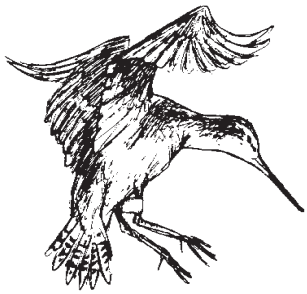

NEW ZEALAND WADER STUDY GROUP

In association with

Miranda Naturalists' Trust

Newsletter No 17 - April 2002 - Compiled by Adrian Riegen ISSN 1173-387X

COMMENT

This summer was not particularly productive in regards to catching waders. There have been considerable changes to the roosting habits and roost sites of the birds particularly on the Firth of Thames and Kaipara Harbour. However several cannon netting attempts were made at Miranda with an interesting catch of 160 Bar-tailed Godwit on 17 Feb 02. More on that later.

An OSNZ survey of Wrybill in May 2001 showed an almost 20% decline in the total population since a similar survey in 1994 from c5100 to c4200. This is of great concern to us and we will be monitoring the species closely over the next few years. Predation, particularly by stoats on the breeding grounds is thought to be the major reason for the decline, but we should also be looking at the major non-breeding grounds in the Auckland region, where around 95% of all Wrybills roost at just six sites.

Wader flag sightings are still coming in at a steady rate. Please don't give up on this valuable work. Of interest has been the big increase in the number of orange (Victoria) flagged Red Knot seen in New Zealand. The Victorian Wader Study Group has been successful in catching Red Knot over the past year or two, many being first year birds which then come on to New Zealand before returning to the Arctic to breed and subsequently become 'New Zealand' birds.

A GREAT YEAR FOR RARE WADERS

Every year a few rare waders show up around New Zealand, however, the summer of 2001-02 has been exceptional. Some species are still to be confirmed with the Rare Birds Committee, but the following is a sample of what has been about.

At Lake Ellesmere: 1 Red-necked Phalarope, about the 6th New Zealand record, 1 Oriental Pratincole, about the 10th record, l Little Curlew and 12 Pectoral Sandpipers.

On the Manukau and Kaipara Harbours: 2 Great Knot, 1 Mongolian Dotterel, a Common Sandpiper at Mangere Sewage Ponds, less than 20 New Zealand records. One Broad-billed Sandpiper at Karaka, Manukau Harbour and last but not least as reported in the Miranda News a Ruff at Miranda, about the 6' New Zealand record.

MIGRATING WADERS

- David Lawrie Reports 1 April 02

I finally got a chance to check out the roost on the South Manukau today. It was clear that the Godwit have left, but there were still good numbers of Knot ready to go. In fact I think that I saw a group leave. Just after I arrived the birds got up and flew around and most resettled, but a group of about 100 Knot spiraled upwards in a series of relatively tight circles rising almost straight above the shellbanks until I could only just see them through binoculars, well above incoming aircraft which fly over at about 1000m, my guess is that the birds were about 3-4000m. They then turned and headed just to the west of north, firstly in a group but as they finally disappeared from view they were stringing out into a 'V' shaped line.

Birds that remained were:

Red-necked Stint 14, most well coloured
Broad-Billed Sandpiper 1, also coloured
Curlew Sandpiper 14, 10 coloured 4 plain
Little Tern 2, with black bills
Knot 3500, 95% well coloured, no sign of the Great Knot reported last week, I had good views as they were spread out close and were reluctant to fly
Godwit 200, only 3 coloured and they all had gammy legs
Pied Oystercatchers 2000
Wrybill 300
Golden Plover 1, about 30% colour

BAR-TAILED GODWIT AND TURNSTONE CATCHES

A flock of about 40 Turnstone was roosting regularly on the shellbanks at Miranda during the summer including one with orange/yellow leg flags from South Australia, probably the one reported in the NZWSG News 16. We were keen to make a catch and the Australian bird was an added incentive. And so on 16 Dec 01 we set a small net on the shellbanks but unfortunately only caught nine birds.

On 17 Feb 02 we made another attempt this time slightly north at Rangipo where Turnstone and Bar-tailed Godwit had been roosting. We set the net and waited for the tide to come in. As it did the birds that were in the area flew south to roost leaving a deserted beach, and then a few Turnstones flew past without stopping. It was not looking good! Eventually a few Turnstones arrived from Kaiaua and settled on the beach below the catching area, they were followed shortly by 20 more. We decided to see what other birds

were roosting at Kaiaua and what chance there was of moving them. Eventually a flock of 300 Bar-tailed Godwit was moved from Kaiaua and they all landed on the beach close to the catching area. A little twinkling soon had plenty of birds in the catching area.

