

Western Australian Bird Notes

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June 1982

Quarterly Newsletter of the W.A. Group
Royal Australasian Ornithologists Union

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NEW RAOU WATERBIRD PROJECT OFFICE

Over the weekend of 15-16th of May, 1982, the RAOU Waterbird Project Office, which has moved to its new location at:

69 Lanark Street, (red brick house at the junction
Coolbinia, W.A. 6050 of Carnarvon Crescent and
Telephone (09) 444 9936 Lanark Street)

This should be a more convenient location for RAOU members and Waterbird Project participants to drop in on — so please do! As the Field Officer Roger Jaensch also now lives at this address, you may contact him after hours on the same telephone number. A telephone answering machine will soon be installed to enable you to leave detailed messages if he is not in when you ring.

COMING MEETINGS

The June meeting will be held at Gygnat Hall, on the waterfront, near the corner of Hackett Drive and Stirling Highway, beginning at 8.00 p.m.

Monday, 28th June — Graeme Chapman will present an illustrated talk: "Birds of the Salmon Gum Woodlands". Graeme has been studying the breeding ecology of cockatoos in the Mukinbudin area and hence is well acquainted with the salmon gum country.

There is some doubt as to whether the September meeting can be held in Gygnat Hall: please check the September issue of this newsletter for confirmation of venue.

Monday, 27th September — John Dell of the W.A. Museum will speak on "Birds of the Jarrah Forest".

Annual Dinner & Meeting — An early reminder that this prestigious but quite inexpensive event will be coming up early in January 1983. It will probably be along similar lines to the 1982 gathering. Please watch the September and December issues of this newsletter for booking details.

COMING EXCURSIONS

Our programme for the next quarter includes two longer-distance excursions in order to encourage country members and interested persons to participate.

1. Saturday, July 10th — Northam/Goomalling area — We plan to visit Lake Walyormour for waterbird training and also the Wongamine Reserve. Meet at 7.30 a.m. at the city end of Centrepoint carpark, opposite the Midland Town Hall, Great Eastern Highway, to organise vehicles. We hope to have our

leader Lindsay Mitchell outside the Northam Post Office (239 Fitzgerald Street) at 9.00 a.m. — look for people with binoculars! This will be a full day excursion, travelling approximately 275 km in the round trip from the Midland Town Hall.

2. Saturday, August 7th — Dobaderry Nature Reserve (off Brookton Highway, about half-way between Mt. Dale and Beverley) — Half-day bush birds excursion: distance to reserve from Kelmscott is about 70 km. Meet at 8.00 a.m. at the first parking opportunity just past the intersection of Canning Road and Brookton Highway, Karragullen. A return trip via the York Road may be organised.

3. Saturday, September 18th — Eagle Hawk Flats & Karakin Lakes — Leader: Roger Jaensch. Full day excursion including waterbird training, completing a round trip of about 275 km from the Perth G.P.O. Meet at 8.30 a.m. at the south side of the bridge over the Moore River, on the Lancelin Road. Those wishing to rationalise vehicles or requiring a lift should meet at 69 Lanark Street, Coolbinia at 7.00 a.m. We will start by looking at coastal-plain scrub north-east of Lancelin and will later move on to the Karakin Lakes.

R.J. may be continuing on to look at wetland nature reserves in the Eneabba and Watheroo districts over the following two or three days. He will be happy to guide people to these places: please contact him beforehand if interested.

4. See also under "Training" in the Waterbird Project report in this issue.

North West Wader Studies Expedition — Spring 1982 (see also p. 1, WABN No. 21).

Opportunities still exist for people to join the second RAOU spring wader expedition to the NW over the period 1st to 11th September 1982. There is a possibility that group transport could be arranged if numbers are sufficient, and also a chance that funds for petrol expenses could be allocated to drivers of four-wheel-drive vehicles joining the expedition. No prior experience at wader banding is needed. However, we would ask that expeditioners be prepared to participate for the whole of the eleven day study period.

If interested, please contact the Field Officer in Coolbinia immediately.

WAROONA WEEKEND — OCTOBER 1-4, 1982

The RAOU, W.A. Group, will hold a weekend conference at the Waroona Hotel on the Queen's Birthday weekend, October 1-4. Most time will be devoted to Benger Swamp and its birds. A large part of Benger Swamp, W.A.'s largest southern fresh water wetland, has been purchased by the W.A. Department of Fisheries and Wildlife who are developing management plans for the area.

The weekend will provide an opportunity for RAOU members to talk with Dr. Andrew Burbidge, the Chief Wildlife Research Officer, and Jim Lane, the Waterfowl Research Officer as well as to hear about the Birds of Benger from Eric Sedgwick. Eric has known the swamp and its birds well for many years and is willing to help us during the weekend.

The weekend will also follow up the series of talks this year on the woodlands and forests of the south-west, with an excursion to the coastal tuart forests near Waroona.

The provisional programme is:

Friday, October 1 from 5.00 p.m. Arrive.
6.00 p.m. Dinner.
8.00 p.m. Talk on local birds and Benger Swamp by Eric Sedgwick.

Saturday, October 2 8.00 a.m. Breakfast.
All day excursion to Benger Swamp. Cut lunch available.
7.00 p.m. Group Dinner.

Sunday, October 3 8.00 a.m. Breakfast.
All day excursion Benger and surrounding woodland. Cut lunch available.
6.00 p.m. Dinner.
8.00 p.m. Discussion on Benger Swamp with contributions by Dr. A. A. Burbidge and J. A. K. Lane.

Monday, October 4 8.00 a.m. Breakfast.
Excursion to tuart woodland. Cut lunch available. Return to Perth.

Accommodation will be in the Waroona Hotel on the S.W. Highway. 11 Single rooms, 3 flats (2 single beds, 4 single beds; 1 double and 2 x two single beds), two twin rooms and one double room are available. Prices are:

Single room	\$12.00 per night
Single room/bathroom	\$16.00 per night
Flats	\$10.00 per person
Twin Rooms	\$10.00 per person
Double Room	\$20.00
Breakfast	\$ 4.00
Cut Lunch	\$ 4.00
Dinner	\$ 6.00
Saturday Dinner	\$ 8.00

Bookings should be made as soon as possible to Stephen Davies, Waters Upton, Mount Helena, W.A. 6555, stating the type of accommodation preferred and enclosing a \$5.00 per person deposit. I shall assume that you want full board for the whole period of the conference unless you otherwise state. Each participant will be responsible for settling their own account with Mr. John Blackburn, the hotel manager, but we have arranged for him to hold all accommodation for us at present.

Stephen Davies.

MARCH MEETING

Sixty members and their friends attended the first of this year's evening lectures on Monday, March 29th. Dr. Ron Wooller spoke about his work on the birds of the Karri forest. He discussed the factors that control the diversity of species living in the forest and the abundance of those that do. His talk was illustrated with some beautiful photographs and promoted a lively discussion of the effects of developmental changes on the forest and its birds.

