MIRANDA NEWS

Naturalists' Trust

November 2004 Issue 55

Signs of Spring

Avian Influenza

Aquaculture in the Firth of Thames

November 2004 Issue 55

Situated on the Firth of Thames between Kaiaua and the Miranda Hot Pools, the Miranda Shorebird Centre provides a base for birders, right where the birds are. Drop in to investigate, or come and stay a night or two. The Centre has three bunkrooms for hire, plus two self-contained flats. For rates see Back Page. The best time to see the birds is two to three hours either side of high tide. The Miranda high tide is 30 minutes before the Auckland (Waitemata) tide.

The Newsletter of the Miranda Naturalists' Trust is published four times per year to keep members in touch, and to bring news of events at the Miranda Shorebird Centre.

Front Cover:	A colour banded godwit photographed at Miranda on March 25th 2004.
Back Cover:	Wader flocks at Miranda.
Photos:	Brian Chudleigh

Upcoming Events

November 21
OSNZ Firth of Thames Census

December 31
New Years Eve
Special Guests YOU!

January 10-15
Residential Field Course
See page eight for details.

February 20
Celebratory Lunch
Bookings essential, see page 3 for details.

March 9 11AM Start
Open Day.
Guest Speaker David Melville

May 15
Annual General Meeting
Speaker to be announced.

A word from the editor

Spring is probably my favourite time to go bird watching, heading out into the field knowing that the migrants are on their way, or have just arrived. There is an element of the unknown, as who knows what might show up, at even the most well visited site. The Hudsonian Godwit that was recently seen at Kiwi Esplanade, an incredibly accessible roost site in Auckland, is the type of sighting that can just keep me out looking at the same old places.

This year it seemed it wasn't just me who was getting excited about the birds return, Miranda had our usual Spring Migration Day, the welcome to the Godwits at Ohiwa Harbour is an event that seems to get bigger every year, and in Christchurch they rang all the bells to welcome the early returnees. There are probably more celebrations that I don't know about. I find incredibly cool this expansion of knowledge, that more and more people are being exposed to, and subsequently recognising the remarkable nature of the migration undertaken each year by these birds. The story on page four of this issue about things to look for during spring came a little out of nowhere, and was meant to be a small article, and yet it seemed so appropriate that it just kept on growing!

Of course their are migrants that choose not to hang out on shorelines, and David Medway's article on Shining Cuckoos also fits the theme remarkably well.

On a more serious note for some time David Lawrie has been mentioning in his Chairman's Reports the council's concern about aquaculture in the Firth of Thames, Keith Woodley's article fleshes out some of the reasons behind these concerns, and raises some slightly scary points.

I hope you enjoy this issue, as usual contributions for the next issue of the news would be welcomed.
Gillian Vaughan

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from the MANAGER

In September the centre hosted a forum of local authority officials and community groups to discuss issues relating to the Firth of Thames. Facilitated by Environment Waikato, representatives from EW, DoC, Franklin District Council, Kaiaua Citizens and Ratepayers, Miranda Naturalists' Trust and local communities attended. The meeting was primarily an opportunity for regional and district authority personnel to hear at first hand from local people.

During the forum a wide range of subjects were canvassed, including district and regional planning, growth and development, environment, sedimentation, mangroves, tourism, camping, recreation, boating and fishing. Environment Waikato has given an undertaking to report back on a number of issues by next month. It is envisaged that future meetings will be scheduled on a regular basis, perhaps quarterly.

Giving talks to groups has long been a regular function of the centre manager or relievers. Such occasions provide an excellent platform for raising general awareness about the Trust and our interests in coastal ecology and shorebirds. From time to time there arise opportunities to give talks in other locations. Recently for instance, I have done so in Thames, Waihi and Whangamata. In late September a delegation from the Trust attended a China- New Zealand conference on the environment, held in Auckland, at which a paper on shorebird migration and conservation challenges was presented. In early October Gillian Vaughan and Eila Lawton represented the Trust at the Birds a Plenty festival in Whakatane. Gillian also gave a presentation to Manurewa Forest and Bird. On other occasions of course, Trust members have made presentations at conferences overseas.

When based at the centre, there are excellent resources on hand to illustrate such presentations - be it the bird cases, the display panels or mounted bird specimens. Indeed, such aids are deeply incorporated in my normal talks. At other locations on the other hand, the absence of such material can be a limiting factor. We have recognised for some time therefore, that a series of mobile display screens would be of the utmost value for Miranda.

We are currently exploring funding options for three such displays. Potential themes would include the Trust and its activities, a map showing migratory patterns and the story of migration itself. We are also interested in acquiring a data projector, as the capacity to make power point presentations both at the centre and elsewhere is widely recognised as the way forward.

Elsewhere in this issue is an obituary for David Baker. I wish to make my own acknowledgement of the enormous contribution David made to the Shorebird Centre. For me he was one of the key people responsible for creating the facilities we know today. In short he was one of the faces of Miranda Naturalists' Trust. He was always very supportive of me and I recall many good conversations on everything from politics to birds to the latest good art exhibition either of us had seen. In recent years he was a regular visitor whenever the gardeners were here, and I am sure they very much valued his contributions. His genial face creasing into a broad chuckle is very much missed.

Keith Woodley

EXTRA! EXTRA!

CELEBRATION LUNCH

ON SUNDAY, 20th February, 2005.

Earlier this year in the Miranda News, we reminded our members that in 2005, we have the opportunity to mark the 30th anniversary of the establishment of the Miranda Naturalists' Trust. We would like to thank and remember those who have done so much to help make Miranda the wonderful place which means so much to us all.

Your Council has planned an extra event with which to start the year on Sunday 20th February. No need for pot-luck this time, the cooks can have a break. We have caterers from Ngatea coming to look after us. Who can resist ham on the bone, chicken, lots of lovely salads, new potatoes and peas as well as fresh fruit salad etc.etc.?

Some of you must have wonderful, interesting and amusing tales to tell of those early days. We'd love to have you share them - five minutes is all we ask. To help us plan the programme, please let Nanette know if you have a tale you will share. Ph.(09) 486 2515 or nanette.mcl@clear.net.nz

We'd also love to have a display of photographs, cuttings or anything else of interest and Judy Piesse has very kindly agreed to organise this. We can't leave these things until the last minute, if you have something to share, don't delay, please phone Judy at Ph.(07) 868 7170 to make arrangements. (Or if necessary, send anything on loan, to our manager).

Also, it would be great if any gardeners could supply some posies for the tables.

We can cater for 70 people and need to have payment of $25.00 per person by Wednesday 15th December. Don't miss out. Please send your cheque or credit card details to our manager Keith Woodley by that date (details inside back cover). Let's make this a day to remember.

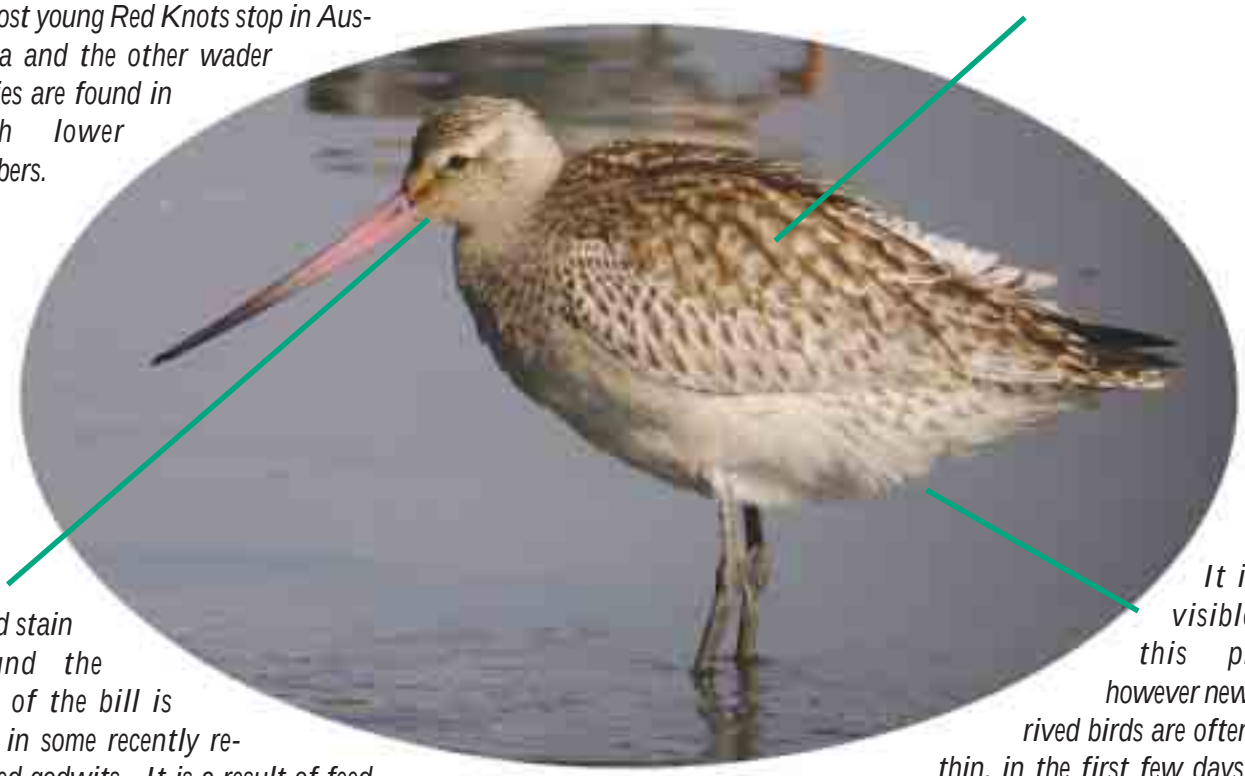
Nanette Mclauchlan

Signs of Spring

The return of the arctic migrants is one of the early signs that spring is on its way. From early September the wader flocks start to build up, by mid October most of the birds are here, however they will continue to drift in until well into November. During spring there are a number of things to look for in a Bar-tailed Godwit flock that are not present during the rest of the year.

