

MISCELLANEOUS PAPERS OF JIM LANE RE
WADER BANDING ACTIVITIES
MAINLY ON THE SWAN RIVER
IN THE 1970s & EARLY 1980s

RESEARCH MATERIALS CONSOLIDATION REPORT

JAK Lane
WA Department of Parks and Wildlife

August 2014

This particular **Research Materials Consolidation Report** is a PDF of WA Department of Fisheries & Wildlife Research Officer Jim (JAK) Lane's papers concerning wader (shorebird) banding activities on the Swan River (Perth) and a few other places in Western Australia in the 1970s and 1970s. This work was a project of Research Officer Jim Lane.

CONTENT OF THIS RMCR

This RMCR includes:

Miscellaneous papers of J. Lane concerning Wader (Shorebird) Banding Activities on the Swan River (Perth) and some other places in W.A. mainly in the 1970s.

- 1981 article 'Russian-banded bird recaptured in W.A.' S.W.A.N.S. 11(2): 11-12. Regarding cannon-netting of Russian-banded Red-necked Stint on the Swan River at Point Waylen (next to Alfred Cove) on the Swan River, Perth. Good map of banding (Siberia) and retrap (Swan River) locations.
- Media articles, some by / featuring Mike Bamford, regarding wader migration to WA.
- A report by GB Pearson on a wader cannon-netting trip on the Swan River.
- A Table of waders banded, 'controlled' and retrapped at Pelican Point, Swan River, from 1972-73 to 1977-78.
- Serventy, D.L., Farner, D.S. & Nicholls, C.A. (1962). Trapping and maintaining shore birds in captivity. *Bird-Banding* 33(3):123-130.
- Nicholls, C.A. (1962?). Recovery of a ringed Sharp-tailed Sandpiper in Siberia. *Emu* ... p.328.
- Registered 'Locodes' with coordinates.
- Extract regarding J. Lane's wader banding on the Swan River, 1972-78. from Minton, CDT (2005). *What have we learned from banding and flagging waders in Australia?* pp.116-... in, Status and Conservation of Shorebirds in the East Asian-Australasian Flyway. Proceedings of the Australasian Shorebirds Conference 13-15 December 2003, Canberra, Australia.
- Article by Robert Stranger re disturbance of waders, and wader banding activities on the Swan River in the 1960s.
- Map of some overseas recoveries of Australian-banded waders.

Contents of J. Lane's 'Bird-Banding Supplies' file

- Band supply forms with band numbers.
- Requests for mist netting and wader banding and measuring supplies.

Contents of J. Lane's 'Australian Bird-Banding Scheme' file

- Moulting-recording extract (example only) from 'The Australian Bird-Bander's Manual' 1st edition, 1989, by Kim Lowe (Note that JL has previously PDF'd the entire manual).
- Some other bits and pieces.

Note that other RMCRs have similar, overlapping and/or related materials.

MISCELLANEOUS PAPERS

OF J. LANE

CONCERNING WADER (SHOREBIRD)

BANDING ACTIVITIES ON THE

SWAN RIVER (PERTH) AND

SOME OTHER PLACES IN W.A.

MAINLY IN THE 1970s

Russian-banded bird recaptured in W.A.

A tiny wading bird, banded in Eastern Siberia in June, 1979 by Russian scientists, has been recaptured in Alfred Cove near Perth, Western Australia.

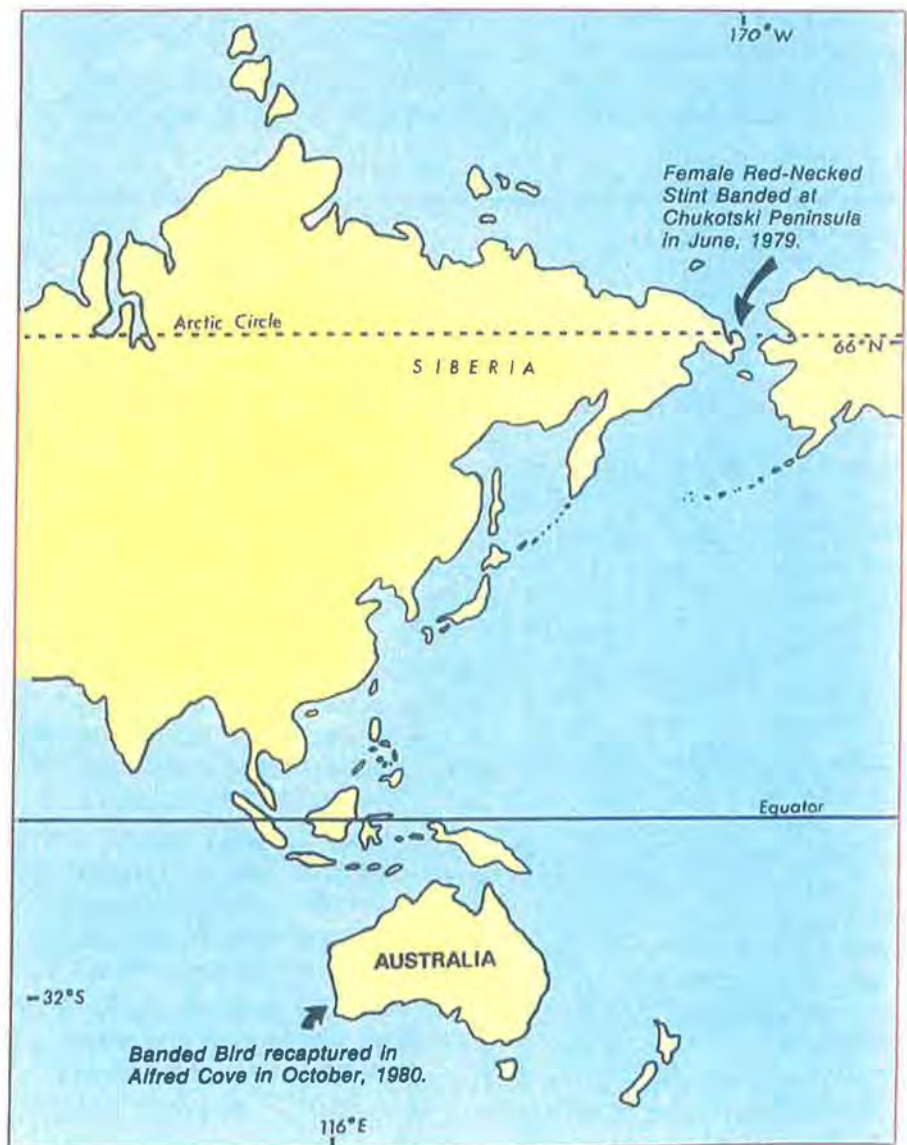
Although the bird, a Red-necked Stint (*Calidris ruficollis*) is commonly found in Western Australia, the species only breeds in Eastern Siberia and parts of Western Alaska—a distance from Perth of more than 12 500 kilometres via South-East Asia and Japan. However, no bird of this species previously ringed in its breeding area had been recaptured in Western Australia before now. In addition, the capture was the first recorded of any wader species being recaptured in W.A. after being ringed overseas.

A research officer with the Western Australian Wildlife Research Centre, Mr Jim Lane, who helped capture the Stint, said it was caught with a cannon-net while he was demonstrating the netting technique to members of the W.A. Wader Study Group. The Group was formed several years ago and is composed solely of amateur ornithologists with a special interest in migrating waders visiting W.A. One of the main activities of the Group is capturing various waders and banding them, noting information such as the time and place of their capture. The birds are then released and, if recaptured at a later date, the bands can provide valuable information as to the bird's travels.

Mr Lane pointed out that the capture of the Russian-banded Stint was also interesting in that it was the first time any waders had been caught with a cannon-net in Western Australia. Previously, the W.A. Wader Study Group had used set mist nets to trap birds, a technique



▲ A Red-necked Stint, one of many which annually visit W.A. from their breeding grounds in Eastern Siberia and Western Alaska. Photo—Copyright A. G. Wells.





◀ An example of the cannon-netting technique being used in the Swan River to capture pelicans.

which requires patience and a degree of luck. A cannon-net, unlike a mist net is not set up and left. It is usually positioned close to where birds congregate and fired over the birds with shotgun cartridges when they are within reach. The technique has been used to trap waders overseas but, until now, it has only been used

in W.A. to capture larger species such as Pelicans.

On the group's first try with the cannon-net, 151 waders were caught of which the banded Red-necked Stint was one.

Enquiries to the U.S.S.R.'s Moscow Ringing Centre for

Wildfowl revealed the bird was one of 267 Red-Necked Stints banded near Uelen on the Chukotski Peninsula between 1978-79 during a three-year study of the birds' breeding biology. The recaptured bird, a female, (ring number S-925.103) was marked at its nest on the peninsula on June 17, 1979. However, at the end of June researchers found her nest destroyed and she wasn't seen again that season nor during the 1980 breeding season.

(The Red-necked Stint (*Calidris ruficollis*) is the smallest member of the Sandpiper family, rarely attaining a length greater than 162 mm and a weight of 28.3 grams. The majority of birds visiting W.A. start arriving in mid-September and leave about April.)

More rare flora illustrated

The last issue of SWANS ie Vol. 11 No. 1 provided details of a newly released Department of Fisheries and Wildlife report (No. 42) entitled *A Guide to the Gazetted Rare Flora of Western Australia* which is available on request from the Extension and Publicity office, Department of Fisheries and Wildlife, 108 Adelaide Terrace, Perth.

The report presents descriptions, illustrations and an introductory discussion of the first 100 Western Australian plants to have been gazetted as rare, likely to become extinct or in need of special protection under the Wildlife Conservation Act 1950-1979. It aims to assist interested persons in identifying these rare plants and to encourage further research on their distribution and reproductive biology.

Some of the photographs from the report were included in SWANS Vol. 11 No. 1 and the remaining photographs are shown on the following eight pages to enable the gazetted rare plants to be easily recognised.

Most of the plants that have been gazetted as rare are restricted to the South-West of Western Australia and more than one third occur in the Albany Wildlife district.

A new series of more detailed leaflets is also expected to be published shortly, with each leaflet depicting a single species from the list of gazetted W.A. rare flora.

Further details of leaflets in this series will be published in SWANS as stocks become available.

SWANS

Vol. 11 No. 2
1981



T O  A Y
EARTH2000

Gone south for the summer

THE number of bird species recorded in Australia stands at more than 750, including migrants as well as species restricted to Australia. Of these, there are migrants which come to Australia to breed and migrants which come here each year but breed somewhere else.

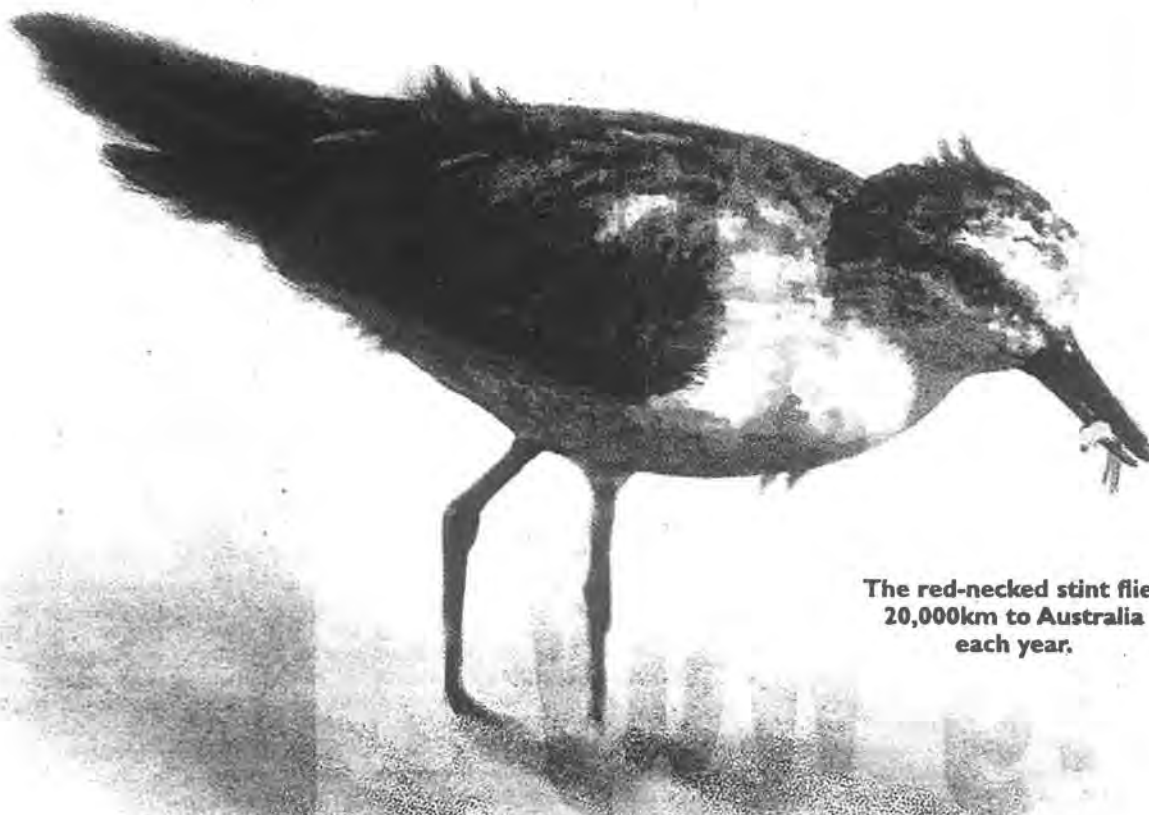
Many seabirds, for example, breed on sub-Antarctic and Antarctic islands but feed along Australia's continental shelf, while the double-banded plover breeds in New Zealand and spends winter in southern

banding birds to monitor their movements, caught a common tern which already carried a small metal band on one leg.

Bird-banding is a well-established research technique and the individually numbered bands carry an address so that anyone finding a banded bird can report its recovery. The address on this band was in Finland.

The Wild Side

Mike Bamford



The red-necked stint flies 20,000km to Australia each year.

Keith W Long

weighs slightly less than a golf ball) which travels annually about 20,000km from its breeding grounds in Siberia and Alaska to South-East Asia and Australia.

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Many seabirds, for example, breed on sub-Antarctic and Antarctic islands but feed along Australia's continental shelf, while the double-banded plover breeds in New Zealand and spends winter in southern Australia.

Some of the most impressive migrants, however, are the sandpipers, plovers and terns which breed in the far reaches of the northern hemisphere but travel all the way to Australia for summer.

About 60 species travel halfway round the planet to spend a few months in Australia. Each Australian spring, some two million birds arrive in northern Australia, especially around the vast tidal mudflats of Broome and the Eighty-Mile Muff.

More than 500,000 stay in that area while the rest disperse across Australia and New Zealand.

The birds remain until the following Australian autumn when they gather and then disappear across the northern horizon, returning to breeding grounds that may be as far away as the Arctic tundra.

The individual efforts of these migrating birds are astounding. In January this year, a research team in Victoria, out catching and

banding birds to monitor their movements, caught a common tern which already carried a small metal band on one leg.

Bird-banding is a well-established research technique and the individually numbered bands carry an address so that anyone finding a banded bird can report its recovery. The address on this band was in Finland.

The common tern had been banded as a chick in Central Finland on June 30 last year. The most direct route between where it was banded and where it was caught is 15,000km but it is more likely that the bird had flown down the west coast of Africa (which is where European common terns usually go in summer) and then across the Indian Ocean.

If this is correct, it would have travelled about 26,000km in less than six months, an average of 150km a day. In its flight across the Indian Ocean, the bird may have been pushed along by the same storms that brought to an end the journeys of three solo sailors.

The common tern was lost. It had literally taken a wrong turn at the southern end of Africa.

So it had travelled further than migrating birds usually travel but the achievements of birds which do not get lost are probably more impressive.

The red-necked stint is a tiny sandpiper (it

The Wild Side

Mike Bamford



Keith Wong

weighs slightly less than a golf ball) which travels annually about 20,000km from its breeding grounds in Siberia and Alaska to South-East Asia and Australia.

It is the commonest sandpiper in the South-West and for many years big numbers have been banded at sites around Perth and Albany.

One of these birds, banded in November, 1974 at Pelican Point, was recaptured in January, 1987 on the foreshore near where Mill Point Road passes over the Kwinana Freeway.

Assuming that it had migrated every year and was less than a year old when first caught, it was more than 13 years old when caught in 1987 and had travelled 260,000km. Imagine a golf ball doing that.

