



NEW ZEALAND WADER STUDY GROUP

in association with

Miranda Naturalists' Trust

Newsletter No 8

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Compiled by Adrian Riegen ISSN 1173-387X

COMMENT

New Zealand has the dubious reputation of supporting some of the rarest waders in the world. The Shore Plover, Black Stilt and Chatham Island Oystercatcher (CIOC) having world populations of less than 150 individuals. In the NZWSG newsletter we are endeavouring to highlight some of the wader studies being undertaken in New Zealand. A good example being the Chatham Island Oystercatcher in this issue.

We are also keen to raise the awareness of the wader sites in New Zealand and articles by local birders would be most welcome. These should help readers visiting these sites as they travel around New Zealand. Lake Ellesmere is featured here.

In Newsletter No 7 I asked for records of waders from the Pacific Islands. As yet I haven't received any. Does this mean none of the readers have been to the Pacific Islands, or are the records not being dragged out of note books? Your sightings really will be worth passing on, so check those old note books please.

CLIVE MINTON IN NEW ZEALAND

The world grand master of wader banding was in New Zealand from 17 - 29 October at the invitation of the Miranda Naturalists' Trust. Whilst here his enthusiasm and unflagging (pun intended) energy inspired many to get out and help on three banding days, with a record 32 participants on 28 October when we were able to catch and band 64 Turnstone at a new site on the Manukau Harbour. Prior to this only 18



Dr Clive Minton and visitors on the shellbank. PHOTO: NICK GREEN

Turnstone had ever been banded in NZ, so the full biometric data gathered will be very valuable.

The three catches were at Miranda, Jordan's and Karaka. They yielded a total of 1284 birds processed, including 875 Red Knots, 339 Bar-tailed Godwits, 64 Turnstones and 6 SIPOs. Most interesting were the knot retraps and controls. 6 from Australia, of which 2 were from Victoria banded as first year birds in 1981 and 1983 (possibly now the oldest known Australasian knots). 3 from Queensland, including one banded just 6 weeks earlier near Brisbane. The last Australian, was one of Clive Minton's (he gets everywhere!!) from a site near Darwin, Northern Territory banded on 15 September 1995 on its southward migration.



Setting up the nets on the shell banks

PHOTO: NICK GREEN

The picture of the Australian birds is becoming clearer with more first year birds banded in Australia, before coming to New Zealand, as second year or older birds. They don't appear to return to Victoria once they have made it to New Zealand. We have caught 18 knot from Victoria but they have caught none of our banded birds.

Clive's visit also seemed to bring on a rash of colour flag sightings with a yellow (N W Australia) Bar-tailed Godwit and Red Knot. Green (Queensland) and white Turnstones at Miranda as well as Orange (Victoria) Red Knot. A1164 Turnstones were fitted with white flags, so watch for them around New Zealand.

In the 12 days Clive was in New Zealand he visited most wader harbours from Auckland to Parengarenga in the Far North. He was in raptures about them all.

BANDING REPORT OF THE NZWSG FOR YEAR 1.7.95 - 30.6.96

The year was not a very productive one for us. We had hoped to start with some winter catching particularly of SIPOs and over-wintering Red Knots. The weather however was against us with the wettest winter on record for the Auckland region and we realised we would have to abandon any attempts. One of the main problems on the Kaipara Harbour and Firth of Thames is that heavy winter rains waterlog the paddocks around the coasts. These are favoured by SIPOs, godwits and knots as they are able to roost and feed in them. Of course they constantly move from one to the other, making any attempt to catch them very difficult.

The summer looked promising but with Stephen Davies away overseas and Adrian Riegen very busy earning a living, there was little time for wader banding.

The birds were very unsettled on the Kaipara only coming off the mud flats when the water was up to their bellies. Many birds that normally roost at Jordan's were flying north to roost at Tapora.

The tides never seemed quite right for catching at Pollok's Spit on the Manukau Harbour and all the waders at Miranda chose to roost next to the Black-billed Gull and White-fronted Tern colonies. Very good for bird watching but no good for catching waders

Even Pavel Tomkovich couldn't add the magic touch and went back to Moscow with only two SIPO to add to his wader banding list.