A catch was made and consisted of

Species	New	Retrap	Total
Siberian (Grey-tailed) Tattler	1	0	1
Turnstone	26	7	33
Bar-tailed Godwit	152	8	160
TOTAL	179	15	194

The tattler was a first for the NZWSG and probably the first caught in New Zealand.

Of the 7 retrapped Turnstones, 6 were from the catch of 16 Dec 01 and the other was from the 31 Mar 01 catch when only one Turnstone was caught.
The retraps showed a slight weight gain from 16 Dec but they still had a long way to go before reaching their 175-195 gram departure weight.
Weights in grams on 16/12/01 and 17/2/02, 99/104, 88/93, 95/104, 108/118, 96/119, 110/128.

Of particular interest were the godwits. Of the 152 new birds caught 134 were male and only 18 were females. We have never before made a catch with such a bias towards one sex. This of course raises the question, Why? These birds were seen feeding at Kaiaua prior to roosting and were there the following day as well. The tidal flat substrate at Kaiaua contains more shell and gravel than Taramaire and Miranda, which may make it more difficult for the longer billed females to feed without competing with males. There is an opportunity for an interesting study there if anyone is interested.

WADER BANDING 2001-2002
Five successful catches were made during the year using rnist and cannon nets at Miranda and Karaka.

Banding results April 2001 to March 2002

Species	New	Retrap	Total
Bar-tailed Godwit	169	8	177
SIPO	99	0	99
Turnstone	35	7	42
Red Knot	16	0	16
Wrybill	1	0	1
Siberian Tattler	1	0	1
TOTAL	321	15	336

HOW SITE FAITHFUL ARE BAR-TAILED GODWIT AND RED KNOT IN NEW ZEALAND?
Historically it is suggested that Bar-tailed Godwits and Red Knot arrive in the north of New Zealand and work their way south during Oct-Nov and north again in Feb-March. This may well be true but what is the evidence? Daily counts during these periods are sadly lacking from places like Parengarenga Harbour in the Far North. Regular counts by Ian Saville and others at the Manawatu Estuary show a steady increase and decline at these times but the numbers are only in the hundreds. There are plenty of good counts in the Auckland region but as the numbers build up rapidly in spring, they also tend to move about locally, making it difficult to determine whether birds are arriving and then moving on.

One would expect band recoveries and flag sightings from around the country to show these movements. To some extent they do with Red Knot but not with Bar-tailed Godwit. Since 1986 the NZWSG had banded 1941 new Bar-tailed Godwit at five sites in the Auckland region, of these 23 have been retrapped, all of them at the original banding site. On the other hand 5169 new Red Knot have been banded in the same period and of those 67 have been retrapped at the original banding site and 14 from other banding sites.

Flag sightings should be helpful in determining movements and although white flags on godwits are easy to see, they have been sighted at only three non-banding places in New Zealand.

White Flagged Godwit
Of 198 records to date (some of the same bird) only 39 (20%) are from outside the three banding harbours of the Auckland region and only 9 (4.5%) are from the rest of New Zealand:
Matakana Island, Bay of Plenty
Manawatu Estuary
Farewell Spit

There are 30 overseas records from:
New South Wales
Queensland
Japan
South Korea
China
Alaska

Orange (Victoria) Flagged Godwit
By comparison, of 63 orange (Victoria) flag sightings 24 (38%) were outside the Auckland region, a much higher percentage and more widespread, at:
Parengarenga Harbour Far North
Takahiwai, Whangarei Harbour
Colville, Coromandel
Tauranga Harbour
Ohiwa Harbour, Bay of Plenty
Manawatu Estuary
Farewell Spit
Waikawa Harbour, Southland

White Flagged Red Knot
Of 95 records to date (some of the same bird) 28 (29%) are from outside the three banding harbours of the Auckland region, 15 (16%) in New Zealand, at:

Parengarenga Harbour, Far North
Takahiwai, Whangarei Harbour
Waipu Cove. Northland
Manawatu Estuary
Farewell Spit

There are 13 overseas records from:
West Australia
South Korea
Queensland
China

Orange (Victoria) Flagged Red Knot
Again by comparison there are at least 189 records from New Zealand with 48 (26%) outside the Auckland region at almost every site where Red Knot are regularly seen:
Parengarenga Harbour, Far North
Whangarei Harbour, Northland
Ruakaka, Northland
Waipu Estuary, Northland
Mangawhai Estuary, North Auckland
Manawatu Estuary
Pautanui Inlet, Paremata River
Motuaka Sand Spit, Nelson
Farewell Spit,
Lake Ellesmere, Canterbury
Awarua Bay, Southland
Te Whanga Lagoon, Chatham Islands

A lot of work needs to be done to determine just how much birds move around the country and flag sightings will help greatly. So please get looking wherever you see Red Knot and Bar-tailed Godwit and send the records in, they are of little use in notebooks or on the back of envelopes!!

