

# Pukorokoro Miranda News

Journal of the Pukorokoro Miranda Naturalists' Trust

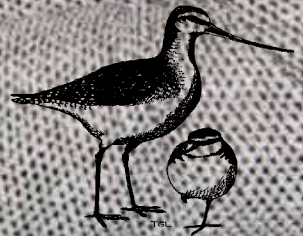
May 2015 Issue 96

## Chinese Ambassador keen to help godwits and knots

Embassy and DOC draw up agreement

Conservation Minister backs Trust

Fonterra puts money into habitat



## From the Editor

# Exciting times for the Trust



It has been another remarkable three months for the Pukorokoro Miranda Naturalists' Trust as you'll see from the stories in this issue.

First, there are the 40th birthday celebrations, still continuing but already a great success. The birthday luncheon was a delightful occasion with many hilarious reminiscences about the early days. The godwit poster competition drew some wonderful work from youngsters whose knowledge of the birds bodes well for the future. And the visit by the first of our three special birthday guests, Pavel Tomkovich from Russia, has enthralled everyone lucky enough to hear him speak.

Second, the Trust met new Conservation Minister Maggie Barry who expressed enthusiasm for our work and has already followed that up by backing our efforts in China.

Third, Chinese Ambassador, Wang Lutong, visited the Shorebird Centre with his wife, young son and a team of embassy officials, and seemed genuinely concerned to hear about the threat to the crucial Red Knot staging site at Bohai Bay. As a result a Memorandum of Understanding is to be drawn up outlining ways in which New Zealand and China can work together to safeguard the migratory birds we share.

Fourth, Pukorokoro Miranda seems to have become the flagship for the Living Water project, a partnership between the Department of Conservation and dairy giant Fonterra, leading to a major effort to upgrade water quality and improve shorebird habitat.

Fifth, right now the Trust has a team in China and North Korea continuing its vital research into our birds that stopover there.

What an amazing organisation this is!

Jim Eagles

## Miranda Snippets

# New DOC rep a crack shot



Greg van der Lee (at left), who is the partnerships ranger with the Department of Conservation in Thames, is to join the PMNT Council.

The Council previously included two representatives from DOC – most recently Hazel Speed from Auckland and Bruce Postill from Hamilton – whose presence did much to improve liaison.

However, since the massive reorganisation at DOC it has been unclear exactly which offices the Trust should deal with or who should represent DOC on the Council. Fortunately links have been kept open with Bruce joining the Council in his own right rather than representing DOC.

Now it seems the primary contact point for the Trust is to be DOC's Thames office and Greg, who is already well-known to us, will be its representative on the Council.

Greg was born in Canada but moved to New Zealand with his family in 1972. 'I grew up in South Auckland and fell in love with this country, and have only been back to Canada once.'

A crack shot, he originally joined DOC as a goat hunter on the Coromandel Peninsula but now works as a ranger focussing particularly on working with community groups like PMNT, Treaty settlements and Fonterra's Living Water programme.

It's a job he loves. 'I love that I can make a difference. I like making connections between corporations and community groups. I love giving support and encouragement to small groups and seeing the successful outcomes.'

Greg is also a big fan for DOC working more closely with community groups to help the environment. 'DOC's vision is huge. Engaging more people in some capacity is crucial to give ourselves some space to breathe. How we engage and manage the community enthusiasm is the trick.

People want to help; we need to make it easier for them to get on with it.

'The work that these community groups are doing is amazing. If you want to get something done, give the job to passionate people. Then support them.'

## Helping students

Money from the fund set up to commemorate PMNT stalwart Eila Lawton will be used to encourage young people to take part in the Shorebird Centre's prestigious annual Field Course. Initially an approach will be made to the nearest high school, Hauraki Plains College, to see if there

## Now in residence

### Arctic Migrants

<i>Bar-tailed Godwit</i>	240
<i>Black-tailed Godwit</i>	2
<i>Ruddy Turnstone</i>	31
<i>Red Knot</i>	370
<i>Sharp-tailed Sandpiper</i>	
<i>Marsh Sandpiper</i>	1
<i>Red-necked Stint</i>	1
<i>Pacific Golden Plover</i>	24
<i>Curlew Sandpiper</i>	
<i>Pectoral Sandpiper</i>	
<i>Eastern Curlew</i>	1

### New Zealand Species

<i>Wrybill</i>	2100
<i>NZ Dotterel</i>	
<i>Banded Dotterel</i>	100
<i>SI Pied Oystercatcher</i>	5000+
<i>White-fronted Tern</i>	
<i>Black-billed Gull</i>	
<i>Pied Stilt</i>	570
<i>Royal Spoonbill</i>	34
<i>Caspian Tern</i>	
<i>Bittern</i>	
<i>Dabchick</i>	2

Cover: Gillian Vaughan gives the Chinese Ambassador the message about the plight of the Red Knots.  
Photo / Jim Eagles



is a student who would benefit from doing the course but might find the cost prohibitive.

### Visiting groups

In the first three months of the year six school groups, with 237 pupils, and 14 community organisations, ranging from Probus and U3A to Mangere Nature Club and Rural Women, have visited the Shorebird Centre to learn about the birds. In addition manager Keith Woodley has given talks to Morinsville Pateke Lions, Devonport U3A and Tauranga Continuing Education.

### Out at the hides



Summer guide Chairmaine Stanley returned to her university studies in early February and the role out at the hides was filled by Trish Wells (above).

Looking back on her three months with the shorebirds Trish recalls many amazing moments:

‘The people I have met! As varied as the species we all came to watch, from far and near, young and old, amateurs to experts, and the stories that we shared. So too the interest level which varied from very keen birders to the ‘porter’ or companion. I hope they all went away with some knowledge of PMNT and a little bit of Pukorokoro perfection and Miranda magic.

‘Of the wide-ranging questions I was asked:

‘The easiest question: What am I looking at? ‘The most common question: What am I looking at? ‘The most difficult question: What am I looking at?

‘Easy, when whoever was asking was just looking at the shell bank in general, not so much when they were peering through binoculars and I had no idea in which direction or at what.

‘The funniest question: What are we trying to hatch from the eggs in the nesting boxes along the trail?

‘My favourite group was Te Kohanga School, Tuakau, where I was required to put the scope past the end of the hide wall as most could not see

over it. Their enthusiasm and interest gives me hope.

‘It was an amazing opportunity and I feel incredibly fortunate that I have had this experience, and it is something I completely recommend.’

### Sibson Fund grant

The Trust has agreed to make a grant from the Sibson Fund to support the research of Massey University masters student Rachel Withington. Her topic is ‘The non-breeding feeding ecology of Wrybill (*Anarhynchus frontalis*) in The Firth of Thames.’

### The skylark

Following the article (in *PMNews* 95) about the skylark, and the inspiration it has provided to poets and composers over the centuries, former chair Stuart Chambers sent in this haiku inspired by the bird’s singing:

The skylark -  
Its voice alone fell  
Leaving nothing behind  
- Ampu



### Young enthusiast

The future of shorebirds in China ought to be secure to judge from the enthusiasm of 10-year-old Wang Bowen who accompanied his father, Chinese Ambassador Wang Lutong, on his official visit to the Shorebird Centre (and seen above peering over the top of the hide wall).

There’s more about the formal side of the visit on pages 12-13 but the personal highlight was watching Bowen – like his father a self-confessed bird lover – dashing about with his binoculars trying to spot as many birds as possible.

At the conclusion of the talks gifts were exchanged. Ambassador Wang got a copy of Keith Woodley’s book *Godwits: long-haul champions*.

In response the ambassador

## What’s on at the Shorebird Centre

### 24 May, Annual General Meeting

10am Have your say on the future of the Trust. Guest speaker Phil Battley. Birdwatching afterwards.

### 21 June, OSNZ Firth of Thames, Wader Census

All Welcome. Phone the Shorebird Centre for further details.



### 10-12 July, Nature Journalling

Sandra Morris runs her annual course in field sketching and nature journalling. \$250 fee includes all meals and accommodation. Contact the Centre for details.

### 8 August, Winter Potluck Dinner

9am-1pm Working Bee. High tide at 1.45pm so a break for birdwatching. 6pm Dinner. Adrian Riegen talks about the Chatham Islands.

### 8-10 September, NZ Dotterel Management Course

Details from the Centre.



### 4 October, Special Birthday Speaker

10am Scott Weidensaul, American naturalist, author of more than two dozen books on natural history - including *Living on the Wing: Across the hemisphere with migratory birds* - and an active field researcher focussing mainly on bird migration. Birdwatching afterwards.

### 15 November OSNZ Firth of Thames Wader Census

Contact the Centre for details.

### 29 November, Special Birthday Speaker

11am Theunis Piersma, Dutch wader biologist, returns to New Zealand after 15 years. Birdwatching afterwards.



presented DOC director-general Lou Sanson with a 3m scroll showing the Forbidden City which will be kept in the Centre to commemorate the visit.

But the happiest recipient was clearly young Bowen who received *The Hand Guide to the Birds of New Zealand* to encourage his interest in our birdlife presented (above), on the Trust's behalf, by local MP Scott Simpson.

#### Poetic inspiration

After hearing via his grandfather that the Bar-tailed Godwits he had seen at Pukorokoro were starting to fly back to Alaska, to exchange our winter for summer on the tundra, nine-year-old Liam Tully sent in this poem:

#### Goodbye Godwits

Goodbye, silky, soft sand.

Goodbye, glorious Godwits,  
off to your home on the tundra.  
Goodbye, Summer.  
Winter is ahead!  
Goodbye, swift, swaying waves.  
Goodbye, shimmering, sparkling sun.  
Goodbye, Summer.  
Winter, hello.  
Hello, dark, dreadful days.  
Hello, mouth-watering hot chocolate.  
Goodbye, Summer.  
Winter is in sight!  
Hello, saggy sofa,  
Hello, burning, black nights,  
Goodbye, Summer.  
Hello, Winter!  
We each have our little part to play  
on stage of life, at end of day.

#### Back in Asia

The latest stage of PMNT's work to improve understanding of our migratory birds in their East Asian stopover points is already underway.

In mid-April a team consisting of banding convenor Adrian Riegen and manager Keith Woodley flew to Beijing where they met up with council member Estella Lee.


The New Zealanders then joined forces with Lee Tibbitts, Bob Gill and Dan Ruthrauff from Alaska to travel to Dandong City and carry out a full survey of shorebirds in the Yalu Jiang Nature Reserve.

