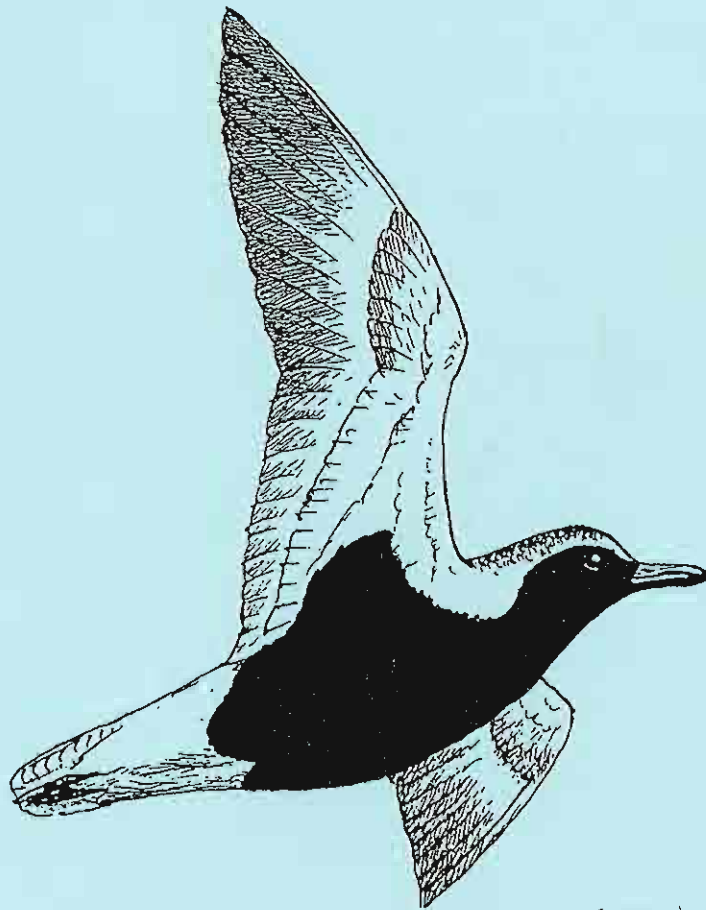


Roy Jessop & Pete Collins

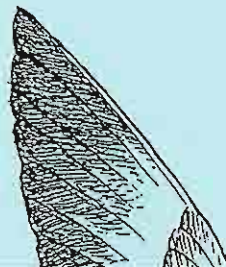
VWSG BULLETIN

JOURNAL OF THE VICTORIAN WADER STUDY GROUP

Number 20
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This bulletin is published on the date of the annual general meeting and contains reports and cumulative records of fieldwork of the Victorian Wader Study Group with articles, field notes and other material.

Contributions are welcome. Please consult the editor or assistant editor on questions of format.



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Summary of VWSG Activities in 1995 and the First Half of 1996

The past year and a half has been an unusual, but successful, period for Victorian Wader Study Group activities. The total number of waders caught (3333 in 1995, compared with an average of 6472 over the last 17 years, plus 1802 in the first half of 1996), was markedly lower than in previous years but the quality and variety of waders handled, and the results deriving therefrom, were if anything enhanced.

The reasons for the change in catching pattern were:

- a) a deliberate attempt to scale down summer catches of Red-necked Stint and Curlew Sandpiper, partly in order to allow more time to be spent on other less frequently caught species (including visits to the SE coast of South Australia).
- b) changes in roosting locations at two key sites. Birds in the Werribee area are now mainly roosting at high tide within the sewage farm, rather than on North Spit/South Spit/Kirk Point because of the creation and management of a number of areas specifically for waders. In Western Port many of the small waders from Yallock Creek now roost at the less accessible Stockyard Point/Pioneer Bay - a consequence partly of regular disturbance at Yallock Creek by a low-flying motorised hang glider.
- c) absence of key personnel for prolonged periods, in both 1995 and 1996 - mainly in the north west of Australia studying waders.
- d) unfortunate coincidences of unfavourable weather conditions, and tides, on some planned fieldwork dates.

Thus in 1995 some 3000 fewer Red-necked Stints and 1000 fewer Curlew Sandpipers were caught than in 1994. As a result the proportion of the year's catch which was of other species increased from 14% in 1994 to 29% in 1995. This trend continued further with 47% of the birds caught in the first half of 1996 being other species.