If a juvenile godwit is seen in New Zealand it is certain to have arrived here in the last few months. Born in July or August, they will make the journey to New Zealand by November, around four months later.

Compared to an adult Bar-tailed Godwit a juvenile has a very strong pattern on its back, giving a spotty look. They are also a "buffy" colour, particularly on the breast. Some can be distinguished from adults until around mid-December, although many lose the distinct markings by mid-November. Obtaining the percentage of juveniles in a flock, and comparing the percentage from year to year can give an idea about the breeding success of the species that year. The website of the Ornithological Society of New Zealand (www.osnz.org.nz) has details of how to do these kind of counts, and what to do with the information. Most waders have a distinct juvenile form, however Bar-tailed Godwits are the most commonly seen as most young Red Knots stop in Australia and the other wader species are found in much lower numbers.



A red stain around the base of the bill is seen in some recently returned godwits. It is a result of feeding on the iron rich mudflats in Alaska, where the rusty water can stain the birds face. The staining can be either light, as shown on the bird in the photo, or heavy, with a more stronger colour going back as far as or behind the eye.

This photo of a juvenile Bar-tailed Godwit was taken at Yatsu Higata Nature Observation Centre, Chiba, Japan on Oct. 14, 2002 Photo (c) William Hull www.mangoverde.com

It is not visible on this photo, however newly arrived birds are often very thin, in the first few days after their return therefore the cloaca can often be seen protruding from the body, until the birds put on enough weight to once again make a smooth line. The green line points to where this would be seen. In addition while they are very thin their legs can look very long. This feature does not last long.

And while you're looking. . .

. . . check for flags and colour bands!

This godwit with a white flag and the colour bands white over blue on the right leg (the bands on the other leg were not photographed) was seen in South Korea on northward migration. Photo Kim Hyun-tae

Other signs of birds arriving that you can look for are:

Increasing numbers.
This is not always as sure a sign as it might seem, as during the winter godwits and knots can change harbours on a regular basis, however its a good start!

Remnants of breeding plumage
If you see birds with very worn, untidy breeding plumage they are likely to be birds returning from the breeding grounds. Red Knots with the last of their breeding plumage will often have a few black feathers on their backs, and red-brown marks down the centre of their breast. The birds wing feathers are likely to look very worn.

Behaviour
On arrival from migration birds will often begin to drink immediately upon landing. For the next day or so the arrivals may appear to be rejected by the rest of the flock. This is most obvious in the early days of migration, when the birds that have overwintered, and are in non-breeding plumage outnumber the new arrivals, which usually have traces of breeding plumage.

Colour Bands and Flags on our Migratory Shorebirds.

While you are out looking for juveniles, red faces and other signs of early arrivals check the flock for colour bands and flags. There are two studies currently on-going that are colour-banding and flagging migratory waders. Birds have been banded at the Firth of Thames, Farewell Spit, in Christchurch and Invercargill.

If you see colour-banded waders you can report them to
Adrian Riegen riegen@xtra.co.nz
Phil Battley philbattley@quicksilver.net.nz
David Melville david.melville@xtra.co.nz
Rob Schuckard rschckrd@xtra.co.nz

Colour bands should be read from top to bottom, left to right (the birds left and right). The bird on the cover of this issue is therefore YRYY with a white flag on the birds upper right leg A reporting form is available from any of the people listed above.

Spring Migration Day

Godwit numbers on the Firth of Thames continued to increase as Spring Migration day 2004 approached. But among the new arrivals there were two particular birds destined to feature prominently on the programme for the day. One arrived via the imagination and creativity of Sandra Morris. The other, following its own natural migration cycle, underlined in staggering fashion the benefits of colour banding.

Several years work for Sandra culminated in the official launching of her latest book for children, *Godwit's Journey*, There have been a number of earlier books telling the story of godwit migration, but in recent years our knowledge of what these birds get up to once they leave New Zealand has increased markedly. This latest volume brings the story up to date. It follows a bird departing on northern migration, its stopover in China, its breeding cycle on the Alaskan tundra, and its return to New Zealand.

Sandra was introduced by Peter Jansen, publishing manager at Reeds Publishing, who had flown in from Frankfurt that morning. An audience of over 90 people then heard Sandra describe the processes behind writing and illustrating the book.

First there were the sketchbooks, product of many hours sketching on the Miranda shellbanks. There were photos of birds in flight and of chicks and eggs on the tundra. There were dead birds to provide invaluable information on form and plumage patterns for the artist. There were consultations with experts on factual details of bird behaviour, migration patterns and routes. Draft designs and mock ups for each page eventually became finished watercolours. Eventually all became synthesised into an illustrated account of Godwit's journey.

Following the presentation, the flocks of people around the cash register served as confirmation the book was well received.

And the other bird to feature on the day? It was the male godwit banded by Phil Battley in March 2004, that was seen at Yalu Jiang in April, then on the Yukon Delta in Alaska in August, and that had returned to the Firth of Thames by early October. How Phil and Sandra managed to orchestrate this dramatic illustration of a godwit's journey in time for the Open Day is something of a mystery.

Keith Woodley

Sandra Morris and her latest book come to rest at the Shorebird Centre. Photo Erin Douglas

Avian Influenza

It was this time last year when avian influenza began to hit the headlines. An outbreak of highly pathogenic avian influenza was occurring in a number of places in Asia, and in addition to affecting large numbers of domestic poultry, the outbreak was affecting humans. From November 2003 to around March 2004 new outbreaks were being discovered, and more cases of humans becoming infected with, and dying from, the disease were being reported. At the height of the outbreak cases were reported in 8 Asian countries: China, Vietnam, Thailand, Cambodia, Japan, Indonesia and South Korea and Laos.

Outbreaks of avian influenza in domestic poultry are not uncommon. Avian influenza of low pathogenic strain is very common around the world even in New Zealand. Worldwide, 18 outbreaks of highly pathogenic avian influenza have been recorded since 1955 when fowl plague was recognised as an influenza virus. Regionally, five outbreaks have caused disease in commercial poultry in Victoria (1976, 1985, 1992), Queensland (1994) and New South Wales (1997).

The Asian outbreak of 03-04 was unusual because it was so widespread, and because the effect on humans was so great. Despite widespread infection, reported cases of avian influenza infecting humans have been rare. The first reported human case of infection with the current subtype of the virus (H5N1) was in 1997 in Hong Kong This outbreak caused eighteen human infections with six deaths, the current outbreak is a re-emergence of that strain.

Mortality in chickens infected with H5N1 approaches 100% and by April 2004, in excess of 100 million domestic poultry had died or been culled to contain the epidemic. In addition to the unusually pathogenic nature of the Asian outbreak it was unusual due to the widespread nature of the outbreak. Early on attention was focused on the spread of the disease and one question asked was had it been spread by migratory birds?

What is Avian Influenza?

Avian influenza is an infectious disease caused by type-A influenza virus. This is the same virus, but different type, that infects humans every year. Type A influenza viruses are responsible for many of the major flu outbreaks in history, including the Spanish Flu which killed upwards of 20 million people. Avian influenza was first identified in Italy more than 100 years ago and occurs worldwide. It usually affects only birds and pigs, however on occasion it has been transmitted to other mammals, including humans.

There are 15 known subtypes of avian influenza. Some are more highly contagious then others, and some have more serious affects on birds than others.

In wild bird populations avian influenza is most commonly found in waterfowl, most specifically ducks. The majority of infections detected in wild birds have been in ducks and geese, shorebirds, gulls and terns however it can be found in nearly any bird (although much less commonly). One study showed that of 21,000 wild birds tested 15% of Anseriformes (ducks and geese) showed evidence of the virus as did 2.9% of the Passeriformes (songbirds), and 2.2% of the Charadriiformes, (shorebirds, terns and gulls). Evidence of the influenza virus has been found in more than 88 species of wild birds (Delogu, 2003).

The different types of avian influenza are broadly put into two classes, those that will sicken a bird, called low-pathogenic avian influenza (LPAI), and those that have a high rate of mortality, high-pathogenic avian influenza (HPAI).

Prior to the emergence of the current H5N1 strain there has only been one documented outbreak of HPAI causing mortality in wild birds. In general, the mutation to highly pathogenic forms of the virus occurs once the virus is in a domestic flock.

Why is it of interest to people?

