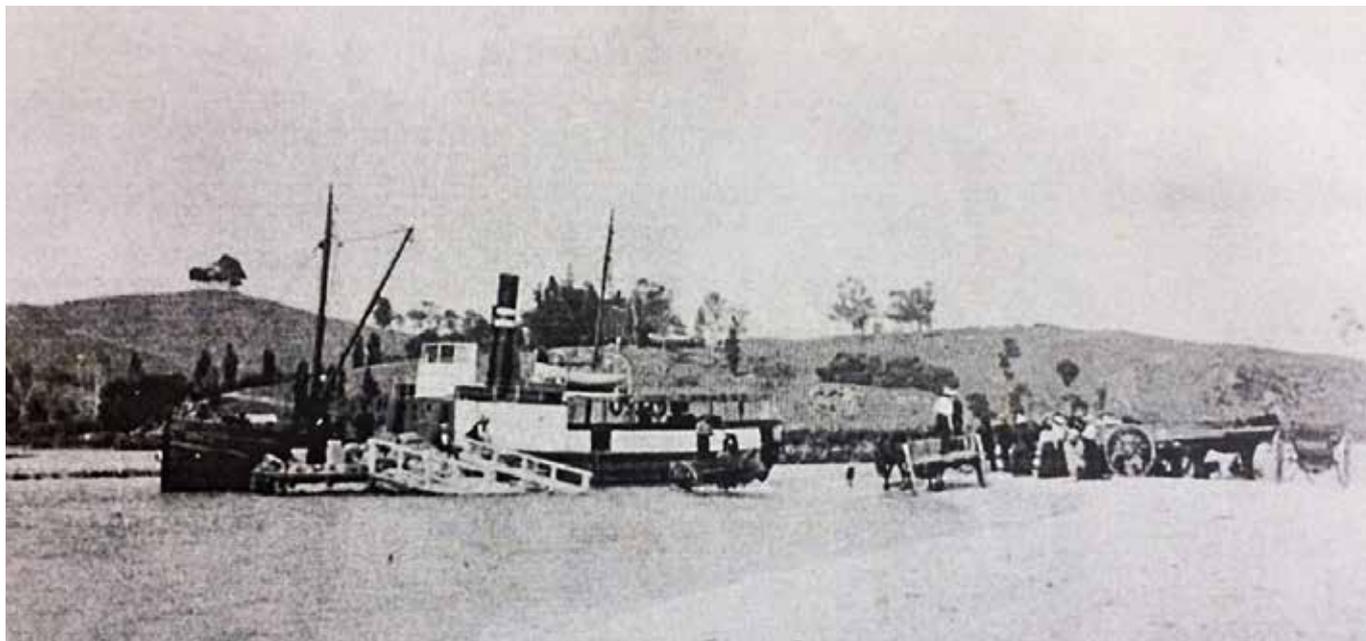
here floods is explained by its origin. The land began to be formed by the sea some 4,000 years ago at a time when the tides were 2m higher than present. For the next 3,000 years the sea level fell, leaving behind a plain of marine mudflat as the tide retreated.

Across this plain there are strands of shell, deposited by storm events, each marking the position of the then shoreline. Materials accumulated behind each shell-ridge and subsequent drainage schemes turned this low-lying land from a wetland into pasture.

Such plains with strands of accumulated material are found around the world though the material deposited is not necessarily shell. They are most often wetlands and frequently provide habitat for migratory birds. Indeed, an image from the Miranda Hot Springs showing locals bathing in a thermal pool in the middle of a swamp gives an idea of the nature of the land prior to drainage.

The constant sea level that has existed for most of the last thousand years has resulted in the shell ridges being closer together.

But since the industrial revolution the sea level has begun to rise. The



BUSY PORT: The *Hirere* taking on cargo at Miranda.

Photos / Lane family

overtopping of the coastal shell ridge during the 5 January storm is an indication of what is to come as the sea reclaims the land that it previously built. In fact storm surges have caused coastal flooding on numerous occasions with such events being recorded for 1924, 1938 and 1995 as well as the 2018 flood.

Following European settlement the ample shell deposits were soon seen to be an exploitable resource. Some uses were quite minor with shell being used as poultry grit with the added benefit of providing calcium for their egg shells. The deposits were also used for roading and farm tracks.