MAY MEETING

An enthusiastic group gathered at Cypriot Hall on the 3rd of May to hear visiting American ornithologist Val Mills. Val has been working on Black Eagles in the Matopos in Zimbabwe.

Zimbabwe. Val's work is largely un-funded but is supported by an experienced team of volunteers.

The Black Eagle *Aquila verreauxi* is a little smaller than our Wedge-tailed Eagle *Aquila audax* and it feeds almost exclusively on the hyrax, a mammal sharing the same rocky habitat as the eagles. Black Eagles frequently nest at exposed sites on huge rock domes. In order to monitor the progress of eggs and young at these sites, skills in rock-climbing had to be developed within the study team. Collectors of Black Eagle eggs were partly deterred by volunteers writing on the eggs with felt pens. The Matopos study team now had detailed knowledge of eagle territories in the Matopos and factors affecting breeding success there (e.g. rainfall). It is now experimenting with techniques for marking and identifying individual birds.

Val concluded her captivating talk by showing a movie film of a wild female eagle that allowed her to handle its eggs and even stroke it, whilst it was still sitting on the nest!

TORBAY CAMPOUT REPORT

February 27th - March 1st, 1982

Forty people attended the RAOU's long weekend camp at Torbay. Participants came from as far as Albany and Perth. Ongeup, Albany, Tenterden, Denmark, Manjimup (foresters); Boyup Brook, Williams and Perth. The venue for the campout was the Woodbury - Boston Environmental School, a superbly out-fitted camp-hall on Torbay Hill, with a spectacular panorama of the rugged Torbay coast.

Light showers on the Saturday did not dampen the enthusiasm of those who investigated nearby karri stands. They were rewarded with good views of feeding Crested Shrike-tits, and Elegant Parrots. Spreading out over the swampy heath near Lake William, observers saw Red-eared Firetails and surrounded a family of Southern Emu-wrens, but alas they did not flush any Ground Parrots!

Waterbirds were the focus of attention on the second day and a trek to Lake Pleasant View near Manypeaks resulted in two Australasian (Brown) Bitterns being flushed from the sedge and seen in flight by all observers. Spotless Crakes were observed at the muddy edges of a bed of spike-rush (Baumea).

Moving on to salt marsh at Emu and Rushy Points near Albany, we encountered roosting Great Knots, Large Sand Plovers and Bar-tailed Godwits which were comfortably viewed with tripod-mounted spotting scopes. While observers were creeping closer to the waders, a group of Rock Parrots alit beside the party, affording brilliant views. We visited an Osprey nest beside Torbay Inlet on the way back to camp and found an immature bird perched tightly in a nearby dead tree.

Car loads went into Albany on two nights to help Ken Mills mist-net waders at Emu Point (see his report this issue).

On the way back to Perth we visited the extensive Lake Muir Wetland Nature Reserves complex and birds seen included Blue-billed Ducks and Great Crested Grebes on Byenup Lagoon.

The campout generated great interest in bird studies in the South Coast region and several people joined the Waterbird Project team. We are most grateful to the Woodbury family for their hospitality at Torbay and we wish them all the best with their venture.

LAKE FORRESTDAL EXCURSION REPORT

Saturday, 13th March, 1982

Delayed distribution of the March issue of W.A.B.N. prevented the announcement of this RAOU excursion, but those present at the February outing were informed and a small group (including several "new faces") subsequently turned out on March 13th.

Lake Forrestdale had dried back past the edges of most reedbeds, enabling observers to easily circumnavigate it. Waterbirds had reached peak numbers in the shallow conditions and 28 species were identified. Detailed counts by David James on the following day produced a total of 14,800 birds of which about one-third were waders, one-third ducks and swans and not quite one-third other birds.

Black-winged (Pied) Stilts, and Red-necked Stilts (3,000) were the most abundant waders present. All observers had excellent looks at colourful Long-toed Stilts feeding at the water's edge or crouching in hollows made by human footprints: 26 were seen all told. Other highlights included Glossy Ibis (5), Yellow-billed Spoonbills (8), Black-tailed Godwits (12), a Wood Sandpiper, a Pectoral Sandpiper and a lone Whiskered Tern.

R.J.

GARDEN ISLAND EXCURSION REPORT Saturday, 17th April, 1982

A total of 65 people had gathered at the causeway carpark by 10 a.m. for a visit to the northern end of Garden Island. The group, which included members of the R.A.O.U. and the Kwinana-Rockingham-Murray Branch of the W.A. Naturalists Club, was escorted across to the excursion area by the Garden Island ranger, Mr. Kerry Taylor. A brief stop was made at Brown Bay to check for wading birds because a Water Group cannon netting was planned for the next day. Grey Plovers, Ruddy Turnstones, Bar-tailed Godwits and many Pied Oystercatchers were seen.

The group then dispersed to search the area beyond the armaments depot. Much of this area is still largely undisturbed but despite the number of observers, only 31 species of birds were seen. One of the highlights of the day was an Osprey seen on its nest built on a limestone outcrop on the western shore. Sacred Kingfishers were seen on the rocks nearer the water level.

Birds seen during the day were: Pied Cormorant, Little Pied Cormorant, Eastern Reef Egret, Pacific Black Duck, Osprey, Banded Lapwing, Grey Plover, Ruddy Turnstone, Bar-tailed Godwit, Pied Oystercatcher, Silver Gull, Roseate Tern, Fairy Tern, Crested Tern, Senegal Dove, Common Bronzewing, Sacred Kingfisher, Welcome Swallow, Tree Martin, Piplit, Black-faced Cuckoo-shrike, Western Gerygone (Warbler), Grey Fantail, Willie Wagtail, Golden Whistler, Rufous Whistler, Western Silvereye, Brown Honeyeater, Singing Honeyeater, Grey Butcherbird, Australian Raven.

Peter Wilmot.

WAGIN FIELD DAY REPORT Saturday, 24th April, 1982

A small contingent of Perth ornithologists met Great Southern and wheatbelt birdos at Narrogin at 9.00 a.m. and then proceeded to Lakes Walbyring (fresh), Taarblin and Bokan (both salty), where the Waterbird Project was explained in detail. Use of spotting scopes was demonstrated at Lake Bokan and about 30 ~~low water levels or over wintering~~ Red-necked Stilts were detected in the flooded samphire fringes.

We met other observers at Wagin at 12.00 noon, bringing the total party to 19 persons. After lunch at Parkaverring Lake, Ray Garstone led the group on a tour of lakes west of Woodanilling, many of which were unusually fresh and deep following the January floods. In past seasons, few birds would have been present on these lakes in April, but we found good numbers of ducks including Pink-eared Ducks with young.