The teenage red-necked stint was not alone when caught in 1987. Eleven other birds caught that day had been previously banded on the Swan River. Five were at least six years old, one was at least five, four were at least four and one was only three.

An impressive record, but why do the birds bother?

As described in a previous article looking

at the conservation problem posed by birds which defy international boundaries, these birds migrate because the high Arctic is a great place to be for a few months.

With almost 24 hours of sunlight each day in mid-summer (June/July), the frozen tundra soil thaws out, plants shoot up and shallow, sun-lit swamps swarm with the sorts of small animals on which red-necked stints thrive.

It is the ideal environment in which to raise a family of stints but the birds have to migrate south at the end of the summer to survive until the following year. It is up to people from Siberia to New Zealand's South Island to ensure that the birds always have somewhere to migrate.

(Information on the common tern was taken from an article in *Wingspan*, the quarterly magazine of Birds Australia. The teenage red-necked stint was banded by the Department of Fisheries and Wildlife, now the Department of Conservation and Land Management, and was recaptured by the WA Wader Study Group).

◆Mike Bamford is a consulting ecologist, wildlife artist and occasional lecturer in zoology.



Keeper no. 9

Snake bite

WITH Spring in the air, snake bite might be on some people's minds. But it pays to remember snakes don't bite — people get bitten, about 2000 of them a year.

Most bites are on the forearm when the snake is picked up in rubbish and to the lower legs when trodden on.

Snake bites can contain venom used to catch

rats into people's homes looking for feed. Dogs and cats can also suffer bites because they hunt and are inquisitive, territorial animals.

Cats might not be so affected by some venoms



Flying visits a WA wonder

■ By Peter Trott

WITH a sound like a swish of silk, flocks of red-necked stints sweep in from the river to the Pelican Point wetland to roost.

In the gathering darkness it is easy to miss the birds of an endless summer who spend the night squatting on the mud between the rushes and the water.

The modest appearance of these bright-eyed little brown and white birds weighing only 100g belies the incredible feat they perform each year, flying 12,000km from their breeding ground in the tundra of northern Siberia to southern Australia.

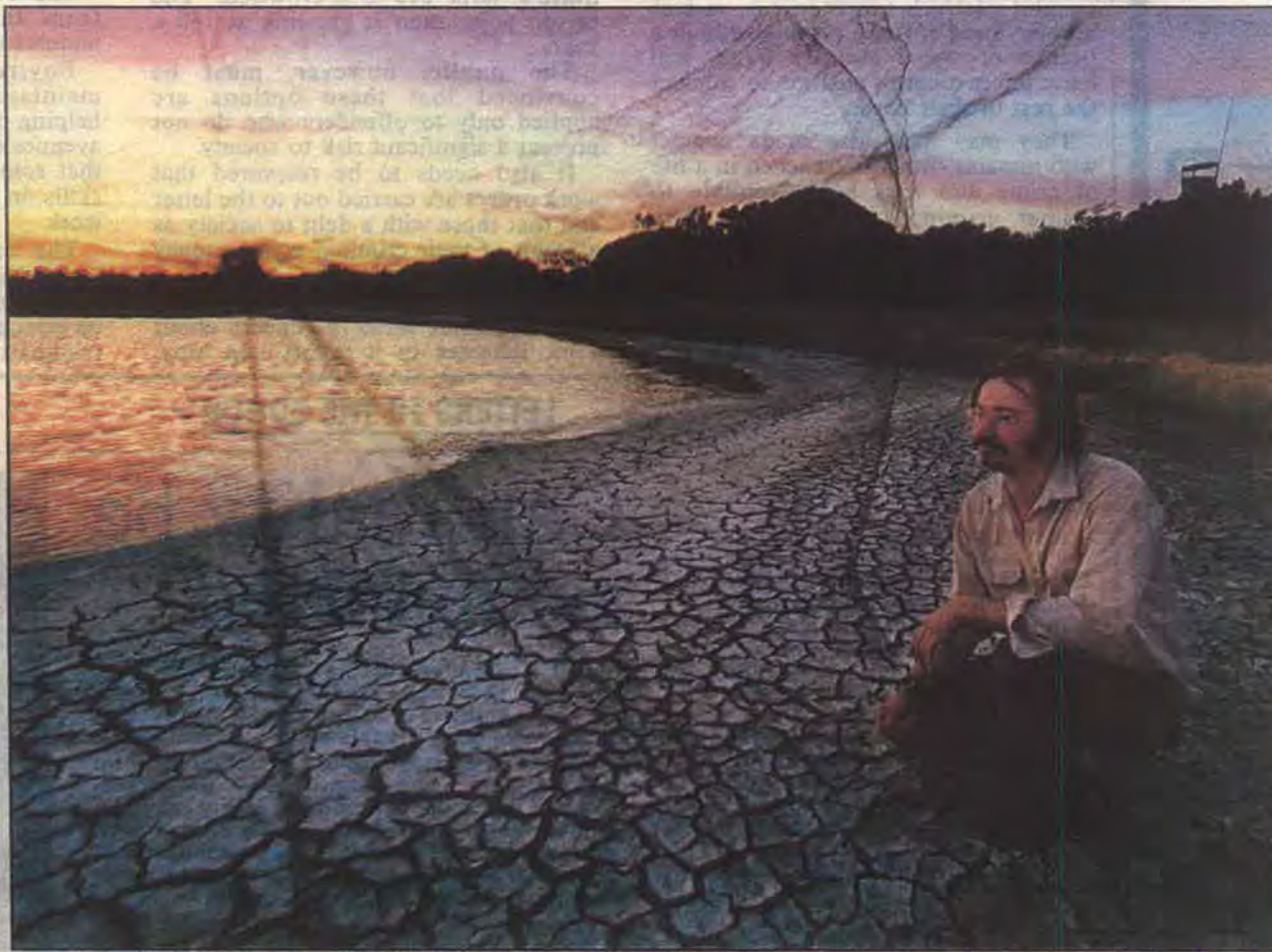
For biologists Mike and Mandy Bamford, the annual appearance of the birds is an inspiration.

"They lose a third of their body weight during the trip," Dr Bamford said.

The couple have spent more than a decade catching and banding migratory wading birds.

Dr Bamford is in the final stages of building a picture of the stint's double life using data from researchers in Australia and along the migration route through Indonesia, Thailand, Cambodia, Vietnam, Philippines, Taiwan, Japan and Korea.

He believes there are about 315,000 stints in the



Sundowner: Mike Bamford waits for sunset at Pelican Point with nets ready to catch red-necked stint on their annual migration from Siberia. He and his wife have spent more than 10 years studying the birds. PICTURE: MEGAN POWELL

world, of which 85 per cent come each summer to the same spots in WA, South Australia and Victoria.

The banding project team has re-caught many birds with bands up to nine years old and one which had been banded 13 years earlier.

The project, funded partly by a Federal Government Environment Australia program and run under the auspices of Birds Australia, involves catching birds in fine nets.

The birds are removed from the nets quickly, measured and checked for previous bands.

Last year, among 55 birds caught near the Narrows Bridge, two had been banded at Pelican Point two years earlier.

Dr Bamford said the frequency of catching WA banded birds and lack of any that had been banded in the eastern States suggested that they returned to the same spots each year.



©AP/Wide World Photos / Mike Regal

REPORT ON WADER NETTING - ALFRED COVE - 10 JANUARY 1981

A migratory wader cannon netting exercise was carried out once again at Alfred Cove and resulted in two nets being fired for a total of 43 birds. The catch comprised 39 Red Necked Stint, 2 Greenshank, 1 Grey Plover, 1 Pied Stilt.

Several hundred Knot and Great Knot were observed on a bank north of the bird observatory, but could not be netted. Bar-tailed Godwits were also sighted but remained out of range of the nets.

Tidal Conditions:

Barrack Street	January 10 1981	0148 hrs	1.0 m
		1157 hrs	0.5 m
2 Pelicans Point	January 11 1981	0210 hrs	1.0 m
		1157 hrs	0.5 m

By 1430 hrs the tide had exposed much of the mud flats. At about 1700 the nets were detonated with the tide at about 3/4 high and 10 m from HWM.

Weather:

Hot and still influenced by cyclonic conditions in the North-west.

Procedure

Two nets were placed 100 m apart at HWM on the beach near the bird observatory. Setting up took about 90 minutes with many of the group becoming involved in activities. The detonator was placed in long rushes at the eastern end of the shore. A jiggler was run at the rear of the nets but was not used.

Four Twincklers were employed with hand radios to direct birds into the netting zone. However, most of the knots and Godwits flew off in the direction of Pelican Point leaving only a small group of Stint and the odd Plover and Greenshank in the netting zone.

Charges used were standard 120 grain FFF. The Local Police, and Melville City Council were notified prior to proceedings. Bourke Drive residents were not notified as the actual report is inaudible from their homes.

It was necessary to place people around the net area to ward off joggers and dogs.

The catch of 43 birds of 4 species were considered a reasonable number at such early stages by all participants and generated considerable enthusiasm for future ventures. The next attempt was set for February 7 1981 at the same location.

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G B PEARSON
Technical Officer

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...
...

5 February 1981

By 1200 hrs the tide had covered most of the wet flats. At about 1400 hrs some were delineated with the tide at about 1/2 high and at a level 100%.

Weather

... and still influenced by cyclonic conditions at the ...

Equipment

Two ... were placed ... on the beach ... The

Two ... were ... with

... ..

It was

SPECIES		1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	TOTALS
Red-necked Stint <i>Calidris ruficollis</i>	b	267	243	366	110	138	39	1163
	c	1	5	33	4	2	0	45
	r	0	5	17	18	12	0	52
Curlew Sandpiper <i>(C. ferruginea)</i>	b	7	156	67	3	126	6	365
	c	0	7	7	0	5	0	19
	r	0	0	5	0	3	0	8
Knot <i>(C. canutus)</i>	b		25	0	2	4		31
	c		2	0	0	0		2
	r		0	0	0	0		0
Great Knot <i>(C. tenuirostris)</i>	b		9	24	2	5	3	43
	c		1	3	0	0	0	4
	r		0	1	0	0	0	1
Bar-tailed Godwit <i>(Limosa lapponica)</i>	b		6	15	13	4		38
	c		0	0	2	0		2
	r		0	0	0	0		0
Grey Plover <i>(Pluvialis squatarola)</i>	b	2	2	2	2	4		12
	c	0	0	0	0	0		0
	r	0	0	1	1	0		2
Turnstone <i>(Arenaria interpres)</i>	b					1		1
	c					0		0
	r					0		0
TOTALS	b	276	441	474	132	282	48	1653
	c	1	15	43	6	7	0	72
	r	0	5	24	19	15	0	63

TABLE 2. Numbers of waders banded (b), controlled (c) and retrapped (r) at Pelican Point (Swan River) since January 1973.

~~Handwritten~~ All trapped + banded by J. Beale & various associates

5 pages

16/8/04

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~~Handwritten~~ All trapped & banded by J. Bone & various assistants

5
16/8/74
16/8/74



With the Compliments

of

The Chief,

Division of Wildlife Research.

*Commonwealth Scientific and
Industrial Research
Organization.*

P.O. BOX 109,
CANBERRA CITY,
A.C.T.

BIRD-BANDING

A JOURNAL OF ORNITHOLOGICAL INVESTIGATION

Vol. XXXIII

July, 1962

No. 3

TRAPPING AND MAINTAINING SHORE BIRDS IN CAPTIVITY

D. L. SERVENTY¹, D. S. FARNER², C. A. NICHOLLS¹,

INTRODUCTION

Because so much remains to be learned even empirically about the migration of shore birds and because they also offer important possibilities for physiologic research on transequatorial migration, we feel that it may be useful to communicate our experiences with trapping and maintaining several species in captivity.

In October 1958 we began trapping operations on the Swan River estuary at Perth, Western Australia, to obtain live birds for experimental investigations. Large numbers of Palaearctic-breeding sandpipers and dotterels annually congregate on the estuary beaches during the southern hemisphere summer, arriving in late September and leaving again by mid-April. The tides in this area are slight and are of the daily type, with one high and one low water in each 24 hours. In the summer months low water is in the early mornings and the tidal range varies only from about 30 to 100 centimeters. The physical conditions are such that it appeared the estuary would be an ideal place to adopt the trapping technique described by Holgersen (1953: 148).

TRAPPING OPERATIONS

The site of the trapping station was the western shore of Pelican Point within a mile of our laboratory. This sandy promontory juts into the estuary at Melville Water; a fairly firm beach of muddy sand is backed by a sward of *Salicornia* and further inland with dense tussocks of *Juncus maritimus*.

The traps were constructed according to Holgersen and were of triangular form with a galvanized wire frame (14 gauge) covered with galvanized wire-netting of 18-millimeter (3/4-inch) mesh. The sides of the traps were 105 centimeters (42 inches) long and 35 centimeters (14 inches) high. On two of the sides were funnel entrances, 22.5 centimeters wide and 17.5 centimeters high (9 x 7 inches). These were continued inwards for about 32.5 centimeters (13 inches) and their openings narrowed internally to about 15 centimeters (6 inches) wide and 10 centimeters (4 inches) high. A trap door was made in the roof to permit removal of the birds caught. As many as 21 traps were used simultaneously. They were arranged in batteries of three and four on floating masses of sea weed (*Gracilaria confervoides* and other species) or at "capes" in the meandering shore line, the line of traps being set normal to the shore line, partly in and partly out of the water.

¹ Wildlife Survey Division, Commonwealth Scientific and Industrial Research Organization, Nedlands, Western Australia

² Laboratories of Zoophysiology, Washington State University, Pullman, Washington. Guggenheim Fellow, University of Western Australia, 1958-1959.

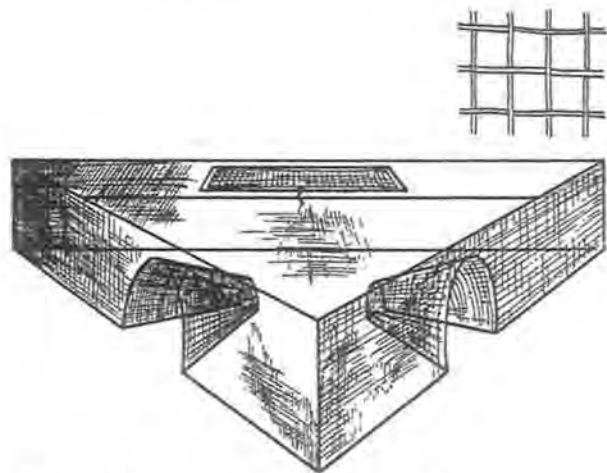


Figure 1. Diagram of Holgerson-type Trap for Shore Birds.

At first we also used low fences of galvanized wire netting as extensions to the trap line to "guide" the flocks of feeding birds to the traps, but these did not seem to materially increase the catches and soon became clogged up with drifting seaweed. Subsequently the traps were used alone and were set as illustrated in Fig. 2.

Our procedure was to put out the traps early in the morning, when the tide was out, and arranged the series at the then shore line. The tide would remain stationary for a few hours or advance very slowly during the forenoon. The traps were visited at about 2-hour intervals, the birds removed and the traps moved to adjust them to the new position of the tide line. At dusk the traps were taken up and stacked on the shore. Our earlier practice was to take them out to deeper water so that they would be in a catching position again at low tide in the early mornings. However it was found that the traps gathered so much drifting seaweed (of the slimy *Enteromorpha* type) when submerged overnight that the wire mesh became fouled and too difficult to clean.

Traps of the size described and with an entrance opening of 22.5 x 17.5 centimeters (9 x 7 inches) were ideal for the capture of the smaller and medium sized shore birds, up to the size of Sharp-tailed (*Erolia acuminata*) and Pectoral (*E. melanotos*) sandpipers. Very occasionally a Black-bellied

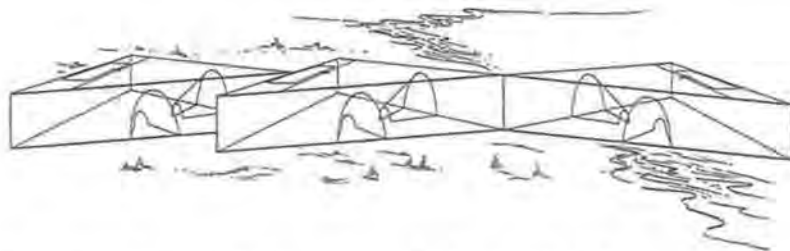


Figure 2. A Commonly Used Arrangement for Trapping Shore Birds.