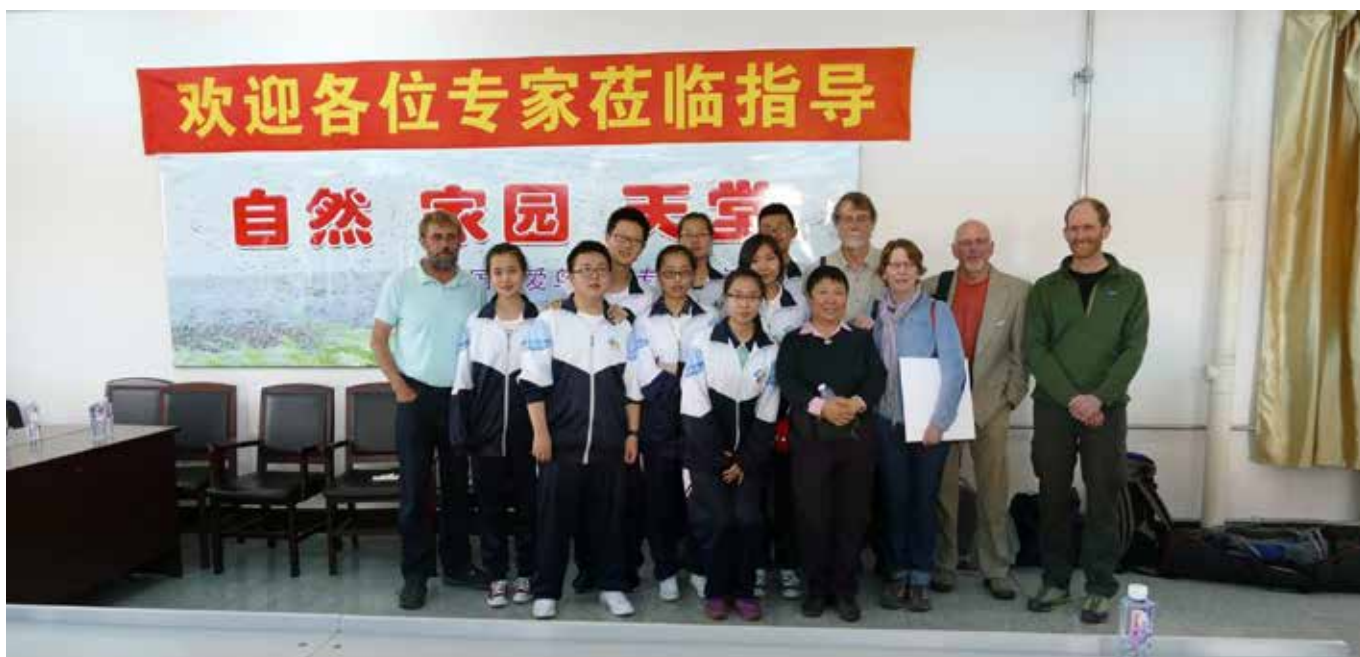
They then switched to educational and political work by taking part in a Workshop on Conservation of Migratory Waterbirds in the Yellow Sea, visiting schools and having talks with local officials.

The party then returned to Beijing where they visited the New Zealand Embassy and briefed new ambassador John McKinnon on their work at Yalu Jiang, as well as the threats to Red Knots on the Luannan Coast of Bohai Bay.

Adrian and Keith were then going to meet up with David Melville, and fly across the border to the North Korean capital of Pyongyang.

There it is likely that a couple of days of orientation and finalising arrangements will be necessary before the trio can get down to birding business. Adrian, who did the initial shorebird survey work in North Korea, said they will 'head to the coast near Nampo at the mouth of the Taedong River. This is North Korea's main port and the river goes up to Pyongyang. We will be there a few days surveying the shorebirds.'

Finally, the team will return to Pyongyang for a meeting to plan next year's shorebird survey visit before heading home. There will be a report on the trip in the August issue of *Pukorokoro Miranda News*. 



INTERNATIONAL AGREEMENT: Birders from Alaska and New Zealand meet with pupils from Donggang Number 2 Middle School, near Yalu Jiang Nature Reserve, as part of the effort to develop a broader understanding of the area's importance as a roosting site for migratory birds.





IN HARMONY: Whakatiwai Marae chairman Tipa Compain, Keith Woodley, Ngati Paoa negotiator Morehu Wilson and Gillian Vaughan outside the meeting house at Whakatiwai  
Photo / Jim Eagles

## Geographic board adopts Pukorokoro

The NZ Geographic Board has followed the Trust's example by agreeing to the combined name of Pukorokoro Miranda. And, in passing on the news, Ngati Paoa has paid tribute to the Trust for its support.

The ancient Maori name of Pukorokoro, adopted by the Naturalists' Trust a year ago, is to return to the wider district.

The NZ Geographic Board is recommending to the Minister of Land Information, Louise Upton, that the area should have the dual names of Pukorokoro and Miranda.

The board said it did so in recognition of 'the long association of the original Maori name Pukorokoro with the locality' and 'the long term use of the name Miranda'. Both names will have 'equal significance'.

The board is also recommending that the locality now known as Miranda Hot Springs should in future be known as Pukorokoro Hot Springs though that will not affect the name of the baths complex.

The decision was announced shortly before this issue of *Pukorokoro Miranda News* went to the printers and, in sharing the announcement with the Trust, Ngati Paoa negotiator Morehu Wilson said, 'This is especially significant for Ngati Paoa. Thanks to you and your team for supporting the name change. It made a great influence

on the outcome.'

Then he added, 'Nga mihi motuhake, na matou no Ngati Paoa (special greetings from us at Ngati Paoa).'

The iwi paid a similar tribute at a function held at Wharekawa Marae to mark Waitangi Day where the Trust was one of several community groups invited to erect stalls on the marae to publicise their work.

Chair Gillian Vaughan, secretary Will Perry, editor Jim Eagles and manager Keith Woodley were among those formally welcomed with a powhiri. Afterwards they were able to chat about the Year of the Godwit and other shorebird matters, surrounded by a master carver at work, a hangi, karaoke and traditional oratory.

Later, in the meeting house, Morehu outlined the iwi's involvement with the Treaty of Waitangi. Ngati Paoa was not represented at Waitangi when the treaty was first signed on 6 February 1840, he said, but 16 chiefs signed it at Karaka Bay, St Heliers, on 4 March and six more signed it on 9 July. Ngati Paoa had always supported the treaty and still did.

The iwi's negotiations with the

Crown to achieve a settlement of its grievances under the treaty were well advanced, he said, and a deed of settlement should be signed shortly. 'We had hoped it would be finalised by now, so we'd have something to celebrate today, but it's going to take just a little bit longer.'

Morehu also mentioned the effort to have the traditional name of Pukorokoro restored to the area now more commonly known as Miranda and explained why it was so important to Ngati Paoa (as outlined in issue 89 of *PMNT News*).

The campaign to change the name had been strongly supported by Hauraki District Council and the Naturalists' Trust 'which even changed its name to include Pukorokoro in its title,' he said. 'It was fantastic to have that community support and we're very grateful for it.'

The Trust hopes to meet with Ngati Paoa in the near future to discuss areas where the two might work together, such as taking a joint approach to aquaculture development, coastal planning and protection of the shoreline. 🐦

# Chilled bubbly, fond memories and joyous laughter flow at Trust's 40th birthday party

Stories about the Trust's early days flowed thick and fast at PMNT's 40th anniversary lunch as several long-time stalwarts shared their memories, reports **Ann Buckmaster**.

**Stuart Chambers** remembered visiting Miranda as far back as 1949 when he came with Dick Sibson. 'Sib,' he said, 'used to dress for birding in leather shoes, pressed trousers, sports jacket, shirt and tie.' Having brought his love for birding from the UK, Dick started a birding club at Kings College and brought pupils and Auckland birders, many of them also English migrants, to Miranda.

**David Lawrie** also recalled an encounter with Sib. As a boy he found a wrecked albatross on Clarkes Beach. He cut off its head, packed and posted to Dick Sibson with a note. He got a polite reply saying it was a White-headed Albatross 'but if you find another please don't send me its head as it was a bit pongy.'

**Michael Taylor** spoke of a fundraising venture in 1975 involving Richard Adams, famous as the author of *Watership Down*, in New Zealand as guest of naturalist Ronald Lockley, whose book, *The Private Life of the Rabbit*, he had drawn on. Adams cheerfully took up a suggestion that he give an illustrated lecture 'Watership Down – the Country behind the Book' in aid of the building fund.

**Stuart** noted that the idea of building a lodge was conceived by Beth Brown and Gillian Eller who wanted to get two tides of birding a day and reduce the need for travel over rough roads. The Trust was established as a separate organisation in 1975 and by 1982 The Roost, a Skyline garage in Kaiaua, started providing accommodation to birders. But many members wanted to do more so, despite having only \$8000 in the bank - having lost \$10,000 in the Securitibank collapse – 'David Barker went ahead and drew up plans and so building began'.

**John Rowe** told how he and Stella used to visit Miranda to help with the building and watch the Centre grow. In those days the key was kept at the Kaiaua store and, he noted proudly, the Rowes were the first people to



**SPECIAL GUEST:** The Trust's first secretary, Judy Piesse, attended the party in spite of being in a wheelchair. Photos / Ray Buckmaster

spend the night and sleep on the floor.

**David** said unfortunately the early plan of keeping the building locked and the key at Kaiaua didn't work so the Trust advertised for a resident manager and John Gale was the first to volunteer. 'John was a charmer. He knew nothing about birds but he could sell a story and he got things moving. Then Keith came for a trial period and is still on trial.'

**Adrian Riegen** looked back to 1993 when Keith arrived and 'everyone wondered: How long will he stay? Six months if we are lucky. He is still here and he is the face of the Trust both in New Zealand and internationally. The Trust is very lucky to have Keith.'

**John** spoke of one memorable stormy evening when he commented to Keith 'the surf is loud'. They looked out 'and there were cattle outside the window and the Centre was surrounded by water. Just the Centre, Keith's cottage and the farm cottage were above water. Surf was breaking on the road. The following day was a Council meeting and the members arrived having driven round the logs across the road.'


**Sandra Morris** remembered wading across the stream to the shell-bank with Gwenda Pulham holding a bottle of wine to help the birdwatching pass enjoyably.

**Michael** told of another special visitor in 1979, again hosted by Ronald

Lockley, this times 'none other than Sir Peter Scott. In my mind's eye I see Scott busily sketching the Wrybill flock, while his wife Philippa takes photographs. They were given afternoon tea and Scott drew a sketch on the front of the Trust's first visitor book.'