The Field Day was a great success in that people met other birdos from different areas while coverage of wheatbelt wetlands for the Waterbird Project was improved by nine reserves.

EYRE BIRD OBSERVATORY

Eyre has been greatly improved in the last few months by the sealing of the underground water tank and the installation of a solar hot water system. Our thanks to the H.E. Anderson family for support for this work and to Keith and Marjorie Bradbury, Doug and Peter Watkins and Shapelle McNee for the hard work involved.

Courses in the near future are:

Aug. 29 - Sept. 4: Bird Banding. Leaders: ~~Peter de Rebeira~~
Peter de Rebeira

Sept. 5 - 11:

Birds in the Landscape. An art course led by Eileen Brooker

Bookings to Peter Congreve, Warden, Eyre Bird Observatory, Cocklebiddy, via Norseman, W.A.

W.A. BIRD REPORT 1982

Many thanks to all those people who have sent in reports and letters. I shall be replying to the letters soon. I am pleased that there are many reports from country people, outnumbering those from city based observers.

With very few recent records to hand I have nothing to report in this newsletter. I would happily make this a feature of future newsletters if records become more regular.

There is still some confusion as to what records I shall be using in the compilation of the final report. I hope eventually to have sufficient records of all species to enable changes in population in relation to seasons, years, weather and any other factors to be monitored. These may be man-induced changes such as changes in landscape or natural changes such as forest die-back. For this to be done, I need records of all species, especially if they form part of regular observations from the same area, or a complete list from a single visit to an area of interest. Possibly some of you may pay a subsequent visit to the area and make the observations even more valuable. Where possible, it is preferable to avoid such terms as common, rare etc. and try to estimate numbers i.e. 3 kestrels per 10 km.

I look forward to receiving more records soon. Please note my new address and phone number.

15 Lagonda Drive, Gwelup, W.A. 6021 — Telephone 445 2417

Geoff Shannon.

NATIONAL WADER COUNT SUMMARY

The results of the National Wader Count have now been collated and are currently being analysed in Melbourne by the A.W.S.G. Co-ordinator, Brett Lane. A report on the results for W.A. has been prepared and distributed to all contributors.

In brief, 28 observers submitted 99 reports regarding 86 different sites. The great majority of the sites covered were in the Metropolitan, South-West, and Great Southern areas, for which coverage was good. Coverage was fair in the South-East (Esperance) and Mid-West (Geraldton) areas, but only nominal in the North-West (i.e. Shark Bay to Kununurra). More observers are urgently required in these areas.

A total of 43,744 birds were recorded, with 35 species represented. In addition, reports covering dates prior to the count were received from Broome and Bremer Bay, which unfortunately could not be visited in February. This subsidiary data concerned 2,789 birds of 29 species, including 4 species (Oriental Plover, Little Curlew, Marsh Sandpiper and Australian Pratincole) which were not recorded during the count proper.

The overall results are summarised region by region in Table One.

A particular feature of the count was the large number of birds observed on Peel Inlet near Mandurah. These included Banded Stilt (9,250), Red-necked Stint (4,750), Black-winged Stilt (1,900), Red-necked Avocet (1,500), Sharp-tailed Sandpiper 680 and Red-capped Plover (540). It is not possible to say at this stage whether this is a typical pattern, or a consequence of the flooding of inland wetlands which occurred as a result of heavy unseasonal rains shortly before the count.

It is not possible to present more detailed results here, and anyone requiring either specific information or a copy of the W.A. report referred to above, is therefore invited to direct their request to me personally.

Early information from R.A.O.U. headquarters indicates that in excess of 630,000 birds were counted throughout Australia, and that after subsidiary data gathered earlier in the season have been added, the gross total will exceed 1,030,000 — a remarkable result for only the second ever summer count. An over-

TABLE 1 SUMMER WADER COUNT WESTERN AUSTRALIA February 1982	South-East	Great Southern	South-West	Metropolitan	Mid-West	North-West	TOTAL
Bush Thick-knee		2					2
Pied Oystercatcher	31	21	9	39		4	104
Sooty Oystercatcher	75	41	16	7	3		95
Banded Lapwing		10	15		5		30
Grey Plover	50	133	56	79	35	31	384
Lesser Golden Plover		41	6	2	17	8	74
Hooded Plover	23		2				25
Mongolian Plover				2			2
Large Sand Plover		32	12	4	3	200	251
Red-capped Plover	166	205	1,274	374	174	42	2,235
Black-fronted Plover	8	16	37	59			120
Black-winged Stilt	3	2,464	2,039	1,825	72	8	6,411
Banded Stilt	200	771	9,552	898	15		11,836
Red-necked Avocet	15	457	1,626	114	6	20	2,238
Ruddy Turnstone	118	1		277	56	35	487
Eastern Curlew		1	2			11	14
Whimbrel				2	1	20	23
Wood Sandpiper			7	17			24
Grey-tailed Tattler	3	3		4		52	62
Common Sandpiper	13		17	12	12	2	56
Greenshank	9	51	171	42	13	26	312
Terek Sandpiper	3						3
Black-tailed Godwit				4			4
Bar-tailed Godwit	27	21	144	13		303	508
Red Knot	150	44	6	200		250	650
Great Knot	6	279	30	280		65	660
Sharp-tailed Sandpiper	3		1,558	78	41		1,680
Pectoral Sandpiper			5				5
Red-necked Stint	225	1,680	7,553	1,929	302	120	11,809
Long-toed Stint			8	28			36
Curlew Sandpiper			103	92	17	100	312
Sanderling	50			128	13		191
Ruff			1				1
Broad-billed Sandpiper						100	100
Oriental Pratincole				2		3,000	3,002
TOTAL	1,778	6,236	24,039	6,514	780	4,397	43,744

view of the count from a national viewpoint is currently under preparation, and will soon be distributed to participants together with a request for assistance in the winter count to be held during the first two weeks in July.

Ken Mills
State Co-ordinator
A.W.S.G.

5 Burns Street,
Narrogin, W.A. 6312.
Phone: (098) 81 1188 (work)
81 1809 (home)

WADERS IN THE GREAT SOUTHERN ONE YEAR ON

Twelve months have now elapsed since I began preparations for a study of waders in the Great Southern region of Western Australia, and as the trans-equatorial migrants have now returned to their northern breeding grounds, it is an appropriate time to review the activities of the last year and to begin planning for the next.

My activities for the year were centred on Albany, with the dual objectives of learning how many birds of which species were present in the area, and of establishing whether the trapping of waders for banding and biometric studies was feasible there.

In order to accomplish these objectives, I spent weekends in Albany at intervals of three to five weeks, where, with the help of local enthusiasts, counts were conducted and attempts were made to mist-net birds at night. Initial attempts at mist-netting were frustrating, with catches either very small or non-existent. In January, however, success was finally attained at a site near Emu Point, and the future looks most promising.