In the past the greatest impact of avian influenza on humans has been on poultry farmers. When a farm is infected with a strain of LPAI it can cause lowered rates of egg laying weight loss, and general loss of condition of the poultry. When a farm is infected with an HPAI strain it can cause large losses of poultry. In both cases culling of the poultry is done in order to stop the spread of the disease, and because LPAI strains can mutate into HPAI strains. There can be large economic losses due to avian influenza, as well as large numbers of domestic poultry slaughtered.

Recently two strains of avian flu (one of which is the H5 subtype) have started to affect humans more directly. In 1997 in Hong Kong the disease appears to have jumped directly from birds to humans and resulted in the first human deaths from the H5N1 subtype. Confirmed human cases of avian influenza (H5N1) totals 42, of these 30 people died (WHO 28 September 2004)

The less common a subtype of influenza is in humans, the greater the effect can be if it begins to infect them. As the influenza subtypes that cause avian influenza do not normally occur in human populations there is no chance for people to build up a resistance to them. As yet there is no evidence of efficient and sustained human to human transmission. If this changed and the virus was able to pass directly from person to person then the number of infections would increase dramatically and the possibility of a pandemic would be greatly increased. Influenza viruses mutate rapidly, and as the number of humans infected grows the chance that these strains will mutate into something that is directly transmissible between humans grows.

The movement of SARS around the world shows how quickly a disease that people have little or no resistance to can spread when it has the ability to jump directly from person to person.

There are no current vaccines against infection by H5N1, although there are a number of drugs used effectively against it. Prototypes of a vaccine have been produced by two companies based in the USA. Trials on these are not expected to begin before the end of the year.

How is Avian Flu transmitted?

In the wild, birds that survive infection of avian influenza can remain infectious for up to 14 days, excreting virus in respiratory secretions and faeces. Water can then assist the transfer of the virus from one bird to the next, as the virus can remain active in freshwater lakes for between 4 and 30 days depending on the conditions. In seawater the lifespan of the virus is substantially reduced.

Wild ducks are often implicated in a new outbreak of the disease in domestic flocks. The ducks are mostly resistant to disease in the same way that people are resistant to many strains of human influenza. Domestic poultry do not share this resistance, and when they come in contact with the infected droppings of wild birds, or contaminated water supplies, the disease can spread rapidly.

Once in a domestic flock the disease spreads from flock to flock by

- movements of live poultry - a common practice
- movements of manure produced by infected birds.
- movement of contaminated equipment
- particles carried by animals (e.g. rodents) moving around.

While wild birds are implicated in the initial transmission of avian influenza into a domestic flock, in most cases the "secondary" spread of avian influenza is caused by human activities, not the further movement of infected wild birds.

Will wild birds bring avian flu to New Zealand?

The big risk of avian influenza transmission from migratory birds comes from ducks. With regard to migratory birds there are no regular migrations of ducks to New Zealand, there are occasional records of overseas ducks, these mainly come from Australia, itself a low risk area for avian influenza. Low pathogenic strains of avian influenza were found in wild duck populations in New Zealand prior to the recent Asian outbreak.

There are other possible methods by which avian influenza could become an issue in New Zealand. As avian influenza is already here, it could be transmitted into a domestic poultry flock. (New Zealand is a low risk for this as management practices used here keep domestic and wild birds separate, however this does not eliminate the chances. Europe and North America both regularly have outbreaks of avian influenza. New stains could also be brought in by bird smuggling or the import of poultry products. Border control was tightened last year in both Australia and New Zealand with regard to poultry.

Avian influenza is going to be an issue that those interested in migratory birds should watch closely. In China earlier this year places such as MaiPo, an area where people can see large numbers of shorebirds and waterfowl were closed to people, and bird-watching was frowned upon. There was also the potential for large culls of wild birds.

Whether migratory shorebirds are carrying avian influenza to New Zealand as they arrive each year is something that MAF and the EpiCentre, Massey University, are studying this year. Samples have been taken from Wrybills prior to the return of the shorebirds in September, and further samples have been taken from Red Knots since their return. No results are available yet.

The shorebirds that come to New Zealand are coming to the extreme end of their flyway, and on the way they pass through staging areas such as the Yellow Sea, where they congregate in areas that also hold waterfowl, and could easily be exposed to avian influenza. Questions that remain to be answered are many. Can shorebirds infected with avian influenza migrate? Are we far enough away that they would not be infectious by the time they arrive?

While New Zealand may be a low risk area for avian flu we are not immune, and if there are continued cases of infection of humans by avian flu it may yet become more serious again.

Coacal Swab being taken from a Red Knot. The sample will be tested for Avian flu, and compared to samples taken from Wrybill earlier in the year. Photo G. Vaughan

References

Tracey et al., 2004. The role of wild birds in the transmission of avian influenza for Australia: an ecological perspective. Emu 104, 109-124

Websites of MAF, the CDC and WHO.

Acknowledgements. My thanks to Ian Langstaff of the EpiCentre Massey University, for his invaluable comments!

Gillian Vaughan

Wandering the Internet

Sooty Shearwaters

Although they are what most people in New Zealand think of when they think of migratory birds shorebirds are not the only group to migrate, overseas regular migrations of passerines and raptors occur, but here the main other migratory group is seabirds.

After breeding in New Zealand Waters Sooty Shearwaters head to the coast of the Americas to feed. Off the coast of California researchers are placing satellite transmitters on Sooty Shearwaters to first, determine how long they stay in the area before heading back to New Zealand, and second look at the exact areas they are feeding in at sea. Next they did genetic studies on the birds, which showed that the Sooty Shearwaters in the Monterey Bay area were from both New Zealand and Chilean breeding colonies.

Find out more at www.seaturtle.org/tracking/?project_id=46

Climate

"...some arctic areas are showing warming of between five and ten times the global average. Winter temperatures have risen by as much as 4°C over the last few decades, compared to a global average warming of 0.6°C."

The climate in the arctic is obviously of huge importance to the yearly breeding success of those shorebirds that breed in the very high arctic regions. These include both the Bar-tailed Godwit and the Red Knot. There are several groups monitoring the effects of climate change in the Arctic. One is the National Oceanic & Atmospheric Administration, NOAA. They keep records of many kinds of indicators, some physical, some biological. For example one study showed that ring neck ducks were not observed in Old Crow Flats, located in northwestern Canada, until the 1980's, previously they had only been located further south, and while their numbers have fluctuated, they are on the increase.

Find out more at www.arctic.noaa.gov

Breeding Conditions

More specifically related to shorebirds each year the International Wader Study Group in conjuntion with Wetlands International produces the Arctic Breeding Conditions Report. They collate information from across the arctic, and analyse data on bird numbers and breeding performance during Arctic summer in relation to climatic, predatory and other relevant factors.

For example at Barrow Alaska in 2003 the first shorebird clutch was laid on the 4th of June, and the last on the 4th of July, similarly, in the National Petroleum Reserve the summer was described as late and cold. Each years report, full of details can be downloaded.

Find out more at www.arcticbirds.ru

N ew Z ealand D otterel M anagement Course

Like so many of our endemic species, New Zealand Dotterel are in need of assistance. They nest on open coastlines around much of the northern North Island during spring and summer, the very time when human activities in those same areas, tend to be at their highest. Coupled with habitat loss through development and other causes, and predation by introduced pests, breeding for dotterel becomes a problematic business.

Management of dotterel at some important sites in the Auckland and Northland regions have largely been dependent on DoC programmes aimed at critically endangered fairy terns. At other sites, such as Opoutere on the Coromandel, dotterel have been specifically targeted for active management. In recent years more and more community groups and volunteers have become interested in assisting with dotterel management.
Last year we identified the need for a training programme to assist people working with the species. A management workshop held at Miranda was extremely well received. Demand for places on the course was higher than we could accommodate. Consequently a second course was held in September 2004. Conducted by John Dowding, it attracted 20 participants from DoC, Auckland Regional Council, BHP Taharoa and several community groups. Participants ranged from Great Barrier Island and Waiheke, to Kawhia harbour and Matata.

The course had the following aims:

1) To provide a detailed and up to date account of knowledge of the species

Courses

Getting down to basics

2) To provide practical guidelines for conservation management
3) To encourage accurate reporting to assist research and help refine management practices
4) To provide a forum for discussion of dotterel related issues
5) To provide a list of resources with information on the species and protection.

Most of the course was conducted indoors, but a brief expedition into the field helped demonstrate one of the difficulties inherent in field work. A number of model birds, all bearing leg colour bands, had been positioned on or around the shellbank. Course participants were asked to record all the band combinations. The wide disparity in data recorded indicated just how many variables can inhibit accuracy: difficulties of light and shadow, distance, individual eyesight, quality of optics, colour sight etc meant a variety of combinations from the same bird were recorded.

The course was judged by all to be extremely useful. The Trust is very interested in organising more courses in the future, covering a range of topics. Current suggestions include shorebird identification, and field sketching.

We all have our own satisfactions from birdwatching. For me, time spent alone with several thousand waders in perpetual sound and motion on the shellbanks or a quiet conversation with the shining cuckoos as I hang out the washing is pretty special.

But if you want to take your awareness and understanding of the bird world a quantum deeper, consider spending $450 on one of the best birding weeks available in NZ, right here at Miranda. To quote from a recent comment by Peter Fryer in *Southern Bird* – "I spoke enthusiastically about my attendance at the **Miranda Field Course** – six days of full-on birding and related themes which I heartily recommend to all who have an interest in migratory waders."