<i>Species</i>	<i>Site</i>	<i>Date</i>	<i>Total</i>	<i>Retraps</i>
Wrybill	Miranda	14.4.96	1	
Wrybill	Jordan's	7.1.96	13	3
SIPO	Miranda	14.4.96	7	
SIPO	Jordan's	9.3.96	2	
Banded Dotterel	Miranda	14.4.96	1	
TOTAL			24	3

The end result was a less than satisfactory year.

Our special thanks as always go to the Miranda Naturalists' Trust for their unfailing support. We are also grateful to the National Bird Banding Scheme, all land owners who have allowed us access to their properties and most importantly to all the volunteers who braved bad weather and early starts. Without them no banding would be possible.

Adrian Riegen Stephen Davies Conveners.

LAKE ELLESMERE

Between the 1890's and 1930's, Edgar Stead, the pioneering Canterbury "waderologist" would regularly pack spying-glass, fowling piece and picnic hamper into his vintage motor car

and proceed forth on a sandpiper-seeking expedition over the muddy shores of Lake Ellesmere. Through his expeditions he added seven new wader species to the New Zealand list, and proved that a range of northern hemisphere-breeding waders reach Lake Ellesmere on their annual migrations with some frequency.

A century later, Ellesmere is still a Mecca for wader and wetland bird watchers. 44 species of wader have been recorded, giving Lake Ellesmere the highest species richness of any site in New Zealand (Miranda 40 species). Counts by Wildlife Service/DoC and OSNZ in the 1980's show that total numbers of wetland birds sometimes exceeds 90,000 individuals, including up to 14,000 waders. Data from past studies and present OSNZ monitoring indicate that some 31 wetland bird species regularly occur on the lake in numbers exceeding 50 individuals; twelve species exceed 1000 individuals, and six species are known to reach up to 10,000 individuals (Black Swan, Canada Goose, Mallard, NZ Shoveler, Grey Teal and Pied Stilt).

Lake Ellesmere is a shallow coastal lagoon covering an area of approx. 20,000 ha. Most of the habitat is open water, but there are also extensive areas of rushland, raupo swamp, willow swamp and up to 6000 ha of Mimulus and Salicornia-dominated saltmarsh and mudflats. The lake is not tidal, but water levels fluctuate daily in response to changes in wind direction. The lake outlet is also periodically opened and water drained to the sea. Under strong winds, the water from one side of the lake may be pushed up to two or more kilometres out, leaving exposed mud on one shore and flooding low-lying areas on the other. One consequence is that the mudflat habitat is constantly changing and renewing itself. Another consequence is that the usual tricks of finding waders at high tide roosts or guaranteed favourite feeding places doesn't work here. To find birds at Lake Ellesmere you've got to put your gumboots on, rest your scope on your shoulder and SLOG!!

In summer you'll need lots of drinking water and sunscreen as the temperatures get into the high thirties. In winter you'll need ten layers of clothes because it gets so cold that ponds and lake edges freeze over. In spring you'll need cotton wool in your ears and nose to keep out the swarms of midges - luckily nothing else (except maybe the eels) at Lake Ellesmere bites!

The best time for wader-watching at Ellesmere is late summer-autumn (January - May). This is the period when numbers peak, birds assume breeding plumage and some of the more unusual species tend to be found. The most numerous of the smaller artic waders are Red-necked Stints (with up to 220 recorded/but usually 60-100 present); followed by Golden Plover (<128/20-50); Curlew Sandpiper (<86/30-50); Sharp-tailed Sandpiper (<33/1525); and Pectoral Sandpiper (<11/2-6). In recent years less common wader species recorded have included Mongolian Dotterel, Oriental Dotterel, New Zealand Dotterel, Far-Eastern Curlew, Little Whimbrel, Black-tailed Godwit (up to 13), Hudsonian Godwit, Greenshank, Marsh Sandpiper, Siberian Tattler, Terek Sandpiper, Painted Snipe, Ruff/Reeve, Great Knot, Sanderling, Wilson's Phalarope, Black Stilt and New Zealand's first Little Stint, which returned again in the 1995/96 season. Artic Skuas, Pomarine Skuas, Little Terns and particularly, White-winged Black Terns (which are a Canterbury speciality with flocks of up to 14 recorded locally) are regular migrant visitors to the lake and adjacent coastline.