But the greatest potential was as a source of agricultural lime, sometimes shortened to aglime. Aglime is very finely powdered calcium carbonate ( $\text{CaCO}_3$ ) and cockle shell is mostly made of this. Much of the land being brought into pasture came from draining acidic swamp land. Pastures on acid land generally don't thrive as the acidity produces elevated levels of aluminium in the soil which inhibits root growth and mineral uptake. Lime reduces this acidity and improves the crumb structure and drainage of the soil. It also unlocks the fertility of marine mud-based soils. Add to this the fact that bones of grazing animals are largely made of calcium phosphate and lime becomes an agricultural necessity.

Initial use was probably fairly modest but in 1932 roading contractors Tate and Hodge contracted with a firm of Penrose bridge and general builders from Penrose, Bill Clare

and Company, to erect the Miranda Limeworks on the site that is now the Reserve carpark.

Once completed the works was in operation night and day. Its need for electrical power resulted in reticulation of the area so farmers no longer needed to rely on generators to run their milking sheds.

The shell came from the Lane Farm, of which our Reserve was part, the Coxhead property and Fairview Farms, which are reputed to have covered 3,000 acres. Payment for the shell was set at sixpence a cubic metre but there was a requirement to restore and drain the land after the shell was removed.

Stuart Chambers, who first visited the area in 1949, notes that 'small lakes were found from the Limeworks to well beyond Ray's Rest, formed by the removal of shell'.

Stuart returned to the works in 1951, on a birding trip led by Dick Sibson, and he recalls that lunch was eaten on the lime sacks and most of the birding was around those long shallow lakes, the margins of which were frequented by Sharp-tailed Sandpiper, Turnstone and Wrybill.

The initial years of lime production were not profitable, but the Second World War increased the demand for aglime as superphosphate was too costly. Lime production was simple. The first stage involved feeding shell into a horizontal revolving cylindrical kiln, measuring 1.2m by 7.5m, fitted with baffles to move shell along it. Initially a coal-fired furnace provided

heat to dry the shell. But this was later replaced by an oil-burning model as the earlier furnace burnt the works down twice. The dry shell was crushed to a coarse flour consistency and put into 50kg sacks.

This aglime was in high demand and was barged around the Firth and the Hauraki Gulf so a channel and a basin were kept open adjacent to the Limeworks. The *Lady Eva*, a parafin-powered 17m tug, was the largest vessel to enter the basin and it towed a wooden barge made from a converted scow to collect the lime. The *Lady Eva* went into retirement in 1989 after many years with the Subritsky Line and, as local roading improved, the lime was also trucked out to Pokeno for further distribution.

An anecdotal source suggests that the Limeworks also produced cement for the growing cities of the Auckland region and this would certainly have been possible. The process involves heating lime with fine material like that making up the mudflats below the chenier ridges. A high temperature is required to drive off the carbon dioxide component of the shell to produce burned lime ( $\text{CaO}$ ) and rotating kilns are used for this purpose.

It is possible the lines of shell were being exploited even before the Limeworks started to operate. A cement works was in operation at Mahurangi from the late 19th century until 1928 and the limestone it used was of variable quality. To improve this pipi shell was added from Clevedon but the chenier plains would have been a more

convenient source.

The Limeworks ran out of shell in the early 50s and the works were closed. Today the concrete base of the works is all that remains and, interestingly, you can see that cockle shell was used as part of the mix. Somewhere there is reputed to be the remains of the old boiler. The lime silos themselves went to consolidate the boat entrance to the stone crushing plant up the coast at Whakatiwai.

Trudy, one of the Lane children, tells of playing around the old works. On the northern concrete pad there was a rusted-out piece of machinery with ferocious internal teeth. She never put head or hand into the maw of this machinery lest it came to life and dragged her inside.

During its operation the Limeworks copped a fair number of complaints. In 1948 it was accused of causing seawater to encroach on farmland and to threaten the existence of the road. By March 1949 the existing road was moved and in June it was ordered that no excavations should occur within two chains, about 40m, of high water. These orders were seldom honoured and frequent illegal mining is recorded in Ministry of Works archives.

Today only a single, patchy chenier ridge exists between land and sea and this proved a notably ineffective barrier during the recent flood event. The sea burst through under that ridge in several places, including the approach to the new Poaka hide, which is sited less than 40m from the main track.