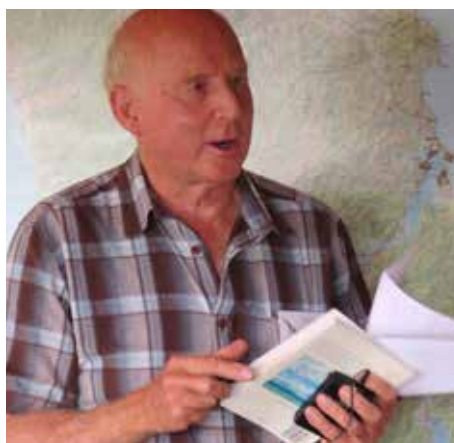
**David** was just back from representing PMNT at the East Asian-Australasian Flyway Partnership along with representatives of countries like Mongolia, Indonesia, Australia, China and Korea. 'PMNT with just 600 members had an equal voice. Every report mentioned Pukorokoro Miranda and the work of the Trust.'

**Adrian** attended the meeting in Japan in 1994 which led to the establishment of the East Asian Australasian Shorebird Site Network, the predecessor to the current Flyway Partnership, so the Trust has been involved from the start. 'In those days it was thought that godwit migrated to Siberia through Australia and Asia in both directions.'

Summing up the stories, Trust chair **Gillian Vaughan** said the story of the godwit was a story of connections. 'The birds connect Miranda with China and Alaska. The story of PMNT is the same as the birds. It is a story of connections. It is the people in this room who make this possible. the strength of the Trust is the strength of the people. 2015 is the Year of the Godwit. It is the year to celebrate the birds and to celebrate ourselves.' 



THE SPEAKERS: Michael Taylor; Stuart Chambers; Adrian Riegen; John Rowe; Sandra Morris; David Lawrie; Gillian Vaughan.



AND THE AUDIENCE ....





# Godwits seen through

**Ann Buckmaster** reports on the hugely successful Schools' Competition held to mark PMNT's 40th birthday.

The Year of the Godwit Schools' Competition attracted 154 wonderful posters from pupils eager to illustrate the theme of 'See through the eyes of a godwit'.

We were fortunate to have Sandra Morris, well known illustrator, artist and author, to take on the difficult task of picking winners from so many marvellous entries. It was obvious an enormous amount of thought and skill had gone into creating the posters and all deserved congratulations. Sandra narrowed the field down and then re-examined her selection, Keith Woodley was consulted and finally the winners were chosen. The standard was so high that 37 Highly Commended Certificates were also awarded.

Sandra commented, 'It was a thrill to see the enthusiastic response to our competition and the creative output of the students. Many have artistic merit and it is gratifying to see that they have absorbed many critical facts.'

The Creative Writing part of the competition did not generate as much response. However our winning entry is a very touching poem which speaks eloquently for the godwit. Judge Nicola Daly, Senior Lecturer in Arts and Language at the University of Waikato, commented, 'The poem *Can you hear?* was a very strong entry because of the way it incorporated into a short poem facts about the amazing annual journey of the godwit, and the way



**KALEIDOSCOPE OF TALENT:** Judge Sandra Morris and organiser Ann Buckmaster sort through some of the entries in the school poster competition.



Lincoln Vitasovich



Above: Grier Buchanan

Below: Chloe Beals



Above: Jessica Luo

Right: Owen Lance





# the eyes of children

in which land development threatens their flight. The poem uses rhyme confidently, and is punctuated excellently. A concerned “voice” is used to advocate for the godwit which gives the poem the rhetorical power needed to deliver this urgent message.’

Results: **Overall Winning School** – Netherton, with 65 entries and 90 points.

**Creative Writing Competition**, Group Five (16-18 years), winner - Salome Schwartzfeger, home schooled.

**Poster Competition**, Group One (5-7 years), winner - Chloe Beals, Kopuarahi School, runner-up Lincoln Vitasovich, Kopuarahi School. Group Two (8-10 years), winner - Grier Buchanan, Netherton School, runner-up Jessica Luo, Henderson North School. Group Three (11-12 years), winner - Jordyn Keays, Netherton School, runner-up Owen Lance, Netherton School.

Highly Commended - Kate Stephens, Eila McCay, Jacob Porter, Jessica Licht (Hukanui School), Chloe Bax, Jaden McGaffin, Kayla Te Moananui, Amara Frow (Kopuarahi School), Rickie Hoitinga, Vanessa Martin, Grace Cains, Sophie Millar, Lily Coats, Joel, Tayla-Rose Martin, Kaitlyn Ridler, Mitchell, Josh (Mangatangi School), Phoenix McKain, Kobin Chwesik, Marshall Peterson, Ryley Ballantine, Danica Halden, Jason Barker, Anthony Barker, Callaghan Liam Wood (Netherton School), Liam Tully and Dom Williams, Oliver Cox, Caitlin Stanley, Tyler Pendergrast, Lillie Butler, Angelina Green (Oropi School), Lavidicus Cage, Arshpreet Kaur, Abigail Moa, Jayden Weck (Parawai School).



Jordyn Keays

## Can you hear?

There's a hustle and tussle of the busy growing cities,  
When the eager open planners, who have run out of space  
(As if it's a race), and point to the mudflats and carelessly say:  
'We need to keep expanding so foundations we will lay!'  
At the end of the day they're just in it for the pay.  
As the seawalls appear, I watch in dismay.  
The city-loving people just don't seem to care.  
'These birds need their mudflats, can't you hear?'  
Like seasons they come here, year after year,  
Replenishing their fat, then taking to the air,  
On an astonishing journey, at the Arctic they appear.  
So sad that the people don't wish to be fair,  
For even the mudflats they don't want to spare.

Salome Schwartzfeger

## Photo Competition

As part of the celebrations for the 40<sup>th</sup> anniversary of the founding of the Pukorokoro Miranda Naturalists' Trust we are running a photographic competition

There will be two sections:

The **Best Bar-tailed Godwit photo taken anywhere** will win a \$100 book voucher from the Shorebird Centre shop



Photo / Phil Battley

The **Best photo taken at Pukorokoro Miranda** will also win a \$100 book voucher from our shop. In addition, the Pukorokoro Miranda section will be divided into sub-sections for: **Fauna, Flora, Landscape and People**, with the best photo in each winning a \$50 book voucher.

Entrants will retain copyright over their entries but the trust will have the right to run photos in the magazine and (in a reduced size) on its Facebook page and website.

Entries can be sent to shorebird@farmside.co.nz (with 'photo competition' in the subject line) or delivered to the Shorebird Centre on a memory stick or a CD. Initially please keep file sizes down to less than 100kb. Finalists may be asked to provide larger files. Be sure to provide full contact details with the photos.

Entries will close at 5pm on Sunday May 31

The competition will be judged by Bruce Shanks who for several years has run the Bird Photography courses at the Shorebird Centre.

The best photos will be on display at the Pot Luck Dinner on 8 August. Winners will be announced in the August issue of *Pukorokoro Miranda News* and on the trust's web and Facebook pages.

# Travels with a Russian migration expert

As well as giving well-received talks at the Shorebird Centre and the University of Auckland's Tamaki Campus, special birthday guest Pavel Tomkovich also hit the road with manager **Keith Woodley**, visiting Wellington and Nelson

The Zoological Museum curator was now back in one of his two natural habitats. There was the familiar museum aroma of camphor the moment we entered the large basement room where the Te Papa museum's collection is held. Then the rows of wide cases with their multi-layers of trays packed with study skins.

There are three trays of knots, many of them labelled merely as *Calidris canutus*, the nominate for the species. The great majority of specimens are from New Zealand, some of them correctly labelled as *rogersi*, one of two populations in our flyway and the one from which most New Zealand birds originate. We also get birds from the other population known as *piersmai*, but the two can only be separated when in full breeding plumage.

As a leading authority on the calidrid sandpipers, Pavel Tomkovich is in his element. Indeed he first described and named the *piersmai* birds and is able to identify the few birds that are definitely of that race.

Te Papa curator Alan Tennyson is delighted. Red Knots are circumpolar in their breeding range, and this collection encompasses more than just our region.

Pavel identifies two birds from the *rufa* population of the East Atlantic Flyway and, in something of a bonus, a single bird collected in the western United States. This is from the *roselaari* race that he also described and named. The collection is now confirmed to hold specimens from all knot races with the single exception of *Islandica*.

Next up are the godwits where a similar process unfolds. Almost all birds in the collection are *baueri* from Alaska, but there are some specimens that are definitely *menzbieri* birds from northern Russia. Pavel is particularly interested in two further birds collected in the Russian Far East. These he declares to be from a small population breeding in between the ranges of *baueri* and *menzbieri* that he described and named *anadyrensis*.



LOOKING FOR BIRDS: Pavel Tomkovich on the lookout for knots (above) and fern birds (below) at Farewell Spit.

Photos / Keith Woodley

This visit to Te Papa, following Pavel's talk there the previous evening, was the final event in our road trip that began back at Miranda over a week earlier. It got off to an inauspicious start when we missed our flight to Nelson. I sent a text to Rob Schuckard who was meeting us: "Sorry, missed our flight. Cut it too fine chatting with the Chinese Ambassador. But it could be good news for Red Knots!" Sharing our affinity for shorebirds Rob was more than content with the reason for our delay.

It is other birds that draw us out on an excursion the next day. Rob has spent years studying the King Shag population endemic to the Marlborough Sounds, and we head to one of the colonies, Duffers Reef at the entrance to Pelorus Sound. Something of an oddity among the shag species of mainland New Zealand, these birds are small in number and tightly restricted in range. They specialise in finding benthic prey on the sea floor so need undisturbed habitat and clear water.

These factors have been a catalyst for driving opposition to the expansion of aquaculture in the sounds. On our way back to shore we investigate a salmon farm – where production has stopped, the result of poor practice and a degraded environment. With government currently pushing for greatly expanded aquaculture, here is a cautionary reminder of the need to place the environment first, followed by careful planning, appropriate scale and best practice.

That night we are back in Nelson where Pavel gives his talk on Red Knots. Arranged at short notice, we are grateful to Birds New Zealand, Forest & Bird, and Friends of Nelson Haven for facilitating the event. The talk is well received and there are many questions.

Base camp for the next few days is in Dovedale near Upper Moutere, hosted by David Melville. From here we make a brief excursion to Marahau and a brief walk in Abel Tasman National Park. 'Abel Tasman and Un-



Abel Tasman' quips our Russian guest.