Although numbers of Bar-tailed Godwits, Lesser Knots and Turnstones are low on Lake Ellesmere, large wader flocks do

occur with up to 10,000 Pied Stilts, 5000+ Banded Dotterels and 2000+ Spur-winged Plovers having been counted. In addition, smaller numbers of SIPO, Black Stilt, Black-fronted Dotterel and Wrybill are regular on the lake. Over the summer-autumn period up to 400 Wrybills may be present at one time. With turnover considered, it is likely that a significant proportion of the Wrybill population stage at Lake Ellesmere on their northward migration - probably at least 1000 birds. Only small numbers occur during the southward migration, when birds probably return direct to their breeding rivers.

Presently, Lake Ellesmere is regularly covered by a core group of about six experienced wader-watchers, with occasional visits by 10-15 other birder's. The most active watcher is probably local farmer and OSNZ member Colin Hill who has developed scrapes and ponds on his property. He is perhaps the only birder in New Zealand luckily enough to have parties of Glossy Ibis, Black Stilt and Curlew Sandpiper regularly visit his garden?! On the lake as a whole, a full wader census is conducted twice yearly (mid-summer/mid-winter) and tabs are kept on the migrant waders at least once a week during the August-May wader season. In the medium-term future it is hoped to commence colour banding of Stints and Sandpipers on the lake. The regular numbers and tendency for species to favour certain parts of the shoreline year after year suggest that the same individuals are returning each season. The other option - that vagrant birds are flying around New Zealand and congregate at Ellesmere because it offers favoured habitat is less likely, but only colour-banding will prove this. Banding will also indicate the degree to which Ellesmere Stints and Sandpipers move to other parts of New Zealand such as the Auckland Region, Farewell Spit and the Southland Lagoons. The results should prove very interesting.

Andrew Crossland

THE CHATHAM ISLAND OYSTERCATCHER RESEARCH AND CONSERVATION

The following article describes research recently begun on the endangered Chatham Island Oystercatcher.

The Chatham Island Oystercatcher (*Haematopus chathamensis*) (CIOC) is the rarest oystercatcher species in the world. The present range includes five islands in the Chathams group: Mangere, Rangatira, Main Chatham, Pitt, and Star Keys. CIOCs are endemic to the Chathams and non-migratory. The population is estimated to be about 110 birds and may be declining (Davis 1988 and DoC 1993). Under the New Zealand's Department of Conservation priority classification system they are among the 14 bird species in the "A" category - i.e. those recommended as highest priority for conservation action (Molloy and Davis, 1992).

A draft recovery plan has been written for the species, but lack of information was identified as a key concern. Relatively little research has been done on this species (Davis 1988, DoC 1993) and historic populations of the species are unknown - making it difficult to set recovery targets.

In 1996 a research project was launched by Lincoln University (funded by DoC) to help support recovery planning. Objectives of the research include: assessing habitat requirements of CIOCs, monitoring productivity, and assessing management strategies. The habitat information will be used to estimate the carrying capacity of the Chathams for CIOCs and assist in setting recovery goals.

Preliminary data is yielding interesting results. Productivity (as measured by fledging success) of the study population has been relatively high compared to previous data in other areas (Table 1). There are several possible reasons for including methods used to collect the data and habitat quality. Future research may help explain these differences.

—TABLE 1—
**Breeding success of Chatham Island
Oystercatchers**

<i>Year</i>	<i>Location *</i>	<i>Breeding success (fledges/pair/ann.) **</i>
1995/96	NCCI	0.53
1994/95	NCCI	0.71
1992/93	NCCI	0.73
1991/92	NCCI	0.54
1987/88	CI grp	0.18
1984-88	RI	0.38

**** Productivity data for 1991-1993 from S. Sawyer, DoC, 1984-1988 from A. Davis (1988)**

Causes for nest loss varied between years, with weather being a particularly noticeable factor in changes from year to year (Table 2). Of the 'unknown' causes predation or trampling is the most likely cause. Abandoned or infertile/dead eggs are left in the nest and are therefore easy to determine. Flooded nests are also obvious after a large storm, whereas predated or trampled eggs are likely to disappear - either being carried away by the predators or the shell remains being carried away by the adults.