Species which particularly benefited from increased attention in 1995 were Ruddy Turnstone (229), Red Knot (54), and Sanderling (49) - all up from just a single bird of each in 1994 - plus Sharp-tailed Sandpiper (228 compared with 29 in 1994) and Latham's Snipe (111) and Bar-tailed Godwit (44) in which no birds were caught the previous year. Failures were in Common Greenshank (only one) and Sooty Oystercatcher (none for the second consecutive year).

Most of the above increases derived from specific targeted activities. For example the Latham's Snipe numbers resulted from a request for more studies of this species, now singled out for special attention under the Japan Australian Migratory Birds Agreement (JAMBA). A new banding site, Belmont Common in Geelong, was visited (with the kind support of the Geelong Field Naturalists) and proved an ideal study location with around 200 Snipe present and mist netting catches of 61 in late

October and 35 in early December. It is hoped to continue banding at least 100 Latham's Snipe per year in the future and to discover new banding sites if possible.

The good numbers of Ruddy Turnstone, Sanderling and Sharp-tailed Sandpiper caught emanated from a most productive visit to the south-east coast of South Australia in February 1995. The huge accumulations of rotting seaweed on the shores there were teeming with food and were particularly suitable habitat for these species. The tradition of visiting there to work with local wader enthusiasts commenced in 1993 and was yet further continued in the latest visit in February 1996 when superb totals of 189 Sanderling and 81 Ruddy Turnstones were caught.

Also in 1996 a most successful visit was paid to the Corner Inlet complex for four days in January. Although large quantities of Red Knot, the prime target, still proved elusive some most valuable catches (totalling 841 birds) were made including 165 Bar-tailed Godwit, 36 Great Knot (the first good sample for several years) and 14 Lesser Sandplover. Unusually three Grey-tailed Tattler were caught and even more surprisingly, one already carried a Japanese band (and leg-flag).

Another exciting experience was the capture of a Long-billed Dowitcher at Barry Beach in June 1995. This is the first record of this species in Australia. It breeds across the Arctic regions of the American continent and into the eastern parts of Siberia. Most birds normally migrate to the central regions of the American continent. It had not been seen before being caught and was in the company of 'overwintering' Bar-tailed Godwit and Red Knot.

A long running VWSG study has been that of Pied and Sooty Oystercatchers. The annual target has been to catch at least 200 birds, and although this has been achieved a number of times over the last eight years totals in both 1994 and 1995 fell well short. The situation was retrieved with an incredibly successful intensive programme in May and June 1996 during which a record 268 birds were caught in seven catches (202 Pied and 66 Sooty). This was in part achieved by the preparedness of keen core VWSG members to make themselves available on weekdays when tides were optimum for catching. The long-envisaged "mid-week geriatric cannon netting team" was born-although this proved a misnomer as several younger members of the group participated. The progress of the Oystercatcher Study is covered elsewhere in this bulletin.

The de-emphasis of Red-necked Stint and Curlew Sandpiper catches was somewhat overdone, especially in the 1995/96 summer, with the Group failing to fulfil - for the first time for over a decade - its minimum sample sizes at some of the four sites monitored annually in relation to breeding success (via % of juvenile birds in the population) and survival (via retraps). This is a particularly valuable data set of international significance and attempts will be made not to miss out in future years. Sufficient samples were obtained in 1995/1996 however to indicate that 1995 was quite a good breeding year for Red-necked Stints but a bad one for Curlew Sandpipers. On the "three year predator/prey lemming cycle" theory 1995 should have been a poor breeding season for all high arctic breeding waders. It seems that the regularity of the cycle may have been broken because lemming numbers did not

crash in the eastern half of Siberia in the manner expected. The results raise an intriguing new question- why did Curlew Sandpipers fare so badly?

The geographic distribution of catches was different in 1995 from usual, mainly because of the changed catch content. Most dramatic was the catching of only eight birds at Werribee the dominant site in most years with around 40% of all VWSG birds having been banded there. In contrast catches at Queenscliff/Swan Bay/Swan Island (1465) were higher than for several years.

In addition to the banding and colour leg-flagging of birds the VWSG seeks to collect relevant biometric and moult data on as many birds it handles as is practicable. Particular effort is made to obtain such data samples in each month of the year. An up to date total of monthly 'processing' samples is maintained in order to assist in determining fieldwork priorities. Particularly valuable processing samples were obtained where virtually none existed before for Latham's Snipe (September and October), Ruddy Turnstone (January, February and October) and Sanderling (February). Overall 1272 (38%) out of the 3333 waders caught in 1995 were fully processed.