You will spend much of your time with some of the best birdbrains we have. Keith Woodley and Dick Veitch will help you sharpen your wader identification skills, whatever your level. They will also initiate you into the difficult skills of counting waders. (We are amassing data as to whether it's true that female counters always underestimate, males often go over the top!) Dick and Keith also run most sessions on wader conservation, their increasingly wide experience and knowledge of this topic invaluable.

But it is the hands-on-birds days that are always the highlight of the course.

Ken Pankhurst banding a passerine on a previous Miranda Field Course. Photo E. Lawton

Processing the catch from early morning mist netting of passerines in a local orchard and the adrenaline rush of cannon netting waders on the shore are special experiences. Adrian Riegen and Stephen Davies, with their assorted band of well-known Miranda-ites, ensure these are well-organised and useful events. You will learn the importance of working safely with birds, practise banding and recording data. You may even get to twinkle!

Stephen's indoor sessions on moult become very pertinent when you are estimating the age of the bird in your hand. Essential knowledge if you are hoping to become involved in serious bird study, but it will also enrich your appreciation of what is happening throughout the seasons in your own backyard or bit of shoreline.

Birds can't exist in a vacuum, and so we have sessions on the ecology of the area "our" birds live in. You will investigate what is out there in the mudflats for them to eat – and you will discover while you are there why birds have hollow bones, and perhaps wish you had too. Insects, aquatic and terrestrial, diurnal and nocturnal, are another major food source, so entomologist Peter Maddison leads the investigations.

Miranda is special for its geology and plantlife – and so we have specialists to introduce them to you. And like all special places, it seems these days, we have to be alert to what might change it irrevocably. Dinnertime conversations cover a lot more than how good the food is. That's one of the best points about the Miranda Field Course – the discussions you'll have and the friends you will make.

10-15 January 2005, still a few places left. See you there?

Eila Lawton

MIRANDA RECORDS
1 July 2003 - 30 June 2004
A LIST OF SELECTED SPECIES

Many of these records are taken from the records book held at the Miranda Shorebird
, however, some records have had to be left out as the observers names were omitted. All records are kept on a database but only a selection is published here. Please write your name CLEARLY with your records. You can also email or fax records directly to Adrian Riegen

NOTE figures preceded by 'Summer' and 'Winter' refer to OSNZ Census totals from the entire Firth Of Thames.
Summer census 16/11/03.
Winter census 27/06/04.

NOTE: Rare birds in this report may not yet have been considered by the OSNZ Rare Birds Committee.

Black Shag: Summer 31. Winter 91.

Pied Shag: Summer 212. Winter 853. Over 250 flew past the shellbanks to feed alongside the mangroves on 19/7 (S&J Rowe).

Little Black Shag: Summer 3. Winter 16. 6 on Stilt Pools 9/5 (BRK). 1 on Widgery Lake 16/6 (KW).

Little Pied Shag: Summer 7. Winter 35.

Spotted Shag: Summer 2. Winter 0.

White-faced Heron: Summer 251. Winter 369. 21 on Stilt Pools 9/5 (BRK).

White Heron: Summer 0. Winter 1.
2 at Taramaire 24/8 (S&J Rowe). 2 opposite Centre 23/9 (PB). Then a single bird seen frequently between 29/1 – 20/6 by many observers mostly around the Stilt Pools but also on Widgery Lake.

Cattle Egret: Summer 1. Winter 34
1 opposite Stilt Pools 13/11 (KB etal).

Bittern: Summer 0. Winter 5. 1 seen 200m south of Centre on 3/9 (KW). 1 in Taramaire Creek 16/3 (MRD).

Glossy Ibis:
1 reported on the Stilt Pools 21/12 (BS). A rare bird for the region if accepted.

Royal Spoonbill: Summer 1. Winter 12. Many records in all months except December and March usually of 2-4 birds and generally seen around the shellbanks/Stilt Pools area. One colour banded RB - YW was seen on 21/10 (BRK). Max of 8 on 9/6 (NM).

Black Swan: Summer 0. Winter 0.
8 Flying over cottage on 16/2 (KW).

Paradise Shelduck: Summer 74. Winter 208.

Mallard: Summer 64. Winter 1672.

Grey Duck: Summer 309. Winter 0.

Grey Teal: Summer 0. Winter 0.
54 on Stilt Pools 9/5 (BRK).

New Zealand Shoveler: Summer 6. Winter 7. 36 on Stilt Pools 24/8 (Dan Houghten - UK). 30 on Stilt Pools 9/5 (BRK).

Harrier: Summer 0. Winter 24.

Nankeen Kestrel:
An unconfirmed sighting of one on wires between Thames and Miranda on 18/3 (Peter Ward - UK). Another rare bird for the region.

Banded Rail: Summer 3. Winter 1.
1 at the Limeworks gate and 1 at Access Bay 21/10 (BRK). 2 on Stilt Pools 10/1 (BS. FR). 1 or possibly 2 on the Swallow Pools 29/1 (KW). Up to 3 seen regularly on Widgery Lake often walking on the lake weed. 1 on the grass between Centre and cottage 3/5 (KW). 5 at Access Bay 9/5 (BRK).

Pukeko: Summer 16. Winter 153.

South Island Pied Oystercatcher: Summer 2524. Winter 10011. Keith Woodley observed the first departures on southward migration of 24 birds on 25/6 which was five days earlier than last year.

Variable Oystercatcher: Summer 65. Winter 102. Two resident on the Shellbanks most of the year. 18 at Kaiaua 24/8, 21 on 27/8 and 35 on 31/8 (PB).

Pied Stilt: Summer 717. Winter 2901. 750+ on Stilt Pools 7/5 (NM). 1700 on Stilt Pools 9/5 inc 2 hybrids (BRK).

Black Stilt/Smudgies: Summer 0. Winter 2. 1 smudgy on Stilt Pools 27/2 (D & M Stracey).

New Zealand Dotterel: Summer 24. Winter 31. Many records in all months usually of 3-4 birds at the Limeworks or on the Shellbanks. A max count of 16 on 17/2 (MRD) and 10 on 9-12/5 (BRK).

Banded Dotterel: Summer 0. Winter 146. Recorded by many observers usually on the Stilt Pools from September - May but only in small numbers this year.

Wrybill: Summer 110. Winter 1610.
At least 2080 at Taramaire on 19/7 (AMH), dropping to 1800 on 16/8 (NM), 507 on 1/9 (PB) and 100 on 19/10 (DAL etal) as they migrated south to breed. By 8/11 only about 50 were left (WNCP. EP). On 23/12 there were 55 (Nicolas Sadoul - France) but by 2/1 160 were back from the South Island (BS). This number increased rapidly to 700+ by 9/1 (KW)

Pacific Golden Plover: Summer 5. Winter 0. Four records this year of an individual bird around the Shellbanks and Stilt Pools on 31/8 (PB), 18/12 (BS), 10/1 (KW) and 11/1 (SA etal).

Spur-winged Plover: Summer 131. Winter 225.

Turnstone: Summer 18. Winter 0.
The first one was seen on 1/9 (PB) probably an early arrival. By 19/10 there were 12 (DAL etal) and 20 on 5/11 (BMS. IS). After that only 2-3 were recorded. An unusually low number for Miranda.

Red Knot: Summer 7600. Winter 166. Seen in all months but only 44 at

Taramaire on 19/7 (AMH). A flock of 89 very active and unsettled birds possibly new arrivals on 1/9 (PB). By 10/9 the number had risen to 1150 (NM). Still 420 on Stilt Pools on 5/5 (KW), most with breeding plumage, although these may not be full adults. Recent banding has shown that some move around the region and probably to Australia in the winter.

Curlew Sandpiper: Summer 1. Winter 0. A very elusive species this year with a single bird on the Stilt Pools on summer census day. 1 on 18/2 (Els Nyssen - NL) and again on 7/9 (AMH).

Sharp-tailed Sandpiper: Summer 6. Winter 0. Numerous sightings of up to 8 birds by many observers between 8/10 and 12/5 with a max of 13 on the Stilt Pools 26/2 (D & M Stracey).

Pectoral Sandpiper: Summer 0. Winter 0. Just three recorded sightings this year all on the Stilt Pools, 1 on 10/12 (TW), 1 on 19/12 (KW) and 1 on 21/12 (ACR).

Red-necked Stint: Summer 0. Winter 0. Many records between September and May of 1 – 4 birds

Far-eastern Curlew: Summer 0. Winter 0. After several years absence Curlews were back with one seen on the Shellbanks on 29/1 (Christine Raines - UK) and 2 on 22/2 (AMH). Then 1 at Kaiaua on 12/3 (JG). 1 on 17/3 (MRD) and 1 also at Kaiaua on 21/3 (WNCP).

Whimbrel: Summer 14. Winter 0.
3 sightings of this uncommon Miranda wader. 1 on 10/12 (BS. FR). 1 on 5/11 (BMS. IS) and 1 on Stilt Pools 22/2 (AMH etal).

Bar-tailed Godwit: Summer 5822. Winter 509. 125 at Taramaire 19/7 (AMH). 320 at Stilt Pools on 31/8, 421 on 1/9, 524 on 8/9, 719 on 9/9 (PB. KW). Tony Habraken watched 25 godwit flying down Firth of Thames from the north. They landed had a drink, preened, and looked a bit flighty. Almost certainly new arrivals. 150 including 8 juveniles on Stilt Pools 19/10 (DAL etal) included flagged birds from Yalu Jiang, China and southeast Queensland. 3000 on 5/11 (BMS. IS).