During the period 5th July, 1981 to 8th May, 1982, 24 species of waders were observed at Albany. The most common was the Red-necked stint, with a maximum count of 2,085. The more interesting species present included Lesser Golden Plover (maximum 41), Large Sand Plover (46), Eastern Curlew (3), Whimbrel (5), Grey-tailed Tattler (28), Terek Sandpiper (2), Black-tailed Godwit (1), Red Knot (90), and Great Knot (280).

Most species exhibited fluctuations in numbers during the season. As an example, a bar-chart showing the numbers of Red-necked Stints counted on different visits is reproduced in Figure One.

A total of 233 birds were trapped and banded, of which 213 were Red-necked Stilts. Of these, 7 were subsequently retrapped at or near the banding place, yielding valuable data regarding weight change and the progress of moult.

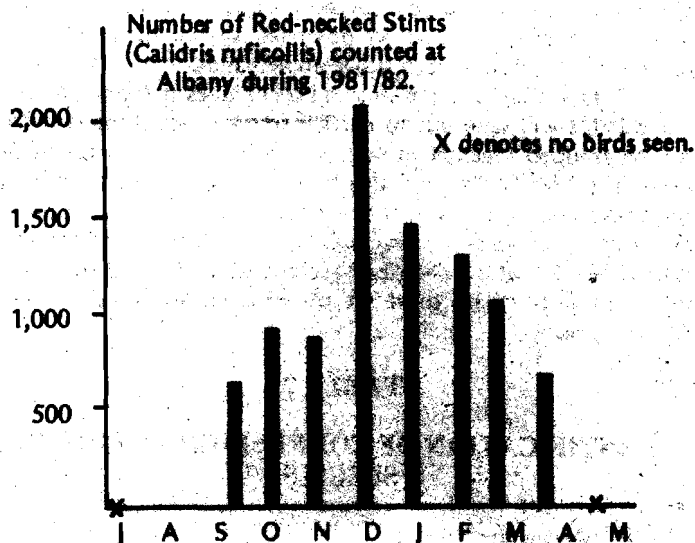
Now that a wader study project in the Great Southern region has been demonstrated to be feasible, I have set the following objectives for the coming year:

1. To form a Great Southern Wader Study Group to enable all who are interested to learn about waders and to participate in any or all aspects of fieldwork and analysis of the data gathered.
2. To expand the study to include other sites in addition to Albany, so that further wader habitat can be identified and documented.
3. To develop additional methods of trapping birds, enabling a greater variety of sites to be worked, hopefully increasing both the number of species and the number of individuals caught and banded.

An invitation to join the study is therefore extended to all who are interested in any way, whether experienced bird-watchers or not. Please contact me at 5 Hilda Street, Narrogin, or telephone (098) 81 1809 for further details.

KRM

FIGURE 1



W.A. WADER STUDY GROUP NOTES

The 1981/1982 wader banding season ended for the Perth subgroup with the cannon netting of 6 Pied Oystercatchers at Brown Bay, Garden Island, on 10th April, 1982.

The gross number of bird captures on the Swan coastal plain during that season was 709. After subtracting 15 (representing the number of birds retrapped after having been banded earlier in the same season), the subgroup is left with a record of 694 birds of 20 different species (including 6 Fairy Terns banded by or for Nick Dunlop of Murdoch University on Garden Island and 5 Spotless Crakes banded by Peter Curry and others at Lake Forrestdale) handled during that season.

Wader species new to the Group as a whole were Pied Oystercatcher, Red-kneed Dotterel and Sanderling, while the subgroup had not previously caught a Ruddy Turnstone. Two Sanderlings, incidentally, were retrapped in March at the same place on Garden Island where they had been banded last December. Other wader species taken were Grey Plover, Red-capped Plover, Pied Stilt, Banded Stilt, Red-necked Avocet, Whimbrel, Grey-tailed Tattler, Common Sandpiper, Bar-tailed Godwit, Red Knot, Great Knot, Sharp-tailed Sandpiper, Red-necked Stilt and Curlew Sandpiper. Of these, Red-necked Stilts were the most numerous, with a total of 402 birds including 25 retraps, followed by Red-capped Plovers, with a total of 156 birds including 4 retraps. At the

bottom end of the scale, the Ruddy Turnstone, Whimbrel, Grey-tailed Tattler and Common Sandpiper species each contributed a singleton. Regrettably, details of when and where some of the re-trapped birds were originally banded have not yet been obtained.

We must congratulate members of the Group, including those from the Safety Bay / Rockingham area who have supported cannon netting on Garden Island so well, on their efforts this last season and to thank those who, like the naval authorities on Garden Island and the Garden Island ranger, have given us such willing co-operation.

Jeremy Talbot.

REPORT ON NORTH-WEST WADER STUDIES EXPEDITION No. 2 : March - April 1982

(First expedition in August - September 1981 was reported in December 1981 issue of RAOU National Newsletter; second expedition also reported in June 1982 issue of RAOU National Newsletter.)

Twelve Western Australian Ornithologists and a television cameraman ventured north to the Pilbara and Kimberley coasts for a second RAOU wader studies expedition during the period 25th March to 5th April, 1982. Objectives were similar to those of the 1981 survey (i.e. to count and trap waders in order to learn of their biology and migration and to enhance conservation of their habitats), but access to some important sites was prohibited by floodwaters from a series of earlier cyclones.

Based on Roebuck Bay near Broome, participants trapped 620 migratory waders by firing cannon - nets over dense packs of birds roosting at high tide. The overall catch from the mangrove-tidal flat environment near Broome was similar in both species composition and proportions to the catch in 1981. However, whereas waders trapped in August - September were thin and light after their long journeys from Arctic regions, birds in the March-April catch had amassed prodigious fatty deposits to provide energy for their return flights. The Great Knot was again the most numerous species in catches and counts at Broome but the highlight here was the recapture of three Ruddy Turnstones banded in 1981 at the same locality.

Absolute numbers of waders were markedly lower near Broome in comparison with the 1981 "migration arrival" survey, but this was compensated by 28,000 waders counted at the saltworks of Leslie Salt Co., 33 km east of Port Hedland. Accounts of marvellous birding treats preceded our visit to this place. However, we were not prepared for 15,000 White-winged (Black) Terns mostly in pied breeding garb, nor 500 rufous, black and white coloured Mongolian Plovers or 500 similarly coloured Broad-billed Sandpipers and we certainly did not expect 150 Asian Dowitchers, some in full red and gold breeding dress. These are all outstanding totals when compared with previous Australian records. It would seem that these species have their strongholds in northern Australia - they are rarely, if ever seen at wader haunts in the south of Western Australia.

