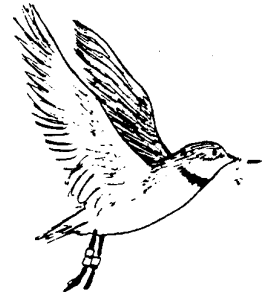




NEW ZEALAND WADER STUDY GROUP

in association with

Miranda Naturalists' Trust



Newsletter No.1

What better way to start the first issue of the NZWSG newsletter than with the latest banding recoveries and re-traps.

On 3.11.90 we banded 506 knot at Miranda and on 4.9.93 one of them was caught by the Queensland Wader Study Group (QWSG) in Moreton Bay, close to Brisbane. The significance of this is that it is the first Arctic wader, banded in New Zealand to be caught anywhere in Australia. We have caught 19 of theirs.

On 28.10.91 at Miranda we caught and banded 5 Turnstone. Then on 19.9.93 the QWSG caught one of the 5. We have only banded 13 of them since 1979. This is indeed an impressive recovery rate. We speculated that both the knot and the Turnstone were on their way back to New Zealand. That speculation turned into confirmed fact at least for the Turnstone on 17.10.93 when we caught 6 Turnstone at Miranda one of which was the same bird that had been caught in Moreton Bay, Queensland, just 28 days before.

This is the sort of information that we need in order to begin to understand the migration patterns of waders, and these controls and recoveries make all the hard work worthwhile.

While we were catching the Turnstone banded in New Zealand and Queensland on 17.10.93, Peter Driscoll and the QWSG were again catching birds in the Brisbane region and caught another of "our" knot, this time one that had been banded at Jordan's on the Kaipara on 28.03.89.

More good news reached us on 26.10.93, this time a sighting of a white flagged knot seen by Rohan Clarke at Altona Beach, just a few kilometres from Melbourne in Victoria. This is the first overseas sighting of a white (from New Zealand) flagged knot and is particularly interesting, as although the Victorian Wader Study Group (VWSG) has caught many knot over the years in Victoria as yet they have not caught any that were banded in New Zealand.

An updated list of colour flag sightings is published in this newsletter.

Other items in this issue will briefly outline work being done on other waders in different parts of New Zealand, in particular the work of Paul Sagar and Richard Maloney in the South Island. In each newsletter we hope to bring you interesting wader news from around the country and any interesting items will be gratefully received. Details of regular counts

from the smaller wader sites around the country would be most interesting. Everyone can help in these projects by sending in colour band/flag sightings.

Adrian Riegen and Stephen Davies are joint conveners of the NZWSG and any contributions should be sent to Adrian Riegen, 231 Forest Hill Rd, Waiatarua, Auckland 8. Phone 09-814-9741. We look forward to hearing from you.

We also welcome any interesting notes on waders from New Zealand and the S.W. Pacific region, particularly sighting of Arctic migrant waders in the islands.

N.W. AUSTRALIAN WADER EXPEDITION MARCH/APRIL 1994

The next major A.W.S.G." expedition" to Broome-80 Mile Beach-Port Hedland Saltworks, will take place in March/April, 1994.

For those who haven't been to this mecca for waders this is your chance. All three sites are very different and very impressive as far as number and variety of waders is concerned. There are also many lovely bush birds to be seen at Broome and 80 Mile Beach. Mist nets will be used to catch some for banding as a sideline to the main wader work of catching and visually monitoring migration departure, a sight to move the most stubborn spirit! The waders at that time of year are in full breeding plumage as an added bonus. The work is not too hard and everyone works well together under Clive Minton's fine leadership. The only problem in going for the first time is that you will be hooked and want to return time and time again. Banding experience, while useful, is certainly not essential and it is a great place to learn. For those who think it will be too hot in March, then the latter half of April would be just perfect.

HOW LONG - Stay as long as you can - minimum two weeks.

COSTS-at Broome-A\$5 per night. Other sites free. Eating is communal and A\$15 per day contribution to 4 wheel drive and other costs A\$100 per week max A\$300.

If you are interested please contact Adrian Riegen, 231 Forest Hill Rd, Waiatarua, Auckland 8. Ph 09-814-9741.