We also venture several times to check out shorebirds. First up is a walk along Motueka Spit ahead of a particularly big tide, where we find at least 1300 knots along with a few hundred godwits. The knots, highly coloured and fat, are closely examined for bands and flags. Behind the scope, discussion ranges widely over the field of knot research. Collecting knot droppings, for instance. Or calculating the time elapsed between a bird ingesting a bivalve and excreting the remains: 25 minutes has been recorded. 'In captive birds,' says Pavel, 'you can hear the cracking of the shell in the knot's stomach.'

Two days later we are still with knots, but their numbers and scale of their surroundings have both expanded. We spend the night at the tip of Farewell Spit, hosted by Mike Ogle from DOC.

Out on the flats the next morning I am envious. Over 10 years ago an extensive survey was made of the benthic life along the Spit. The logistics and the results – as well as the graphics with which they are presented – are very impressive. It is knowledge we are desperately lacking for the Firth of Thames. But standing on these sand flats, firm underfoot and strewn with eelgrass I can see how easy it would be to do such a survey compared with the soft, often bottomless mud of the Firth – conditions which have thwarted any meaningful surveys to date.

Meanwhile, scattered around us are knots foraging ahead of the tide. Gradually they drift off, flying north over the dunes and dropping to a roost somewhere on the seaward side. We follow, traversing thickets of rushes and blackberry, before cresting a huge dune to see a splendid sight. Carpeting the outer beach are nearly 5000 shorebirds - most of them knots.

Once more they are under scrutiny. 'Is this a bird from Kamchatka, Pavel?' Rob beckons him to the scope. 'No, that is bird from Sakhalin.' Pavel and Rob give Mike a tutorial in separating *rogersi* from *piersmai* birds. The latter are more richly and extensively coloured.

'Later in the year,' I tell Mike, 'you will get to meet Theunis Piersma, after whom those birds were named – by the bloke standing behind you.'



BIRTHDAY PUBLICITY: The East Asian-Australasia Flyway has put a godwit on the poster for this year's World Migratory Bird Day.

## Godwits in the spotlight

PMNT has generated some good publicity since the Year of the Godwits was launched back in January.

The story got off to a good start in the local newspaper, the *Hauraki Herald*, which ran a two-page spread on the Year of the Godwit, and the birds that inspired it, as well as covering the school poster competition. If you'd like to see that story Google 'Hauraki Herald Shorebird'. That article was later picked up by the regional daily the *Waikato Times* giving it a much wider audience.

Then the nationally circulating *Sunday Star Times* followed up with an excellent feature story headlined 'Godwits – the great travellers.' To see that Google 'Sunday Star Times Godwits'.

The visit by the Chinese Ambassador also attracted some media attention. After the visit a joint press statement was put out by the Chinese Embassy, the Department of Conservation, Fonterra and PMNT which was picked up by web news sites Yahoo and Scoop. The *Hauraki Herald* used the press release as the basis for a story about the ambassador coming to the Firth of Thames to farewell the godwits on their long flight to China and on to Alaska.

However, the most important coverage appeared on the website of Xinhua, China's national news agency, which headlined its story: 'China, New Zealand unite to protect nature's air links.'

The story then announced that 'New Zealand and China have committed to working together to protect an important migration link between the two countries – nesting areas on two epic bird journeys.' That was significant because Xinhua is very much an arm of the Chinese Government and it went further than the actual statement.

Xinhua went on to say 'Chinese Ambassador to New Zealand Wang Lutong has visited the New Zealand end of the journey [at Pukorokoro Miranda] to watch the Bar-tailed Godwits and Red Knots depart for China on the first leg of a 12,000-km journey,' it said. 'The godwits breed in Alaska and the Red Knots breed in Siberia but both stop over at wetlands in China.'

Ambassador Wang he had "experienced the wonder of nature and the wonder of people" during his visit. "These incredible birds form a chain that links China and New Zealand. They also link human beings and nature. We help ourselves by helping the godwits."

The godwits will also feature on this year's World Migratory Bird Day poster in acknowledgement of 'our Partner Pukorokoro Miranda Naturalists Trust's Year of the Godwit celebration.'

**The 35,000 Red Knots that spend summer in New Zealand headed for their breeding grounds in Siberia last month with their future looking a little brighter. Meetings over the past few weeks involving PMNT, China's ambassador to New Zealand, the Minister of Conservation, the director-general of DOC and representatives of dairy giant Fonterra give reason to hope that something will be done to improve the birds habitat in China and New Zealand. In the following three stories Jim Eagles reports on the encouraging developments.**



GETTING THE MESSAGE (from left): Gillian Vaughan, Keith Woodley, Ambassador Wang Lutong, DOC director-general Lou Sanson and Fonterra co-operative affairs manager Paul Graves. Photo / Jim Eagles

## Ambassador shocked to hear knots' greatest threat is at Bohai Bay

A visit to Pukorokoro Miranda by China's ambassador to New Zealand could prove to be the catalyst that leads to protection of the roosts in Bohai Bay where about half of our Red Knots rest during their migratory flights.

A discussion beside the new hide, between Ambassador Wang Lutong, Department of Conservation director-general Lou Sanson and Shorebird Centre manager Keith Woodley was arguably the most significant event of this amazing day.

As the three chatted amiably, after spending a pleasant couple of hours watching the birds perform, Lou cleverly brought the topic round to the decline in the number of migratory birds coming to New Zealand.

The ambassador, who was clearly enjoying himself hugely, asked: 'Which birds are declining fastest?'

Keith: 'The Red Knots.'

Ambassador Wang: 'Why?'

Keith: 'Oh, loss of habitat.'

Ambassador Wang, looking round

at the glistening mudflats, shellbanks and waters of the Firth of Thames: 'Where? Not here.'

Keith: 'In China . . . at Bohai Bay.'

The ambassador who had previously explained that he came from very close to Bohai Bay, and had loved birds since he was a child (his 10-year-old son does too), looked shocked. For almost the only time during the visit he lost his happy smile: 'Ohhhhhhhhhhhhh. We didn't know that.'

Ambassador Wang asked several questions about the problem at Bohai Bay and asked Keith to send him more information on the subject.

The revelation obviously struck a nerve because later, during a discussion at the Shorebird Centre which wrapped

up the visit, he returned to the topic, saying again: 'This is the first time we knew about it.'

After seeking more details – Keith and chair Gillian Vaughan explained that the most crucial area was an 8km stretch of the Luannan Coast which was being considered as a possible nature reserve – Ambassador Wang asked what could be done.

It was agreed that that DOC's Bruce McKinlay, who represents New Zealand at the East Asian-Australasian Flyway Partnership, and First Secretary Xie Chengsuo from the embassy, would work on a Memorandum of Understanding on how the two countries might work together.

Ambassador Wang nodded in approval and said: 'The preservation



of wildlife has always been important in China. That is why in our traditional paintings you see so many pictures of birds and animals.

‘It would,’ he added, ‘be good to show that China and New Zealand can work together on more than just meat and wool but also to preserve our wildlife.’

### Three countries

This discussion was the culmination of a visit which brought together a remarkable group of people from the three countries crucial to the future of the Red Knots.

From China, where the knots rest and refuel during their amazing flights between Siberia and New Zealand, came the team from the embassy.

Representing Russia, where the knots breed during the short Siberian summer, was Dr Pavel Tomkovich, head of the Ornithology Department at Moscow State University, a world authority on the Red Knot and PMNT’s special guest for its 40th birthday celebrations. Smiling happily at the support for the birds he has spent his life studying, he observed: ‘We share these treasures.’

From New Zealand, where the knots come to grow fat each summer, Director-general Sanson brought a team of DOC officials who paid glowing tributes to the work of PMNT.

MP for Coromandel, Scott Simpson, turned with a message of support from Conservation Minister Maggie Barry, who had rung him the night before to express her hope that the meeting would be a success and offered strong personal support for the work being done to safeguard migratory shorebirds.

Financial muscle was added by Paul Grave, head of cooperative affairs at New Zealand’s biggest company, Fonterra, and Cerasela Stancu, partnership manager of the dairy giant’s Living Water project, which is starting to invest significant sums in improving the Pukorokoro Miranda Catchment.

To a query about whether Fonterra might support building a birding centre at Bohai Bay, Paul said he couldn’t speak for the company at this stage but added, ‘Why wouldn’t we be interested when China is so important to us and Miranda is really the flagship for our



CRUCIAL VISIT (from top): Gillian Vaughan guides Brett Rhind of Ngati Paoa and Ambassador Wang; Yang Yenbo spies a godwit; Keith Woodley hongis with the ambassador; Ambassador Wang is snapped by his son as he checks out the rock marking the agreement between Miranda and Yalu Jiang; Keith and Gillian make a point to the ambassador; Photos / Jim Eagles and Bruce Jarvis

Living Water programme?’

PMNT was represented by Gillian, Keith and Birds NZ president David Lawrie.

Representing the tangata whenua was Brett Rhind, director of Ngati Paoa Group Holdings, who said Ngati Paoa was ‘one hundred per cent supportive’ of the work of the Trust. ‘The Kuaka, the godwit, is a symbol of the links between New Zealand, Ngati Paoa and China and it is appropriate that the discussions we have had today will both strengthen those links and help safeguard the Kuaka.’


#### Follow-up

Since the ambassador’s visit the Trust has sent him the report he requested about the problems facing the knots.

The summary states: ‘Red Knots connect New Zealand, China and Eastern Russia through their massive annual migrations. The official New Zealand threat ranking for the species is Nationally Vulnerable noting that although it has a large population now it is predicted to decline at 30-70% over three generations.

‘Twice a year large proportions of the two populations in the East Asian Australasian Flyway stop during migration to refuel on the mudflats of the Luannan Coast of Bohai Wan. The habitat in this area is under significant threat from development. A proposal has been developed to make the remaining mudflats a reserve. The specialist nature of Red Knot feeding means that the availability of migration sites is strictly limited. This site is essential for the continued survival of this species.’

By way of encouragement the report adds in its conclusion:

‘The decline and subsequent recovery of the Red Knot population in the East Atlantic Flyway shows that where suitable measures are taken, excellent conservation outcomes can be achieved. The rufa population of knots breed in northern Canada and migrate to southern Latin America. In the 1990s human overharvesting of the major food source at the key stopping site led to a severe reduction in numbers of Red Knots. Subsequent restrictions placed on harvesting have resulted in a recovery of the knot population.’ 