BLUE/WHITE FLAGGED GODWIT

While on godwit sightings, Rob Schuckard and Phil Battley saw a blue/white-flagged godwit at Farewell Spit on 26-27 Feb 02. This was one of only 10 Bar-tailed Godwit banded and flagged at the Obitsu Estuary, Kisarazu Chiba, Tokyo Bay, Japan, sometime since May 1999, a distance of 9100 km. This is the first Japanese banded/flagged godwit to be seen in New Zealand.

The challenge now is to keep looking for and reporting flag sightings. All wader flag sightings can be sent to Adrian Riegen, see contact below, and he will pass them on to the relevant persons.

INTERESTING BAND RECOVERIES

Pied Oystercatcher
K-12856
Banded: - Miranda - 08.01.99 - as Juvenile - by NZWSG
Recovered: - Dunedin Airport - 10.10.01 - by Airport Firebrigade
Status: - Shot - Elapsed time 2y 9m - Distance 980km

K-5186
Banded: - Miranda - 24.03.91 - as adult - by Miranda Banders
Recovered: - Miranda - 11.06.01 - via K Woodley
Status: -Tarsus and band on shellbank - Elapsed time l 0y 3m

This brings the total of recovered SIPO to 23, 15 from the South Island.

Bar-tailed Godwit Y-4776
Banded: - Karaka, Manukau - 08.10.99 - as adult - by NZWSG
Recovered: - Bering Is., Russia - 56˚0'N166˚1'E - May-01 -by S. Kharitonov
Status: - Shot for sport - Elapsed time 1y 7m - Distance 10320 km

Wrybill
B-86411
Banded: - Miranda - 23.03.97 - as adult - by NZWSG
Recovered: - Glenn Tanner, Tasman R. - 05.06.01 - by Mike Elliott
Status: - Dead in Stoat Den - Elapsed Time - 4y 3m - Distance 790 km

B-63840/9
Banded: - Miranda - 04.07.92 - as adult - by NZWSG
Recovered: - Glenn Tanner, Tasman R. - 05.06.01 - by Mike Elliott
Status: - Dead in Stoat Den - Elapsed Time - 8y l lm - Distance 790 km

B-52007
Banded: - Miranda - 21.04.92 - as adult - by NZWSG
Recovered: - Glenn Tanner, Tasman R. - 05.06.01 - by Mike Elliott
Status: - Dead in Stoat Den - Elapsed Time - 9y 2m - Distance 790 km

Five Wrybill remains were dug out of the one stoat den. More worrying evidence that stoats are predating Wrybill.

RECENT OBSERVATIONS OF COLOUR-FLAGGED BAR-TAILED GODWITS IN WESTERN ALASKA

We observed Bar-tailed Godwits at a migratory staging sitee near Tern Mountain on the Yukon-Kuskokwim Delta in western Alaska (60U02' N, 164U30') from 2 to 7 September 2001. This work was a continuation of previous observations conducted at the same site in 1999 by Brian McCaffery and Bob Gill. As before, flocks of Bar-tailed Godwits were scanned for colour-banded individuals and to determine the proportion of juveniles present.

Due to inclement weather, we were only able to conduct observations for slightly more than eleven hours. We made observations of 28 colour-banded individuals. By evaluating information on band type, band colour, sex, plumage pattern, location, and time of observation, we were able to identify a minimum of 9 individual Bar-tailed Godwits. This

total ,included 3 with orange flags (Victoria), 2 green flags (Queensland) and 4 with white flags (New Zealand).

We collected juvenile age ratios by scanning flocks and sub-sampling birds from throughout the flock. Birds in crisp juvenile plumage were markedly different from the dull, mostly basic plumage of adults. We recorded age-specific information for flocks of 3750, 3600, and 3050 birds on 5, 6, and 7 September, respectively. On these dates, we sub-sampled 360 (9.6%), 630 (17.5%), and 500 (16.4%) birds, respectively, in a systematic random fashion. In contrast to 1999, when juveniles comprised 2.83% of all individuals sampled, we detected no juveniles during our sampling scans. During our entire stay we noted no more than 5 juvenile Bar-tailed Godwits. We observed 2 juveniles in a flock of 3750 birds on 5 September, 2 juveniles in a flock of 4000 on 6 September, and 1 individual in a flock of 3000 on 7 September. Thus, no more than 2 juveniles were seen at any one time on the same day. While startling, this finding is consistent with data from breeding sites in western Alaska. In 2001, reproductive success for both waterfowl and shorebird species on the Yukon-Kuskokwim Delta was unusually low, apparently due to an abundance of arctic foxes after a regional arvicoline rodent population high in 2000. At the same time, the Seward Peninsula, another major nesting area for Bar-tailed Godwits in Alaska, experienced one of the latest springs on record, which may have adversely affected breeding efforts.