Today little of the Reserve is in its original state. The cheniers were removed down to the level of the marine mud plain that they sat upon and restoring them is an impossibility. It is in effect a disused industrial site that nature has made a remarkable job of rehabilitating. It's not quite a blank sheet but the Trust should not be inhibited from quite dramatic changes when it begins its restoration work.

•This historical jigsaw was formed from many sources. Hopefully, not too many pieces have been forced into the wrong-shaped holes. An article by Muriel Du Feu in the *Auckland-Waikato Historical Journal* was the major source. Thanks also to Trudy Lane and particularly to Stuart Chambers who has an encyclopaedic knowledge of the area and played a significant part in the formation of Pukorokoro Miranda Naturalists' Trust. 



The Limeworks site today.



Remains of the old Miranda Wharf..



Chenier ridges like this newcomer once formed much of the coastal plain.



The sea reclaims the land.

Photos / Ray Buckmaster

# Highly accessible and informative

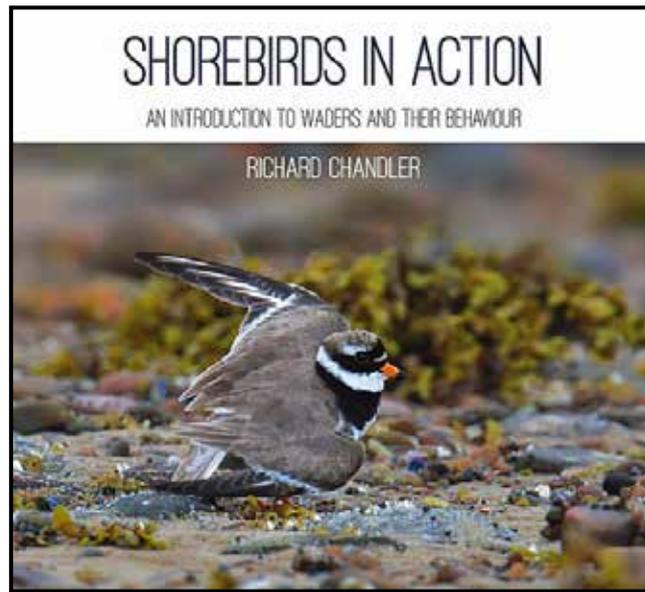
*Shorebirds in Action: An introduction to waders and their behavior*, by Richard Chandler. Whittles Publishing (especially imported by PMNT), \$54.90, Softcover.

Richard Chandler is a photographer with an authoritative knowledge of shorebirds. I first met him in South Korea during the Saemangeum Shorebird Monitoring Project, and a few years ago he spent several days at Pukorokoro Miranda.

I recall complimenting him on his photographic guide *Shorebirds of the Northern Hemisphere* and enquired whether we could expect a companion volume for the Southern Hemisphere. He thought it might be difficult – partly due to time and family circumstances.

But while *Shorebirds of the Southern Hemisphere* may not appear, it does perhaps occur in spirit through some of these pages. Be it a Seedsnipe in Tierra del Fuego, a Crowned Lapwing in South Africa, a Banded Stilt in Australia or a Wrybill in New Zealand, our half of the world is well represented here.

Informative chapters give an overview on plumage and moult, foraging methods and adaptations, flocking behavior, migration and breeding, but it is the photos that are the key purpose for this book.



The images serve multiple functions. Each one indicates the location and time of year when it was taken, essential when discussing a group of birds demonstrating so many variations in plumage and appearance through gender, seasonal changes and age differences.

But the image may also show an aspect of foraging or preening behavior, with some particularly excellent examples. How the preen gland is used for instance, or how the flexible nature of a bill is so important.

Finally, the caption informs on the age of the bird where it can be shown from plumage or other features. The

reader thus comes away with an excellent overview of the diverse shorebird clan, along with a myriad of fascinating details. And if you want to know why turnstones are so aptly named, the images on page 136 will show you.

If you are new to shorebirds you will find this highly accessible and informative. If you are already familiar with them, you will still find many details of interest. Ultimately you could add this to your shelves merely for the comprehensive range of photos, an additional resource for those tricky questions on identification, moult or aging.

Keith Woodley

## Loving portraits of Yalujiang's beautiful birds

*Dancing with the tide in the Yellow Sea – the ecological beauty of Donggang – the rhythm of birds* (in Chinese), by Liu Xiaoyang. Published by China Photographic Publishing House.