Black-tailed Godwit: Summer 0. Winter 1. 1 seen on Shellbanks 31/8 (PB) in 60% breeding plumage. Seen again on 1/9 and 9/9 by (PB. KW). 1 on 22/2 (AMH etal) and 10/4 (WNCP). 2 seen on Stilt Pools 9-12/5 (BRK) and 3 on 23/5 (NM).

Siberian Tattler: Summer 0. Winter 0. Just one record this year of a bird on the Stilt Pools 26/10 (SP).

Marsh Sandpiper: Summer 1. Winter 0. 1 seen between 24/8 and 9/4 usually on the Stilt Pools by many observers. Then 2 seen on 21/4 (NM) and again several times until 9/6 by (NM. BRK).

Terek Sandpiper: Summer 1. Winter 0. Many sightings by numerous observers of 1 or 2 birds between 1/11 and 12/4 mostly on the Stilt Pools or Shellbanks.

Arctic Skua: 3 off Shellbanks on 25/11 (A Whatley - UK). 1 off Shellbanks 29/12 & 31/12 (KW).

Black-backed Gull: Summer 115. Winter 244

Red-billed Gull: Summer 56. Winter 3262. A species that is always around but few people record numbers.

Black-billed Gull; Summer 657. Winter 254. Max count of 220 on Shellbanks 1/9 (PB).

Common Tern: A rare species on the Firth. 1 reported on 13/12 (AMH).

Caspian Tern: Summer 89. Winter 38. 34 on Shellbanks 1/9 (PB). 24 on 19/10 (DAL etal) and 44 on 9-12/5 (BRK).

White-fronted Tern: Summer 710. Winter 7.

Little Tern: Summer 2. Winter 0.
1 or 2 seen regularly between 19/10 and 11/4 mostly around the Shellbanks, Taramaire and Kaiaua by many observers.

Sulphur-crested Cockatoo: 26 seen at the Miranda Orchards on 5/5 (AW).

Spotted Dove: 3 by the cheese factory 13/3 (DAL). 1 at Miranda Orchards 27/4 (NM) and 2 just south of Kaiaua petrol station 24/8 (PB).

Song Thrush: 1 at Access Bay 24/5 heard mimicing the Caspian Tern call (BRK)

Fantail: Regularly seen around the Centre (KW).

Goldfinch: 240+ on the DOC reserve at Taramaire 12/6 (KW).

Greenfinch: 2280 counted going to roost in Access Bay mangroves 9-12/5 (BRK) (see Miranda News #53)

Redpoll: 1 at Access Bay on 24/5 (BRK). This species is rarely reported from Miranda.

Rook: 4 South of Centre 23/9 (PB). 2 at Whakatiwai 29/9 (PB). 7 Back Miranda Rd 10/10 (NM).

Each year we ask for more records as these are a useful way to monitor trends on species numbers over the years. NOT JUST WADERS. If you have new or old records or counts please write them in the records book at Miranda or send then to Adrian Riegen ASAP for inclusion. Ph/Fax 09-814-9741 email riegen@xtra.co.nz

Contributors:
Thank you to all contributors even if your names do not appear in these records your records are kept on the database.

(SA) Sharon Alderson
(PB) Phil Battley
(KB) Ken Bond
(MRD) Martin Day
(JG) John Groom
(AMH) Tony Habraken
(WH) Wendy Hare
(BRK) Bruce Keeley
(DAL) David Lawrie
(NM) Nigel Milius
(WNCP) Will Perry
(EP) Emlyn Perry
(SP) Sheila Petch
(ACR) Adrian Riegen
(FR) Felizitas Rupp
(IS) Sav Saville
(BMS) Brent Stephenson
(BS) Bastian Schmitz
(AW) Annie Wilson
(TW) Tony Wilson
(KW) Keith Woodley

OBITUARY

DAVID GEORGE BAKER

5 July 1921 – 7 September 2004

David Baker, a long term friend of the Miranda Naturalists' Trust and of the Auckland birding scene, died on September 7 2004 after a long period of indifferent health, and kidney failure.

My association with David goes back to 1981 when I became a member of the Miranda Naturalists' Trust which we both joined at the same time. My knowledge of his life before then is sketchy as he wasn't a person who dwelt much in the past but I do know he did war service, established a firm in Auckland called Baker Engineering, reared three sons with his wife Eve, and spent as much spare time as possible at his beach cottage at Tairua, built in the days before power was in the area and the Kopu - Hikuai Road was in place.

Later I know he gained enormous pleasure from his grandchildren. He enjoyed botanising as well as birding, and also enjoyed the cultural side of life with a broad appreciation of music, art and poetry. I also know he regarded the ownership of commercial property as the wisest investment for comfortable old age retirement.

When I was elected on to the Miranda Naturalists' Trust council in 1982 David had been on it for a year. My first recollection of him as a council member was of a person who sat quietly, seldom spoke and never challenged the chairman or an idea. This acquiescence to higher authority seemed to be his manner and later I came to wonder why he was on the Trust council at all. It was only when one day he chided me to try and get something happening about the building of a centre at Miranda that I realised he was interested in the Trust. His silence was simply to do with him not being a meetings man. Instead he was an action man and a doer. If I could make something happen, he said to me, he would design the "lodge" as we called the centre in those days, and supervise its construction.

Eventually when I did become chairman and did manage to get things happening, David swung into action and without even being asked soon had a series of hand drawn "lodge" plans in front of the council. Councils being councils though had to deliberate, and there were problems. The Franklin County Council in those days had told the Trust that any building they might propose for the area had to be one which blended with the environment and was not obtrusive. Then there were those on the Trust council who thought any such building should be of architectural merit. So in the short term David's initial plans were shelved while an architect, at some expense, was employed.

Although David may not have realised it at the time, the brief given to the architect actually embraced all the main ideas from his plans. The architect though had the new design sitting on a concrete floor with cobblestone pavers around it and in the courtyard, and walls made of concrete blocks in an effort to make it more resistant to vandalism. There was no manager envisaged in those days and Miranda was an isolated and lonely place. He had also added a few extra details like the polygonal apse windows at each end of the building, a giant fireplace, and a "perch" on top of the building for wider viewing. Some of these extras were never added but this overall plan the Trust council quickly approved.

At the meeting when the plan was approved David, as usual, said little. But in no time at all he had modified it to suit the Trust's budget and County Council's by-laws, which said the floors of new buildings had to be one metre above the ground. Then even before the County Council had approved the plans he had working drawings drawn up and was on the phone to me about finding a builder. In no time at all he had plans photo-copied and sent out to at least six building contractors and then shortly afterwards he had me in the car going to Katikati to interview the cheapest contractor. This was followed by visits to the suppliers of building materials, where with David's assistance we quietly managed to get prices pared to the bone.

Once the building was underway David was regularly on the road to Miranda to supervise the builders, very often with a trailer load of building materials behind him. His assistance over this period was invaluable and as chairman at the time I don't know how I would have managed without him.

Then, when it came to stages two, three and four of the building construction, David quickly had plans drawn up ready for David Lawrie to present to the Franklin District Council. And with each of the subsequent stages he arranged for builders and supervised their work.

Only recently, when it was suggested that improvements might be made to the Miranda Centre to now cater for its future direction, David again had his drawing board out and plans ready for discussion.

So it is not hard to appreciate the work David did for the Trust over the years and the personal financial cost he must have undergone for it. Without him I often wonder whether we would have seen a Miranda Shorebird Centre sitting where it does today.

And right through this time, while showing a vigorous determination to get things done, he seldom uttered a word at a council meeting because meetings, frivolous discussion and red tape were things he found unnecessary. David was the extreme pragmatist, the type of person New Zealand was built upon, a person of few words but one who got things done and pronto too, and although there was that determination about him there was also a twinkle in his eyes and a ready smile.

Those of us who built the Trust centre have thanked him many times and we have given him honours, but one last thank you is in order because without him there might not have been a centre at all.

Stuart Chambers

THE OSNZ COLUMN

Beach patrol scheme, 1997-1999

I described the Society's beach patrol scheme in *MNT News* No. 45 (April 2002).

The September 2004 issue of *Notornis* contains a comprehensive report on the seabirds found dead on New Zealand beaches in 1997-1999. Over those three years, the many participants in the scheme patrolled 11,362 km of New Zealand's coastline, and recovered 29,790 dead seabirds and 636 dead birds of non-seabird species.

The most unusual recoveries during this period were a Bulwer's Petrel (*Bulweria bulwerii*), the first New Zealand record of this species, and a Leach's Storm Petrel (*Oceanodroma leucorhoa*), the sixth New Zealand record. Both have been accepted by the Society's Rare Birds Committee. The specimens have been deposited in the Museum of New Zealand.