—TABLE 2—
**Causes of egg loss, number hatched and
numbers fledged**

<i>Causes of egg loss</i>	<i>%</i>	<i>Nos.</i>	<i>1994/5</i>	<i>1995/6</i>
abandonment	7%	4	3	1
infertile or embryo died	9%	5	5	0
flooding	44%	25	4	21
trampling	5%	3	0	3
predation	2%	1	0	1
unknown	33%	19	0	19

If an egg is damaged by a predator or livestock, but the shell remains mostly intact, the pair will continue to attempt incubating it rather than re-nest. This has conservation management implications - a cost effective way to increase

productivity may be to remove these eggs thereby encouraging re-nesting.

Damaged eggs were found this last season uneaten but with small holes in them. Spur-winged Plovers have become numerous on the island and are suspected of piercing the eggs. I would be interested in hearing of any suspected or known cases of Spurwing Plover attacks on eggs.

CIOCs seem to have a strong attachment to their eggs. One pair repeatedly rolled a dislodged egg shell back into the nest from as far as a metre away. In another case a nest was found higher on the beach after a storm, the eggs apparently having been washed up the beach. One of these eggs eventually hatched. DoC has found that nests can be moved up the beach and the pair will continue incubating the eggs in their new location.

CIOCs appear to be very territorial, at least on the north coast. Territories are defended from at least August through April (it is not yet known if they remain in their territories between May and July). In August of 1995 one pair of birds was recorded in intense defence displays and fights for 20 minutes. This characteristic has been used to determine territory boundaries by constructing a cardboard silhouette or model of an oystercatcher. The pairs attack the model when it is located within their territorial boundaries. By moving the model around the territorial boundaries can be determined. The attacks are so vigorous that they sometimes knock the model down, punch holes in the sides and dislocate the bills.

Additional work is being done on habitat use, nest site selection, and links between habitat and productivity. Future research will continue the above work, as well as exploring which cues elicit defence behaviours.

Frances Schmechel

Any information about spur-winged plover egg predation as mentioned above can be sent to:

Frances Schmechel at
P.O. Box 209, Chatham Island 8030
or email schmechf@tui.lincoln.ac.nz. or
or Adrian Riegen.

Plovers were in western Europe in mid September, with the same pattern being reported from Britain (Rod West, Wader Study Group), Finland (Kalle Ruokolainen, Raasio Wader Ringing Station) and The Netherlands (Hans Schekkerman).

However it seems that Eastern Siberia, the area that produces many of the migrant waders we see each summer, did not have such a good season. Christoph Zoeckler (World Conservation Monitoring Centre, Cambridge) visited the Yana River delta and found hardly any waders breeding due to very bad weather conditions (delta flooded, cold June and July). Many species bred late and were probably not very successful. This is supported by reports from Nial Moores (Kyushu/Japan Wetland Action Network), who has been coordinating wader counts in Japan and reported that most species are in lower numbers than usual. Among the commoner species that migrate to New Zealand, Bar-tailed Godwit and Turnstone were described as being in very low numbers. Red-necked Stints were fewer than last year, but Nial did note that he had seen 3 or 4 Little Stints, which are considered very rare in Japan. We should keep a watch for any in New Zealand this summer.

Delcan Troy reported that breeding of waders in Alaska was very early this year. This density of wader nests was about one-third higher than usual but hatching success was 'mediocre'.

Grey Plovers on the German Baltic coast have been plumagedyed yellow (picric acid) in recent months. It seems highly unlikely that we will see any of them in New Zealand, but if you do see a Grey plover this season, please check it. The birds also have a dark green band on the tibia.

The Canadian Wildlife Service and the Wader Study Group have recently published a volume entitled 'Shorebird Ecology and Conservation in the Western hemisphere'. This is based on papers presented at a symposium held in Quito, Ecuador. It contains about 20 papers on a wide variety of topics, but restricted to shorebirds of North, Central and South America. I have a copy of the table of contents and information on how to order. If anyone wants further details from any of these reports, let me know. Usually there isn't a lot more information in them but I should at least be able to give you (or get) a contact address for the person concerned or E-mail them and ask for more details.

John Dowding.

THE WADER NET

Like other special interest groups, wader enthusiasts around the world are using the Internet to communicate results and observations quickly and to ask each other for help and information. Below are a few items gathered during September and October that may be of interest.

The big news was that it seems to have been a very good breeding season for some species in northern Europe and the western Russian Arctic. Very large numbers of juvenile Little Stints, Curlew Sandpipers and Pacific Golden

Any articles for this publication or any bird sightings of banded or flagged birds should go to -

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