SUPPORTIVE: Conservation Minister Maggie Barry.

## Minister supportive of efforts to save Red Knots

The new Minister of Conservation, Maggie Barry, has taken steps to demonstrate her backing for PMNT’s work to safeguard the Red Knots.

Chair Gillian Vaughan and editor Jim Eagles have had a productive meeting with Conservation Minister Maggie Barry. The meeting was primarily to discuss support for the PMNT campaign to protect the Red Knot roosting site at Bohai Bay.

The Minister was clearly concerned to hear that the number of birds coming to New Zealand was threatened by the reclamation of the salt ponds and mudflats at Bohai Bay.

Gillian and Jim explained that the Yalu Jiang stopover site vital to Bar-Tailed Godwits was now reasonably secure thanks to the area becoming established as a major birdwatching area, with an information centre and bird festival which attract huge numbers of Chinese birdwatchers.

PMNT’s hope was to see the same thing happen at Bohai Bay where the structure was in place, including the existence of a nature reserve. But plans for a visitor centre which would serve as a focal point had fallen over due to the withdrawal of a sponsorship from an Australian mining company. The Trust hoped to see New Zealand fill this gap.

Ms Barry said there was no way the conservation budget could spare \$1 million for a building in China. But she agreed to talk to DOC about assisting the campaign and indicated a willingness to signal her support for the project.

When Gillian talked about


PMNT’s other work for the birds she again drew offers of support from the minister and since the meeting there have been some encouraging follow-ups.

As reported in our account of the Chinese Ambassador’s visit to Pukorokoro, the minister sent a personal message of support both for the success of the talks and for the work PMNT is doing to safeguard the birds.

Later she sent a letter confirming that the Department of Conservation fully recognised the importance of the Bohai Wan to the knots.

She noted that as a result of the Chinese Ambassador’s visit to Pukorokoro ‘agreement was reached on the desirability of developing a Memorandum of Understanding to set out our respective needs on these important habitats.

‘I am also supporting the Director-General [of DOC, Lou Sanson’s] intention to visit China in September 2015 to engage with central and provincial government partners to share New Zealand’s perspective on the priority of the Bohai Wan for shorebirds.’

The minister said she would be taking up an invitation from the Trust to visit the Shorebird Centre. ‘I understand from the director-general that a visit to the Shorebird Centre is always exciting and has unexpected highlights.’ 





**CHECK-UP:** Testing the state of the Firth of Thames during a Living Water Open Day at Whakatiwai are (from left) DOC head Lou Sanson, Fonterra's Paul Graves, DOC commercial partnerships director Geoff Ensor, Living Water partnership manager Cerasela Stancu and DOC ranger Kevin Carter. Photo / Nick Hirst

# Dairy giant joins the fight to save our migratory shorebirds

The Living Water project, launched by dairy giant Fonterra to combat adverse publicity about 'dirty dairying' looks like providing a huge boost to efforts to protect shorebird habitat in New Zealand and now in China as well.

The Pukorokoro Miranda catchment, and especially the coastal strip which is such a crucial roosting site for shorebirds, will be a major beneficiary of the \$20 million Living Water programme launched by dairy giant Fonterra two years ago.

Indeed, Fonterra's head of co-operative affairs for the Waikato, Paul Graves, and the manager of the Living Water project, Cerasela Stancu, have both described the work being done at Miranda as 'the flagship for our programme.'

The project has taken some time to develop, with a lot of effort going into consultant's reports and talks with stakeholders, but appears now to be moving towards action on the ground.

This will include a big investment in developing more areas around the mouth of the Pukorokoro Miranda Stream as shorebird roosts, protecting the existing roost areas by removal of mangroves and trapping pests, and

rehabilitation of the wider chenier plain to make it a better habitat for both waders and shorebirds.

And the project has recently decided to expand its investment in shorebird habitat to China by 'covering the costs of a visit to [Bohai Bay], meetings with local officials and businesses to try and rally support for proceeding with the reserve, annual survey, etc.'

Cerasela said, 'We see such support as justified as it is aimed at securing the habitat of the migrant wading birds that frequent Miranda. Recent discussion at Miranda farmer engagement group meetings would suggest the logic of supporting international conservation efforts or else our efforts in New Zealand won't deliver full outcomes.'

Living Water is a partnership between Fonterra and the Department of Conservation to improve water quality in general and to reduce the adverse impact of dairying in particular.

To achieve that it has selected five

catchments in significant dairying regions for attention: Hikurangi in Northland, Pukorokoro/Miranda, three Waikato peat lakes, Te Waihora/Lake Ellesmere in Canterbury and Waituna in Southland.

The intention is for the programme to complete a Farm Environment Plan in each of those catchments and to work with the affected farmers to achieve greater farm sustainability, including riparian fencing and planting, effluent and water use management and biodiversity enhancement.

The Living Water team says it has 'begun piloting our Living Water Farm Environment Plan in the Hikurangi catchment so we can assess how effective it is in delivering the goals we are trying to achieve. When we have developed an effective plan we will look at rolling it out on farms in the other Living Water catchments.'

It is also working on other developments aimed specifically at the par-



**SHOWING SUPPORT:** Fonterra representatives Paul Graves (at left) and Cerasela Stancu (at right) added their weight to the Chinese Ambassador's visit to Miranda.

ticular conditions in the Pukorokoro Miranda catchment.

Living Water's annual report for this year explains the area was chosen because while the coastal strip has been modified by grazing and drainage work it 'has the highest biodiversity values in the catchment and the greatest potential for biodiversity enhancement because it adjoins the Tikapa Moana/ Firth of Thames Ramsar site. The site also has the highest public visitation and recreational use and therefore presents the greatest opportunities to inform and demonstrate best practice and create behavioural change on and off farm.'

To lay the foundations for its work, Living Water has selected consultants Golder Associates, who have already reported specifically on the shorebird roosting area at the Miranda Stream mouth, to carry out a catchment-wide hydrological assessment. 'This baseline information is required to develop effective projects to enhance wetlands in the Miranda area and extend the habitat for the birds without affecting farmland drainage.'

Living Water is already working to set aside two areas of land adjacent to the Miranda Stream which have been identified as particularly suitable for development as additional shorebird roosting areas.

'Restoration work could include planting native plants and trees and

creating ponds and other wetland features,' the Living Water team says. But, because this would involve significant investment, the areas would need to be protected by a covenant or some such arrangement.

Unfortunately this has been held up because 'the landowners have stated that they wish to sell the land rather than covenant or retire it from production' and the funding from Fonterra may not be used to buy land.

As a result the project has engaged Wildland Consultants to prepare a report on the conservation values of the land which 'will be used to support applications for funding to buy the land from organisations that provide money for conservation work.'

Living Water has already received a report from Wildland Consultants identifying biodiversity enhancement priorities on the Chenier Plain.

This has recommended work that could be done to improve the habitat for shorebirds, including 'weed and predator control, fencing streams to reduce sediment and nutrient run-off, planting native species to create areas of restored native forest and controlling mangroves.'

Fencing off areas and tree planting has already started and 40 stainless steel DOC 200 traps to catch stoats and rats have been laid in a trapline along the foreshore from the old tip site just south of Kaiaua through the

Taramaire Reserve.


At the moment DOC rangers are monitoring these traps but in the future the partnership is looking at other options including 'maybe using volunteers from a local hunting group or maybe financing the Naturalists Trust to hire a person for this work.'

Living Water says it is also assessing biodiversity opportunities in the upper Miranda Pukorokoro Stream catchment. 'This will provide us with baseline information so we can prioritise sites and begin working with landowners to increase the abundance and variety of native wildlife.'

One of the aims of the Living Water programme is to fund one-off support for 'community initiatives that align with Living Water objectives' in each catchment.

One of the first such projects will be 'the removal of mangroves encroaching on habitat for shorebirds in their main high tide roosting area which was identified as a priority project by the Pukorokoro Miranda Naturalists' Trust.'

As a first step Wildland Consultants is being employed to process a resource consent application for the removal of the mangroves

Similarly, the programme is working with Ngati Paoa to identify a project the iwi can get involved in and which incorporates traditional values and knowledge. 



# GODWIT TIMES

Hi Guys

Hey, did you see me? Did you see me on Super Animal card number 18 (at right)? I got a call a few months back from the SPCA asking me if I would like to be part of the collectible animal cards they were doing with Countdown. As you can see I was put into the 'Toughest' category due to my amazing migratory flight. They even recorded my voice, which you can hear by swiping the card through a little machine!

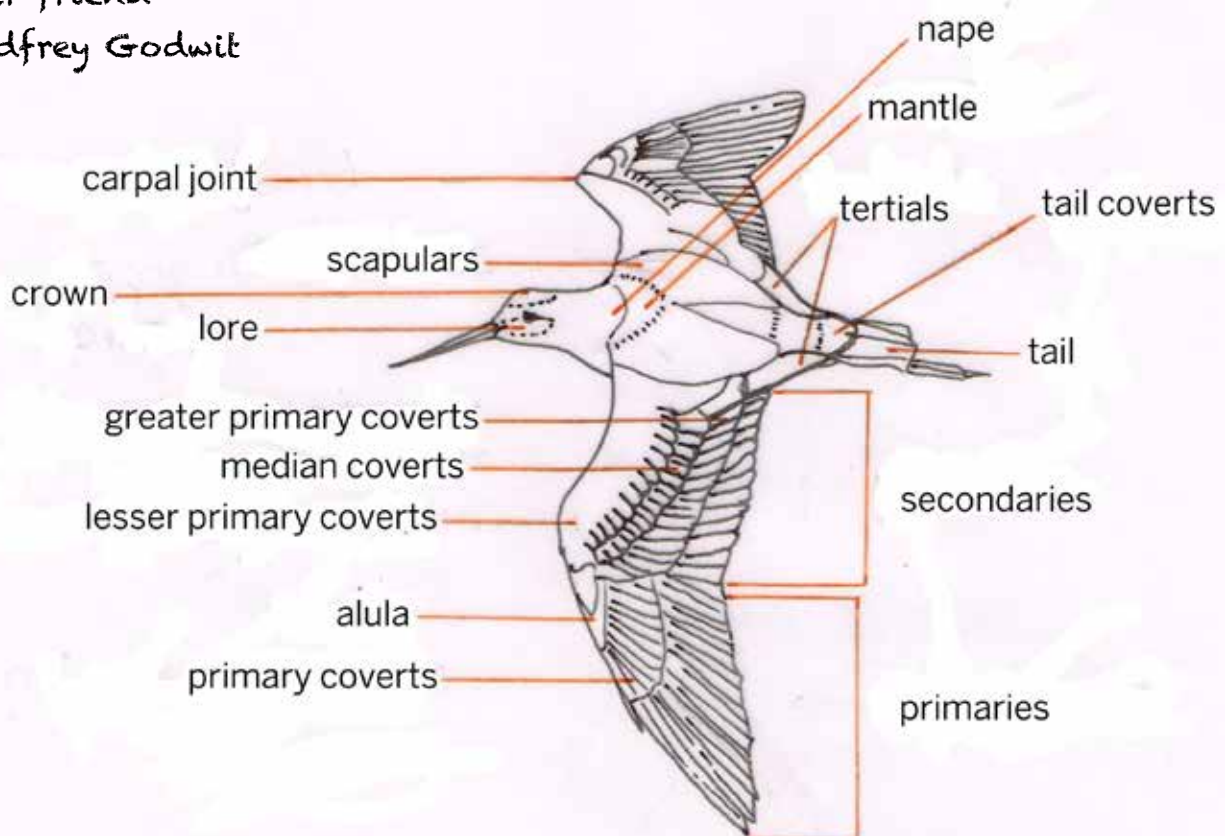
You may have seen in the February issue of this magazine that some of my godwit friends got their bills and wings measured and bands and flags put on their legs. Bands and flags and sometimes tiny transmitters help scientists to track where birds like us fly. It is thanks to them that Bar-tailed Godwits are now known to have the longest migratory flight of any bird.