Liu Xiaoyang, a retired policeman, is one of the great supporters of bird conservation at Yalu Jiang.

Wader researcher Jimmy Choi first met Xiaoyang in 2010 when he knew how to take great pictures but was unaware of where the birds came from. Soon, under Jimmy's tutelage, he came to appreciate and understand the importance of Yalu Jiang to the many thousands of birds visiting the area and passed this information to the many other photographers who flocked to the site daily at high tide.



In those early days photographers would often disturb birds in order to get spectacular shots of flocks in the air. Xiaoyang explained that many of the birds had flown 10,000 km to get to Yalu Jiang so needed to rest and if photographers were patient the birds would get up and fly as the tide rose.

Through his photographs Xiaoyang

has been able to bring the beauty of the area and its birds to a wide sector of the general public through local newspapers and exhibitions. Now, with this book, he has brought together a selection of photographs of a wide variety of birds. Some are beautiful portraits, others atmospheric images showing huge flocks of birds in the coastal environment. One of the most unusual is a series, taken over about 20 minutes, of a Little Egret laying an egg on the branch of a tree with no nest.

This is a beautiful book that will make a significant contribution to raising awareness of the importance of the Yalu Jiang area and the need to conserve its treasured birdlife.

David Melville

# John Gale: the chair who led the Trust into the East Asian–Australasian Flyway Partnership

Manager **Keith Woodley** looks back fondly on the many years service of former honorary manager, Council member and chair, John Gale, lover of political gossip and cricket, books and good wine, who died recently aged 86.

In 1994 PMNT received an invitation to attend an inaugural meeting of governments and NGOs to discuss pressing conservation issues relating to migratory waterbirds in the East Asian-Australasian Flyway. The New Zealand Government also received an invitation to the meeting at Kushiro in Japan but the Department of Conservation, the designated agency, indicated no interest in attending. The Trust however did accept the invitation and sent Adrian Riegen.

While all other countries in the flyway were represented at government level, Adrian was the sole New Zealand delegate at a meeting that proved to be pivotal.

All our very extensive involvement in the flyway since then is a clear and direct outcome of that meeting, most notably our partnership with Yalu Jiang National Nature Reserve and more recently our engagement with DPRK.

The recent TVNZ documentary about that work has resulted in a flood of positive comments and support significantly raising the Trust's profile within this country and overseas. Yet, all of this could well have never happened if we had not attended that Kushiro meeting.

At the time the Trust had very few resources. The Centre was now open seven days a week but visitor numbers were still modest as was our income. The cost of sending someone overseas to a meeting was not insignificant, and the Council needed to consider it very carefully.

However, then chairman John Gale had no doubts that we should be represented. Doubters were rallied to share this view and it stands today as part of John's enduring legacy.

When I first arrived at Pukorokoro



A NEST OF CHAIRS: John Gale (front) and three fellow chairs (from left), Gillian Vaughan, David Lawrie and Stuart Chambers.

Miranda John was my immediate predecessor, having served as honorary manager. He had taken up the role in response to a newspaper advertisement, having just retired as general manager of the Waitakere Licensing Trust.

'Attempting to come to terms with retirement' he later wrote, 'and living a somewhat reclusive life in West Auckland at the time, I applied for the challenge and somewhat to my surprise was given the job. (It was even more of a surprise when I was later asked to stand for the Council and then elected Chairman.) It turned out to be a turning point in my life, and my years at Miranda one of its highlights.'

He was always tremendously welcoming and supportive to the newcomer, and we became good friends. We were subsequently to discover a range of common interests, including cricket, political gossip, books – not the least being the novels of Patrick O'Brian – and good wines.

John was born in Portsmouth but moved to the Isle of Wight at a

very young age. He became intensely and proudly attached to that island, something he was always ready to share with anyone he encountered.

Several years before emigrating he attended the Isle of Wight music festivals, something of considerable interest to a Kiwi music fan who had been confined to reading about such wonderful events from the musically remote outpost of Invercargill.

John had a substantial retail background. He worked for many years for a food distribution company, working his way up through the ranks. The company owned supermarkets all over southern England and when it was decided to source fruit and vegetables directly rather than through intermediaries, John got the task of pioneering daily supply systems. This he did for several years before moving to New Zealand in 1972.