Conveniently accessible mist-netting sites at the saltworks yielded 131 birds including 71 Broad-billed Sandpipers and two Asian Dowitchers. The latter was a new species to be banded in Australia by the Australasian Wader Studies group.

One of the most intriguing results of counts made during this expedition was the radical difference in species composition and abundance between the saltfield and mangrove tidal flat environments. Little Curlews, Asian Dowitchers, Greenshanks and Broad-billed Sandpipers were recorded at the saltfields but not on the mangrove tidal flats near Broome, while the reverse applied to the Terek Sandpiper. Furthermore, Great Knots, tattlers, Whimbrels and Large Sand Plovers were common near Broome but rare at the saltfields while Mongolian Plovers, Sharp-tailed Sandpipers and Red-necked Stilts were far more numerous at the saltfields than at Broome. These differences may be due to various biological constraints (e.g. food types available) resulting from differences in the two environments (e.g. different tidal ranges), but further study is needed to clarify these initial findings.

Brief searches in flooded samphire on Sandfire Flat yielded breeding Black-winged Stilts and hundreds of Greenshanks and

Red-kneed Dotterels, white Oriental Pratincoles, Pin-tailed Snipe *Gallinago stenura*, Wood and Marsh Sandpipers and Long-toed Stints were recorded from sewage ponds at Port Hedland and Karratha.

The North-West wader studies expeditions have clearly generated great interest in waders both in W.A. and Australia and recently also in Japan. We even made the front page of "The West Australian" in September! Considerable knowledge has been gained about major wader concentration sites and wader species biology and several species in particular have become much better known than ever before. Our thanks to Channel 9 Television, the Department of Fisheries and Wildlife (especially Grant Pearson) and all who contributed in some way to this latest expedition.

SOUTH-WEST WATERBIRD PROJECT

Report by Roger Jaensch, RAOU Field Office

1. Recruitment. Since my last report, recruitment has resulted in all but three of the priority reserves listed (in Table 1) in W.A. Bird Notes No. 21, being allocated to observers. These three are White Water (P.W. No. 40), Taarblin (222) and Flagstaff (63) Reserves. Taarblin may only require occasional visits but the other two deserve regular coverage. To 1/6/81, 97 people have been sent introductory material for the Project (we expect that at least twice this number will be needed by the end of 1983) and 58 of these have chosen reserves that they wish to cover: 55 reserves have been allocated (about one third of all reserves to be covered). Country-based observers comprise almost half of the survey team.

Volunteers may opt to regularly survey a reserve that has already been allocated, as multiple coverage enables comparisons of results to be made, revealing how observers can differ in their count estimates. Group surveys are the best approach at wetlands too large to be comfortably surveyed in one day by one person. If you are passing a reserve in your travels, please feel free to undertake a survey if you have time, particularly where remote wetlands are concerned.

I can provide interested people with details of both reserve locations and allocations. You can assist our recruiting drive by mentioning the Project to your friends!

2. Survey Dates. The next three preferred survey periods are July 10-18, September 11-19 and November 6-14. Please consider doing extra surveys as wetlands start to fill and at breeding peaks. If you are unable to conduct counts at your reserve during the preferred and critical periods, encourage other observers also covering your reserve to do so at these times.

3. Equipment. All going well, each active participant will shortly receive final computer forms for use in this project, together with compatible instructions and (eventually) field record booklets. Returns sent in thus far will be transcribed onto the final computer forms, so please discard any Mk. 7A or earlier designs and use the final design exclusively from now on.

It had always been our intention to revise earlier designs at about this time, having as many flaws as possible removed through field testing. The principal changes are to delete the need to count nests (just tick categories of breeding evidence), delete the nest habitat columns, to no longer require waterlines as essential information and to add a surface water question, while the need to mark your survey route on the wetland map has been introduced.

I hope to be able to update all observer kits before the July survey period. The biggest job I face is getting wetland maps drawn: please use "mapped" computer forms in preference to any forms sent earlier without maps printed on their backs. Canoe licences should also be sent to recent recruits shortly.

If you have any queries about Nature Reserves, don't hesitate to contact the nearest Wildlife Officer, listed in metro and country phone books in the W.A. Government pages under Fisheries and Wildlife.

4. Training. Assistance to observers with any aspect of the Project will be available at the July and September RAOU excursions. Special field days prior to preferred survey periods are

planned as follows:

Saturday, June 26th - L. Joondalup - 10.00 a.m. till 1.00 p.m. Meet at the intersection of Scenic Drive and Ariti Avenue, Wanneroo. If weather is foul, post-pone to Sat. July 3rd (ring R.J. to check). We will be concentrating on techniques for identification of waterbirds likely to be encountered in winter surveys, and as always, beginners are especially welcome.

Saturday, August 14th - Narrogin Lakes - Meet at 10.00 a.m. at the intersection of Federal Street and the Harri-smith Road, Narrogin. We will mainly deal with techniques appropriate for surveying waterbirds in wooded wetlands.

Sunday, August 15th - Manypeaks Lakes - Meet at noon at the Manypeaks Store on the Jerramungup Road. We will investigate methods for finding birds and nests in the sedge-infested South Coast wetlands.

Saturday, August 21st - L. Forrestdale - 10.00 a.m. till 1.00 p.m. Meet at the picnic area at the end of Broome Street, Forrestdale. We will concentrate on techniques of surveying on foot winter-flooded, heavily-vegetated wetlands; also nest searching. Bring wading gear but not essential.

5. Techniques. In this project, we are not asking observers to use particular waterbird survey techniques every time they go out. Instead, we are presenting a range of ideas and suggested methods and merely asking that each person makes the maximum effort possible, each time a survey is done. Wetlands vary their character during the year so observers should apply the most suitable approach that each situation demands.

Rather than waiting until all techniques material has been compiled, I will send out to participants a series of papers which can be grouped together in your survey kit folders to eventually make a full set (which will also be indexed). The first paper was the Crake and Rail Key which you received with your introductory gear. The second paper was the set of notes and tables in WABN No. 21 which described techniques of finding and counting waterbirds. The third set of information is given in the following notes.

TABLE 2

IDENTIFICATION OF CONFUSING WATERBIRD SPECIES

- "Deepwater" species

(name abbreviations are those used in the field record booklets)

- all comments refer to adults.

1. Great Crested Grebe / Pied Cormorant (viewed at distance). GCGb sits high on the water and has a head crest (may be laid flat) and pale "body"; PieC sits low or submerged and has no crest and a blackish "body" (upper).
2. Australasian Grebe / Hoary-headed Grebe (non-breeding plumages). Notoriously difficult. Often need to leave "unidentified". HhGb never has buffy flanks. AuGb often has buffy flanks but will never have streaks on its face. Also look out for differences in posture.
3. Darter / Pied or Great Cormorant (in flight). Darter has jet plane (or "+" sign) silhouette - fine wings and neck and long, fanned tail (about as long as neck); also stiffer flight style than GreC or PieC. The latter have shorter tails and heavier necks and wings.
4. Pied Cormorant / Little Pied Cormorant (in flight). LiPC has slender body and fine neck. PieC has heavier body and neck, and the gleaming white neck "overbalances" the wings and tail.
5. Great Cormorant / Little Black Cormorant (in flight). GreC has pale face, LiBC does not.