Three species of seabird were found dead in large numbers in 1998. The most significant was a wreck of Common Diving Petrels (*Pelecanoides urinatrix*) when 4480 were recovered between June and August. This was the highest annual total of that species recorded in the beach patrol scheme. This wreck was followed in August and September by a wreck of Fluttering Shearwaters (*Puffinus gavia*) when 2363 were recovered. This was the second highest annual total of that species. Blue Penguins (*Eudyptula minor*) also wrecked in large numbers when 3517 were recovered, mainly during May to September. This was the third highest annual total of that species. The large concurrent wrecks of three inshore feeding seabirds that obtain their food by diving suggests that food failure, or a significant marine event, was an important contributing factor.

Twenty-one banded seabirds were reported. Long-distance recoveries were a Wandering Albatross (*Diomedea exulans*) that had been banded on Bird Island, South Georgia; a Southern giant Petrel (*Macronectes giganteus*) that had been banded on Laurie Island, South Orkney Islands; a Southern Giant Petrel that had been banded at Cormorant Island, Antarctic Peninsula; and a Southern Giant Petrel that had been banded on Marion Island, Indian Ocean.

Most birds found by beach patrollers are assumed to have washed ashore after dying of starvation, injury or fatigue. Occasionally, observers reported seabird mortality caused by human activity. Some birds had obviously been caught on fishing hooks, or had become entangled in fishing lines or nets. Other human-related causes of mortality were poisoning, shooting, and oiled plumage.

David Medway,
President,
Ornithological Society of NZ.

Q & A How high do birds fly while migrating?

There have been several studies which have looked at the height at which birds fly, one study on birds leaving Siberia found that although most birds were flying at under 1000m high the highest bird was tracked at 4106m.

In Mauritania waders were followed visually until up to 1.5 km when they were lost from sight (some species were lost at only 3-400 m). In a summary of the altitudes at which waders and geese migrate Martin Green lists the results of different radar studies (listed to the left).

average	maximum
1750	3745
1600	3000
2000	6650
2100	3900
1337	4447
541	4755
793	3948

(in metres)

I think it is clear that birds will generally migrate at 1-2 km, though they are capable of flying much higher, and probably adjust their altitude to get the best wind assistance.

Phil Battley

Aquaculture in the Firth of Thames:
Are Shorebirds at Risk?

Aquaculture represents about 20% of the total value of New Zealand fisheries, and is one of the fastest growing areas of the seafood industry. Recent rapid expansion of the sector is expected to continue, with one prediction saying it will be worth over $NZ300 million by the end of the decade. Greenshell mussels and Pacific oysters already contribute $NZ150 million to the country's export earnings.

Such growth inevitably spawns demand for even more growth, so that places like the Firth of Thames are being targeted by industry developers. There are serious questions as to what impact an expansion of marine farming will have on the Firth. Current marine farm activities in the region consist of a 45 hectare operation north of Kaiaua, about 500 ha in the general area around Coromandel town and a 250 ha operation at Wilsons Bay near Coromandel. A further 750 ha has been approved for development at Wilson's Bay.

Applications for resource consents covering 4300 ha are currently before the Auckland Regional Council, whose jurisdiction extends only half way across the Firth.

What are the likely impacts on shorebird habitat?

Given the topography of the Firth, and the proposed locations for expanded marine farming, the affects on shorebird roosting sites are likely to be minimal. However the same cannot be said for feeding habitat.

The biological foundation of the marine food chain is plankton. It provides food for both the shellfish in marine farms and for the invertebrates that are the eaten by wading birds. The abundance or otherwise of plankton is dependent on a number of factors such as light and nutrients, especially nitrogen, as well as seasonal variations. One study indicates that production and ecosystem carrying capacity within the Firth of Thames are influenced by El Nino-related variations in the composition, biomass and community structure of the planktonic community. It also identified potential risks from marine farming for plankton reaching wader-feeding areas in the upper Firth. (Broekhuizen, 2002).

Mussel farms have been operating in the Marlborough Sounds for over 30 years. Studies there have detected marked depletion of phytoplankton levels in the vicinity of farms. There also seems to be a seasonal correlation, with the highest phytoplankton biomass showing in winter and the lowest during November to February. Depletion was also highest in the farms in the inner bays of the Sounds. Detailed studies at Forsyth Bay have estimated that the average mussel farm can extract about 9.3% of phytoplankton available.

Evidence also suggests that one of the cumulative impacts of sustained mussel farming over time is a decline in mussel growth rate. It is reported mussels in the Marlborough Sounds are growing much slower than 30 years ago, when there was considerably less marine farming. (Bellingham and Davies, 2003).

In the Firth of Thames existing aquaculture operations, almost entirely long-line mussel farming, are located towards the northern entrance to the bay. *"Some preliminary estimates of a mussel farm's ecological footprint in the Firth of Thames, predict the highest impacts are in the 100-1000m area around these farms."* However the shallow areas of the southern Firth of Thames are also likely to be affected. These areas have "*slow residual currents, [and] correspondingly long flushing times and slower recovery (Broekhuizen et al. 2002).*

"A flushing time of approximately 56 days for the Hauraki Gulf as a whole (incl. the Firth of Thames) has been calculated, and this is likely to be much longer for the upper Firth of Thames during summer when river inflow is minimal." (Bellingham and Davies, 2003)

Downstream phytoplankton depletion in the Firth of Thames is predicted to be similar to that in the Marlborough Sounds. Given the larger areas of operation proposed for the Firth, depletion is likely to be more extreme. *"The Firth of Thames and Hauraki Gulf is a net consumer of organic material (animals consume more organic material than phytoplankton produce). Furthermore, average phytoplankton concentrations are probably insufficient to support maximal growth rates amongst the herbivorous filter-feeding community." (*Broekhuizen et al. 2002, Bellingham and Davies, 2003)

The implications of this are that even small reductions in phytoplankton abundance could increase the limitation of food available to other animals. If mussel farms intercept the plankton and nutrient supply to the southern tidal flats further up the Firth, then it could lead to a reduction in shorebird food supply.

That this food limitation is likely to be more pronounced in late summer is of utmost significance to migratory shorebirds. This is of course the period when bird concentrations are highest, with both New Zealand and arctic-breeding species present in big numbers. Even more critically, it is the time when the arctic species need to be rapidly gaining weight prior to migration.

So what safeguards are there for ensuring shorebird habitat is not placed at risk from an expansion of marine farming?

The Law

Mounting pressure for more coastal space to be made available for aquaculture around the country led to an amendment to the Resource Management Act 1991. The amendment was intended to ensure

aquaculture is managed appropriately within designated Aquaculture Management Areas (AMAs) where aquaculture can be undertaken with a coastal permit. Aquaculture would not be permitted outside the AMAs. The Auckland Regional Council has identified part of the Firth of Thames as potential AMA.

Under the new aquaculture variations to regional plans, councils are required to adopt a precautionary approach for new development of aquaculture within AMAs. That there is a limited amount of information available on the adverse effects, including cumulative effects, of aquaculture in the coastal marine area, underlines the need for caution.

The Aquaculture Reform Bill is currently before parliament. A submission on behalf of Kaiaua Citizens and Ratepayers Association illuminates several shortcomings in the Bill as it currently stands.

1) An absence of suitable criteria for determining environmental effects of aquaculture at the many existing and proposed locations around the country. Research and monitoring are essential components, especially as regards:

a) biological diversity of the aquatic environment
b) productivity and biological abundance of keystone species
c) habitats of known significance for effective ecosystem management

2) The Bill gives too much authority and responsibility to regional councils without giving them the capacity to carry out essential research and monitoring, and to make considered decisions about siting and management. There needs to be national standards on what constitutes adequate and appropriate research to answer resource management and sustainability questions.

3) There must be provisions in the Bill for funding research into the environmental effects of aquaculture. Councils are currently struggling with the workload and the technical complexity of the aquaculture operations and potential environmental impacts. If the Bill is going to give them a much bigger mandate, it must give them the resources on a comparable scale.

4) There needs to be provision for special consideration of areas of significant conservation value, as recognised by various national and international conventions such as the Hauraki Gulf Marine Park Act, Ramsar Convention on the Protection and Wise Use of Wetlands, and the East Asian-Australasian Shorebird Site Network. It is important that these areas are not compromised by AMAs that put unacceptable demands on the biodiversity and ecosystem processes that are essential to the integrity of these special environments.

Aquaculture then, is an issue of high significance for Miranda Naturalists' Trust, and our interests in the issue extend far beyond the Firth of Thames. We have international responsibilities to ensure that significant shorebird sites such as the Firth, are wisely managed and that migratory shorebird habitat is fully protected.