Arriving by ship in Auckland on a Sunday, his first impressions were somewhat disconcerting. He recalled walking up the length of Queen St

looking for lunch, managing to find only a beetroot sandwich.

This became merely one of innumerable experiences that were subsequently added to an endless fund of jokes and anecdotes, a feature of John that anyone who knew him will remember well. In this case it segued into repeating Fred Trueman's line from an English cricket tour a few years earlier: 'And then we went t' New Zealand and it were shut.'

But if our biggest city seemed modest in what it offered in 1972, how must Tolaga Bay have seemed? For that is where he went next, running a grocery shop before eventually moving to Auckland and the liquor trade via a stint in Paeroa.

This retail and marketing background was one of the strengths John brought to PMNT. Within a short time of becoming Chairman, the shorebird centre's shop was evolving from a few items laid out on a trestle table, to a more substantial operation complete with shop furniture and a cash register. Today it is a pivotal component of our operation and income.

His warm and engaging personality also greatly benefited us when it came to fund raising. In this regard I have had particular cause to be grateful for his skills during my 20 years living in the cottage.

Before then I was occupying one of the units at the centre. By 1998 John had negotiated with our neighbour to purchase his old sharemilker's cottage. The \$85,000 asking price at a time when the Trust still had modest funds was quite a challenge. But John set to work approaching Trust members, the local MP, the ASB Trust and other

charitable trusts and achieved more than the sum needed. A further fine effort by a small group of volunteers to renovate the cottage followed, and it has been comfortable quarters ever since.

Each chair of the PMNT council has brought their own strengths and skills to the role. For example, Stuart Chambers presided over the final fund raising and saw the building of the Shorebird Centre through to completion.

There then followed a period of consolidation, developing the operation to become self-sustaining, and this is where John played a key role. From securing Task Force Green funding to initially subsidise the manager's salary to exploring other income streams, much of the way the centre operates today evolved during his tenure.

Following his term as Chairman, John and his partner Judith, remained frequent visitors and regularly stayed over at Pukorokoro Miranda until Judith's death in 2013. These enjoyable visits were often lubricated with Coopers Creek wines, where John had taken up a part-time sales role.

They both also became enthusiastic members of a North Shore walking group. A further delight for John was an opportunity to assist with the Te Araroa walkway development project. Through all these pursuits he invariably touched many people with his charm and humour.

Our condolences go to his son Christopher. I would also like to acknowledge Judith's sister Kaye Ellis, who was a tremendous support to John during his final years.



CRUNCHY VERSE: New chair Will Perry with his favourite poetry book.  
Photo / Jim Eagles

## Spreading a love of poetry

It began when the daughter of one of Will Perry's colleagues was getting married and wanted to give the guests jars of pickle in Pic's Peanut Butter containers with the trademark six-pointed red star on the lid.

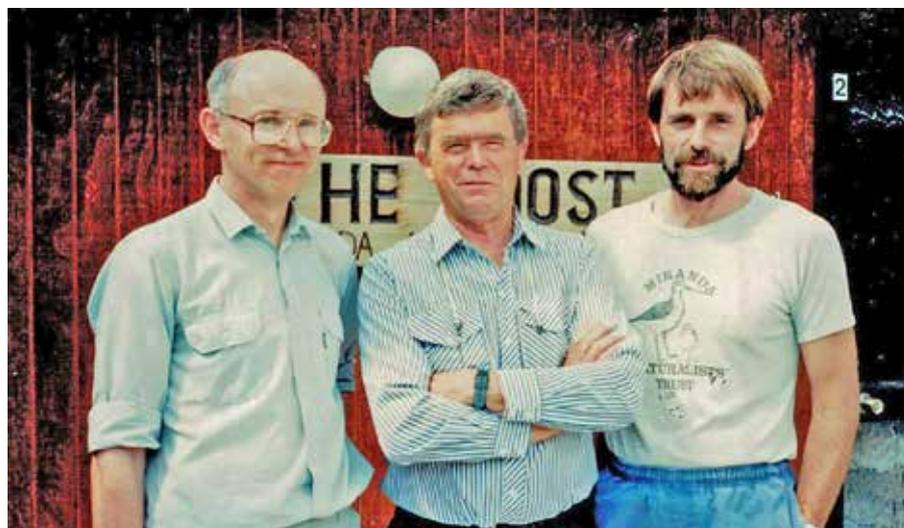
'Although I do not eat peanut butter myself,' Will recalls, 'I cleaned a couple of jars (emptied by the other two-thirds of my household) for her to use and noticed there was something on the back of the label.'