Plover (*Charadrius squatarola*) would be caught and sometimes the small Australian Grey Teal (*Anas gibberifrons*) would crowd into the traps. However, for birds of this size, and also for godwits (*Limosa limosa* and *L. lapponica*), which occasionally frequented the Point, the trap openings were apparently too small.

During the season 1958-59 we had 12 traps almost continuously in operation from 30 October to 20 April. During the 1959-60 season 21 traps were in use between 27 September and 20 April. Laboratory staff members attended the traps during the week and we were assisted during weekends and holidays by volunteer teams of amateur ornithologists. The numbers of birds caught by the traps during the two seasons are recorded in Table 1.

TABLE 1
Resumé of Trapping at Pelican Point
During Two Seasons

Species	Season 1958-59	Season 1959-60
<i>Erolia ruficollis</i>	245	487
<i>Erolia testacea</i>	28	78
<i>Erolia acuminata</i>	108	266
<i>Erolia melanotos</i>	0	1
<i>Calidris tenuirostris</i>	1	0
<i>Arenaria interpres</i>	0	1
<i>Charadrius ruficapillus</i>	53	55
<i>Charadrius leschenaultii</i>	0	2
<i>Charadrius dominica</i>	4	2
<i>Charadrius squatarola</i>	0	1
<i>Erythrogonys cinctus</i>	0	1
<i>Larus novae-hollandiae</i>		2
<i>Sterna nereis</i>	0	1
<i>Anas gibberifrons</i>	20	0
<i>Anthus novae-seelandiae</i>	0	1
Totals	459	900

After removal, the birds were taken to the laboratory in hooded holding cages. Here they were banded, weighed, and notes on molt and plumage were recorded. Some of the individuals of the first three species in Table 1 were held in experimental cages at the laboratory; the remainder were returned to Pelican Point and released. Birds captured late in the evening were usually held overnight at the laboratory and released early the next morning.

It was found that the best catches were made in the forenoon. The following summary shows the temporal distribution of the catches of shore birds during the 1959-60 season by 2-hour intervals:

Time of day	Numbers trapped
0700-0900	216
0900-1100	262
1100-1300	149
1300-1500	148
1500-1700	125

Total

900

As the afternoon sea breezes strengthened most of the birds would disperse elsewhere in the estuary. At times in strong wind the birds would congregate in the lee of the traps and wander in. "Heat wave" conditions, with no wind, appeared to be optimal for trapping. The summer of 1959-60 was unusually cool and the high catches at the end of December and beginning of January (Fig. 4) coincided with the only period of sustained hot weather experienced during that season.

Special local conditions contribute to the capture of particular species. Sharp-tailed Sandpipers prefer wading in 2-5 centimeters (1-2 inches) of water over soft mud and on partially submerged masses of sloppy seaweed (*Gracilaria confervoides* and other species). Little Stints favor similar situations but feed on the shore line itself, and the damp weed beds left behind by the receding tide. Curlew Sandpipers occur generally. The Red-capped Dotterels prefer the damp areas well behind the shore line, or miniature lakes left by the tide; they definitely frequent a drier situation than the other shore birds. Human tracks, to and from the traps, often led to the capture of many birds. Curlew Sandpipers particularly, tended to prod along these wet mud tracks. The lines of tracks would attract scattered birds and concentrate them to the neighborhood of the traps. This method failed in a sandy terrain and tracks over sandy mud seemed to offer no attraction to the birds. The traps would be set wherever the majority of shore birds, at the time, were congregated.

MAINTENANCE OF SHORE BIRDS IN CAPTIVITY

Species and Enclosures

Sharp-tailed Sandpipers (*Erolia acuminata*), Curlew Sandpipers (*E. leucorhoa*) and Little Stints (*E. ruficollis*) were held in captivity in large outdoor aviaries, about 3 meters (9 feet) high 2.5 meters (8 feet) square. Two of the walls were of solid construction, whitewashed on the inside and the other walls were of chicken netting. The roof was of corrugated iron. The earthen floors were covered with beach sand which was changed at regular intervals.

The maximum number of birds in each cage at any one time was 40. The maximum period during which they were held in captivity was 6 months, at which point the experiments were terminated.

Temperature

The maximum temperatures to which the captives were subjected in the cages varied from about 21° to 35° C (70° to 95° F) in the summer months and the minimum temperatures fell at night to between 11° and 18° C (51° and 65° F). In April and May, at the close of the experiments, the maximum temperatures by day ranged between 21° and 29° C (70° and 84° F), and the night minimum temperatures to between 6° and 14° C (45° and 57° F).

As cold weather approached the outdoor enclosures were warmed by the following heating arrangement. Two 100 watt light bulbs were led into a cavity in the floor and covered with a metal drum 75 x 30 centimeters (30 x 12 inches) turned upside down over them and buried in the ground. A thin film of earth was heaped over the drum. The birds stood over this at night in the cold weather.

Social Behavior

Some aspects of social behavior in the Sharp-tailed Sandpipers appeared to have an effect on the well-being of some individuals when kept in captivity and it seems impracticable to cope with this effectively. One bird almost invariably assumed dominance over the others and controlled their access to both the feeding and water trays. If there were more than about twelve birds in the enclosure there would be two such "despotic" or dominant birds, one at each tray. If there were less birds one despot was able to dominate both of the trays simultaneously. This it would do by herding the other birds into a neutral corner (where there was neither perch nor tray) and keeping them there by walking in a crouched position backwards and forwards across the corner, with feathers ruffled, legs bent and uttering a "cheek, cheek, cheek" note. Birds that broke away would be driven back to the corner by pecking and beating with the wings. This would occasionally cause the attacked bird to fall down, whereupon the attacker would jump on the victim and beat it up. Two birds were killed in this way before the attacker could be restrained.

After several weeks of captivity physical violence gave way to a more stylized aggression, in the form of docile sparring. The dominant bird would take up a stand beside the food and water trays and endeavor to keep others away by making crouched runs at any intruders. There was very seldom any pecking or beating with the wings, but occasionally when a sandpiper would call the attacker's bluff, fighting would be resorted to. It was usually a show of fight, however, and rarely would aggressive posturings lead to actual conflict. The birds during these maneuvers would run forward and backwards with equal facility. Much of this behavior would soon have an exhausting effect and the birds would generally sit on the ground for a moment or so to recover, or perhaps break off the engagement entirely. A graded social hierarchy existed, the net result of which was that birds low in the order appeared to have difficulty in obtaining adequate food and were compelled to bathe in water trays somewhat fouled by previous use.

Water Requirements

Trays of both sea water and fresh water were provided in the enclosures, the depth of water being about 5 centimeters (2 inches) or less. Bathing was frequent but only when the water was cool and clean after replenishment during the mornings. The large bowls were dispensed with when the cold weather set in, as the birds would soak themselves at their morning bath and then stand shivering, the weaker individuals failing to preen or dry themselves sufficiently. Small bowls were introduced which allowed water to be used only for drinking, and in place of bathing the birds were sprayed daily with a hose. Spraying appears to have the advantage over bathing as all the individuals are washed with clean water. The last individuals to use a tray after the majority have bathed are forced to use greasy, usually sandy, water.

Shore birds drink large amounts of water daily, and fresh water is preferred. During a 24-hour period, 12 birds may drink more than 500 milliliters of water.

Very often a bird will go to the water bowl when hungry, not thirsty. It will probe for several minutes, apparently searching for food and, finding none, will look elsewhere. A thirsty bird drinking water lifts its head to swallow a large amount at once.

Food and Feeding

All food, with the exception of an occasional snack of meal worms and fly larvae, was given to the birds in shallow galvanized iron trays, 75 x 37.5 x 2.5 centimeters (30 x 15 x 1 inches). The birds fed readily from these and showed no unfavorable reaction to the feeling of the metal either on their feet or beaks. The birds, however, would probe with great avidity in the damp earth when it was newly laid on the floor of the cages and were agile in capturing larvae and other live prey offered to them from among the floor debris. From observations made during the treatment of sick birds (to be described in greater detail later) it would appear that the birds might with advantage be given their food submerged in the water in the feeding trays.

The food offered to the birds was porridge (crushed oats), powdered milk, bread, raw chopped beef, raw chopped liver, and chopped fillet of raw fish of several marine species (particularly *Mugil dobula*, *Arripis georgianus*, *Pomatomus saltator* and occasionally Coriidae). Chopped raw liver was preferred by the birds to anything else and, almost without exception, was always entirely consumed. Meal worms also were always acceptable but unfortunately our cultures of these were never sufficiently successful to provide adequate meals. Whole earthworms were not readily taken but were eaten when chopped.

A quantitative estimate was attempted of the food eaten per day during the 1958-59 experiments by weighing the food before and after the birds had fed. Exact assessments were not possible, but with a mixed fish and liver diet it was calculated that Sharp-tailed Sandpipers ate 18 grams per bird per day and Little Stints from 11 to 15 grams so the percentage of food eaten daily per body weight was, respectively, 28 percent, and 42 percent to 58 percent.

Potassium iodide was added to fish so that each bird received about 0.2 milligrams per day. This treatment was given as a preventive against aspergillosis of which we had no cases during our experiments.

A vitamin additive (in the form of a proprietary preparation known as ABDEC Drops, in aqueous solution) was added daily to the fish (one drop per bird per day). Later we used another proprietary preparation, Vitamol, a vitaminized oil for animal use.

During the 1958-59 season a small tray of table salt was kept before the birds, but apparently little notice was taken of it.

In our experiments of 1959-60 in the second season we decided not to continue with the Little Stints owing to mechanical problems of preparing their food into sufficiently small particles so that the birds could ingest them. The gapes of these small sandpipers are so small that even meal worms are too large for them.

During both seasons it became evident that something was lacking in the diet being offered to the birds. In 1960 we added live woodlice or slaters (oniscid isopods) to the diet, as an approximate substitute for their normal food. Ample supplies were forthcoming from the public following appeals in the press. These were given to the Sharp-tailed Sandpipers and the birds ate them freely. There is no doubt that they contributed to the success in keeping the birds in captivity but it is felt that the problem of maintaining shore birds in captivity has not yet been solved completely and that dietary problems still have to be overcome. In the following section we discuss in more detail the difficulties which we encountered.

Dietary Deficiency in Captive Shore Birds

A number of the captive shore birds appeared to be suffering from a nutritional deficiency after a month or so of aviary life. Not all birds were so affected, and several became heavy with fat and remained in good condition.

The bodies of several Sharp-tailed Sandpipers which died in the aviaries were thoroughly examined by the Animal Health and Nutrition Laboratories of the Department of Agriculture. No infectious organism was located in any of the body tissues, and the condition therefore was attributed at least tentatively, to nutritional deficiency.

Diarrhea was the first symptom of malfunction in the bird, followed by gradual bodily emaciation coupled with hypertrophy of the liver. Affected birds became lethargic and ill-kempt, failing to bathe or preen sufficiently. Examination of enlarged livers disclosed great infiltration of fatty substance, a significant sign of malnutrition despite apparently adequate food.

Feathers became loose, and in some cases were shed, particularly from the body. Normal wing molt was retarded. The outer skin of the bill and legs of ailing birds peeled and flaked off, leaving tender areas prone to ulceration or injury. In the last stages of this deficiency disease, anemia developed and the bird debilitated. In a few cases eyesight was impaired and the eyes affected as though by conjunctivitis. Motor co-ordination became erratic in the final stages, ending in complete paralysis of the legs. The birds usually succumbed in a comatose state, lying on one side on the ground with the head arched over the back.

Treatment of Shore Birds with Nutritional Deficiency

Several severely affected Sharp-tailed Sandpipers and one Curlew Sandpiper in a coma, were taken from the aviaries and attended individually. Most of them, including the Curlew Sandpiper, completely recovered in approximately 7 weeks. Immediately upon rescue from the cage, a strong solution of warm glucose was force fed to the birds. For the first few days they were kept in an artificially heated cage. Paralyzed birds were held in a squatting position by padding and a head support was used to hold up the bill horizontally. Any wounds were dressed immediately, and raw bills and legs coated with Tincture of BenzCo and thus sealed. All sick birds were hand washed in warm water to which a detergent was added in order that the grease might be removed from the plumage, and the body heat subsequently regulated.

Until they were able to feed, the birds were force fed the following items in rotation: chopped earthworms; chopped slaters; sand hoppers; house flies; maggots; meal worms; fresh minced fish; fresh fish liver; small insects; meal worm cuticles stuffed with wet beach sand; and small amounts of sugar solution; honey and warm water; vitamin enriched fresh water; and salt water in which powdered cuttle bone was mixed. Shorebirds caught in the traps and decapitated for gonad inspection invariably had their stomachs full of sand. To ensure that sick birds, being force fed, received as natural a diet as possible, wet beach sand was stuffed into meal worm cuticles and given. Each bird received three 1/3" cuticles of sand daily, one with the early morning meal, one at midday, and one in the evening. When they became able to feed, all feed was mixed with a little beach sand and covered by 1 centimeter vitaminized water with a pinch of iodized table salt per 25 milliliters of water. The birds much preferred

search under sandy water for feed than taking it from a dish. Water also helped to break up the food.

When they were able to walk about and feed, the birds were kept in an open-air run (ordinary black-soil ground) through which a small stream of water ran from a hose. Feed bowls were placed along this miniature water course, where the birds spent much time probing. They appeared not to like to probe in dry sand whereas feed bowls sunk in wet sand were accepted readily. They would probe along the wet sand, and then coming to the feed bowl and poking about in the sandy water therein, would consume the feed.

Only small amounts of feed were kept before the birds at any one time. Immediately after the bowl became nearly empty, a fresh meal was supplied. This involved changing feed bowls at 2-hour intervals. When sufficiently strong, each bird was taken at least once per week to the river foreshore, to bathe and forage for a few hours. During this time a large bowl of wet sand from the shore line was gathered and transported back to their run. For the rest of the day the birds were allowed to probe in this, and Sharp-tails were often observed pulling out 2-5 centimeter worms and earwigs and thrashing them on the ground to kill them before eating them. The Sharp-tails were also extraordinarily adept in catching fast moving sandhoppers.

ACKNOWLEDGEMENT

We are grateful to Professor H. W. Waring for allowing us to use the facilities of the Zoology Department of the University of Western Australia and in particular for space for the aviaries.

REFERENCE

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Received April 1961.



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STRAY FEATHERS

[The Emu
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Stray Feathers

Swan River)

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Note the
large no. of
birds present.

Recovery of a ringed Sharp-tailed Sandpiper in Siberia.—
On January 5, 1961, I ringed a Sharp-tailed Sandpiper (*Erolia acuminata*) at the C.S.I.R.O. Wildlife Survey Section's wader traps at Pelican Point, on the Swan River estuary, Nedlands, Western Australia (lat. 32° S., long. 115° 50' E.). On May 28, 1961, this individual (bearing C.S.I.R.O. band no. 040-13531) was killed in Siberia just north of the Arctic Circle at a point about 12 km. north of Batagaj (Jacutian ASSR), in lat. 67° 40' N., long. 135° 20' E. This is the first long-distance recovery of any of the 2,000-odd waders marked at Pelican Point, the seasonal figures for the Sharp-tailed Sandpiper being: summer of 1958-59, 25 birds ringed and released; 1959-60, 160; 1960-61, 122. This makes a total of 307 Sharp-tailed Sandpipers ringed and released.

Sharp-tailed Sandpipers begin to disappear from the Pelican Point area from the end of February. Normally none are seen after the end of March and our latest observation of a bird was on April 11.

Though the Sharp-tailed Sandpiper is one of the commonest of the northern-breeding waders in Australia its nest and eggs have not yet been discovered. Gladkov (in Dementiev and Gladkov, *The Birds of the Soviet Union*, 1951, vol. 3, p. 153) states that the nesting area is not known, but cites observational data to indicate where it might be, outlining an area on his map (Fig. 30, p. 154) between the lower Kolyma River in the east to the Indigirka River in the west. He states that in the late summer there are records as far west at the Yenisei River. Bird no. 040-13531 was taken in the general area of the Yana River, somewhat west of the breeding limits suggested by Gladkov.

It may be mentioned that Gladkov's indication of the contra-nuptial range in Australia (in his Fig. 30) is considerably astray. He outlines an area in northern Australia only, from the Kimberley Division in Western Australia to about Southern Queensland in the south-east. The species occurs, however, in marine marshes and freshwater swamps to southern Australia and Tasmania.—C. A. NICHOLLS, Nedlands, W.A., 13/11/61.