6. **Hardhead / Blue-billed Duck.** Hard usually does not have erect "stiff tail", has a relatively long body, is always chocolate-brown on its upperparts, has a white undertail nearly always visible and has white wing-bands in flight. BbiD often has erect "stiff-tail" but can droop this in the water, it is more evenly proportioned — a shorter body, it may be dark grey or brown on its body, has a white undertail only when its tail is erect and has no distinctive plumage characters in flight.

7. **Hardhead / Musk Duck females** (males have bill lobe). Hard is never dark grey and has a fine bill cross-section. MusD is never chocolate-brown, never has white in its wings and has a heavy triangular bill cross-section.

8. **Blue-billed Duck / Musk Duck.** BbiD has a fine, dished bill and short body. MusD has a stout triangular-section bill and a long body.

9. **Dusky Moorhen / Purple Swamphen / Coot** (on water). DuMo has a fine bill and two vertical white strips under its tail. PuSn has a heavy bill and one large white patch under its tail. Coot has a fine bill and no white under its tail (not much of a tail either!).

(1) Identification of confusing waterbird species — species likely to occur in "deepwater" situations (i.e. under winter/flooded conditions).

Table 2 gives points of identification for separating confusing waterbird species pairs. The information should be used both as a guide to identifying unfamiliar waterbirds and as a check whenever you record either of the two species mentioned in each case (check that it wasn't the other species). Most of the identification points used can be found also in Pizzey's Field Guide (Collins, 1980) and were chosen as being the most practical to use in the field.

(2) Finding waterbird nests — general comments.

One of the first clues one should learn about nest finding (and avoiding) is where each species or group of species typically nests. Table 2 on page 5 of WABN No. 21 gives a rough guide of this type (see also texts on nests and eggs by Beruldsen, North etc.). More detailed information such as the types of sites preferred by a species within a particular region, can be found in publications such as Serventy and Whittell's *Birds of Western Australia* (1976). Some general clues which apply to many species are given as follows:

- A large proportion of waterbird nesting commences soon after water reaches its peak depth.
- In general, species which dive for their food nest first, while species dependent on shallow-thriving organisms will wait for levels to fall to allow their food source to prosper.
- Clues to follow up immediately are:
 - single birds flushed from appropriate cover,
 - agitated behaviour and distraction displays by single birds or pairs,
 - fresh or recent droppings near potential sites,
 - clumps of bent-over reed or sedge stems in otherwise upstanding beds,
 - walkways through or into isolated clumps or tussocks.
- Favourite sites for a number of species are the middles of large, droopy tussocks standing in water and in collapsed, dried material in *Typha* and *Baumea* beds.

Please beware of tiger snakes: do not put hand where eye cannot see! Also, do not touch eggs or young in order to minimise chances of nest desertion by parents. At all times keep the welfare of the nesting birds foremost. Do not enter breeding colonies of large waterbirds when young are in the nests (they leap out to their death on your approach).

First nesters are frequently Black Swans and Coots. Swans build large mounds of fairly coarse material: these may be used

later by some ducks and Marsh Harriers if they are well concealed. Coots make semi-floating mounds of various sizes, all with a substantial bowl at the top. Coot nests are built up to peak waterlevel and usually have some green material such as water weed in them when in use.

Best results are achieved by patient watching and careful searching in types of sites known to be favoured by each species.

6. **Returns.** Upto the 1st of June 1982, I had received 173 computer forms from participants and 55 of these were for May 1982, mostly from within the preferred survey period. The following people have sent in five or more forms: J. A. K. Lane (25), A. K. Daw (20), B. & A. Buchanan (18), R. C. Burking (15), S. & D. Keeling (15), D. F. James (10) and B. J. Newbey (10), and also P. Clay, S. J. Davies, B. K. Kneebone, R. Nable and the Rockingham - Kelmscott - Murray Naturalists all of whom contributed five returns. My thanks also to those who have just sent in one return — these are equally valuable, particular for lesser-known reserves.

Please note the following points regarding use of computer forms:

- write zeros in dates and times of start and finish but not in "total number ... etc."
- add comments freely, especially to clarify particular observations or to describe survey approach.
- if wetland maps are not available for your wetland reserve, try sketching the wetland yourself on the backs of your completed computer forms.
- make sure that you have answered all the questions including that concerning "all species".
- please return completed forms as soon as possible.

7. **Feedback / Results.** As computing arrangements are at present still being made, feedback for this newsletter had been hand compiled and is limited in scope. I hope to have a computer run done within the next two months and I will post samples of those results out to all contributors. That is, a summary of results for your wetland(s) plus possibly a copy of the summary of data for one particular species.

Vetting will need to be performed on all incoming sheets, so some queries may come your way from time to time.

The following examples are from all data received to 1st June 1982.

(1) **Peel Inlet Reserve:** totals from a co-ordinated survey (of four sections) of the eastern shores by the Rockingham - Kelmscott - Murray Branch of the W.A. Naturalists' Club on 22nd May 1982.

- Grand total: 8,256 birds of 29 species.
- Most numerous: Grey Teal - 1,825, Black Swan 1,691.
- Interesting totals: Red-necked Stint - 1,565,
Great Cormorant - 137,
White-faced Heron - 104,
Great Egret - 78,
Greenshank - 32,
all "migratory" waders - 1,607.
- Other interesting species: Chestnut Teal (2), Hooded Plover (1), Osprey (1).

Only 1,132 stilts and avocets were recorded, compared with more than ten times this number in February 1982. This would be a fairly predictable result — higher water levels in May causing favoured feeding areas in the Inlet to be flooded.

Note. If totals for your reserve seem insignificant in comparison with these and other results, do not be discouraged! Networks of small wetlands play a major role in the conservation of waterbirds. In some instances, wetlands which support vast masses of birds do not support much breeding activity — breeding of many species which use the big refuges in summer takes place in many smaller wetlands.

(2) **Results from May 1982 Surveys** (See Table 3)

Inspection of data received to 1/6/82 shows that predictably, some species contribute major portions to the total waterbird number while others do not. The figures for Australasian (Blue-

winged) Shoveler and Great Egret confirm our concern for the long-term viability of these two species in the South-West. We will keep a close watch on them during the Project.

The data in Table 3 is from all May returns received upto 1/6/82. If I had presented figures for the period 8-16 May only, Coots would have contributed 28% of the bird total and Banded Stilts only 1%. This suggests that the presence or absence of these two super-abundant species at reserves covered, could drastically affect summary results in this project.