RESEARCH ON WADER ECOLOGY ON FAREWELL SPIT

New Zealand has a very sizeable and obvious wader fauna, one which receives much attention from the birding public. Scientific research, however, has been rather limited in its scope. Most studies relate to the breeding of our endemic waders and their conservation, or the description of internal migration patterns (achieved through the large efforts of so-called "amateurs"). Knowledge of the ecology of waders in the non-breeding areas is extremely poor. Northern hemisphere migrants have received little scientific research except from banding studies as carried out by the New Zealand Wader Study Group (NZWSG) (Miranda Banders).

Conservation wise, New Zealand holds a large proportion of certain subspecies of birds, the migratory habits of which give New Zealand an international responsibility for their welfare. Scientifically, waders face many problems which make them ideal species to study. Globally, most studies of wader ecology have come from Europe, Africa and North America. Recent years have seen an increase in Asian studies, but Australasian ones are still relatively few. Basic information about the ecology of most of our waders is totally lacking.

I am working towards a masterate in ecology from Massey University, studying the ecology of three main species of wader, the Bar-tailed Godwit, Red Knot and South Island Pied Oystercatcher on Farewell Spit. Farewell Spit, designated by the IUCN as a wetland of international importance, is one of New Zealand's premier wader habitats. Totalling over 9,000 ha of intertidal sandflats at low tide, it regularly holds over 30,000 waders

The main thrust of my research is determining the seasonal availability of prey to the different wader species, and the usage of this by the waders. Many studies in cold temperate zones (e.g. Europe) show large seasonal changes in prey availability, with prey becoming less available through density changes and/or behavioural changes in winter. Whether this happens in a warm temperate zone such as New Zealand is unknown. Likewise the basic levels of prey are unknown. An invertebrate sampling programme near the tip of the spit is addressing these questions.

Diet and energy intake of the waders themselves is being studied through visual observations for godwits and oystercatchers,

but also through faecal analysis for knots. Knots are useful to study as they ingest whole molluscs, primarily bivalves, crush them in their stomachs, and pass the shell fragments out in their "poops". Hence one is able to determine the diet much more precisely than with many other species.

How the northern waders cope with the increased energy demands of having to increase their fat and protein deposits prior to migration will be investigated next autumn. In addition, I hope to be able to get observations of departing waders from the spit from mid-March to early April 1994. A few extra pairs of eyes could be very useful, and if anyone felt able to join me over that period, they would be most welcome to. *(Actually watching Arctic waders leaving New Zealand on migration is something that anyone can help with and we do need many more observations all round the country. If you can help please let the editor know)*

The research will hopefully give us a much better picture of how waders cope in one of our intertidal areas at least. Is New Zealand as truly congenial as we would like to envisage it to be? Basic information on diet and prey availability, currently lacking, is essential for conservation purposes. As the study is only in its early stages, results are few, or frozen in large bags in the freezer. However, this will hopefully serve as an introduction anyway, and show that at least something is being done in New Zealand ecologically. Perhaps some others can be persuaded to join the ranks of waderologists on our tidal flats.

Phil Battley first began watching waders on the Firth of Thames ten years ago, and can vividly remember crawling across parched mud between mangroves to see a Grey Plover (a species which then eluded him for another eight years, ironically until another visit to the Firth!). A family move to Wanganui meant visits to the Auckland wader haunts were fewer, but regular watching of local estuaries maintained a strong interest in waders, with the occasional rarity proving a bonus.

An interest in wader ecology was sparked by a passing comment by Dick Sibson some years ago which grew over the years, and led to him travelling to the Netherlands in 1991 to research with Dutch scientists on the ecology of the knot in the Dutch Waddensea. He completed a BSc. in ecology from Massey University in 1992.

BREEDING AND SURVIVAL OF PIED OYSTERCATCHERS IN MIDCANTERBURY

In August 1993 we began the 7th year of our long-term study of the breeding and survival of South Island Pied Oystercatchers which nest on farmland in Mid-Canterbury. The main aims of the study are to determine factors which affect breeding, the fidelity of birds to their mates and breeding territories, survival from year to year, and dispersal from the study area.

There are 40-45 pairs nesting within our study area and most of these birds are fitted with a unique colour band

combination. At the end of 1992, 79 colour-banded birds were known to be alive and by October 1st 1993 we had located 72 of these back in the study area. A further 13 breeding birds have been banded during August and September 1993.