The Green-winged Pigeon in Victoria.—On January 4, 1961, while en route to Mallacoota, Vic., I saw a Green-winged Pigeon (*Chalcophaps chrysochlora*) in the centre of the Mallacoota road only 200 yards from Genoa township. The bird made no attempt to fly when approached and as I slowed down, it began to walk in front of the moving car. When the car was almost on top of it, the pigeon flew up to a branch of a "black" wattle on the roadside and, quite unconcerned, observed the car and its occupants. Al

REGISTERED LOCODES

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Latitude: 31 deg 59 min 0 sec S ; Longitude: 115 deg 49 min 0 sec E

Status and Conservation of
Shorebirds
in the East Asian-Australasian Flyway

Proceedings of the Australasian Shorebirds Conference
13-15 December 2003, Canberra, Australia

Edited by Phil Straw

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What have we learned from banding and flagging waders in Australia?

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Abstract

More than a quarter of a million waders have been banded in Australia over the last 45 years, 95% being migratory species. Around 126,000 of these have also been colour leg-flagged since this process was introduced in 1990. There have so far been 534 recoveries and 3903 sightings of leg-flagged birds overseas, as well as 150 recoveries and 225 leg-flag sightings in Australia of waders marked overseas. Overseas recovery rates for species varied widely, between 0.03% for Red-necked Stints banded in NW Australia and 1.1% for Red Knot from SE Australia. The average recovery rates for migratory waders banded in these two regions were 0.32% and 0.12% respectively, and 0.21% for Australia as a whole. Overseas flag-sighting rates were on average 30 times higher for birds marked in SE Australia and 5.6 times higher for NW Australia than banding recoveries. Flag-sightings have now been reported from 16 different countries in the Flyway. There is a strong preponderance of flag-sightings in Asia, of birds on northward migration over birds on southward migration. Maps of recoveries and flag-sightings show the marked differences in migration routes and destinations between different species, and even between different populations of the same species. Other knowledge gained from banding activities is briefly outlined, and future priorities discussed.

Introduction

Waders comprise nine percent of the Australian avifauna. Of the 73 species recorded in Australia, 37 are migrants (36 being from the Northern Hemisphere), 17 are vagrants (again, all from the Northern Hemisphere), and 19 are residents (nine being endemic to Australia).

As in many parts of the world intensive studies of waders have lagged behind studies of other groups of birds, especially land birds, seabirds and waterfowl. Systematic widespread population censuses of wader populations in Australia only commenced in 1981. The chicks of some resident species of waders have been banded ever since the inception of bird-banding in Australia in 1953. However large-scale banding of adult waders, especially of the migratory species, only commenced in the 1970s, when mist-nets and cannon-nets were first employed to catch the birds.

This paper concentrates on information that has come out of banding and colour leg-flagging activities via recoveries and re-sightings of colour-marked birds in the last 25 years. Other knowledge (such as biometric and moult data, age data, survival and reproduction rate information) gained during catching and banding operations is only briefly covered.

History

In comparison with many other banding activities, wader banding is very much a team operation. This is partly because of the logistics of handling heavy and bulky catching equipment, often in difficult terrain, but also because, in both mist- and cannon-netting, quite large numbers of birds may be caught at once. To process these birds quickly and collect the maximum amount of data, a large team is needed.

Wader banding activities around Australia have resulted largely from the efforts of a few experienced and enthusiastic individuals who gathered teams together to carry out the fieldwork. These teams have operated at different periods in time and at different locations over the last 45 years. Some programs operated for just a few years whilst others have been sustained over more than 25 years.

The main programs are summarised below:

- a) Dom Serventy and Lexie Nichols caught waders on the Swan Estuary, Perth, from 1958 to at least 1961, using walk-in style traps (Serventy *et al.* 1962)
- b) Jim Lane continued wader studies on the Swan River using mist-nets from 1972 to 1978. In 1979 the WA Wader Study Group (WAWSG) took over responsibility for wader banding in the Swan River Estuary, later introducing cannon-nets. This activity is continuing under the guidance of Mike Bamford,
- c) Fred van Gessel, assisted by others including Bill Lane, commenced cannon-netting and mist-netting waders in New South Wales in 1970, mainly on the Hunter Estuary near Newcastle. These activities have continued intermittently up to the present time. The NSW Wader Study Group was also active in cannon-netting waders from 1991-97, under the leadership of Phil Straw.
- d) Wader mist-netting was commenced by David Robertson and others at Werribee Sewage Farm in Victoria in late 1975. These efforts were augmented in late 1978 when Clive Minton introduced large-scale cannon-netting, as developed in Europe. The Victorian Wader Study Group (VWSG) was formally constituted at this time. These activities have been consistently maintained over a 26-year period.
- e) The Australasian Wader Studies Group (AWSG) held the first of its expeditions to Northwest Australia (NWA) in 1981. These visits have become almost

Table 1. Migratory Waders Banded in Australia

Species	STATE Region Bander/s Period**	VIC*	WA				NSW		TAS	QLD	NT			SA	TOTAL	
			NWA	Perth	Perth	Albany	Perth	Fred van Gessel 1970-	NSWWSG 1991-1997	BOAT 1979-1988	QWSG 1989-99	Ray Chatto 1995-96	Tony Hertog 1978-85	Fred van Gessel 1983-86	Max Waterman 1981-82	
			WWSG 1975-	AWSG/BBO/ NWSWG 1981-	WAWSG 1979-	Jim Lane 1972-78	Vic Smith 1985-	Serventy & Nichols 1958-60								
Red-necked Stint	Calidris ruficollis	94196	12876	2256	1163	812	732	1044	66	4270	184	60	83		117742	
Curlw Sandpiper	Calidris ferruginea	23854	9014	452	365	81	106	1454	273	1263	280		42		37184	
Great Knot	Calidris tenuirostris	593	15678	74	43	219	1	27	2		1028	392	1		18058	
Bar-tailed Godwit	Limosa lapponica	3019	9734	10	38	19		933	728	34	1991	1			16507	
Greater Sand Plover	Charadrius leschenaultii	31	8848	2		27	374	10	2		81	113	14		10863	
Red Knot	Calidris canutus	3928	4919	66	31	114		188	29	8	320	271		900	10774	
Sharp-tailed Sandpiper	Calidris acuminata	7476	1089	14		32	2	1582	83	11	35		184		9147	
Terek Sandpiper	Xenus cinereus	33	5402	1		3		659	112	1	4	29	11		6255	
Grey-tailed Tattler	Heteroscolus brevipes	38	5379	2				248	31	1	288	4	7		5998	
Ruddy Turnstone	Arenaria interpres	2418	1428	1	1	1	1	83	8	8	78	16	3		4046	
Double-banded Plover	Charadrius bicinctus	3516						150	35	89	74				3864	
Sanderling	Calidris alba	2671	649	12								4			3336	
Eastern Curlew	Numenius madagascariensis	796	147					47	33	1	243				1309	
Little Curlew	Numenius minutus		1244										5		1267	
Broad-billed Sandpiper	Limicola falcinellus	5	1229					67					8		1249	
Common Greenshank	Tringa nebularia	474	174	4				183	205	4	1				1139	
Black-tailed Godwit	Limosa limosa	3	623			16		250	204		55				1057	
Lesser Sand Plover	Charadrius mongolus	115	409			2		328	56		113	12	12		1047	
Latham's Snipe	Gallinago hardwickii	347				11	6	71	34						841	
Oriental Plover	Charadrius veredus		323							3			1		807	
Grey Plover	Pluvialis squatarola	144	278	18							4				566	
Pacific Golden Plover	Pluvialis fulva	236	23		12	24	1	285	205	14	57		4		463	
Marsh Sandpiper	Tringa stagnatilis	2	157					314	315				19		452	
Whimbrel	Numenius phaeopus	24	273	2				26	121		100		4		329	
Oriental Pratincole	Glaucopis maldivarum		162												162	
Common Redshank	Tringa totanus		6												109	
Swinhoe's Snipe	Gallinago megala		6										47	56	101	
Common Sandpiper	Actitis hypoleucos		48	2				6					18		74	
Asian Dowitcher	Limnodromus semipalmatus		101												62	
Long-toed Stint	Calidris subminuta	1	61												57	
Australian Pratincole	Stiltia isabella		15										5	6	26	
Wood Sandpiper	Tringa glareola		57												23	
Little Stint	Calidris minuta	7	1				1	1		1					13	
Pectoral Sandpiper	Calidris melanotos	2	2					2		1					10	
Red-necked Phalarope	Phalaropus lobatus		23												6	
Little Ringed Plover	Charadrius dubius		1												3	
Ruff	Philomachus pugnax		1					1					1		2	
Cox's Sandpiper	Calidris paramelanotos	1						1							2	
Pin-tailed Snipe	Gallinago stenura		1											1	1	
Short-billed Dowitcher	Limnodromus scolopaceus	1													1	
Buff-breasted Sandpiper	Tryngites subruficollis							1							1	
TOTAL		143931	80381	2916	1653	1361	1224	7966	2542	5709	4936	902	469	63	900	254953
Species		27	36	15	7	13	9	26	19	15	18	10	19	3	1	41

As at Dec. 2003

* Includes c. 7000 banded in S.E. of South Australia

** Where no end date is given, banding is still taking place

early autumn. They are much less common through winter and early spring. I'm not sure where most of the birds go, but I understand that some subspecies or populations of Silvereyes are thought to be migratory (particularly the Tasmanian form). It seems that movement of this species is very complex and highly variable throughout its range. Other local bird banders have observed coastal plain birds with well-developed fat stores at certain times of the year, a feature often indicative of migration. I would love, one day, to investigate this further (at least in a local context) but, for now, I will simply have to remain intrigued.

It may also interest Robert to know that there is a patch of wild blackberries in the creekline near my banding site, that Silvereyes love eating blackberries and that I regularly finish a bird banding session with purple-stained fingers. My clothes line has, so far, escaped lightly but my bird holding bags have been distinctly Silvereye-dyed, permanently.

Wes Bancroft

Silvereye Appreciation Society (member number 002)

PELICAN POINT: A DOG, SOME WADERS AND ME

Having read Mike Bamford's article "Do dogs disturb waterbirds?" (WABN 79: 15) I was prompted to relate an experience of mine. In the late 1950s and early to mid 1960s we trapped waders on Pelican Point with automatic traps, that is, the birds could enter the trap at any time but then had difficulty escaping from it. Dogs and people were rare on Pelican Point in those days but obviously dogs posed a threat to trapped birds.

Thus one weekend in the early 1960s I attacked a large dog terrorising some trapped birds by throwing driftwood at it, and then tried to scare it away with a large stick. The dog's owner then arrived on the scene, was somewhat in a huff and demanded to know who I was and just what did I think I was doing. Calmly I explained that I was working for CSIRO Wildlife — but didn't mention in a voluntary capacity — and that his dog was a nuisance and interfering with my work — and on a C-class reserve! This didn't placate him, however, and he launched into a tirade of insults and abuse and, now even more huffy, he sternly said that if I continued to harass his dog — I was trying to kill it actually — or, horror of horrors, actually hit it, he would report me to the police.

So I promptly hit 'Fido' on the head with the stick and it promptly took flight in the general direction of Steve's Hotel, and the owner did too, in an even greater huff. But the rest of the day passed quietly and I thought the matter at an end. Not so! On Monday morning Dr Serventy received a telephone call from one very irate dog owner and he was still threatening to report the matter to the police. But the good Doctor hated dogs on Pelican Point, too, and I have no doubt that the dog's owner was told what he could do with his dog and advised of the sanctity of the Point. And no, the police never arrived or even telephoned.

I notice too, that Mike refers to wader numbers at three locations on the Swan Estuary reducing from thousands to hundreds after the early 1980s. But even by the mid 1960s Pelican Point had seemingly lost its attraction to waders. The



Galahs at Lake Monger.
Photo courtesy Maris Lauva

birds were no longer feeding voraciously for sustained periods, and therefore were not as easily trapped. The flocks were flighty and instead of settling not far away when disturbed, they often departed completely. Perhaps the birds were being disturbed more frequently then, and at one time the waders were being seen more often and in greater numbers along the Kwinana Freeway foreshore. But logistics ruled out trapping them there.

The Red-necked Stint had been the commonest species trapped and Curlew and Sharp-tailed Sandpipers were perhaps caught in equal numbers but less commonly than the stint. It was difficult to assess numbers because the flocks disperse into smaller groups during the day and re-assemble towards evening. But if my memory serves me correctly, flocks of 500–1000 Red-necked Stints would have been notable and similarly for flocks of 50–100 Curlew or Sharp-tailed Sandpipers. Red Knots were uncommon and therefore of interest, and Great Knots decidedly rare. A Grey Plover or two and their calls were a feature of the Point as were small numbers of Red-capped Dotterels, which were also sometimes trapped. Other waders were decidedly casual or vagrant.

Actually my introduction to trapping and banding waders was quite brutal. Upon returning to Perth for two weeks' furlough over Christmas of 1959 I visited the CSIRO laboratory to see what was happening, and was simply instructed to proceed to Pelican Point and trap waders. So I found the traps, set them, and returned to the lab. About one hour later I returned to the Point and indeed there were several birds in the traps. These were taken to the lab, where eyebrows were raised. Obviously beginner's luck! But Lexie Nicholls set about banding, weighing and measuring the birds and showed me how to describe any moult they had, and I dutifully recorded all of such. I then released the banded birds at the Point, cleared the traps and reset them. This was great fun! Much more so than the fishing I had done on the northern side of the Point when younger, where the yacht clubs now are.

Upon returning to the lab eyebrows were raised again — twice successful! Again the birds were banded, etc, I returned

to the Point, released them, cleared the traps and reset them, the latter being necessary to allow for the rising or falling tide. Back at the lab nothing was said but this time Dr Serventy drove me to the point and released the banded birds himself, just to make sure, I now suspect, that I wasn't removing the bands from the birds and re-presenting them at the lab. But there were even more birds in the traps, so his suspicions were allayed and he beamed at my success, for I had already caught more birds than Lexie did in a week.

Thus in the following two weeks I learnt how to trap, band, weigh and measure the birds and how to describe their moult, and when Lexie was busy with other matters the good Doctor recorded the data for me. But I had banded birds before, on the poultry farm of Alf Hampton in Kewdale. Part of my job had been to trap the fowls when they laid, band them, weigh their eggs and record the frequency with which they laid, because Alf was intent on proving that his methods of selection, learnt in Yorkshire, England, were superior to the application of modern genetics.

But now I was working on wild birds and must have trapped several hundred in that magical two weeks, and clearly remember the excitement of arriving at the Point and seeing the waders jumping around in the traps, and the devastating disappointment if the traps were empty. On one occasion I was late and though there was a good catch of Sharp-tails in one trap they were up to their necks in water and thoroughly drenched, for the rising tide had its own timetable. We had to dry the birds before weighing them and smooth their feathers before releasing them. A Red-necked Stint was a retrap that had been banded the previous year, and Dr Serventy was especially elated by that.

In subsequent years though and up until 1965 I never repeated my success of that two weeks. Conditions were never as good again, and I guess that disturbance of the birds by others may have increased too. But one day there were only four Red-capped Plovers on the entire Point, and by judiciously setting the traps and cautiously shepherding them, I caught three of them. The fourth had entered the trap but then, after a short, seemingly thoughtful pause, exited through the entrance funnel in the other side. I don't think I trapped anything of note other than the Red-necked Stint banded in the previous year but several of "my" birds were retrapped in subsequent years. My best daily catches were 60, 55 and 50, but 20 or so would have been the daily average.

Robert Stranger



Malleefowl road sign
Photo courtesy Diane Beckingham

MINI MYSTERY

On 7 August at about 9:00am I was driving along a track in the Fitzgerald River National Park. Ahead was a Wedge-tailed Eagle apparently feeding. As I drew close, it rose with something dark brown and furry clutched in one foot. A thickish short tail dangled down. The little creature was dropped as the eagle gained height, and it fell with a bang onto the roof of the vehicle then slid to the ground. I stopped immediately and rushed to see what it might be. My number one guess was a Dibbler. Wrong. To my surprise, all I could find in the right spot, was a dead banksia flower spike, about the size of a Dibbler, brown and hairy-looking and with a stem just as long and thick as the tail I had seen. The stem was cut diagonally and there was a bare patch on the cone where some dead flowers had been.

Brenda Newbey

WEIRA NATURE RESERVE, NORTH EASTERN WHEATBELT, 23 September

This was the first time I've recorded a Malleefowl sighting within the first five minutes of a 2-hectare 20-minute survey. And it wasn't the Malleefowl on the nearby road sign, though that prompted me to stop and walk in the scrub of the Weira Nature Reserve, 13 km south-east of Mukinbudin, on the Mukinbudin to Southern Cross Road.