During our stay at Tern Mountain, 18 of 28 band observations were of orange-flagged individuals. While we were only able to identify 3 distinct individuals from these 18 observations, it should be noted that this is a conservative estimate. Determination of greater than 3 unique individuals was precluded by the advanced stage of moult of birds observed at Tern Mountain. The majority of birds were in complete basic plumage, and as such, individual plumage characteristics were essentially non-existent. This is in contrast to 1999, when many birds possessed unique plumage patterns due to the variable progression of moult among individuals.

The uniformity of moult in 2001 may be linked to the low numbers of juveniles spotted during our stay. Failed breeders likely move to the coast and initiate moult at an earlier date than successful breeders. Given the apparently low reproductive success of Bar-tailed Godwits breeding in western Alaska, adult birds may have initiated moult earlier in 2001 than in 1999. Alternatively, juvenile birds may segregate temporally or spatially (or both) on the staging grounds. We agree with McCaffery and Gill that resighting efforts in subsequent years should include work at additional sites over longer periods of time to better address these questions.

Daniel R. Ruthrauff and Fred J. Broerman Yukon Delta
National Wildlife Refuge
PO Box 346, Bethel, AK 99559

NUMBERS OF JUVENILE GODWIT

In view of the work done in Alaska last September, a big effort was made to find juvenile Bar-tailed Godwit in the Auckland region as they arrived from Alaska. Many thanks to all those who searched the godwit flocks for them in particular Tony Habraken, David Lawrie, Gwen Pulham, Bev Woolley and Gillian Vaughan. For those not familiar with juvenile Bar-tailed Godwit the key feature to look for is the crisp speckled backs and wings, adults have dull less marked plumage. Once seen they are easily recognised, however this plumage phase only lasts from September to early December.

It is generally thought that juvenile birds travel separately and later than adults do although some probably do travel with adults. As one would expect the ratio of juveniles to adult will increase as the season progresses.

The following is a series of observations starting on 29/09/01 when 3000 Bar-tailed Godwit were seen at Miranda but there were no juveniles. By 06/10/01 there were 3000 at Karaka but no juveniles. On 08/10/01 there were 550-600 birds on the stilt pools at Miranda with one juvenile. The number of godwit at Karaka on 14/40/01 was about 11,000 a huge increase from a week earlier. A check of 4000 of them revealed 1 juvenile. On the same day a big increase at Miranda with 5200 godwit present. A very careful check of all 5200 produced 4 juveniles.
On 20/10/01 at Miranda about 5000 were present but only 3 Juveniles were seen. Omaha on 23/10/01 had c350 including 2 Juveniles.

Into November and the numbers of juveniles started to increase. By 16/11/1 the Omaha flock was up to 400 including 3 juveniles. On 17/11/01 at Jordan's 4000 were present with 6 juv in 200 checked. On 18/11/01 at Mangere 450 were checked out of 900 and 2 juveniles found. On 22/11/01 at Jordan's, Kaipara 6 juveniles were counted in a flock of 700 godwit. Also on 22/11/01 at Kiwi Esplanade, Manukau there were 1800 godwit, 440 were carefully checked but only 1 juvenile was seen. However, on 24/11/0 1 Kiwi Esplanade had c.1500 godwit and there were 22 juveniles and possibly 6 more.

At Opoutere 05/11/01 1 juvenile in 334 godwits was seen. The previous year Bob Gill and Bev Woolley counted 8 in a flock of similar size.

What does all this mean?
In October there was roughly 1 juvenile per 1000 adults 0.1% In November the figures ranged around 0.7 - 0.8%, and the best was 1.4%.

This is fairly good evidence of a poor breeding season as suggested by the Alaskans. It has also shown us, that it is possible to monitor the breeding success of Bar-tailed Godwit by looking at the number of juveniles present when they first arrive in New Zealand.

Adrian Riegen
Contact on (09)-814-9741
Email riegen@xtra.co.nz