The reason they measure the bills is because it is a reliable way to tell if a godwit is a male or a female because the female has the bigger beak.

Looking at the different types of feathers birds have, like the primary and secondary feathers, tells the researchers if the bird is moulting. This is when old feathers fall out so that new feathers can grow. I have drawn a picture showing the names of my different feathers types and body parts to help you become an expert.

Your friend

Godfrey Godwit



# A photographer's



Bar-tailed Godwit

White Heron



Welcome Swallow



Skylark





# paradise

Photographer Tony Whitehead has captured some of the beauty of Pukorokoro Miranda and its birds in these pictures. More of his photos can be seen at [www.wildlights.co.nz](http://www.wildlights.co.nz). Don't forget our 40th birthday Photo Competition, closing on May 31, which gives you a chance to show how you see this special place.



Black-billed Gull



White-faced Heron



Pied Stilt

# Friend or foe? NZ's native mangrove

The mangrove is a controversial plant. It is defended as a vital nursery for marine life which does great work removing sediment from seawater, and attacked as blocking views, drainage . . . and the flight path for shorebirds. **Ray Buckmaster** tells the story of this fascinating plant.

New Zealand's only mangrove – Manawa or the Grey Mangrove – has a long and exotic scientific history. The first description of the plant, and of its value in treating smallpox scars, occurs in a thousand-year-old Persian scientific text called Qanum.

The physician who wrote it, Abu Ali al-Husayn ibn Sina, lived between 980 and 1037, and he lives on, if a little obscurely, in the first part of the mangrove's original scientific name *Avicennia resinifera*.

That specific name, *resinifera*, was given during Captain James Cook's first voyage, whilst visiting the Firth of Thames. Kauri gum resin found entangled in the mangrove's roots was wrongly thought to have been produced by the mangrove.

These days Manawa is known as *Avicennia marina* var. *australasica*. *Australasica* refers to the southern or austral distribution of this variety. It is not an Australian weed, although this is often seized upon as a pretext for its removal, but is a New Zealand native.

It is found in New Zealand north of latitude 38 degrees South, with Raglan and Ohiwa Harbours marking its southern limits, and has existed here for at least 19 million years. The species is also found in many other parts of the world, including the Arabian Gulf where ibn Sina encountered it.

Manawa cannot tolerate frost, which is why its southern limit coincides with the -3 degree isotherm, and also why it grows much taller in warmer northern areas.

The plant also has other particular requirements. Its salt-tolerance gives it an edge over other intertidal plant species but it does thrive best when salinity is in the mid-range which typically occurs at river mouths.

Seedlings deprived of oxygen for six hours do not survive. They can only become established above Mean Tide Level where they are submerged for less than this. Their upper intertidal limit is, to an extent, mangrove determined. Mangroves calm wave action and cause suspended sediments to fall to the bottom. Their presence can increase sedimentation rates from



**SPREADING:** A crop of mangrove seedlings is rising in front of established trees at Pukorokoro.

20mm/yr to 100mm/yr. As the ground level rises the tidal inundation lessens and the soil retains slightly less water, particularly in periods of neap tides, causing it to have a higher salt content. This inhibits the plant's photosynthesis and, at the slightly higher elevations where only spring tides reach, Glasswort-dominated salt-marsh takes over.

Mangrove propagules are a major adaptive feature. These are seeds that germinate on the parent plant then float off, remaining viable for about a week, until wave action deposits them somewhere in the intertidal zone.

In the southern Firth of Thames seedling recruitment years seem to come in clumps and usually coincide with extended periods of calm weather. In windy years the intertidal area is constantly being remodelled by wave action making it harder for propagules to become established.

In the early 1990s mangroves spread markedly. Between 1977 and 2007, however, seedling establishment was limited. The past summer has been particularly calm. Is another period of mangrove recruitment underway?

A change in distribution has been noted in the Firth. In the mid-1940s mangroves were largely restricted to river mouths. Since then, 7sq km of inter-tidal flat between the Piako and Waitakaruru Rivers have been colonised, as well as another 11sq km to the south, resulting in the loss of shore-

bird roosts. It is uncertain whether the intertidal flats also lost as feeding areas have been replaced by the development of new inter-tidal flats.

Manawa is often portrayed as the villain but it is man that has provided increased habitat for the plant. Core sampling of sediment shows that, prior to human occupation, sediment formed in the Firth at the rate of 0.5mm/yr. Post-occupation that rate increased to 5mm/yr. In the 40 years up to 1918, 44 million cubic metres of sediment are estimated to have been contributed to the Firth, most of it on the western shore.

Today the Waihou and Piako Rivers add 185,000 tonnes of sediment each year. It is the sediment and nutrient load of these rivers that encourages mangrove establishment.

The inter-tidal flats provide a challenging environment for life as oxygen can be detected only to a depth of 3mm below the surface of the mud and the underground parts of a mangrove, which make up two thirds of the whole plant, need oxygen to survive.

This is delivered by the plant's unique root system of which the most noticeable feature is the upward growing root structures known as pneumatophores. Unlike most roots these grow into the atmosphere and also photosynthesise. If you place the severed end of a pneumatophore in water and squeeze, bubbles of air




emerge from the cut.

A thick spongy air-conveying layer surrounds the central tissues that transport water and photosynthetic products. Sampling of the gas within the spongy layer quite distant from pneumatophores shows it to still contain oxygen at levels around 60% of that in the atmosphere.

Because Manawa is found in the intertidal zone it can conflict with community wishes and its removal is often sought on the grounds that views will be improved, estuarine beaches restored and drainage improved. These desired results do not always eventuate and re-invasion of cleared areas generally occurs. The long term solution is improved catchment management to reduce sediment and nutrient supply.

On the other side of the balance sheet mangroves provide significant ecosystem services. The settling of suspended sediment increases water clarity. This, in turn, allows greater growth of phytoplankton, the base of a food web upon which many organisms, including shorebirds, depend. Annually, a hectare of mangrove contributes up to 5.38 tonnes of dry leaf matter and many juvenile fish species feed by sucking the bacterial slime from the surface of such decaying plant material. The moderating effect of mangroves on wave action also protects stop banks which themselves protect the Hauraki Plains from inundation.

There has never been an attempt to put a cash value on the benefits of mangroves in the New Zealand context. But elsewhere experts have quoted values ranging between US\$33,000 and US\$900,000 per hectare.

While the picture we have of Manawa is one of continual spread, in reality it faces a future of coastal squeeze. The intertidal area of the Firth is sinking due to compaction. Some authorities suggest that sediment deposition is insufficient to compensate for this and the rise in sea level caused by climate change. Sea level rise will, over time, displace the mangrove belt shoreward into areas presently occupied by salt-marsh and sea-meadows. But any further landward expansion will be impeded by structures like stop-banks and roads. Thus mangrove communities, could, in time, become as threatened as the salt marsh communities they will displace. 



MANGROVES (from top): Members of the mangrove family house many species including, in Costa Rica, boa constrictors ; pneumatophores or roots; propagules or seeds; sweet-smelling flowers. Photos / Ray Buckmaster





## The 40th annual general meeting of Pukorokoro Miranda Naturalists' Trust will be held at the Shorebird Centre at 10am on Sunday May 24



Annual report from the chair

### Every year has its own highlights

The Pukorokoro Miranda Naturalists' Trust's continues to make remarkable progress on several fronts, ranging from educational work in China to repairing damaged hide at home, writes **Gillian Vaughan**

In my Inbox this morning: a message from Ray about maintenance work he and Trish have been doing down at the hide, pictures of school groups from China where Adrian, Keith and Estella are speaking about godwits, and an email from Otago where Trudy has some students doing a course project on our website, looking at ways we can better communicate what we are doing.

It can be hard to look back to last year when everyone is focused on moving forward. But each year has its own highlights.

Getting members of the Department of Conservation to Yalu Jiang officially, and later on that trip the team meeting Carl Worker, then Ambassador to China, and other Chinese Government officials was a significant highlight for me. The trip into North Korea may have been a logistics only trip but it has led to a research trip this year. The long awaited launch of the report on 10 years of surveys at Yalu Jiang went ahead in China.



**RESILIENT:** A powerful storm wrecked both hides but, as ever, volunteers were quickly into action to make repairs. Photo / Keith Woodley

One of the things I have been quietly pleased about is the amount of research now taking place at Yalu Jiang National Nature Reserve, with Professor Ma of Fudan University having several students working in the reserve. While the trust will continue to be involved with the area a broader, and more local, base of interest will provide a more secure footing. Back in

Auckland Estella was very passionate when explaining the story of the godwits to the Vice Consul General of the Chinese Consulate in December.

Locally, in June we lost the new hide then got it back up again in July. It has since survived a few good storms so we are hopeful it will continue to stay up! We worked through the year with DOC and Fonterra towards the Living Waters project, which has the potential to be of significant environmental benefit to our coastline. We received a grant for a new computer and new display boards, the boards are still in process but we hope to see them soon. The change of name to Pukorokoro Miranda Naturalists' Trust is slowly working its way through, with signage and displays being replaced as they come due.