It was sunny but windy at 9:00 am. The Malleefowl was squatting relaxed under some low scrub about 3 metres from a disused track. I had one good look through binoculars before it shimmered away and vanished, as they do.

Then I chanced upon a freshly scratched nest mound a few metres further on. It was great to see what appears to be a successful breeding area for these vulnerable ground-nesting birds.

Not far away there was the inevitable fox print in the sand. Foxes remain a threat, even though the Malleefowl chicks 'can fly and fend for themselves within several hours' (Graham Pizzey).



Malleefowl nest mound
Photo courtesy Diane Beckingham

THE SIBERIAN CONNECTION

MIGRATORY WADING BIRDS OF WESTERN AUSTRALIA

Alex Harris
Photography A. G. Wells

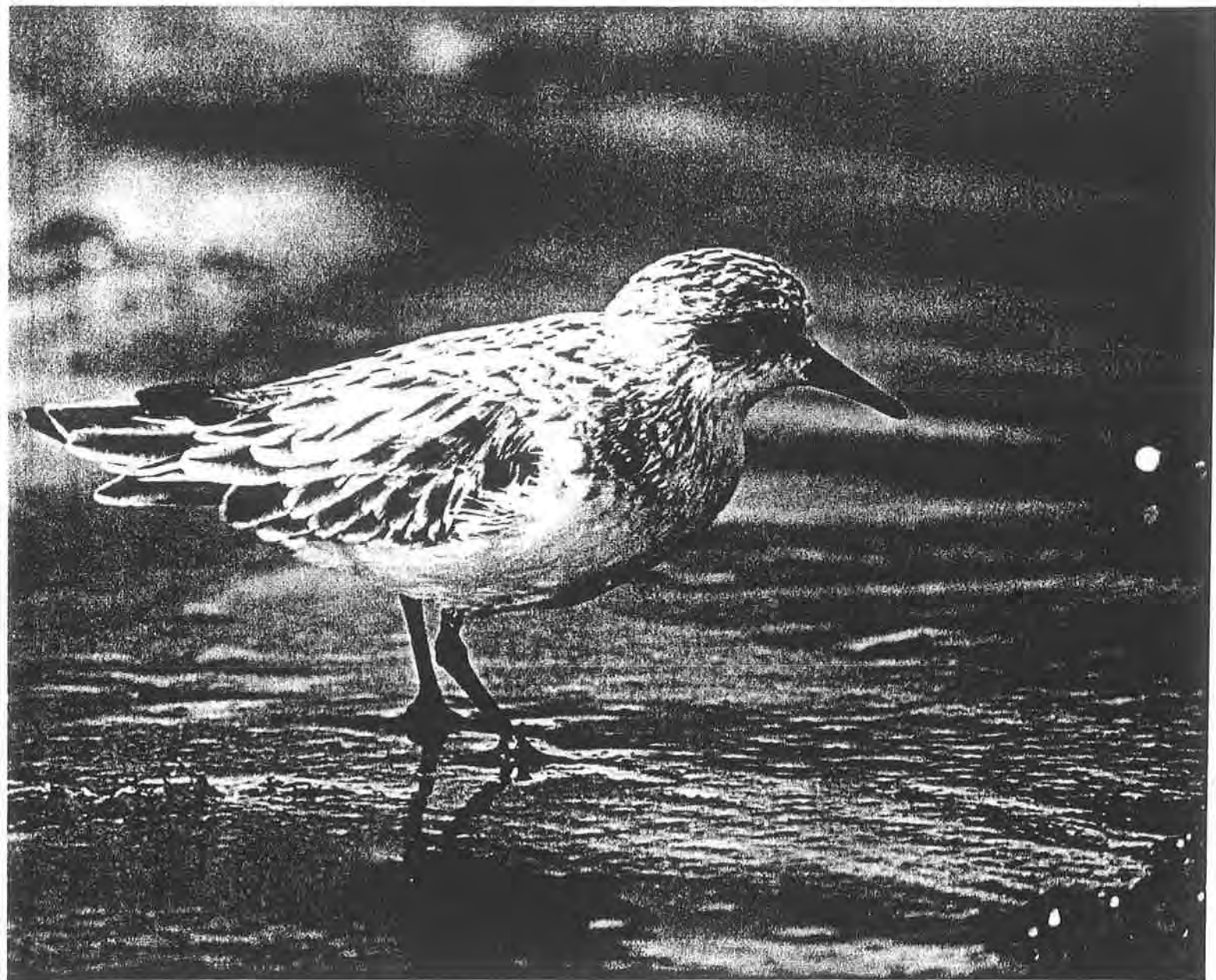
In September 1981 a party of ornithologists surveying the North-West coast found the landfall for hundreds of thousands of sub-Arctic wading birds that each year spend the summer in Australia.

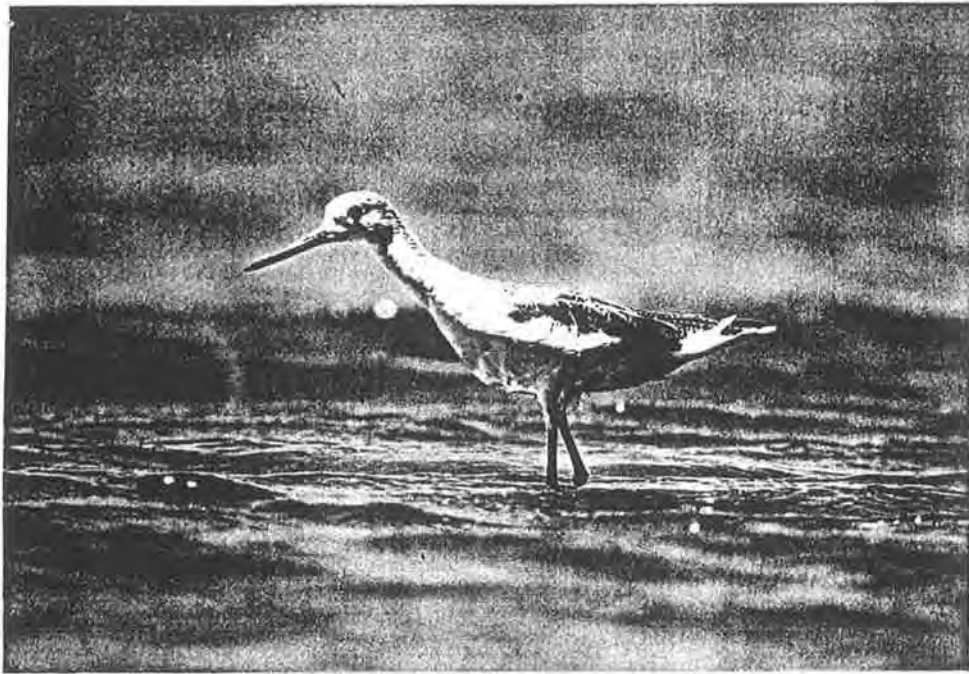
The emaciated travellers had just completed a 12,000 kilometre flight from Siberia and north east Asia. Their plumage was tattered and dull, their bodies little more than bundles of feather and bone. Some had burned up all their fat and were drawing on their muscles for energy. Weight losses of up to 30 per cent were common. Tiny species like the Red-necked Stint were found to weigh less than 30 grammes.

As soon as they landed the visitors began feeding with desperate voracity. They spread out in flocks of up to 60,000 on the tidal mud flats and sandy beaches between Broome and the Eighty Mile Beach to gorge themselves on insects, worms and crustaceans, building up strength for the second leg of a journey that would take them as far south as the Great Australian Bight. Six months later they regrouped for the long flight home. Their bodies were plump with months of good living, their plumage bright with health. They would raise their young during the northern summer before turning south again as the days began to get shorter, the nights colder and the food scarcer.

Last year's survey was carried out by the Royal Australasian Ornithologists Union and the WA Fisheries and Wildlife Department, using ground parties and two seats on a Commonwealth Department of Transport coastal surveillance

A mixed flock of migrant waders, concentrated at Roebuck Bay near Broome, prior to their return flight to the Northern Hemisphere.



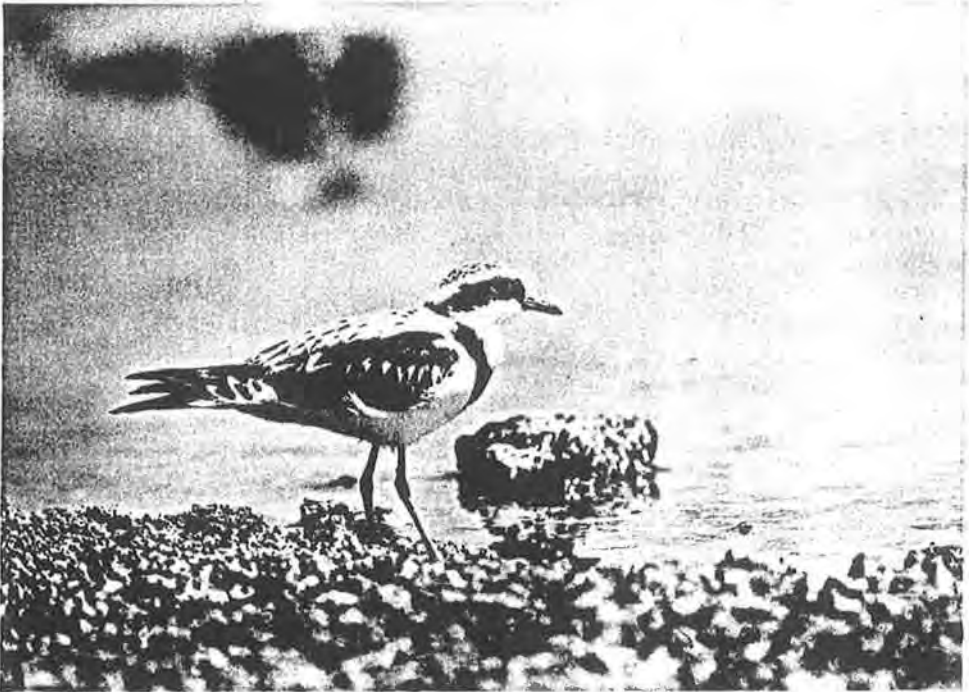


Lower Far Left: The Common Sandpiper, *Tringa hypoleucos*, is a slender, elegant bird often seen feeding on its own along the margins of tidal rivers. It also flies far inland and sometimes may be seen feeding in street gutters.

Top Far Left: Red-necked Stint, *Calidris ruficollis*. These birds are the smallest of the migrant waders and often overwinter in Australia. They have been recorded as far south as the sub-Antarctic islands off New Zealand.

Lower Centre: Sharp-tailed Sandpiper, *Calidris acuminata*, also called the Asiatic Sandpiper, is one of the commonest waders to visit this continent. It is seen in coastal and inland districts and mixes freely with other species.

Top: Greenshank, *Tringa nebularia*, migrates each year to the river flats at Alfred Cove, about eight kilometres from the centre of Perth. Its arrival is a sure sign that the worst of the winter is over.



Left and Below: Small resident non-migratory waders which frequent similar locations as those from the Northern Hemisphere.



aircraft. It established the North-West as one of the world's great wader habitats.

'None of us had seen anything like it' Fisheries and Wildlife technical officer Grant Pearson said. 'One flock alone contained 10 species, including 110 Great Knots, the biggest trapping made in Australia.'

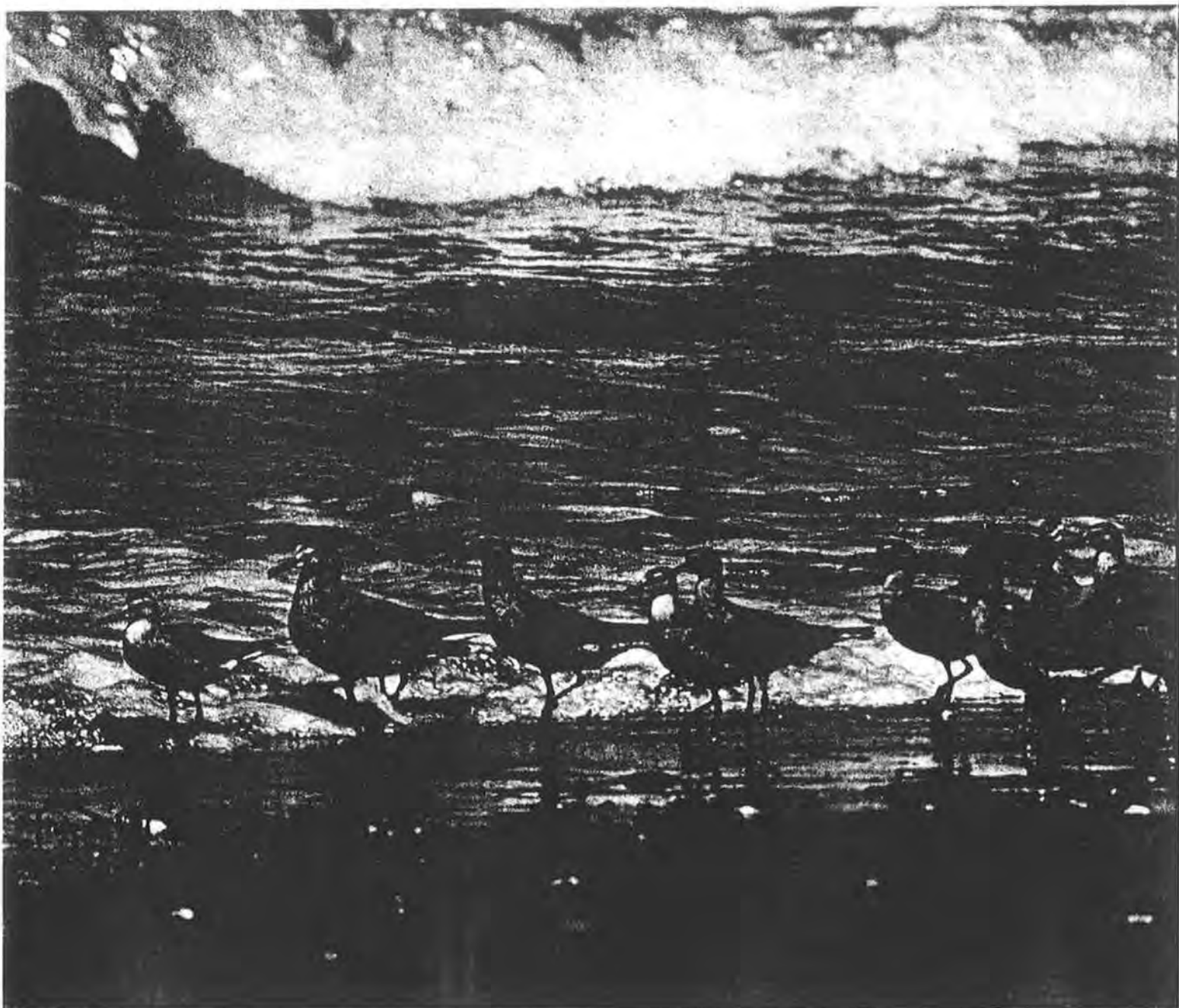
The Great Knot, sometimes called the Great Sandpiper, is a heavy-bodied, squat bird that breeds in Siberia. It was seldom recorded before 1950.

Waders are among the world's least known birds. Most of those seen in Australia are migrants, making the trans-equatorial flight twice a year, although a few are known to overwinter here for their first season.

The curator of birds and reptiles at the Western Australian Museum, Dr Glen Storr, believes they fly day and night in a direct line, following the meridian with very little deviation to the East or West.

The evidence, he said, pointed to hard-driving, non-stop migrations of birds in big flocks of similar size and endurance. Young birds often flew with

*Below: Grey Plover, *Pluvialis squatarola*, has been described as a large bird 'of hunched dejected appearance'. It is a graceful feeder that keeps aloof from other waders and remains in Australia from August to April.*



their parents on the first journey south, with the parents acting as teachers until their offspring learned how to make it on their own.

Species which keep together during the migration follow the same pattern when they settle down to feed on arrival. The Ruddy Turnstone, for example, potters busily along the shoreline where it can use its short bill to overturn seaweed, shells and pebbles in search of a meal.

Small waders like the Dotterels and Stints haunt the mudflats and sandspits to catch minute animals in the shallows. The bigger Knots and Whimbrels have longer beaks for probing the mud, equipment that serves them just as well on flooded inland pastures as in the waters along the coast.

A sharp-eyed observer may see some bickering among members of the same species but he is unlikely to see any between those of different species. The need for fighting simply does not arise, because each selects the water depth and feeding ground to which it is best adapted.