TABLE 3

MAY 1982 WATERBIRD TOTALS

(from a sample of Wetland Nature Reserves in the South-West and Eucla Divisions, Western Australia.)

(from data received upto 1/6/82; using maxima for each wetland for this period.)

1. Total number of birds recorded = 38,503* from 40 wetlands — maximum at any one wetland = 10,955 at L. Mears (28% of *).
2. Grey Teal total = 4,794 (12% of *) from 22 wetlands — maximum recorded = 1,825 at Peel Inlet (38% of Grey Teal total)
3. Shoveler total = 336 (1% of *) from 9 wetlands — maximum recorded = 200 at Anderson L. (60% of Shoveler total).
4. Coot total = 3,521 (9% of *) from 11 wetlands — maximum recorded = 2,250 at Parakeyerring L. (64% of Coot total).
5. Banded Stilt total = 9,053 (24% of *) from 7 wetlands — maximum recorded = 5,200 at L. Mears (57% of Banded Stilt total).
6. Great Egret total = 101 (less than 1% of *) from 5 wetlands — maximum recorded = 78 at Peel Inlet (77% of Great Egret total).

(3) Fluctuations in totals at selected wetlands.

Figure 2 displays graphs of total waterbird populations (for all species) recorded at Lakes Bambun and Wannamal in 1982. No scales are given as we are essentially interested in trends here but totals varied from 130 to 220 and 700 to 2600 respectively. These two wetlands were chosen for this illustration as they were surveyed in a consistent manner on each occasion. They also exhibit two different water regimes — Bambun is a permanent, relatively fresh lake (salinity around 2 p.p.t.) whereas Wannamal can be quite salty (2 to 100 p.p.t. : seawater is about 35 p.p.t.) from drying right back in dry seasons.

Interpretation of these graphs is a complex matter. We can see though, that as Wannamal's depth dropped well below 1.0 metres during this period (shown by Fisheries & Wildlife data) it experienced a sharp decline in waterbird populations. Bambun which remained over 1.0 metres deep. Individual rises and falls in the bird total curves cannot be easily explained as many species replace each other or become more numerous at different stages of the wetland depth cycle. Some of these (e.g. stilts) are often highly abundant and their presence or absence can obliterate any fluctuations caused by less abundant species.

8. Rubber Waders. I can offer two pair of top quality full-length waders, in normal boot sizes 6, 7, and 8 at \$45 each. Please write to me immediately if you are interested in keeping dry whilst wading in wetlands this winter!

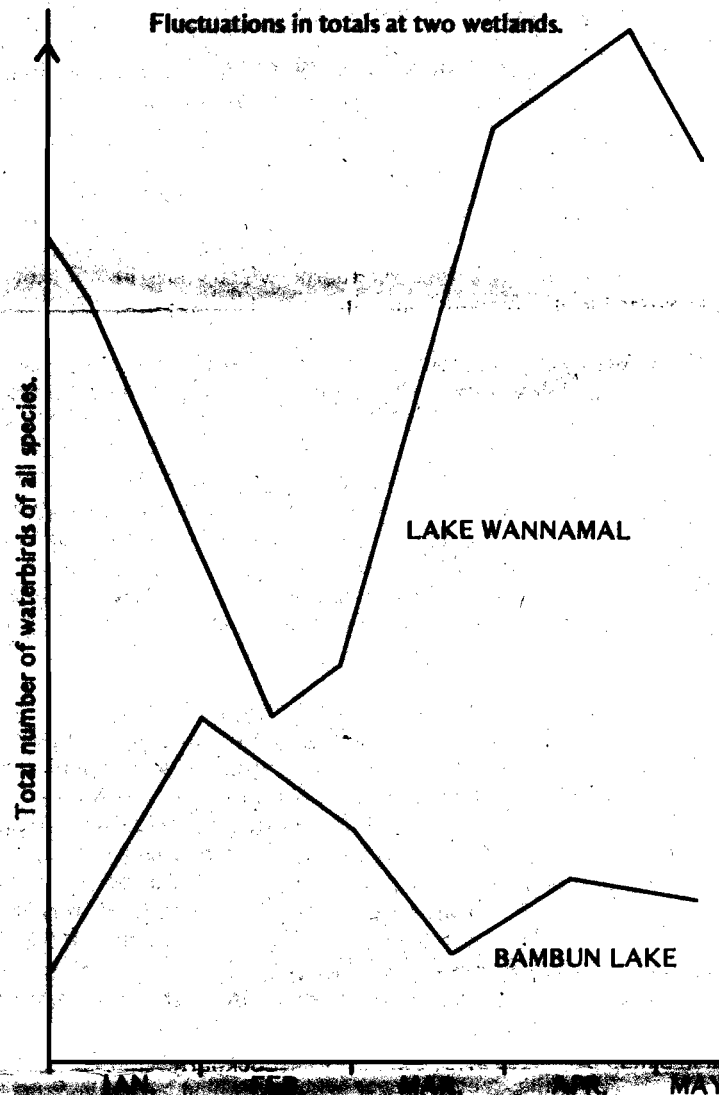
9. Spotting Scopes. A telescope unit identical to the GSA unit that I described in the last newsletter, was recently available in Perth K-Mart stores at \$147 each. Quite a few were ordered and bought by project participants and we have apparently now bought out this source.

However, the Bushnell "Spacemaster" scope (top-rating in U. K.) is stocked by Science World, 363 Cambridge Street, Wembley and this may be of interest to those prepared to pay around \$250 for a 60mm unit complete with a fixed eyepiece. If you mention that you are from the RAOU and that it is an interest group or club, they should offer you a reduction on the retail price.

10. Field Officer absent. During the period covered by this newsletter issue, I expect to be away from the office for more than one day during:

- (1) the week of 12-16 July (waterbird survey period),
 - (2) the period of 14-17 August (waterbird training in the country),
 - (3) the period of 1-12 September (North-West Wader Expedition),
- and probably part of the following week (waterbird survey period).

FIGURE 2



INTERESTING WATERBIRD SIGHTINGS

Series 4 : 1982

Note: * indicates wetland is within a WAWA Wetland Nature Reserve being studied in the Waterbird Project. Unless otherwise indicated, the place names refer to lakes or swamps.

Species names follow the RAOU recommended list of English names in Emu Vol. 77 Supplement.

To assist the reader in locating these wetlands, shire names are given in brackets following the wetland names.

Australasian Grebe — 148, 20/2, Chittering* (Chittering).

Great Crested Grebe — 1, 18/2, Woody* (Esperance).

9, 1/3, Bambun (Gin Gin).

1, 26/4, Wheatfield* (Esperance).

1, 16/5, Coyrecup* (Katanning).