We had a significant staffing change in 2014 with Kristelle Wi not taking up the shorebird guide role for the 14-15 summer. Kris had been with us for some time and I know that she has been missed. We have had great replacements, however, this summer with first Charmaine Stanley and then Trish Wells making the role their own.

Keith and David amongst others have also been involved locally at a dif-

#### Agenda for the 40th annual meeting of Pukorokoro Miranda Naturalists' Trust

Apologies for Absence

Minutes of the AGM held on 25 May 2014

Minutes of the Special General Meeting held on 25 May 2014

Matters arising from the minutes

Chairperson's Report

Treasurer's Report

Election of Officers (Treasurer, Secretary, Auditor, 10 Council Members)

Recommendation from the Council that for 2016 subscriptions rise from single \$45 to \$50; family \$55 to \$60; overseas \$60 to \$65; Life (under 50) \$1300 to \$1500; Life (over 50) \$750 to \$850

General Business



## The 40th annual general meeting of Pukorokoro Miranda Naturalists' Trust will be held at the Shorebird Centre at 10am on Sunday May 24

ferent level, continuing to prepare and deliver submissions to local governments (mainly Auckland City), to get greater recognition of the requirements of migratory shorebirds for significant harbours around New Zealand. Keith has also been representing the PMNT at SeaChange: a spatial plan for the Hauraki Gulf (which includes our Firth of Thames site), a joint project of local government, state agencies and community groups to develop an integrated management plan for the Hauraki Gulf.

We also have spaces on council, with Emma Pearson standing down this year. Emma has been on the Trust Council for several years now and I would like to thank her for her work over this time. Council would now particularly benefit from a Council member with experience in marketing and promotions, if this is something that you feel you could contribute please get in touch with Keith or I. Shorebird knowledge or long term involvement with the trust are not a requirement. If you have different experience but might be interested in being on the Trust council please feel free to contact me and we can go through the details.

2014 had a lot else going on, courses, speakers, consultations, but one of the significant projects of 2014 was getting ready for 2015 as Year of the Godwit. It's been a great start to the year with the members lunch – which was thoroughly enjoyable – Pavel Tomkovich giving talks around the country, the Chinese Ambassador's visit to the Shorebird Centre, along with a host of others. To keep up to date please check our Facebook page – and for your daily godwit dose follow @miranda\_trust or #yearofthegodwit on twitter.

The traditional end to an annual report is the thank yous. There are too many names to write here, so my thanks first to our volunteers at the centre and away from it, to Trust Council members and officers, to our staff, the work of the trust is only possible because of the work of the individuals involved. Thank you all.

### Minutes of the 39th Annual General Meeting of the Miranda Naturalists' Trust held at the Shorebird Centre at 1100 on Sunday 25 May 2014

**PRESENT:** The Chairperson (Gillian Vaughan), Secretary (Will Perry), and 44 others.

The meeting held one minute's silence in memory of Eila Lawton, who had died a few weeks earlier. Gillian observed that Eila would have been amused that the "minute's silence" was shattered completely by passing motorcycles.

**APOLOGIES:** Charles Gao (Treasurer), Chris Thompson, Peter Thompson, Stuart Chambers, Alison Chambers, Jim Eagles, Chris Eagles, Peter Maddison, Krishna Buckman.

Apologies Accepted (Gillian Vaughan / Bruce Postill).

Gillian Vaughan acknowledged the presence of David Lawrie (former Chairperson) and Bruce Keeley (long time member of the Trust who was today attending his first AGM, having missed all the others because he worked on Sundays).

**MINUTES:** The minutes of the 38th AGM held on 19 May 2013 had been published in *MNT News*.

The minutes were approved as a correct record. (Gillian Vaughan / Heather Rogers)

**MATTERS ARISING:** Kitesurfing – No progress to report. David Lawrie reported that there is provision for protection of shorebird roosts in the

Auckland Council Unitary Plan, for which hearings begin later in the year.

**CHAIRPERSON'S REPORT:** Gillian Vaughan's report from the chair was published in *MNT News* with the subtitle 'Another year of impressive progress' and Gillian spoke to some of the issues mentioned.

- Special thanks to MNT volunteers and staff and everybody who has put effort into Miranda Naturalists' Trust.

Particular thanks to Eila Lawton and Peter Maddison for their huge contributions to the field courses over many years.

- Building activity at the Limeworks has seen a new hide and new interpretative signage, both of which improve the visitor experience.

- Through the summer there has been a guide from the Shorebird Centre present for most of the time also enhancing the experience for visitors.

- The Bioblitz was a great success and data are still being collated.

- DoC report on restoration options for the local area.

- Cycleway – MNT position is to minimize impact on the birds.

- Adrian Riegen and Keith Woodley have just returned from China – update to follow.

- New water tank has meant that we required only one delivery of water



**BIG STEP:** A meeting at Yalu Jiang with New Zealand Ambassador to China Carl Worker was a highlight of 2014. Photo / Keith Woodley

## The 40th annual general meeting of Pukorokoro Miranda Naturalists' Trust will be held at the Shorebird Centre at 10am on Sunday May 24

last summer.

- Building programme – Gillian, Keith Woodley and Alister Harlow recently visited the architect. Now we need a Quantity Surveyer who will not cost too much.

It was moved that the chairperson's report be received (Gillian Vaughan / John Rowe).

**MATTERS ARISING:** David Lawrie said he may have a solution to the search for a Quantity Surveyer and will discuss with Gillian later.

**TREASURER'S REPORT:** Charles Gao's Financial Report was published in *MNT News*.

Charles has relocated to Blenheim, where he has a new job. He has said that he is happy to continue as Treasurer of the Trust if reappointed.

Gillian spoke to some of the issues in Charles's report:

- Life Membership reserve left untouched

- Shop trading slightly lower than previous year but profit about the same

- Thanks to Ann Buckmaster for designing new apparel

- Recent update – Grant approved by Greenwood Trust for update of cannon-netting equipment – thanks to Alister Harlow for this and other funding applications

- Len Taylor and Jim Eagles have found a more cost-effective way of distributing MNT News and the money saved has been used to convert the magazine to full colour

Questions / Comments on Treasurer's Report:

1 Betty Seddon asked whether costs of the Bioblitz were met by MNT. Answer – Yes.

2 In 2012 there was a surplus of \$25,344 and in 2013 there was a \$1,952 deficit. Gillian explained that 2012 was unusual in that it included a large individual donation.

3 Where do we expect to get funding for the Building Project? Answer – Alister will approach ASB Trust and Lotteries Commission; where we will get remaining funding not yet decided.

4 What can we sell to passing

cyclists? Answer – Food, but only if we are set up to do so.

5 Who will maintain the cycleway? Answer – Hauraki District Council and possibly DoC.

Moved (David Lawrie / Laurie King) that the Financial Report be adopted. Carried nem con.

### ELECTION OF OFFICERS:

Secretary – William Perry elected unopposed.

Treasurer – Charles Gao elected unopposed.

There were 10 nominations for Council, namely David Lawrie, Adrian Riegen, Gillian Vaughan, Wendy Hare, Estella Lee, Emma Pearson, Trudy Lane, Ray Buckmaster, Ann Buckmaster, Bruce Postill.

These 10 candidates were elected unopposed.

Auditor: Lance Fielder of Gyde Wansbone proposed: Carried.

### SUBSCRIPTIONS:

Proposed (Gillian Vaughan / John Rowe) that subs remain unchanged for 2015. Carried.

### GENERAL BUSINESS:

1 Cycleway - Betty Seddon asked

whether there is a plan of the Cycleway. Gillian responded that she has copies of proposed routes.

2 Vandalism and Burglary – these issues continue, particularly at the Limeworks car park. We have been visited by police. Possibility of security cameras. Stella Rowe reported that Gwenda Pulham's supervision of the car park at the last Open Day made a difference. Tony Habraken suggested that vehicle plate numbers be noted and reported to the Shorebird Centre.

3 New Hide – Martin Day reported damage to the northern door of the new hide caused by people slamming the door. Adrian Riegen will examine and fix it.

4 Toilet facilities – It has been suggested that toilet facilities be sited somewhere at the Limeworks. Gillian Vaughan reported that the cycleway people have discussed toilet facilities with us – no decision so far.

5 Bev Woolley expressed her thanks to the Council of Miranda Naturalists' Trust for advancing the work of the Trust both locally and in China.

The meeting closed at 1146.

## Minutes of the Special General Meeting of Miranda Naturalists' Trust held at 1147 on Sunday 25 May 2014

A Special General Meeting immediately followed the Annual General Meeting having been convened to consider a single resolution as follows:

'This Special General Meeting of Miranda Naturalists' Trust instructs the Executive Council to alter the Trust deed to change the name of the Trust to 'Pukorokoro Miranda Naturalists' Trust'.'

Keith Woodley explained the background of this resolution and the depth of feeling amongst local iwi that the region had been named after a warship that opened fire on local inhabitants in an unprovoked attack that killed many people

Resolution officially moved: David Lawrie; seconded: Sue Reid

Discussion points:

1 Are local iwi approaching the

New Zealand Geographic Board to ask for a locality name change? Answer: Yes.

2 Are local iwi happy to have the two names associated? Answer: They understand our need to keep the word 'Miranda' in our name but they hope that it will eventually disappear.

3 Suggested that we leave out the word 'Naturalist' because it causes misunderstanding. On the other hand, the Trust is interested in all living things, not only birds.

4 The Constitution requires at least a 75% majority for such a resolution to be carried.

The Chairperson put the resolution to the meeting. It was carried unanimously.

The Special General Meeting closed at 1203.



# The 40th annual general meeting of Pukorokoro Miranda Naturalists' Trust will be held at the Shorebird Centre at 10am on Sunday May 24

Annual report from the treasurer

## Trust moves from deficit to surplus

This is the fourth year I have liaised with the auditor to finalise the accounts for PMNT since I took over the Treasurer's role . . . time flies indeed. Communication with Centre staff, Council members and suppliers is being done mostly via emails as I moved to Blenheim for work in the beginning of 2014.

First, let's have a look at the 2014 Financial Statement which reflects the whole picture of the Trust's activities.

PMNT recorded a \$27,253 surplus in the 2014 financial year compared with a \$1,952 deficit last year.

The major difference came in the value of grants and bequests which were received from: Foundation North



for a boardwalk, traps and bait for the trapping programme; Ron & Edna Greenwood Environmental Trust for bird banding equipment; Chisholm Whitney Family Charitable Trust for a computer upgrade and bequests from Eila Lawton, for the land restoration project, and Nanette Lucy McLauchlan.