A follow-up expedition in March this year showed how this works in practice when the

ornithologists added a third locality to their survey, a new, artificial habitat at the Leslie Salt Company's evaporation ponds 33 kilometres east of Port Hedland. Little Curlews, Asian Dowitchers, Greenshanks and Broad-billed Sandpipers were recorded on the saltfields but not on the mangrove flats near Broome. The Terek Sandpiper was found around the Broome mangroves but not at Port Hedland.

Great Knots, Tattlers, Whimbrels and Large Sand Plovers were plentiful at Roebuck Bay but less common farther south. Mongolian Sand-Plover, Sharp-tailed Sandpipers and Red-necked Stints were more numerous on the salt fields.

The ornithologists counted 28,000 waders at Leslie Salt. They included 15,000 White-winged (Black) Terns, most of which were in their pied breeding colours, 500 rufous, black and white coloured Mongolian Sand-Plovers, 500 Broad-billed Sandpipers and 130 Asian Dowitchers in full red and gold breeding plumage.

In the flooded samphire on Sandfire Flat, half-way between Broome and Port Hedland, they found Black-winged Stilts, Red-kneed Dotterels and hundreds of Greenshanks. The latter spend the summer at Alfred Cove on the Swan River, within whistling distance of children playing with their dogs.

In the sewage ponds at Port Hedland were big numbers of Long-toed Stint, one of the world's shyest birds. Ninety percent of all those that arrived in Australia in 1980 gathered on feeding grounds in a 30 kilometre radius of Perth.

Although the waders' annual arrivals and departures have been known to the Aborigines for centuries the discovery of their landfalls has raised some new issues for Western Australians. Health authorities want to know more about possible exotic diseases they might bring with them. This was not a problem when the region was sparsely settled, but it could become one as more people make their homes in the North-West.

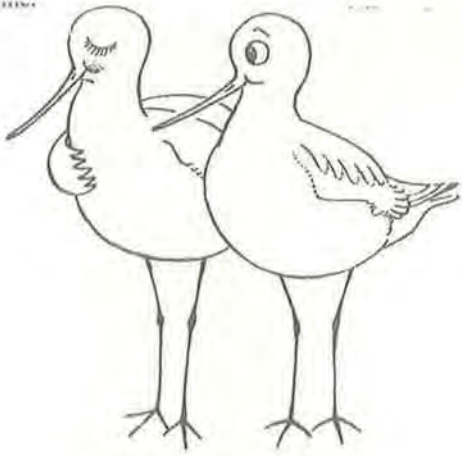
Conservationists are anxious to see the birds' feeding grounds are preserved in the event of future development. Some civic authorities are beginning to see the coast's potential as a mecca for interstate and overseas birdwatching enthusiasts.

Western Australian ornithologists would also like to set up a closer liaison with their opposite numbers in the Soviet Union. In October 1980 a Red-necked Stint banded in eastern Siberia was recaptured at Alfred Cove. It was one of 267 released by Russian biologists on the Chukotski Peninsula on June 17, 1979—the first wader banded overseas to be recaptured in this State.

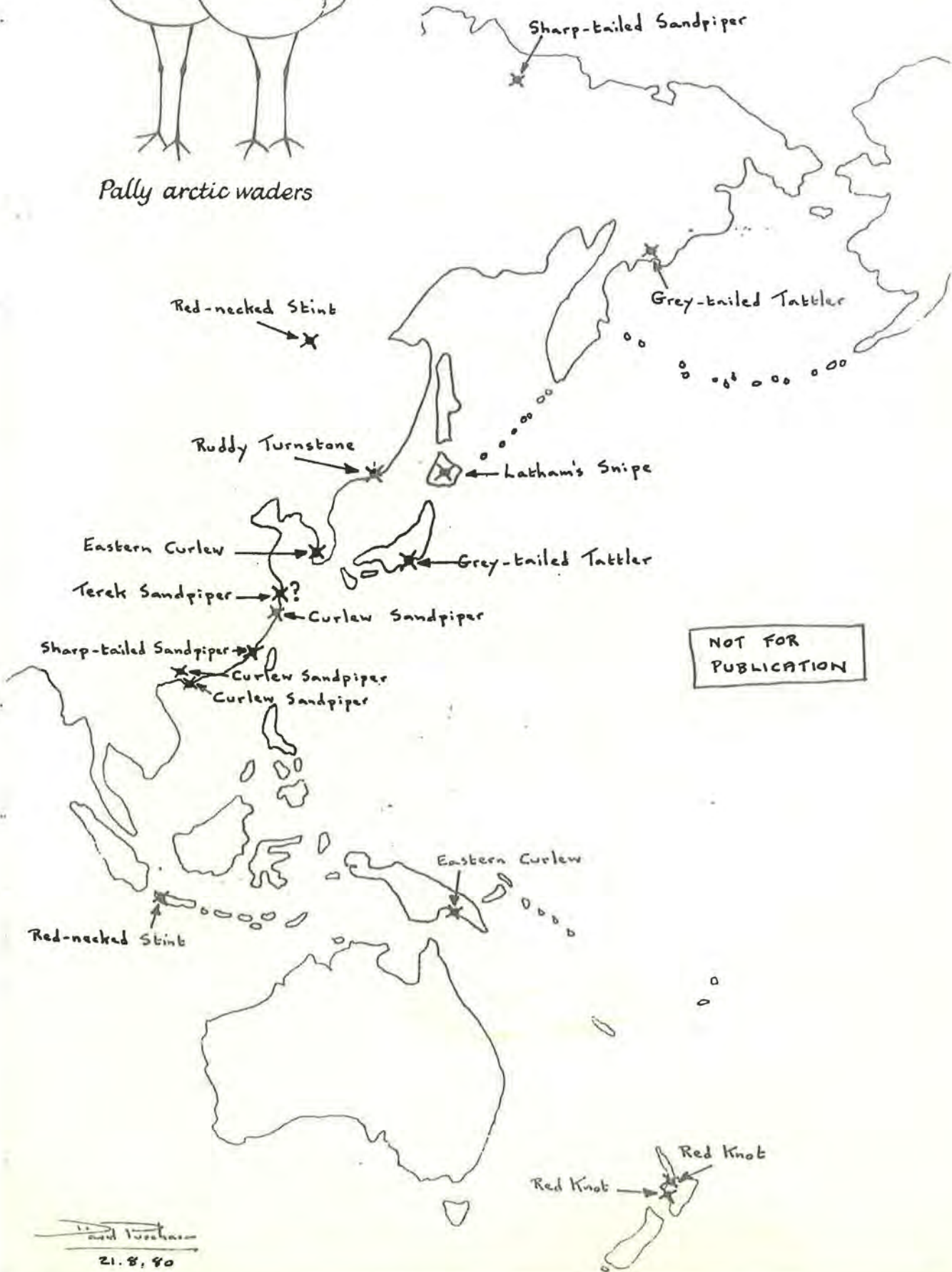
With the prospect of more expeditions to the North-West, birds banded here are certain to be re-netted in the far northern hemisphere. When they are, Australian ornithologists will want to know, to complete the other half of the wader story. ■



OVERSEAS RECOVERIES OF
PALAEARCTIC WADERS Banded
IN AUSTRALIA (up to 21.8.80)



Pally arctic waders



L. and J. ...
 21.8.80

CONTENTS OF

J. LANE'S

" BIRD-BANDING SUPPLIES "

FILE .

AUSTRALIAN BIRD-BANDING SCHEME

Division of Wildlife Research, CSIRO, P.O. Box 84, Lyneham, A.C.T. 2602

Issued by: *JS*
 Catalogued by: *B*
 Checked by: *A*
 Date: *20 Aug 74*

REQUEST/ACKNOWLEDGEMENT OF BIRD-BANDING SUPPLIES

From: J.A.K. LANE. CSIRO Bird-Banding Authority No.: 593
 Address: WILDLIFE RESEARCH CENTRE, P.O. BOX 51 WANNEROO. 6065

Please fill in your requirements in the columns indicated and return WITHOUT DETACHING ANY OF THE COPIES OF THE FORM. It is important that you state the numbers of bands in hand for each size ordered. When the supplies are sent to you the top copy of this form will be enclosed together with an unused form for your future use. On receipt of the supplies please sign the copy where indicated and return it to the Banding Office as acknowledgement that the supplies have been received. ALWAYS CHECK THE SIZE, PREFIX, AND SERIAL NUMBERS OF BANDS BEFORE SIGNING THE RECEIPT AND INFORM THE BANDING OFFICE OF ANY DISCREPANCY.

BANDS

Requested		Despatched			Requested		Despatched		
Size	In hand	Required	Prefix	Serial Numbers	Size	In hand	Required	Prefix	Serial Numbers
1					15				
2					16				
3	<i>19</i>	<i>1000</i>	<i>032</i>	<i>10601 - 11600</i>	17				
4	<i>95</i>	<i>500</i>	<i>040</i>	<i>90301 - 90800</i>	18				
5					19				
6					20				
7					21				
8					22				
9					23				
10					24				
11					25				
12					26				
13					27				
14					28				

EQUIPMENT

Equipment	In hand	Required	Equipment	In hand	Required
Pliers, 5 hole (Lambourne model 1)			Field Notebook Cover		
Pliers, Large (Lambourne model 11)			Trial-of-band-size Gauge		
Haversack			Band Dispenser (for size 16)		

LITERATURE

Title	Required	Title	Required
List of Approved Band Sizes (Australia)		Field Notebook Refill	
List of Approved Band Sizes (New Guinea)		Publicity Leaflet	
List of Approved Band Sizes (Waterfowl)		Application to Colour Band	
Request/Acknowledgement of Supplies		Trial-of-band-size Cards	
Despatch/Acknowledgement of Schedules		Moult Cards (Passerine)	
Species Schedule (pads)		Moult Cards (Non-Passerine)	
Live Recovery Schedule - blue (pads)		Mist Nets: Circular and Price List	
Live Recovery Schedule - old gold (pages)		Bander's Manual	
Dead Recovery Schedule (pages)			

I acknowledge receipt of the supplies listed above _____ (Signature) _____ (Date)

Mrs D. Cameron
Australian Bird Study Association
10 Sevenoaks Street
BALWYN
Vic. 3103.

Dear Mrs Cameron,

I would be grateful if you could supply me with 5 reels of shelf string thread and two reels of net repair thread suitable for use on 2" mesh 125 L/2 ply English nets.

My C.S.I.R.O. Bird-Banding Authority number is A593.

Kind regards.

J.A.K. LANE
Research Officer.

September 20, 1977.

THE BIRD BANDERS ASSOCIATION OF AUSTRALIA

c/o D. Cameron.
10 Sevenoaks St.
BALWYN. 3103 Vict.

Dear Mr. Lans,

Enclosed are 5 shelf string spools

1 repair thread spool.

If you should ever receive the first parcel I sent to you would you please return these spools to me as shelf string is in very short supply.

Yours sincerely,

D. Cameron

XXXX WILDLIFE

Mrs. D. Cameron,
10 Sevenoaks Street
BALWYN Victoria 3103.

Dear Mrs. Cameron,


I have received the four spring balances thank you.
However, the reels of thread have still not arrived.
Perhaps you could chase up the P.M.G. from your end.

Kind regards.



J.A.K.LANE
Research Officer.

March 10, 1975.



10 Sevenoaks St,
Balwyn Victoria

26 February 1975.

Dear Mr. Lans,

Attached is invoice for your 4 balances which I have sent by Certified mail today.

Unfortunately the prices have again been increased on us by the Swiss manufacturers and we have no option but to pass this on.

I hope the reels of thread have reached you before now. They were posted to you from the Balwyn Post Office on 20 January and addressed to 108 Adelaide Terrace.

Let me know if they do not arrive and I will replace them

Kind regards,

J. Cameron

XXXX WILDLIFE

Mrs. D. Cameron
10 Sevenoaks Street
BALWYN VICTORIA 3103.

Dear Mrs. Cameron,

Thank you for your letter of the 20, January.

Unfortunately, the six reels of thread which you mailed to me have not yet arrived. Would you be able to let me know when and how they were mailed so that I can attempt to trace them through the P.M.G.

Yours sincerely,


J.A.K. LANE
Research Officer.

February 18, 1975.

THE BIRD BANDERS ASSOCIATION OF AUSTRALIA

c/o Mrs. D. Cameron
10 Sevenoaks Street
BALWYN VICTORIA 3103

20 January 1975.

Mr. J.A.K. Lane
Department of Fisheries & Wildlife
Western Australian Wildlife Research Centre
P.O. Box 51
WANNEROO Western Australia 6065.

Dear Mr. Lane,

Thank you for your letter of 14 January. I have sent you the six reels of thread and enclose the invoice for same.

I am sorry to say there are no 2" wader nets available, nor do we expect to carry these in the future. Most of the demand for wader nets is for 1½" mesh and at the present moment I could let you have up to 9 60ft x 1½" nets and 15 40ft nets.

You would notice from the last circular from David Purchase that the mist net position is far from satisfactory and I am sorry that I cannot give you any clear indication when further supplies will become available.

If you have a big demand for wader nets it is possible to get Nylon nets from Japan - they have available a 40 ft x 7 ft x 2 3/8" mesh. It would be necessary to place an order for 50 nets and delivery would be about 3 months.

Please let me know your wishes.

Kind regards,

Yours sincerely,

Dawn Cameron

THE BIRD BANDERS ASSOCIATION OF AUSTRALIA

c/o Mrs. D. Cameron
10 Sevenoaks Street
BALWYN VICTORIA 3103

20 January 1975

INVOICE NO. 108

Department of Fisheries & Wildlife
Western Australian Wildlife Research Centre
P.O. Box 51
WANNEROO, Western Australia 6065.

Your Order No. C 108043.

To supplying -

5 only reels shelf string thread	65c ea	3.25
1 only reel net repair thread		65
Postage		48
		<hr/>
		* 4.38
		<hr/>

Despatched per parcel post 20/1/75

Addressed to - Department of Fisheries & Wildlife
108 Adelaide Terrace
PERTH W.A.

XXXXX WILDLIFE

Mrs. Dawn Cameron,
Bird Banders Assocn. of Australia,
10 Sevenoaks Street,
EALWYN,
VICTORIA. 3103

Dear Mrs. Cameron,

Would you please supply me with 5 reels of shelf
string thread and 1 reel of net repair thread.

I would be grateful if you could also let me know
how many wader nets (9 ft. x 60 ft. 2" mesh 3 shelf,
tethered one side, English) you have in stock and
whether you anticipate receiving any more.

My C.S.I.R.O. Bird-Banding Authority Number is A593.

Kind regards,

JAK

J.A.K. Lane,
Research Officer,
January 14, 1975.

THE BIRD BANDERS' ASSOCIATION
OF AUSTRALIA
MIST NET ACCOUNT

S J Wilson
2 Scott Street
NARRABUNDAH ACT 2604
AUSTRALIA

26/2/74

Mr J. A. K. Lane,
Fauna Research Board,
Dept. of Fisheries & Fauna,
108 Adelaide Terrace
Perth WA. 6000

Dear Mr Lane,

Balances have arrived
& I've packed your 2 - 50K Desola balance
& will post them in the morning.

Would you please put
the enclosed account into the system
for payment.

Again I'll enclose an
S.A.E. for the return of the stamps
from the parcel if this is
convenient.

Sorry for the long delay.
Normally I have balances on hand at
all times & will stock 100g, as well
in future. Nets continue to be a
problem & supply remains a matter of
uncertainty which talks with the
manufacturers while I was in England
have not solved.

Sincerely
Steve Wilson

THE BIRD BANDERS' ASSOCIATION
OF AUSTRALIA
MIST NET ACCOUNT

ISSUES
RECORDS

S J Wilson
2 Scott Street
NARRABUNDAH ACT 2604
AUSTRALIA

16/2/74

Supplied to —
Department of Fisheries & Forest
108 Adelaide Terrace
Perth WA 6000
Posted direct to Mr J. D. K. Lane
Fanna Research Branch

10 Wader nets 60' x 9' \$140 00
@ \$14.00 each

Postage 1.75

Amount due \$141.75

Part order B No 704385
of 7/9/73

Balance of order will be sent
in late February



Mr. S.J. Wilson,
Bird Banders' Association of
Australia,
2 Scott Street,
NARRABUNDAH. A.C.T. 2604

Dear Mr. Wilson,

I would be most grateful if you
would supply me with the following
equipment.

Ten (10) Wader nets (60ft x 9 ft)

Two (2) 50 gm Pesola Spring Balances.

My CSIRO Bird-banding Permit number is A593.