'I peeled it off and there was a poem. Now when a jar of peanut is finished I check out the poem and recently I found this one with its references to our shorebirds.'

### What the tide scribbles in the mud

I know these waters well, I fancy,  
But I remember what is still to come  
One day I will be fine ash, suspended in a  
column of light, dispersed like the silt at the  
tide's beck and call, impeding the passage  
of ships  
And supporting the strutting of stilts,  
Poaka, kuaka, torea, kawau,  
And overhead a frenzy of terns wheeling  
and diving.  
The mud-backed mirrors flash their  
messages a hundred urgent ways to say  
one thing at the end, the sure and certain  
hope  
First the scattering and then the gathering  
into the sea's warm and kindly arms.

**William Butler Smith**



FLYWAY FRIENDS: John Gale (centre) with Pavel Tomkovich (left) and Adrian Riegen.  
Photo / Keith Woodley

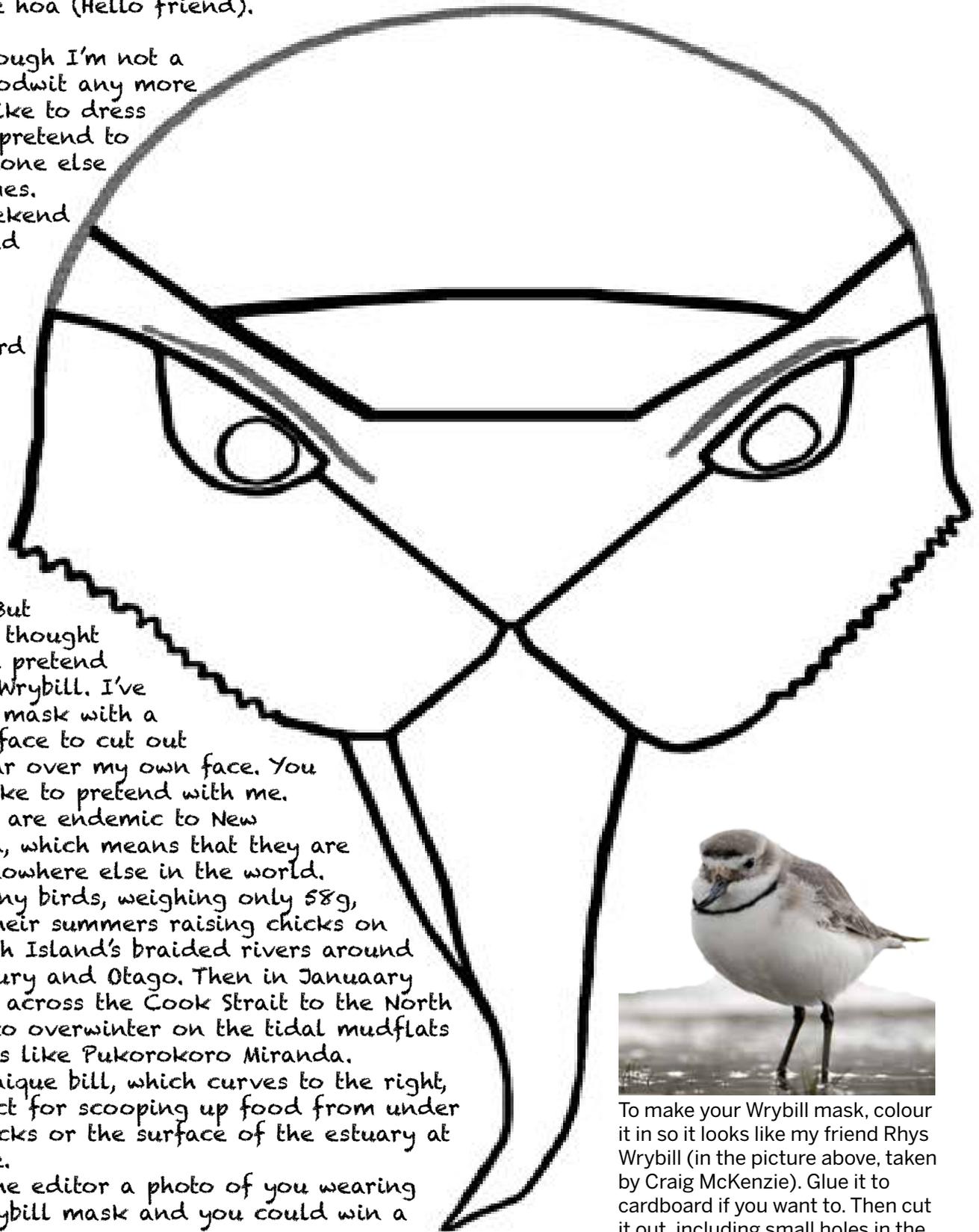
# GODWIT TIMES



Kiaora e hoa (Hello friend).

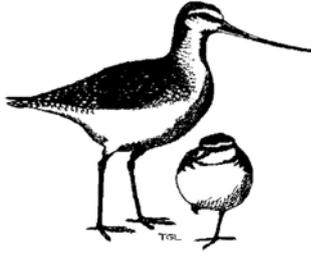
Even though I'm not a Little Godwit any more I still like to dress up and pretend to be someone else sometimes. Last weekend I dressed up as a knight with a cardboard sword and the time before that I was a princess with a sparkly crown. But today I thought I would pretend to be a Wrybill. I've made a mask with a Wrybill face to cut out and wear over my own face. You might like to pretend with me. Wrybills are endemic to New Zealand, which means that they are found nowhere else in the world. These tiny birds, weighing only 58g, spend their summers raising chicks on the South Island's braided rivers around Canterbury and Otago. Then in January they fly across the Cook Strait to the North Island to overwinter on the tidal mudflats at places like Pukorokoro Miranda. Their unique bill, which curves to the right, is perfect for scooping up food from under river rocks or the surface of the estuary at low tide. Email the editor a photo of you wearing your Wrybill mask and you could win a book. Have fun pretending.

Bye for now from Godfrey



To make your Wrybill mask, colour it in so it looks like my friend Rhys Wrybill (in the picture above, taken by Craig McKenzie). Glue it to cardboard if you want to. Then cut it out, including small holes in the eyes so you can see where you're going. Next cut out a head band and tape it to the mask so that it fits snugly and won't slip off.