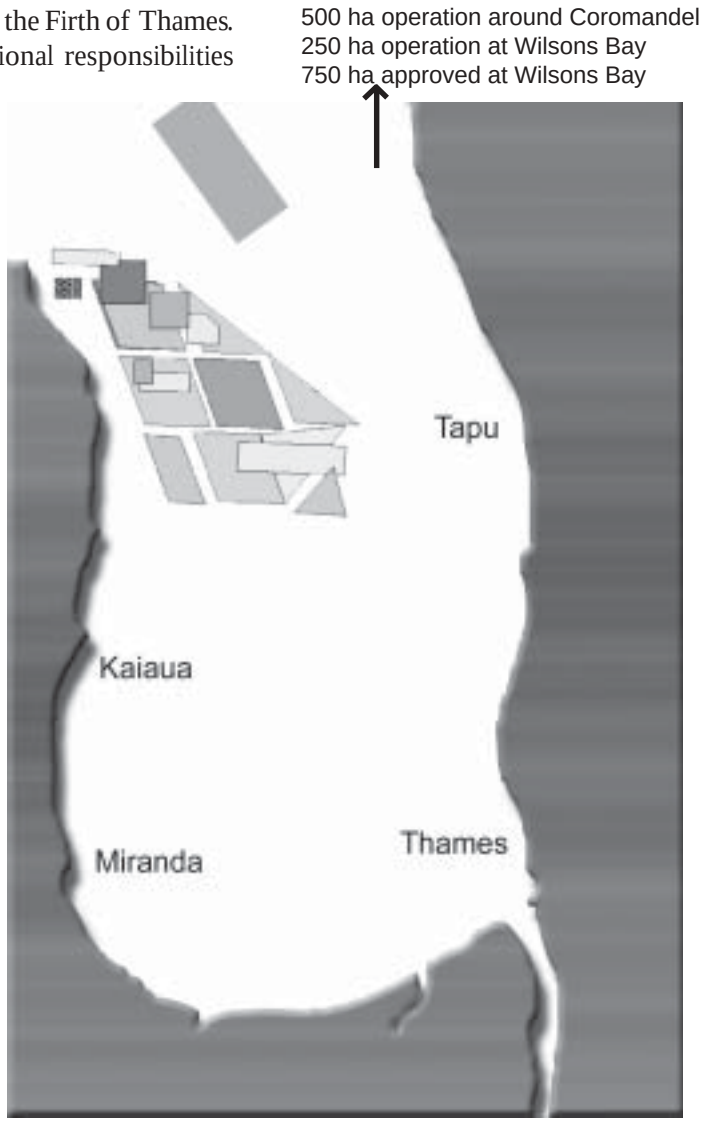
Much more substantive research into possible impacts of expanded marine farming needs to be done. At present it appears that decision making on which areas should be allocated to marine farming is largely based on an inadequate ecological knowledge base. Regional Councils must require applicants for marine farming resource consents to demonstrate substantively that migratory shorebird habitat will not be adversely affected by their operations.

References

Bellingham, M and Davis, A 2003 Threats from Marine Farming in New Zealand to Waders on the East Asia Australasia Flyway, Australian Wader Studies Group Conference, Canberra.

Broekhuizen et al. 2002 Factors Related to the Sustainability of Shellfish Aquaculture Operations in the Firth of Thames: a Preliminary Analysis. NIWA Client Report,

Keith Woodley



CHAIRMAN'S REPORT

1. New Zealand – China Environmental Conservation Conference:

On 24th and 25th September the Inaugural New Zealand – China Environmental Conservation Conference was held in Auckland. This event was sponsored and largely organised by the Golden Raindrop International Group of Companies to assist in developing links between the two countries.

Keith Woodley was one of the key note speakers and gave a very polished power point presentation about the important links between the two countries through the migratory birds. Keith's use of modern technology taxed the abilities of the Sky City Convention Centre to provide the computer and projector necessary for a power point presentation. Not bad for someone who required lessons in even basic computer technology only several years ago.

Adrian Riegen, Glenice Bullen and myself also attended as Trust Representatives although there were several other Trust members there representing other organisations. The Minister of Conservation in his comments included in the written proceedings makes the following statement that is relevant to the Trust and its activities.

"Representatives of the Miranda Naturalists' Trust have just returned from China where they signed an agreement with the Dandong Environmental Protection Bureau to safeguard the Yalu Jiang National Nature Reserve for the two million migratory shorebirds that use the area as a stopover on their way to and from their breeding grounds in Siberia and Alaska. So why did members of a Trust based in a tiny village at the bottom of the Pacific Ocean make the journey to China? Because many of these birds spend their summers feeding in the food rich wetlands of the Firth of Thames just south of Auckland. Protection for these migratory species is vital along their entire route".

Following the opening proceedings I took the opportunity to discuss with the Minister the possibility of having a formal meeting to examine the possibilities of funding the Trusts activities in developing the flyway programmes that are more appropriately Government tasks. He agreed to a meeting and that should be held in the relatively near future.

This conference clearly illustrates once again the role that migratory species can have in bringing countries together and the part that even small organisations such as the Miranda Naturalists' Trust can play in developing those links.

2. Aquaculture:

Included within this magazine is a article prepared by Keith Woodley relating to the possible major expansion in aquaculture in New Zealand. It is of real concern that we as a country have not learnt the lessons from past mistakes in developing resources without considering the long term effects. There are many cases of extreme exploitation of which the consequences have only been discovered many years later. Examples include the wholesale clearing of native bush from steep unstable land, the draining of wetlands, the crayfish and fishing bonanzas followed by the inevitable collapse of the populations and yet as a country we are rushing headlong into a major aquaculture expansion without knowing the long term consequences.

The Trust Council endorsed by the recent Annual General Meeting believe that a precautionary approach should be taken, particularly in such a sensitive environment as the enclosed Firth of Thames. The Trust Council is working with the local community to ensure that any expansion in the Firth of Thames occurs either in a controlled manner or following long term research.

3. Recent Bereavements:

David Baker

While there is a more detailed obituary to David Baker in this newsletter I feel that it is appropriate that I also make some comments relating to the passing of one of the people who was instrumental in the development of the Centre as we know it today. While David spent a number of years on the Council his greatest strength was not around the meeting table as he preferred to be doing something rather than talking about it. At a time when the Trust was struggling to come to grips with how to turn the architects plans into a solid structure David stepped forward and offered to not only prepare the working drawings but also to act as a clerk of works during the building phase. This not only saved the Trust considerable amounts of money it also provided the impetus to ensure that building could start and within the limited budgets that were available at that time.

David ended up preparing the plans for all of the buildings that exist and in overseeing the construction of all of them. The buildings are a monument to his tireless efforts over an extended period of years.

The Trust Council is grappling with how to acknowledge David's contribution on a continuing basis in a meaningful way and any thoughts from members would be welcome.

Ken Pankhurst

Ken was Eila Lawton's partner and would have been known to regular visitors to the Centre. Ken shared with Eila a deep interest in environmental and conservation issues. Both were actively involved in such areas in England before Eila returned to New Zealand with her English husband in 1999. It is perhaps not surprising therefore that Ken took such a shine to Miranda. Ken suffered ill health for the whole of the time that we knew him at Miranda and this prevented him from becoming as closely involved as

he would have liked. Nevertheless he would nearly always be busy undertaking various maintenance tasks. The poorly performing stove in the kitchen was a particular challenge that Ken grappled with for nearly 12 months until he finally solved the problem.

While Eila would be attending Council meetings I would see Ken out of the corner of my eye marching resolutely backwards and forwards collecting tools while he dismantled the stove. As the day would wear on I would see Ken gathering larger and larger tools and I would know that the stove would be in a hundred bits scattered throughout the kitchen. However by the end of the day it would all be back together ready for the test run.

4. Working Bee:

The working bee on the 28th August saw a reasonable crowd tackle various maintenance jobs around the buildings and grounds. I would urge all members to offer their services in any capacity with the maintenance of the buildings and grounds at any time but particularly during organised working bees as it is only by regular maintenance that the facilities will endure.

We have a wonderful asset in the Centre and we want to ensure that its life is prolonged to reduce the possibility of replacement in the medium term.

I would thank all of those members who did attend the working bee and who assist Alison Stanes on the long term basis in maintaining the grounds. Most visitors to the Centre are astounded to learn that not only was it largely built by volunteer labour but it is maintained on a voluntary basis by our members. Long may that continue.

5. Open Day:

The open day on the 16th October is also more fully reported on within this edition of the newsletter. In my opinion this was a huge success with the launch of Sandra Morris's new children's book describing a Godwits journey.

Sandra has been a long time member of the Trust and us older members have watched Sandra develop her passion for art into what is now almost a profession.

Many members may not realise that the membership brochure is some of Sandra's artwork and we were delighted that she chose the Centre to launch her new book. We wish her well with that venture and look forward to greater successes for her in the future.

It was appropriate that Phil Battley gave an update of his research into the migration of godwit following Sandra's book launch. This gave the scientific basis on which Sandra's book was based.

6. 30th Anniversary:

At the recent Council meeting the Trust mapped out a programme for the 30th anniversary year. The details will be shown on the calendar of events that is enclosed with this copy of the newsletter.

I would draw members attention to the founders lunch on the 20th February that is being organised by Nanette McLauchlan. This event is being used to effectively launch the activities for the year and will be a chance for participants to acknowledge the efforts of the members over the previous 30 years.