Yours faithfully,

J.A.K. Lane
FAUNA RESEARCH BRANCH

7 September, 1973
JAK/EJP

Attached papers are requests / receipts, etc.
for Police bands / pliers.

Arranged in chronological order.


12/8/2014

12				26			
13				27			
14				28			

EQUIPMENT

Equipment	In hand	Required	Equipment	In hand	Required
Pliers, 5 hole (Lambourne model 1)			Field Notebook Cover		
Pliers, Large (Lambourne model 11)			Trial-of-band-size Gauge		
Haversack			Band Dispenser (for size 16)		

LITERATURE

Title	Required	Title	Required
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List of Approved Band Sizes (New Guinea)		Publicity Leaflet	
List of Approved Band Sizes (Waterfowl)		Application to Colour Band	
Request/Acknowledgement of Supplies		Trial-of-band-size Cards	
Despatch/Acknowledgement of Schedules		Moult Cards (Passerine)	
Species Schedule (pads)		Moult Cards (Non-Passerine)	
Live Recovery Schedule - blue (pads)		Mist Nets: Circular and Price List	
Live Recovery Schedule - old gold (pages)		Bander's Manual	
Dead Recovery Schedule (pages)			

I acknowledge receipt of the supplies listed above _____

(Signature)

(Date)

AUSTRALIAN BIRD-BANDING SCHEME

Division of Wildlife Research, CSIRO, P.O. Box 84, Lyneham, A.C.T. 2602

Issued by: [Signature]
 Catalogued by: [Signature]
 Checked by: [Signature]
 Date: 18/2/77

REQUEST/ACKNOWLEDGEMENT OF BIRD-BANDING SUPPLIES

From: Mr J.A.K. Lane CSIRO Bird-Banding Authority No. 593
 Address: Fauna Research Branch, Dept of Fisheries & Wildlife, Wildlife Research Station
P.O. Box 51, WANNEROO W.A. 6065

Please fill in your requirements in the columns indicated and return WITHOUT DETACHING ANY OF THE COPIES OF THE FORM. It is important that you state the numbers of bands in hand for each size ordered. When the supplies are sent to you the top copy of this form will be enclosed together with an unused form for your future use. On receipt of the supplies please sign the copy where indicated and return it to the Banding Office as acknowledgement that the supplies have been received. ALWAYS CHECK THE SIZE, PREFIX, AND SERIAL NUMBERS OF BANDS BEFORE SIGNING THE RECEIPT AND INFORM THE BANDING OFFICE OF ANY DISCREPANCY.

BANDS											
Requested			Despatched			Requested			Despatched		
Size	In hand	Required	Prefix	Serial Numbers	Size	In hand	Required	Prefix	Serial Numbers		
1					15						
2					16						
3					17		1000	170	01901 - 02900		
4					18						
5					19						
6					20						
7					21						
8					22						
9					23						
10					24						
11					25						
12					26						
13					27						
14					28						

EQUIPMENT					
Equipment	In hand	Required	Equipment	In hand	Required
Pliers, 5 hole (Lambourne model 1)			Field Notebook Cover		
Pliers, Large (Lambourne model 11)			Trial-of-band-size Gauge		
Haversack			Band Dispenser (for size 16)		

LITERATURE			
Title	Required	Title	Required
List of Approved Band Sizes (Australia)		Field Notebook Refill	
List of Approved Band Sizes (New Guinea)		Publicity Leaflet	
List of Approved Band Sizes (Waterfowl)		Application to Colour Band	
Request/Acknowledgement of Supplies		Trial-of-band-size Cards	
Despatch/Acknowledgement of Schedules		Moult Cards (Passerine)	
Species Schedule (pads)		Moult Cards (Non-Passerine)	
Live Recovery Schedule - blue (pads)		Mist Nets: Circular and Price List	
Live Recovery Schedule - old gold (pages)		Bander's Manual	
Dead Recovery Schedule (pages)			

I acknowledge receipt of the supplies listed above _____ (Signature) _____ (Date)

AUSTRALIAN BIRD-BANDING SCHEME

Division of Wildlife Research, CSIRO, P.O. Box 84, Lyneham, A.C.T. 2602

Issued by:
 Catalogued by: *R*
 Checked by: *SP*
 Date: *2.17.75*
593

REQUEST/ACKNOWLEDGEMENT OF BIRD-BANDING SUPPLIES

From: Mr J.A.K. Lane CSIRO Bird-Banding Authority No.: _____
 Address: Dept of Fisheries & Wildlife - WA Wildlife Research Center - P.O. Box 51, Wanneroo WA

Please fill in your requirements in the columns indicated and return WITHOUT DETACHING ANY OF THE COPIES OF THE FORM. It is important that you state the numbers of bands in hand for each size ordered. When the supplies are sent to you the top copy of this form will be enclosed together with an unused form for your future use. On receipt of the supplies please sign the copy where indicated and return it to the Banding Office as acknowledgement that the supplies have been received. ALWAYS CHECK THE SIZE, PREFIX, AND SERIAL NUMBERS OF BANDS BEFORE SIGNING THE RECEIPT AND INFORM THE BANDING OFFICE OF ANY DISCREPANCY.

BANDS											
Requested			Despatched			Requested			Despatched		
Size	In hand	Required	Prefix	Serial Numbers	Size	In hand	Required	Prefix	Serial Numbers		
1					15						
2					16						
3					17		198	170	00451 - 00500 00702 - 00796 00198 - 00800 00800 - 00850		
4					18						
5					19						
6					20						
7					21						
8					22						
9					23						
10					24						
11					25						
12					26						
13					27						
14					28						

EQUIPMENT					
Equipment	In hand	Required	Equipment	In hand	Required
Pliers, 5 hole (Lambourne model 1)			Field Notebook Cover		
Pliers, Large (Lambourne model 11)			Trial-of-band-size Gauge		
Haversack			Band Dispenser (for size 16)		

LITERATURE			
Title	Required	Title	Required
List of Approved Band Sizes (Australia)		Field Notebook Refill	
List of Approved Band Sizes (New Guinea)		Publicity Leaflet	
List of Approved Band Sizes (Waterfowl)		Application to Colour Band	
Request/Acknowledgement of Supplies		Trial-of-band-size Cards	
Despatch/Acknowledgement of Schedules		Moult Cards (Passerine)	
Species Schedule (pads)		Moult Cards (Non-Passerine)	
Live Recovery Schedule - blue (pads)		Mist Nets: Circular and Price List	
Live Recovery Schedule - old gold (pages)		Bander's Manual	
Dead Recovery Schedule (pages)			

I acknowledge receipt of the supplies listed above

J.A.K. Lane
 (Signature)
Note Correction!

8 JULY 75
 (Date)

01/7/04

B5/593

Mr J. A. K. Sam

Dept of Fisheries and Game

Public Works Department Hostel

Kumunura W.A. 0743

500 size 180 bands 06001-06500-15017

1 pair pliers

ISSUED BY	B
CHECKED BY	B
PACKED BY	B
REMOVED BY	A

AUSTRALIAN BIRD-BANDING SCHEME

Division of Wildlife Research, CSIRO, P.O. Box 84, Lyneham, A.C.T. 2602

Issued by: B
 Catalogued by: B
 Checked by: D
 Date: 18.6.74

REQUEST/ACKNOWLEDGEMENT OF BIRD-BANDING SUPPLIES

From: J.A.K. LANE CSIRO Bird-Banding Authority No.: 593
 Address: WILDLIFE RESEARCH CENTRE, P.O. Box 51 WANNEROO 6065

Please fill in your requirements in the columns indicated and return WITHOUT DETACHING ANY OF THE COPIES OF THE FORM. It is important that you state the numbers of bands in hand for each size ordered. When the supplies are sent to you the top copy of this form will be enclosed together with an unused form for your future use. On receipt of the supplies please sign the copy where indicated and return it to the Banding Office as acknowledgement that the supplies have been received. ALWAYS CHECK THE SIZE, PREFIX, AND SERIAL NUMBERS OF BANDS BEFORE SIGNING THE RECEIPT AND INFORM THE BANDING OFFICE OF ANY DISCREPANCY.

BANDS											
Requested			Despatched			Requested			Despatched		
Size	In hand	Required	Prefix	Serial Numbers	Size	In hand	Required	Prefix	Serial Numbers		
1					15						
2					16						
3					17	<u>40</u>	<u>50</u>	<u>170</u>	<u>00301-00350</u>		
4					18						
5					19						
6					20						
7					21						
8					22						
9					23						
10					24						
11					25						
12					26						
13					27						
14					28						

~~40 50~~ NBS Bands are required by WED 19th JUNE at latest.

EQUIPMENT					
Equipment	In hand	Required	Equipment	In hand	Required
Pliers, 5 hole (Lambourne model 1)			Field Notebook Cover		
Pliers, Large (Lambourne model 11)			Trial-of-band-size Gauge		
Haversack			Band Dispenser (for size 16)		

LITERATURE			
Title	Required	Title	Required
List of Approved Band Sizes (Australia)		Field Notebook Refill	
List of Approved Band Sizes (New Guinea)		Publicity Leaflet	
List of Approved Band Sizes (Waterfowl)		Application to Colour Band	
Request/Acknowledgement of Supplies		Trial-of-band-size Cards	
Despatch/Acknowledgement of Schedules		Moult Cards (Passerine)	
Species Schedule (pads)		Moult Cards (Non-Passerine)	
Live Recovery Schedule - blue (pads)		Mist Nets: Circular and Price List	
Live Recovery Schedule - old gold (pages)		Bander's Manual	
Dead Recovery Schedule (pages)			

I acknowledge receipt of the supplies listed above

J.A.K. Lane
 (Signature)

12 JUN 74
 (Date)

AUSTRALIAN BIRD-BANDING SCHEME



Request/Acknowledgement of Bird-Banding Supplies

Request			Despatch		Acknowledgement	
CSIRO Permit No: A593 Bander: J.A.K. LANE Address: DEPT. FISHERIES AND FAUNA 108 ADELAIDE TEE PERTH Date required: 26 NOV 73			Issued by: A Catalogued by: / checked by: Date: 5 NOV 73		I acknowledge receipt of the following supplies - Signature: Date:	
Band Size	Bands in size	Required	Band prefix	Numbers	Band prefix	Numbers
1*				-		-
2*+				-		-
3*+o				-		-
4*o				-		-
5*o				-		-
6*				-		-
7*o				-		-
8*o				-		-
9*xo				-		-
10*				-		-
11*x				-		-
12*				-		-
13*x				-		-
14*o				-		-
15*				-		-
16o				-		-
17*				-		-
18o				-		-
19ox				-		-
20x				-		-
21x				-		-
22x				-		-
23x				-		-
24x				-		-

- * Available in ALUMINIUM o Available in MONEL
- x Available in STAINLESS STEEL + Available in ALLOY

PLEASE INDICATE YOUR PREFERENCE

EQUIPMENT

Pliers, 5 hole (Lambourne model II)	.....	in hand;	.....	required
Pliers, Large (Lambourne model I)	..... 0	in hand;	..... 2	required
Haversack	.....	in hand;	.....	required
Field Notebook Cover	.....	in hand;	.....	required
Trial-of-band-size Gauge	.....	in hand;	.....	required
Band Dispenser (for size 16)	.....	in hand;	.....	required

LITERATURE

<u>Ref. No.</u>	<u>Title</u>	<u>Quantity</u>
WLS/B-BS/9(a)	List of Approved Band Sizes (Australia)	_____
9(b)	List of Approved Band Sizes (New Guinea)	_____
9(c)	List of Approved Band Sizes (Waterfowl)	_____
10	Request/Acknowledgement of Supplies	_____
13	Field Notebook Refill	_____
14	Species Schedule (pads)	_____
15	Live Recovery Schedule (pads)	_____
30	Dead Recovery Schedule (pages)	_____
17	Despatch/Acknowledgement of Schedules	_____
21	Publicity Leaflet	_____
25	Trial-of-band-size Cards	_____
26	Application to Colour-Band	_____
	Mist nets: Circular and Price List	_____
	Moult Cards (Passerine)	_____
	Moult Cards (Non-Passerine)	_____

LOSSES

The following supplies have been lost in the circumstances stated:

INSTRUCTIONS

When requiring supplies, fill in the first section of this form for bands (see reverse side), and indicate any requirements of equipment, literature, etc. (above). When supplies are forwarded to you, this form will be enclosed. On receipt of supplies please complete the last section ('Acknowledgement') on the reverse side and return the form to the Banding Office. It is important that you state the number of bands in hand for each size ordered. ALWAYS CHECK SIZE, PREFIX, AND SERIAL NUMBERS OF BANDS WHEN YOU RECEIVE THEM, AND WRITE THESE IN THE ACKNOWLEDGEMENT COLUMN BEFORE SIGNING THE RECEIPT.

CONTENTS OF

J. LANE'S

" AUSTRALIAN BIRD-BANDING SCHEME "

FILE .



THE AUSTRALIAN BIRD BANDER'S MANUAL

Compiled by KIM W. LOWE

AUSTRALIAN BIRD AND BAT BANDING SCHEMES
AUSTRALIAN NATIONAL PARKS AND WILDLIFE SERVICE
FIRST EDITION 1989

This is a photocopy of a small part
of the blue plastic mounted on my
bookshelf — to remind me to
make use of it / reference to it when
working on public & water banding
data, including re-mount.

J 17/6/2012



The Australian Bird Bander's Manual



**Australian Bird and Bat Banding Schemes
Australian National Parks and Wildlife Service**

Appendix II. Moulting recording data sheets.



Australian Bird Banding Scheme

MOULT RECORDING DATA SHEETS

Notes on Use

The Bird Banding Scheme has in the past provided cards for recording the moulting activity of Australian birds. With the advent of the computerised banding database the type of information that was recorded on the "moulting cards" can be easily stored on the computer. This provides many advantages over the card system, such as a vastly improved ability to manipulate the data for analysis.

There are two types of data sheet available for recording moulting information; Type I and Type II. The Type I sheet is intended for your use by those banders who are only just beginning to, or only occasionally, record moulting data and the Type II sheet is for more experienced moulting recorders. The two sheets are provided "back-to-back" on the one sheet so that banders may choose which format they prefer to use.

Moulting data are computer stored using a series of codes; one for the feather tract or group and one for the stage of the moulting. These codes are given below:

FEATHER TRACT OR GROUPING :

Head & Body : Forehead & Lores (MH)
 Crown (MC)
 Ear Coverts (ME)
 Nape (MN)
 Mantle & Back (MM)
 Scapulars (MS)
 Rump (MR)
 Uppertail Coverts (MU)
 Undertail Coverts (MD)
 Belly (ML)
 Flanks (MF)
 Lower Breast (MB-L)
 Upper Breast (MB-U)
 Throat (MT)
 Chin (MI)

Wing & Tail : Primaries (M1)
 Secondaries & Tertiaries (M2)
 Primary Coverts (M3)
 Secondary Coverts (M4)
 Tail (M5)
 Alula (M6)
 Median Upperwing Coverts (M7)
 Lesser Upperwing Coverts (M8)
 Underwing Coverts (M9)
 Axillaries (MA)

M
O
U
L
T

STAGE OF MOULT :

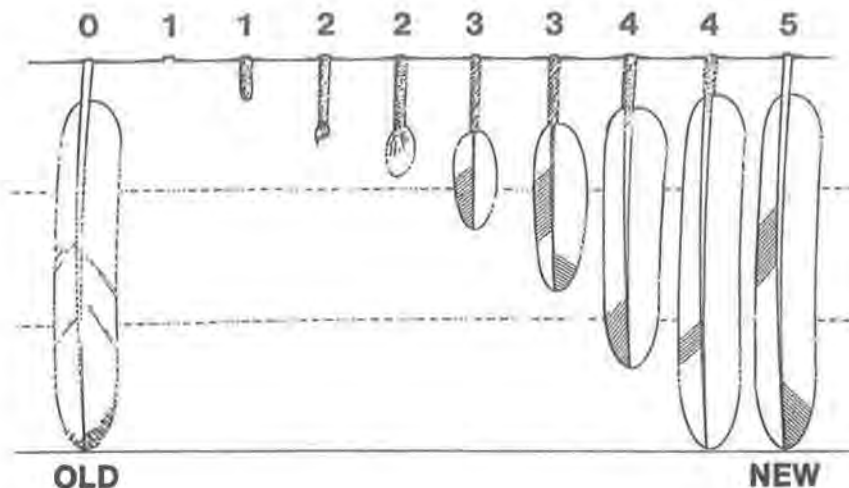
Record stage for complete feather grouping as:

- O = No moult activity
- S = Slight moult activity
- A = Active moult
- C = Moult completed

Record stage for each feather as shown below :

- 0 = Old feather
- 1 = Missing or new feather in pin
- 2 = New feather less than 1/3 grown
- 3 = New feather 1/3 to 2/3 grown
- 4 = New feather 2/3 to fully grown with trace of waxy sheath
- 5 = New feather fully developed

M
O
U
L
T



If you encounter any difficulties in using this sheet please contact the banding office. The collection of complete moult descriptions is time consuming and should only be undertaken when there are sufficient personnel available to ensure that the handling time of birds is not significantly increased. Mould descriptions should not be taken to the detriment of other birds being banded.