Spring and summer 1992 were cold and wet and these conditions resulted in the least successful breeding season recorded for the oystercatchers in our study area. Several clutches were abandoned during a heavy snowfall at the end of August and many chicks did not survive the cold and wet weather. Only 19 well-grown chicks were banded that season (usually 25-30 are banded). Chicks are fitted with a combination which identifies their year of banding only.

OSNZ members put in an amazing effort during autumn and winter 1993, reporting 23 of our 79 oystercatchers from as far afield as Otago Harbour in the south to Whangarei Harbour in the north. In addition, several known-age birds were also reported. If similar numbers of birds are reported over the next year or so we will have good information about whether pairs stay together throughout the year, whether males and females travel similar distances, and whether the same birds return to the same estuaries year after year.

- Paul Sagar & Donald Geddes

WORK ON SOUTH ISLAND BRAIDED RIVER

I work as the Ecologist for Project River recovery - a ECNZ funded, Dept. of Conservation run, project that focuses on habitat enhancement of braided rivers and wetlands in the Mackenzie basin. The broad goal of the project is to provide habitat for species that have lost out through the large scale hydro-electric development of recent times. The target species that we emphasise at the moment are the Wrybill, Black-fronted Tern, Black Stilt and the rare Robust Grasshopper. Future work may include a number of threatened wetland plants and birds such as crakes, bitterns and Crested Grebes. However the overriding philosophy is not on the species themselves but on management of broad habitats-for all the species that live there.

A major part of the project is assessment, research and monitoring. I co-ordinate a large research team, of contract workers, university students and wage workers who study various aspects of braided rivers and wetland systems. Some of this is baseline monitoring (i.e. let's find out what we have, where it is, and assign it a priority). Most of our effort is spent monitoring the success of some large scale enhancement work we are doing on the Tekapo and Ahuriri Rivers. As the project removes willows and lupins from these important wader breeding areas, we are intensively monitoring how effective this work is in providing more habitat for species such as Wrybills, Black Stilts and Black-fronted Terns.

This is where the banding of Wrybills fits in. We are colour banding not only Wrybills (about 10-20 per year) but also pied oystercatchers (20 per year), Banded Dotterels (200 per year), Black-fronted Terns (20-50 per year) and Harriers (20

per year). We give each bird an individual colour combination by catching them on the nest using a small drop trap. All birds we band have two bands on each tarsus.

All SIPO, Wrybills and Harriers have three colour and a metal and the metal is part of the combination. SIPO that we band always have one (or more) black bands in the combination -this distinguishes them from Paul Sagar's birds in mid-Canterbury, which all have at least one orange band. Banded Dotterels are banded with metal on the left tibia (not part of the combination) and with two colours on each tibia. We went to this system as lots of dotterels were banded in the past by the Banded Dotterel study group and there are very few combinations left available.

After banding, we then follow the breeding success of each bird and examine changes in the breeding and feeding areas before and after the habitat enhancement. If our vegetation clearance programme is successful then we will have more waders using restored habitat, and those waders will breed successfully.

In this area (and I suspect for all braided river and wetland areas) the major factors affecting the distribution and survival of waders are habitat degradation and the effect of introduced predators. Hopefully, in the next few years we will come up with a few solutions about how we can provide long-term solutions that ensure the survival of populations of species such as Wrybills and Black-fronted Terns before they become endangered.

Apart from the intensive monitoring of eight sites in the Ahuriri, Ohau and Tekapo Rivers we are attempting to carry out general bird surveys in all the braided rivers within the Mackenzie Basin. This is no small task. There are ten large braided rivers in the Basin and a number of smaller ones. Last year we surveyed all the large systems.

This is the first time such a survey has been attempted, and in some rivers, it's the first that have ever occurred. That's understandable-the Tasman River is over four km of dean grey Wrybill-sized shingle in width-so spotting Wrybills becomes an onerous task. What we aim to do is survey each river using the same number of people in the same way each year for the next three years. This will give us a baseline to work from in terms of the distribution and the abundance of waders within the Mackenzie Basin region.

I haven't looked closely at the results of the last ten counts, but we counted around 600 Wrybills in total on all rivers (so this is the minimum number present). Now that we are picking up a number of "your" metal banded birds we will in future start recording the percentage of metal banded to unbanded birds we have down this way.

In the mean time keep sending in those colour band sightings either to the: Rod Cossee at the Banding Office, Department of Conservation, P.O. Box 10-420, WELLINGTON, or to Adrian Riegen. w

- By Richard Maloney