Darter — 1, 20/2, Noonying* (Tamboora).

Great Egret — 26, 26/4, Wheatfield* (Esperance).

Australasian Bittern — 2, 13/5, swamp off Cheyne Beach Rd* (Albany).

Black Bittern — 1, last week in Feb., Blackwood R. near Boyup Brook (Bridgetown-Greenbushes).
1, Easter, Nanga Brook near Dwellingup (Waroona).

Glossy Ibis — 24, 17/3, Thomson's* (Cockburn).

Sacred Ibis — 44, 20/2, Chittering* (Chittering).

Freckled Duck — 40, 18/3, Toolibin* (Wickepin) : upto 53 on 10/4.
180, 11/5 (a rare spectacle in the South-West).

Pacific Black Duck, Grey Teal & Pink-eared Duck — several reports of broods of these species from Great Southern wetlands in April and May.

Australasian Shoveler — 2000, 5/3, Thomson's* (Cockburn).
185, 8/5, Floreat Waters (Metro).
40, 16/5, Coorow* (Kalamunda).

Hardhead — 2000, 10/1, Eganu* (Coorow).

Chestnut Teal — 100, 10/1, Eganu* (Coorow).
24, 26/4, Wheatbelt* (Esperance).

Blue-billed Duck — 68, 12/4, Byerup* (Mandurah).
70, 13/5, reserve no. 2626* (Gnowangerup).

Buff-banded Rail — remains found in sedge at Thomson's* (Cockburn) only.

Spotless Crake — 3, 8/3, Shark* (Esperance).
11, 15/4, Jandabup* (Wanneroo).

Black-tailed Native-hen — 2, 17/5, Noonyong* (Tammin).
3, 23/5, Mears* (Brookton).

Dusky Moorhen — 10, 1/1, Mungala (Gin Gin).

Coot — 40, plus 6 active nests, 13/3, Little White* (Narrogin).
4200, 14/3, Forrestdale* (Armada-Kelmscott).

Red-kneed Dotterel — 4, 12/5, Anderson* (Tambellup).

Hooded Plover — 5, 27/3, Wannamal* (Gin Gin).
300, 4-13/5, Gore* (Esperance) : this represents one of the largest recorded concentrations of this species in Australia. A special survey in Victoria a few years back only found 475 birds in that State.

Red-capped Plover — 1283 on 10/4, 1130 on 9/5, Forrestdale* (Armada-Kelmscott).
nest with eggs, 21/5, Camel* (Cranbrook).

Black-fronted Plover — 2 adults with 3 day old chick, 9/2, Nine Mile* (Murray).
34, 24/4, South Hedland Sewage Ponds (Pilbara region).

Red-necked Avocet — 1050, 10/4, Thomson's* (Cockburn).

Wood Sandpiper — 8, 4/4, Baylump (Esperance).

Marsh Sandpiper — 20, 27/5, Thomson's* (Cockburn).
2, 2/4, Warden* (Esperance).
4, 9-12/4, Forrestdale* (Armada-Kelmscott).

Black-tailed Godwit — 12, 14/3, Forrestdale* (Armada-Kelmscott).

Pectoral Sandpiper — 1, 14/3, Forrestdale* (Armada-Kelmscott).
1, 17/3, Thomson's* (Cockburn).

Red-necked Stint — 1000, 9/5, Forrestdale* : all present in first week of June, most in non-breeding plumage.

Long-toed Stint — 26 on 14/3, 2 on 1/5, Forrestdale*.
2, 27/3, Thomson's*.

Australian Pratincole — about 4000 passing to the NE, Yeelirrie, near Wiluna, April 1982.

OBSERVATIONS

SEABIRDS

Sea watching from Rottnest Island from 10-15th May produced, as well as the common coastal species, Yellow-nosed Albatross, Black-browed Albatross, Arctic Skua, Australasian Gannet, Roseate Tern, Wedge-tailed Shearwater, Little Shearwater and Fluttering Shearwater. Best results were achieved from

the western tip with a north-westerly wind — during a three-hour watch some 30 albatrosses and 45 shearwaters passed north. Two albatrosses seen on the evening of the twelfth were thought to be White-capped, but certain identification was not possible. The ferry trip out on the 10th produced Arctic Skua, Southern Skua, Roseate Tern and a Wandering Albatross on the sea; the return trip produced both skuas and Little Penguin. Neither Fluttering Shearwater nor Wandering Albatross are often seen in this area, but this may reflect merely the lack of regular observers.

Dr. Stephen Daxies Jnr.
7/74 Broadway, Nedlands.

RAPTORS

Peregrine Falcon — 1, 3/2/82, Coblinine R. near L. Coomelberrup Dumbleyung Shire (Grant Pearson).
3, 18/3/82, Toolibin L., Wickepin Shire (Steve Keeling).
1, 25/4/82, Wannamal L., Gin Gin Shire (Bob Burking).

Osprey — a report of two near the Mt. Henry Bridge, Canning River, 13/3/82 (Eric & Sallie Green).

ASSISTANCE URGENTLY NEEDED!

1. **Newsletter.** The volume of work that I am at present required to contribute to the production of W.A. Bird Notes, is unfortunately hindering the progress of the Waterbird Project. We desperately require the assistance of volunteers who could type articles which have been contributed. Also needed are people who can regularly write brief reports on meetings or excursions. Alternatively, I may approach people who attended a particular excursion to report on that event. Help is also wanted with proof-reading of typeset work, the delivery of copy to and from the printers in Belmont and with the collation and preparation of newsletters for posting.

Unless assistance can be found, the continuation of this very worthwhile publication may be in jeopardy. Please give serious thought to whether you can help out in some way.

2. **Waterbird Project Office.** You may not be in a position which allows you to participate in the fieldwork of the South-West Waterbird Project, but you may be able to help out in the office work — an equally important contribution. I particularly need help from time to time with typing, and with collating of copied material before sending it out to observers.

If you are interested in helping out either regularly, occasionally, or in special circumstances, please contact me at your earliest convenience.

Roger Jaensch.

"REPORTING FOR THE ATLAS"

by M. Byrne

*Reporting for the Atlas
On each and every bird
Would have brought me pleasure
If they'd only take my word*

*These learned wise professors
Said, "She couldn't see that there!
Identity mistaken!
The place she said was where?"*

*I filled in sheaves of papers
Though I couldn't see the use.
"How did I know the bird was pled?
Or that it was a goose?"*

*I said the bird was black and white
The fact is there were two,
Long necks outstretched, and honking —
That's not what wagtails do.*

*And neither does a Mudlark
Nor do they have web feet
And even magpies are not large,
Though black and white and neat.*

*The birds I saw were two Pled Geese —
Not wrens, or coots or crows
For though you don't believe it,
Pled Geese are birds I knows!*