The "Moult Description Sheet" was designed and prepared by W.R. Phillips. Diagrams were provided by C.P.S. de Rebeira. (9/87)

MOULT CODES

The moult codes are similar to the codes used for colour descriptions of plumage. The moult codes are also set-out in the same order as the colour codes.

- M1 = moult of primaries
- M2 = moult of secondaries
- M3 = moult of primary coverts
- M4 = moult of secondary coverts
- M6 = moult of alula (bastard wing)
- M7 = moult of median upperwing coverts
- M8 = moult of lesser upperwing coverts
- M9 = moult of underwing coverts
- ME = moult of ear coverts
- MH = moult of forehead and lores
- MC = moult of crown
- MI = moult of chin
- MN = moult of nape
- MM = moult of mantle and back
- MR = moult of rump
- MS = moult of scapulars
- M5 = moult of tail
- MU = moult of upper tail coverts
- MD = moult of under tail coverts
- MF = moult of flanks
- ML = moult of belly
- MB = moult of breast
- MT = moult of throat

Moult can be recorded in two ways; details of these and the feather groups is given in section

6.8. The score codes are listed below:

For complete feather groups —

- O = No moult activity
- S = Slight moult activity
- A = Active moult
- C = Completed moult

For individual feathers —

- 0 = Old feather
- 1 = Missing or new feather in pin
- 2 = New feather less than $\frac{1}{3}$ grown
- 3 = New feather $\frac{1}{3}$ to $\frac{2}{3}$ grown
- 4 = New feather $\frac{2}{3}$ to fully grown with trace of waxy sheath
- 5 = New feather fully developed

COLOUR MARKING METHODS

The codes for colour marking fall into two groups; the colour marks carried by a bird at a certain date (including the application of the colour mark) and the codes to describe the removal and/or replacement of colour marks.

Describe the colours that are used with the following symbols:

- b for dark blue
- c for crimson
- e for grey
- g for dark green
- k for pink
- n for black

11.11



*→ G Pearson: to note
protected by 4/1/85*

AUSTRALIAN NATIONAL PARKS AND WILDLIFE SERVICE

AUSTRALIAN BIRD AND BAT BANDING SCHEMES

G.P.O. Box 8
Canberra, A.C.T. 2601
Phone (062) 466180 Telex AA62971

Ourrel
Yourrel

BANDER'S BULLETIN

No. 1, June 1985

I have reserved my "A" class licence for 8/86.

Dear Bander,

This is the first of what we hope will be a regular newsletter through which we will provide you with information about the banding scheme and any associated activities of interest. At this stage our intention is produce the bulletin twice a year depending on the information which comes to hand. Should you wish to advertise a forthcoming event or alert other banders to colour-marked species we will be only too happy to include such information. Banders are also encouraged to advertise the same material in the other existing newsletters such as those from the Australian Bird Study Association and the Royal Australasian Ornithologist's Union. We will also use the bulletin to notify you of any procedural changes associated with the banding scheme and any additions or changes to the list of recommended band sizes.

This edition is co-incident with the annual renewal of banding authorities and we would ask you to carefully read and note the several changes associated with the re-issue of authorities, colour banding and band issues which are described in the following pages.

Also included with this bulletin are several sheets which should be completed and returned by 'A' class banders only. From now on all projects will receive a number and this will be used as a reference for the computer storage of data. Any future requests for printouts of the banding information for a particular project will then be greatly simplified. More details are given in the "Banding Office" section. Also included is a form relating to the confidentiality of data and this should be very carefully considered.

Banders will be pleased to know that we are rapidly catching up on the back-log of banding data for this financial (banding) year. An additional staff member has been employed for a short time to hasten the recording. Some of you will have already received computer printouts of your data for checking and in the near future this will be the case for all of you.

David Purchase finished his activities as Secretary on 30 March last and is now fully engaged in analysing some of the banding data in the preparation of several publications. We join all banders in acknowledging David's devotion to the Australian Bird and Bat Banding Schemes and thank him for his fine efforts. David will continue his association with the schemes through his

analyses and so will remain a familiar face in the banding office for some time. Finally we are saddened to say farewell to Mrs. Estelle Lawler who is leaving us after having served the Scheme most efficiently for the past five years. We take this opportunity, on behalf of all banders, to thank Estelle for her commitment to the Schemes during this time. The smooth transition of the Banding Schemes from CSIRO to ANPWS would not have been possible without the assistance of both Estelle and David. To them both we express our gratitude.



W.R. Phillips
Secretary



K.W. Lowe
Co-ordinator

FROM THE BANDING OFFICE

**** BANDING INFORMATION FOR THIS YEAR IS NOW DUE ****

When you return the enclosed forms you should also send any outstanding schedules for this banding year (i.e. up to and including 30th June). For the present you should continue to use the existing schedules and recovery forms and fill them out in the standard manner. Please take particular care that you include accurate co-ordinates of the banding site, species numbers, and the "new" age codes (which were introduced as of 30 June 1984) where possible. Don't forget your greens !!!

The new style schedules will replace all of the existing forms, i.e., banding and all recovery information can be included on the one form. The new data sheets are intended for field use and should not require rewriting of the data for submission to us. The sheets are presently being field tested by several experienced banders and we hope that they will become available to all banders when their authorities are renewed. The schedules currently in use will then not be accepted by the banding office for birds and bats banded after 1 August 1985. The accurate and efficient computer storage of banding data relies heavily on the use of codes. We have attempted to keep these as simple as possible and for most of you it will mean familiarising yourself with only one or two new numerical descriptions for how a bird was caught, aged and sexed. In addition the new data sheets will simplify the procedure of describing the banding site. Rather than writing out the co-ordinates each time, the details of the site can be registered with the banding office and thereafter you can use a two digit code to designate that site on the data sheets. 'A' class banders should note that provision has been made on the enclosed "Project Description" form for this information to be recorded. Many banders have already been allocated location codes for some

sites as their data was input into the computer database. A list of these codes has been sent to these banders. All banders will be contacted to supply details for these location codes.

In addition a "Banders Diary" form has been produced which will enable you to keep records of the weather conditions, number of nets used, times of opening and closing the nets etc. in a routinely recorded fashion. This information will be stored on the database and will tell us more about when particular species are active and how they are most likely to be encountered. The forms also record the details of bird mortalities that occur during banding so that the causes of mortalities can be monitored and remedied.

NEW PROJECTS

Please remember that if you are the holder of an 'A' class banding authority this does not entitle you to commence banding projects anywhere in the State or Territory for which you are licenced to operate. Apart from seeking the permission of the relevant State fauna authority to trap, band and release in a new area you must also submit the project aims for approval by the Co-ordinator of the Banding Scheme. If the project is approved it will be given a project number and allocated location codes by the Secretary.

CONFIDENTIALITY OF BANDING DATA

As of the 1st of August 1985 a formal system of safeguarding confidential banding data will be introduced. Banders are now invited to apply in writing to the Co-ordinator outlining which band records are to be reserved for the bander's sole use. The most efficient manner to administer this system is for complete banding records to be nominated so that they can be processed correctly although the confidentiality may apply to only part of the record (eg measurements, recovery information, etc.). Banders will specify exactly what data is to be considered confidential. A five year moratorium will then be enforced for each banding record from the date of banding. If requests are made for access to data that is confidential the Co-ordinator will approach the banders concerned enquiring as to whether the bander wishes to make an exception for the release of some or all of the confidential data. When the five year moratorium has expired the Co-ordinator will discuss with the bander progress towards analysis and publication of the banding data and whether a further five year moratorium will be applied to the banding data. Band recovery data will be similarly treated with the five year moratorium starting from the date of recovery. Of course, details of banding and recovery that are required for "Report of recovery to finder" forms will be exempted from the moratorium. The system is designed to protect the interests of banders where it is clear that the bander intends to analyse and publish his/her data. Most banders will not require confidentiality and will be enthusiastic about the analysis and utilization of their banding data. No analyst will have sole rights of access to banding data.

****NB**** If a bander does not formally notify the Banding Scheme of the need for confidentiality then it will be assumed that responsibility for controlling access to the data is transferred to the Co-ordinator. As in the past the Co-ordinator will allow access to such data only if he considers the request legitimate and if a written undertaking is given that all banders responsible for the data will be duly acknowledged in any publications.

The Co-ordinator will also nominate selected species (mainly endangered species) for which all banding data will be strictly confidential. The computer database has three functional security barriers that will protect these data from unauthorised use. The present practice of providing inexact banding data on Recovery Reports will be continued for these selected species.

AUTHORITY RENEWAL

As in past years banding authorities become due for the renewal as of 1st August. On this occasion however they will be valid for a period of only 11 months meaning that they will expire on 30 June, 1986. With the endorsement of the State fauna agencies we have decided to bring the issue of banding authorities into alignment with the licensing by the State system. This will mean that the renewal forms will be sent out next year on or about 1 June. At this time you will be reminded to renew your State licence and also to submit any outstanding schedules for that year at the time of returning the authority renewal forms. Authorities may be withheld or cancelled for those banders who do not keep their species schedules up to date. You are reminded that you may NOW need to RENEW your State or Territory license for the year 1985/86.

The banding authorities themselves have been redesigned and are now a small, wallet-sized card similar in size to most credit cards. When you receive your new authority, sign it and then seal it within the plastic covering provided. This must be carried with you whenever you are actively engaged in handling and banding birds. The State fauna authorities do not look kindly upon those who cannot prove that they are bonafide banders when challenged by Rangers. You should take care to destroy cards which have expired and the loss of a card should be immediately reported to the Banding Scheme.

COLOUR BANDING

At present the colour banding scheme is running very much in an ad hoc way. It is somewhat embarrassing for the Scheme when we are unable to provide banding information to members of the general public who phone in with information on a colour marked bird. There have been several instances lately where the staff of the Banding Office have been totally unaware of on-going colour banding programmes.

Banders are reminded that authority has to be gained from the Bird Banding Scheme to undertake any form of colour marking. We will then provide you with a unique colour coding system for that species. Colour banding authorities will be renewed annually with the general banding authority and any expansions to the colour marking programme (in terms of either species or number of individuals) must first be approved by us so as to avoid duplications of the colour combinations. Colour banding has become so popular that there is now the possibility of significant levels of confusion and loss of data without proper co-ordination from the Banding Office.

Colour bands are no longer available from the Bird Banding Scheme and must be purchased from the Australian Bird Study Association (contact : Mrs. Wendy Filewood , 26 Trelawney St. Eastwood NSW 2122). Colour bands will only be issued to 'A' class banders (or 'B' class banders with the written endorsement of their 'A') who can cite their approved project number (see section entitled "Project Numbers". The Bird Study Association will have up-to-date listings of all authorised banders and their project numbers.

We hope you can all appreciate that we have been forced to take these measures because the number of persons colour banding and tagging increases weekly and we are fast approaching an impossible situation. All banders who are currently responsible for a colour marking project should complete the relevant sections on the attached sheets.

BAND SUPPLIES

In future bands will only be issued on THURSDAYS in order to streamline the record keeping and despatch procedures. Unless the circumstances are extenuating requests for bands and other stocks will be held over until Thursday of each week. Requests for bands and supplies will not be accepted by telephone and for the present you should continue to use the normal pink forms. Several recent requests for supplies have come in the texts of letters relating to other matters. These tend to be overlooked and the supply of the items cannot be guaranteed. Please use the pink forms and attempt to anticipate your band needs well in advance.

TRIAL OF BAND SIZE

It has come to our attention recently that some banders are undertaking band size trials without first consulting with the Banding Office. Before banding a species which does not appear in the list of recommended band sizes, or amendments, you must first contact the Secretary to obtain a "Trial of Band Size" form and to learn of any other such band trials which have already been carried out for that species. We rely heavily upon your judgement in the area of ideal band size for infrequently encountered species, however, it is vital that we know of band size trials so that other banders can be advised.

SUBMISSION OF COMPUTER STORED BANDING DATA

Banders who store their banding data on computers may be able to submit that data to the banding scheme on computer media such as magnetic tape, floppy discs or microdiscs. Several banders have agreed to submit their data in one of these forms. There are several advantages in this procedure including the minimisation of data coding errors and the avoidance of "keying" the same data twice (once by the bander and once by the staff of the banding office). Any banders who may be in a position allowing them to submit banding data on computer media are encouraged to do so and should write to the Co-ordinator to arrange the transfer of the data.

BANDING SCHEME "HOTLINE"

It is certain that many banders will have queries regarding the new procedures that are being introduced to the banding schemes. As well, we are very keen for banders to provide advice and offer suggestions to us and to assist this we would be pleased to answer these approaches from banders both on the telephone and by letter. The banding schemes' "hotline" and address are both given on the front page of this bulletin.

BAT BANDERS PLEASE NOTE

All of the preceding information also applies to bat banders although you will not be receiving the new card-style authorities at this time.

Please note the recent revision to the species which previously fell within the Genus Nycticeius (Kitchener and Caputi, 1985 ; Systematic Revision of Australian Scoteanax and Scotorepens (Chiroptera : Vespertilionidae), with Remarks on Relationships to other Nycticeiini. Rec.West.Aust.Mus.1985, 12(1); 85-146).

What was Nycticeius rueppellii is now Scoteanax rueppellii and the generic name for N.orion , N.balstoni , N.sanborni and N.greyii has been changed back to Troughtons (1943) form ; Scotorepens.

Bat banders should also note that for the purpose of computer storing data their authority numbers have been prefixed with "90" (i.e. what was authority number 53 now becomes 9053). Please note this change and in future submit all schedules under your altered authority number.

FORTHCOMING EVENTS

1. Arid Zone Bird Study Workshop

The Bird Study Association is organising a workshop on field study methods at the University of NSW Arid Zone Study Centre, Fowlers Gap from September 1-7, 1985. Fowlers Gap is about 100 km. North of Broken Hill and is an ideal location for such an exercise. More details can be obtained from Win Filewood (26 Trelawney St., Eastwood NSW 2122). Dormitory style accommodation and shearers cooking facilities will be available. You are required to provide your own food and advised to bring your warmest gear.

2. Guide for Sexing and Aging Australian Bushbirds

Ken Rogers has approached the banding office for support in the production of a guide for bushbirds. The banding scheme has been allocated funds (from within the Australian National Parks and Wildlife Service budget) to publish a short guide based on material collected on live birds trapped for banding. The guide will be given free of charge to all banders. Ken Rogers is currently preparing accounts for over 50 species. There is a clear need for other banders to write accounts for particular species describing the sexes and age classes (and giving measurements) for inclusion in this guide. Banders are hereby invited to contribute to the project by contacting the Coordinator for full details of content, format and species coverage. The types of accounts will vary from fully documented "cut and dried" accounts to others which include moderate levels of speculation on age and sex characters. Both the full and speculative accounts will be field tested by all banders during a twelve month period after which a second or revised edition of the guide will be published through the banding scheme.

PTO

BE ON THE LOOKOUT FOR !

1. Colour Banded and Wing Tagged Cattle Egrets

The colour marking of cattle egrets has been going on at ten colonies on the northern NSW and southern Queensland coastal region for several years now. These birds move down the NSW coast to Tasmania and New Zealand in late-summer and autumn. We have received several reports of colour marked cattle egrets in New Zealand and around the banding sites however very few reports have come from localities in between. These birds carry either combinations of colour bands on the tarsii and tibia denoting the colony and season of banding or patagial tags of various colours with two numbers or a number/letter combination on them. Please notify the Banding Office of any sightings. Some Little , Intermediate and Great Egrets have also been colour banded by Max Maddock at the Shortland Wetlands so keep your eyes open.

2. Colour Dyed Albatrosses

The French Antarctic authorities have notified us of a large scale colour dying programme carried out on the Kerguelen Group of islands in December of 1984. The breast feathers of 1,500 Black-browed albatross , 2,500 Grey-headed albatross and 200 wandering albatross have been colour dyed either pink or orange/brown. If you're working around the southern Oceans be alert and report any sightings to us.