Turning to the operating income

(ASB Community Trust) for the summer shore guide and trapping programme; Waikato Regional Council

earned through the Centre's activities, the accounts show shop sales to have dropped by 25.6% or \$22,443. I believe that one reason for this is that spending per visitor was much less than the previous financial year. However, another factor is human error, namely the inaccurate coding of shop sales, subscriptions, accommodation, school tours, lectures, etc.

I have checked the figures for income from these sources in previous years and found that the total for shop sales, accommodation, school tours and lectures in 2013 came to \$109,629, compared with \$95,290 for 2014, representing a \$14,339 drop. The profit margin for the shop nevertheless remains at a good level.

The apparent downturn in shop sales has been reported to the Council and I will work closely with Keith and Maria to monitor shop figures.

Looking at other sources of income: The field course surplus is \$9,445 and courses continue to be an important income source; Accommodation income increased by 15.6% or \$3,227 with increased use of the two self-contained units; school tour and lecture income surged by 472% due to more visits from local schools and some community groups; membership subscriptions dropped by 8.3% or \$1,393.

We received \$8,000 due to Keith doing reports for DOC on the Flyway Partnership sites at Firth of Thames and Farewell Spit

Total cash expenses were up by 6.5%, mainly from publicity expenses reflecting an increase in activities undertaken during the 2014 financial year. These included:

A PMNT delegation flew to China for the launch of the Yalu Jiang Estuary Shorebird Survey Report. Air tickets were funded by MFAT and there was further funding from DOC. PMNT also bought gifts for Chinese officials and funded the Wetland International's representative travel and accommodation costs for the launch.

### STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2014

	2014	2013
<b>TRUST EQUITY</b>	\$1,112,880	\$1,085,627
<b>CURRENT ASSETS</b>		
BNZ Current Account	15,814	8,786
BNZ Achiever Savings Account	66,089	55,070
Accounts Receivable	3,592	
GST Refund Due		59
Inventories	24,066	25,772
<b>TOTAL</b>	<b>109,560</b>	<b>89,687</b>
<b>NON CURRENT ASSETS</b>		
<b>Property, Plant and Equipment</b>		
As per Schedule (at Book Value)	797,976	797,067
Investments		
<b>Fixed Term Deposits</b>		
T S B Term Investment (Sibson Award)	38,728	37,189
T S B Term Investment	213,256	206,039
<b>TOTAL</b>	<b>251,983</b>	<b>243,228</b>
<b>TOTAL ASSETS</b>	<b>1,159,520</b>	<b>1,129,982</b>
<b>CURRENT LIABILITIES</b>		
Accounts Payable	11,636	12,041
Employee Leave Liability	1,371	1,091
Life Membership Reserve	9,030	9,030
Accruals - Subscriptions in Advance	9,113	7,965
GST Payable	502	
40th Anniversary Income in advance	330	
Unspent Grants Income - Muddy Feet	11,228	11,228
Field Course Income In advance	3,000	3,000
Accommodation Income in advance	430	
<b>TOTAL LIABILITIES</b>	<b>46,640</b>	<b>44,355</b>
<b>NET ASSETS</b>	<b>\$1,112,880</b>	<b>\$1,085,627</b>

## The 40th annual general meeting of Pukorokoro Miranda Naturalists' Trust will be held at the Shorebird Centre at 10am on Sunday May 24

Insurance is now managed through an NZI broker

PM News magazine has been upgraded to full color. Thanks to Jim Eagles and Len Taylor for working with NZ Post to reduce the postage costs

Building maintenance cost in-

creased as the Centre needed to do roof cleaning, fire alarm upgrade and other repair and maintenance works.

Gillian attended a bilateral meeting held in China on behalf of PMNT. Bruce Postill represented PMNT at the Sydney Bird Fair. Keith and Adrian visited North Korea and met rep-

resentatives of the Nature Conservation Union

Many thanks go to all volunteers who behind the scenes to contribute to PMNT's operation and to the Centre staff, Keith, Maria, Kris and Charmain.

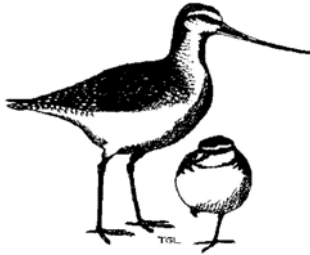
Charles Gao

### STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED 31 DECEMBER 2014

	2014	2013		2014	2013
<b>INCOME</b>			<b>EXPENSES</b>		
Sales	65,363	87,806	<b>General Operating Expenses</b>		
<b>COST OF SALES</b>			ACC Levy	469	283
Opening Stock	25,772	30,469	Bird Banding Expenses	943	2,524
Purchases	40,153	42,091	Cleaning	2,740	2,805
	65,925	2,560	Equipment Rental	1,111	673
Closing Stock	24,066	25,772	Magazine Distribution	4,173	3,278
Cost of Sales	41,859	46,788	Magazine Publication	10,423	9,180
			Power	3,857	3,486
<b>GROSS PROFIT</b>	23,504	1,018	Predator Control	1,390	942
Gross Profit %	35.96%	46.71%	Project Costs - Bio Blitz		2,726
			Publicity	9,535	1,571
<b>INVESTMENT AND OTHER INCOME</b>			Sibson Awards Scholarship		2,500
Interest Received	9,571	8,901	Wages	88,885	83,486
Subscriptions Received	15,383	16,746	<b>TOTAL</b>	<b>123,526</b>	<b>113,454</b>
School Tours & Lectures	6,274	1,097	<b>Repairs &amp; Maintenance</b>		
Profit on Field Courses	9,445	7,966	Buildings	4,455	2,900
Accommodation Receipts	23,653	0,726	Furniture & Fittings	399	50
Land Lease Received	4,800	4,800	Grounds Maintenance	1,736	835
Grants Received	42,813	16,000	Kitchen Supplies	1,432	2,651
Donations Received	42,823	22,917	Plant & Machinery		403
Project Income - DOC	8,000	7,000	<b>TOTAL</b>	<b>8,023</b>	<b>6,839</b>
Other Income	446	738	<b>Administration Expenses</b>		
<b>TOTAL</b>	<b>163,209</b>	<b>106,891</b>	Auditors Fee	3,685	3,535
			Computer Expenses	312	86
			Fees & Licences	677	
			Postage	440	457
			Printing & Stationery	1,178	4,486
			Telephone	1,055	1,022
			Website Design/Maintenance	2,335	2,423
			<b>TOTAL</b>	<b>9,681</b>	<b>12,009</b>
			<b>Standing Charges</b>		
			Bank Charges	2,658	2,715
			Insurance	4,204	3,701
			Rates	1,237	1,484
			<b>TOTAL</b>	<b>8,099</b>	<b>7,900</b>
<b>TOTAL INCOME</b>	<b>186,712</b>	<b>147,909</b>	<b>TOTAL CASH EXPENSES</b>	<b>149,329</b>	<b>140,202</b>
			<b>NET CASH SURPLUS</b>	<b>37,383</b>	<b>7,707</b>
			<b>NON CASH EXPENSES</b>		
			Depreciation	10,114	9,177
			Loss on Sale of Fixed Assets	16	482
			<b>TOTAL</b>	<b>10,130</b>	<b>9,659</b>
			<b>NET SURPLUS BEFORE TAX</b>	<b>27,253</b>	<b>(1,952)</b>
			<b>NET SURPLUS (DEFICIT) AFTER TAX</b>		
				<b>\$27,253</b>	<b>\$(1,952)</b>



# PUKOROKORO MIRANDA NATURALISTS' TRUST



## The Shorebird Centre

283 East Coast Road  
RD 3 Pokeno 2473  
phone (09) 232 2781  
shorebird@farmside.co.nz  
www.miranda-shorebird.org.nz  
www.facebook.com/  
MirandaShorebirdCentre

Shorebird Centre Manager:  
Keith Woodley  
Assistant Manager  
Maria Stables-Page

## Pukorokoro Miranda Naturalists' Trust Council

Chair: Gillian Vaughan  
gillianv@actrix.co.nz  
09 298 2500  
Deputy Chair and Banding  
Convenor: Adrian Riegen  
riegen@xtra.co.nz  
09 814 9741  
Secretary: Will Perry  
home 09 525-2771  
emlynp@actrix.co.nz  
Treasurer: Charles Gao  
charlesgao69@gmail.com  
021 2674 919  
Council members: David Lawrie  
(Immediate Past Chair), Estella  
Lee, Wendy Hare, Bruce Postill,  
Trudy Lane, Ann and Ray  
Buckmaster, Cythia Cater, Greg  
van der Lee (Department of  
Conservation).

## 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  
eagles@clear.net.nz  
(09) 445 2444  
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 \$45 a year for individuals, \$55 for families and \$60 for those living overseas. Life memberships are \$1300 for those under 50 and \$750 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.

## 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 Maria Stables-Page 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, the census days are a good chance to get involved with field work and research. This year's are on June 21 and November 15. 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 at eagles@clear.net.nz.

### 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 and call it your own or feel free to take up any garden maintenance you can see needs doing.

# Celebrate the Year of the Godwit

To mark its 40th birthday the Pukorokoro Miranda Naturalists' Trust has declared 2015 to be **the Year of the Godwit**

The Shorebird Centre shop is joining in the festive spirit with some great birding goodies

Coffee tastes even better when you sip it from one of these elegant wrybill mugs for only \$15.90.



Look cool in our special Year of the Godwit tee-shirts (\$24.50) and polo shirts (\$29.90) designed by member Anne Buckmaster.

## Check out New Zealand's finest range of bird books

We stock books about birds, especially godwits, for birders of all ages, including:

**The Very Important Godwit Book**, by Jenny Patrick, \$36.90

**Godwits: longhaul champions**, by Keith Woodley, \$49.90. And if you ask nicely Keith might even sign it for you



Avoid dehydration with one of our Year of the Godwit drink bottles for \$14.50.



Get yourself a Year of the Godwit tea towel for \$12.50. They're so appealing that visitors will rush to do your dishes so they can get their hands on one. These DOC officers from Thames couldn't resist.

**Why not drop down to the centre, buy from our amazing range of gifts and then sneak out and watch the birds. Or, if you really can't find the time to visit, ring 09 2322 781 with your credit card handy, or use our on-line shop at [www.shorebird.org.nz](http://www.shorebird.org.nz)**