# PUKOROKORO MIRANDA NATURALISTS' TRUST



## The Shorebird Centre

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MirandaShorebirdCentre

Manager: Keith Woodley  
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## Pukorokoro Miranda Naturalists' Trust Council

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

## Magazine

Pukorokoro Miranda Naturalists' Trust publishes *Pukorokoro Miranda News* four times a year to keep members in touch and provide news of events at the Shorebird Centre, the Hauraki Gulf and the East Asian-Australasian Flyway. No material may be reproduced without permission.  
Editor: Jim Eagles  
jimeagles45@gmail.com  
021 0231 6033

## See the birds

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

## Low cost accommodation

The Shorebird Centre has bunkrooms for hire and two self-contained units: Beds cost \$20 per night for members and \$25 for non-members. Self-contained units are \$70 for members and \$95 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 \$65 for those living overseas. Life memberships are \$1500 for those under 50 and \$850 for those 50 and over. As well as supporting the work of the Trust, members get four issues of PMNT News a year, discounts on accommodation, invitations to events and the opportunity to join in decisionmaking through the annual meeting. You can join at the Centre or by going to our webpage ([www.miranda-shorebird.org.nz](http://www.miranda-shorebird.org.nz)) and pay a subscription via Paypal, by direct credit or by posting a cheque.

## Bequests

Remember the Pukorokoro Miranda Naturalists' Trust in your will and assist its vital work for migratory shorebirds. For further information and a copy of our legacy letter contact the Shorebird Centre.

## Want to be involved?

### Friends of Pukorokoro Miranda

This is a volunteer group which helps look after the Shorebird Centre. That can include assisting with the shop, guiding school groups or meeting people down at the hide. Regular days for volunteer training are held. Contact the Centre for details.

### Long term Volunteers

Spend four weeks or more on the shoreline at Miranda. If you are interested in staffing the Shorebird Centre, helping with school groups or talking to people on the shellbank for a few weeks contact Keith Woodley to discuss options. You can have free accommodation in one of the bunkrooms and use of a bicycle.