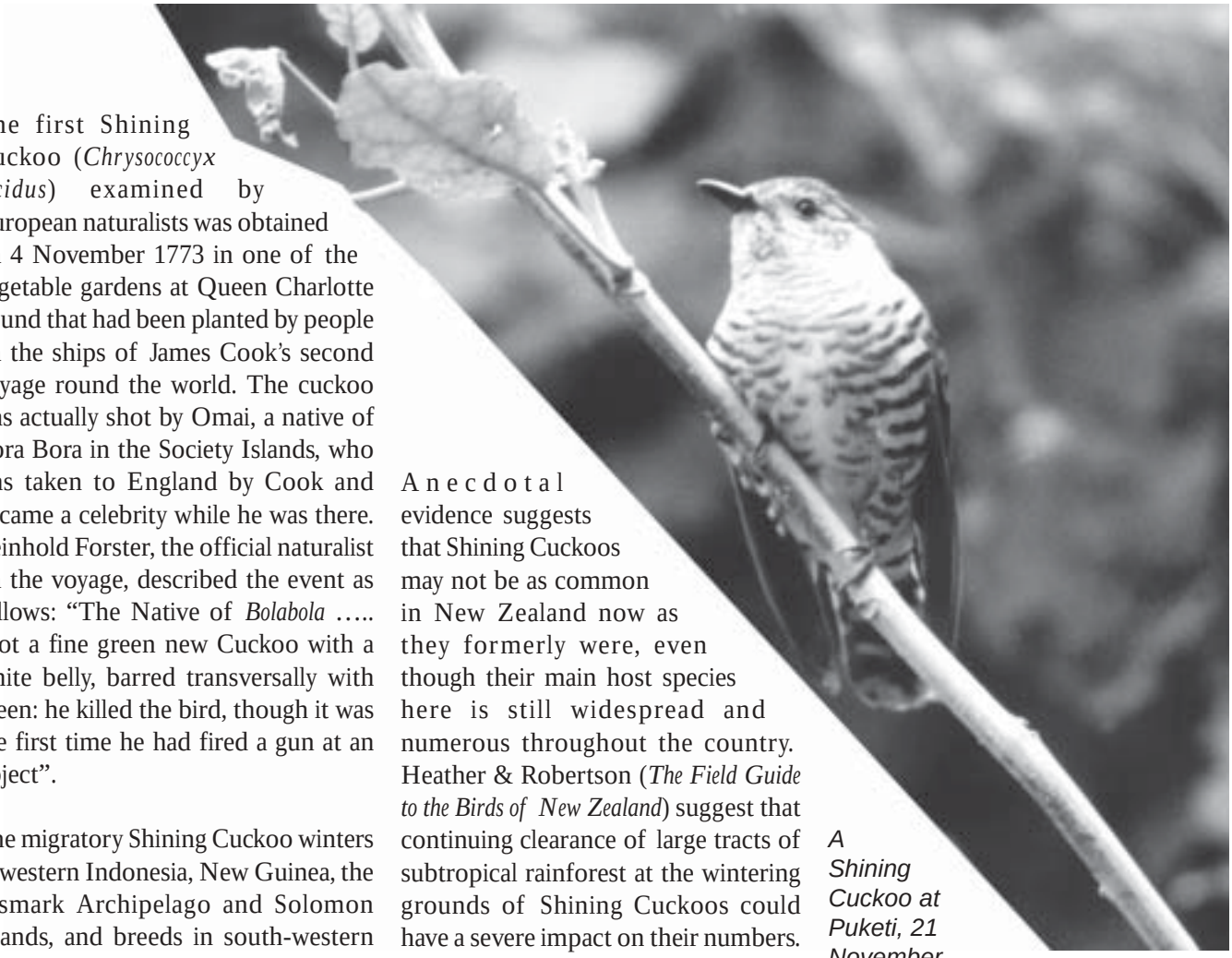
There is no doubt that the Trust has been hugely successful far beyond the wildest dreams of those that were involved all those years ago. It would be a bold person to predict where the Trust will be in 30 years time but of one thing I am certain and that is that the foundations have now been well and truly laid for the Trust to become a pivotal organisation in providing education and research into the migratory shorebirds that utilise the Firth of Thames.

Not a bad achievement for an organisation that was started with the chief aim of providing overnight accommodation for members traveling from Auckland.

David Lawrie
Chairman

Photo David Lawrie

Are Shining Cuckoos in trouble?



A Shining Cuckoo at Puketi, 21 November 1992. Photo D Medway

The first Shining Cuckoo (*Chrysococcyx lucidus*) examined by European naturalists was obtained on 4 November 1773 in one of the vegetable gardens at Queen Charlotte Sound that had been planted by people on the ships of James Cook's second voyage round the world. The cuckoo was actually shot by Omai, a native of Bora Bora in the Society Islands, who was taken to England by Cook and became a celebrity while he was there. Reinhold Forster, the official naturalist on the voyage, described the event as follows: "The Native of *Bolabola* ….. shot a fine green new Cuckoo with a white belly, barred transversally with green: he killed the bird, though it was the first time he had fired a gun at an object".

The migratory Shining Cuckoo winters in western Indonesia, New Guinea, the Bismark Archipelago and Solomon Islands, and breeds in south-western and eastern Australia, Vanuatu, New Caledonia and New Zealand. In New Zealand, Shining Cuckoos breed throughout the mainland and offshore islands where the Grey Warbler (*Gerygone igata*), their main host species, lives. Shining Cuckoos arrive in New Zealand in late September and early October. They migrate north in March. A few birds overwinter in New Zealand, but they remain quiet and inconspicuous.

The only formal survey of the dates of arrival of Shining Cuckoos in New Zealand was carried out in 1952 and 1953. The results were published in *Notornis* 6 (1955): 121-130. There is evidence from western Europe that arrival dates of at least some migratory birds are becoming earlier, and it is considered that this may be linked to global climate change. Similar information appears to be lacking for any species in the southern hemisphere.

Anecdotal evidence suggests that Shining Cuckoos may not be as common in New Zealand now as they formerly were, even though their main host species here is still widespread and numerous throughout the country. Heather & Robertson (*The Field Guide to the Birds of New Zealand*) suggest that continuing clearance of large tracts of subtropical rainforest at the wintering grounds of Shining Cuckoos could have a severe impact on their numbers.

It is therefore appropriate that a formal survey should be commenced as soon as possible to determine both the present dates of arrival of Shining Cuckoos in New Zealand and, more importantly, to obtain some idea of the number of Shining Cuckoos that are in this country each year. The limitations of the 1952-1953 survey of arrival dates may mean that only generalised comparisons with that survey can be made. Nevertheless, we do have the results of that survey to use as a baseline, whereas we do not have any information at all on the numbers of Shining Cuckoos that have been in New Zealand in former years. It is important to begin gathering reliable data in that regard. Only when this has been done over a period of time will we have any meaningful information that will enable us to determine whether or not the number of Shining Cuckoos visiting New Zealand annually appears to be declining.

The Ornithological Society is presently considering a proposal to begin a nation-wide survey with the objectives mentioned. It has been suggested, sensibly, that any such survey should also include our other migratory cuckoo, the Long-tailed Cuckoo (*Eudynamys taitensis*), that has never been formally surveyed for arrival dates in New Zealand, or for its numbers while here.

Text and photo by David Medway

Check out the website for the latest events news.
www.miranda-shorebird.org.nz

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Adrian Riegen (Deputy Chairman)

Membership Rates
Ordinary Member - $35
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Membership of the Trust entitles you to –

- Four Miranda News issues per year.
- A $5 discount on overnight accommodation
- Invitations to Trust Events
- The right to attend the Annual General Meeting
- The right to vote for council members

Help support the Trust's efforts to educate and promote conservation awareness.

Bequests
Remember the Miranda Naturalists' Trust in your Will and ensure that our vital work in education and protection of the migratory shorebirds can continue. For further information and a copy of our legacy letter contact the Shorebird Centre.

Accommodation
The Centre at Miranda has three bunkrooms for hire plus two self-contained flats: (new rates effective May 1st 2003)

Per bed / night member	$12.50
Per bed / night non-member	$17.50
Hire of flat member	$40.00
Hire of flat non-member	$50.00

For further information contact Keith at the Shorebird Centre, RD3 Pokeno
phone / fax (09) 232 2781

From the Blackboard November 15th 2004

Arctic Migrants

Bar-tailed Godwit	4000+
Red Knot	4000+
Turnstone	8+
Sharp-tailed Sandpiper	6
Black-tailed Godwit	2
Marsh Sandpiper	2
Whimbrel	1
Terek Sandpiper	1
Little Tern	4
Red-necked Stint	3
Sanderling	1

New Zealand Species

Pied Oystercatcher	1080
Wrybill	48
NZ Dotterel	6+
Variable Oystercatcher	12
Royal Spoonbill	2
Banded Rail	
Black-billed Gull	260
White-fronted Tern	
Caspian Tern	
Pied Stilt	
Cattle Egret	4

Want to be involved?

The Miranda Garden

If you want an excuse to stay at Miranda for a couple of week nights free of charge, come and help a small team of gardeners maintain the gardens. It is satisfying and worthwhile work in the outdoors. We make the time enjoyable especially when we down tools at high tide and go and watch the birds on the shell banks. If interested phone Alison on 09 524 0291.

This is your magazine!

If you have a story, poem, photo, or piece of research you would like to include in the MNT news please contact the editor, Gillian Vaughan, on 09 294 7610 or gillianv@actrix.co.nz

Friends of Miranda

A volunteer group which helps look after the Shorebird Centre during busy periods or in Keith's absence. While so far somewhat informal, plans are being made to try and arrange for a more regular volunteer programme. If you'd like to be involved (or a co-ordinator!) or if you'd like to spend up to a few weeks at the Centre helping out contact Keith at the Centre.

Are you a Caterer? We pay market rates for catering of residential courses and its nice to have members involved!

Firth of Thames Census Run by OSNZ and held twice a year the Census days are a good chance to get involved with ongoing field work and research.

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