### Firth of Thames Census

Run by Birds NZ (OSNZ) and held twice a year, in June and November, the census days are a good chance to get involved with field work and research. Ask at the centre for details.

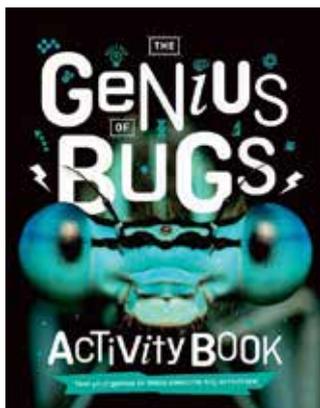
### Contribute to the Magazine

If you've got something you've written, a piece of research, a poem or a photo send it in to *Pukorokoro Miranda News*. If you want to discuss your ideas contact Jim Eagles.

### Help in the Shorebird Centre Garden

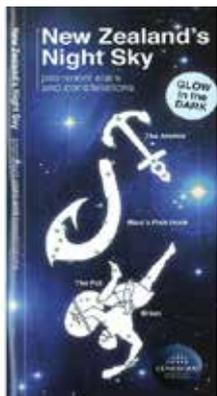
We can always use extra hands in the Miranda Garden, be it a half hours weeding or more ambitious projects. If you do have some spare time please ask at the centre for ideas, adopt a patch or feel free to take up any garden maintenance you can see needs doing.

# Check out our revamped online shop



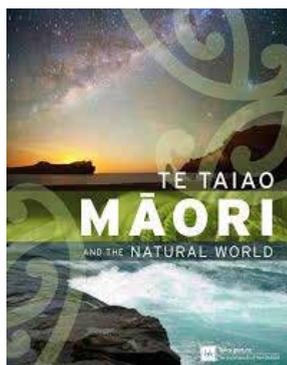
Finalist for the 2017 New Zealand Book Awards for Children and Young Adults Non-Fiction. Inspired by the blockbuster science exhibition Bug Lab, brought to Wellington this summer by Te Papa and Weta Workshop.

**\$19.90**



A glow-in-the-dark laminated guide to the most prominent stars and constellations in our night.

**\$14.90**



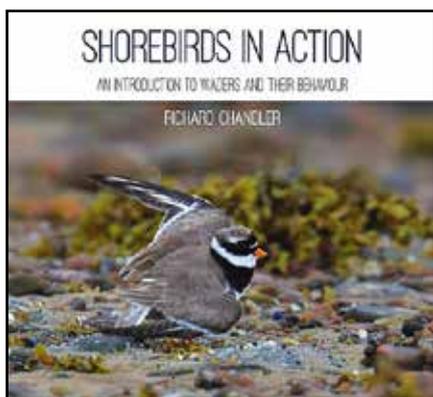
A unique perspective on New Zealand's environment, plants and animals from leading researchers and writers on Maori culture and the natural world.

**\$49.90**

Our online shop has been completely revamped so pop in and check out New Zealand's finest selection of birding books, not to mention unique shorebird teatowels and mugs, all at great prices. You can enter via our website or go directly to

**<https://shop.miranda-shorebird.org.nz/>**

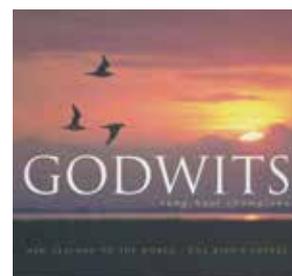
Or you can always visit the Centre, have a chat with Keith or Chelsea, do your shopping, then head down to watch the birds.



If you are new to shorebirds you will find this highly accessible and informative. If you are already familiar with them, you will still find many details of interest. Ultimately you could add this to your shelves merely for the comprehensive range of photos, an additional resource for those tricky questions on identification, moult or aging.

– Keith Woodley

**\$54.90**



Keith Woodley's beautiful story of our amazing godwits recently reprinted by PMNT.

**\$49.90**

## And don't miss out on a shorebird calendar

Enjoy the beautiful photos of your favourite shorebirds. Use the big calendar block which has lots of room to write on, plus high tides for the Findlay Reserve and dates of Shorebird Centre events. Read Keith Woodley's notes on what our shorebirds are up to each month.

Calendars are priced at \$17.90 (including an envelope if required) at the Shorebird Centre. Or if you visit the website or ring the Centre at **09 232 2781** we can post them out for you.