Although it is only about seven months since an up to date list of recoveries and sightings of leg-flagged waders was produced (VWSG Bulletin, number 19, December 1995) a number of interesting new reports have been received and are detailed in this Bulletin. Pride of place must go to two recoveries and the sighting of ten orange leg-flagged Red-necked Stints in southern Siberia between 5th and 12th June 1996. This is the first strong evidence of the route taken by birds between their Chinese coastal stopover and their breeding grounds in northern Siberia. Captures of overseas banded birds were also a highlight in the recoveries area (Grey-tailed Tattler from Japan, Curlew Sandpipers from Taiwan and Vietnam). Other overseas sightings of orange leg-flagged birds involved six species (Ruddy Turnstone, Eastern Curlew, Bar-tailed Godwit, Red-necked Stint and Sanderling) with multiple records of the last two species in Japan. Such data has helped to create the foundation for the recent RAMSAR Convention Initiative of a proposal by Australia for a network of reserves throughout the East Asia Australasian Flyway. Recoveries and sightings of marked birds delineate the migration routes taken by each species and identify key 'stop-over' sites.

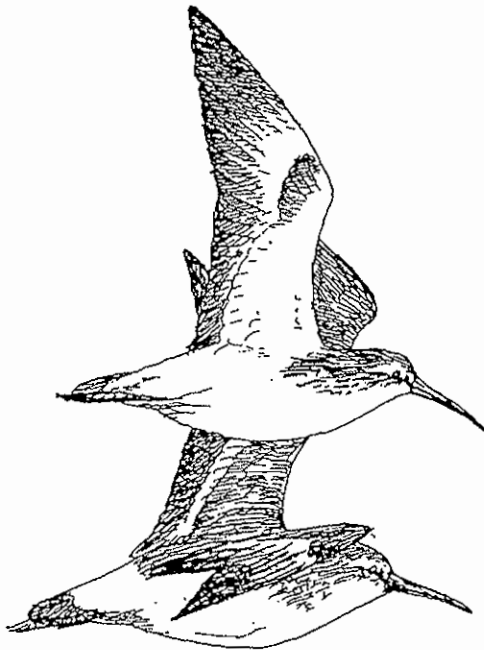
A major surprise was the extent to which colour flagging, introduced by the VWSG in 1990, has increased the rate of data generation on migratory routes. An analysis (see note elsewhere in this bulletin) has shown that overseas leg-flag sightings for VWSG birds are 17 times higher than conventional banding recoveries reported by the Australian Bird and Bat Banding Schemes, and an even higher 38 times for reports within Australia. I am delighted to acknowledge that my early scepticism on whether extra time and effort spent in 'flagging' would be profitable has proved to be spectacularly pessimistic!

Tern studies have been an integral part of the VWSG activities almost since the Group's formal inception. Detailed reports on breeding, banding, recoveries and leg-flag sightings are included, as usual, in this bulletin. All aspects of the studies continued successfully and the innovation of colour coated metal bands to identify

yearly cohorts of young birds and their subsequent return to breed looks to be particularly timely.

The VWSG is indebted, as always, to the many members and non-members who do so much in so many ways to facilitate and assist its activities. These were spelled out in detail in the last VWSG Bulletin and remain equally appropriate. Rather than specifically list these again may I just once more thank everyone who has been connected with the Group's activities in the past year and a half. Much has been achieved, by many. Long may it continue. Best wishes to all.

Clive Minton



- S. MINTON -

Numbers of waders processed by the VWSG each month in Victoria to December 1995. Processing includes measuring wing length, bill length and or total head length (as appropriate) and weight; also recording full details of primary feather moult (if any). Additional wing moult has been gathered on some birds which were not fully processed. The table below is used to plan fieldwork, with the object of obtaining useable data (preferably on at least 50 birds of each group) for each month of the year for all the main wader species.

	J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
Latham's Snipe	50	44	0	0	0	0	0	0	15	62	24	57	252
Long-billed Dowitcher	0	0	0	0	0	1	0	0	0	0	0	0	1
Bar-tailed Godwit	134	8	308	14	0	195	18	0	64	88	197	268	1294
Whimbrel	0	0	16	0	0	1	0	0	0	2	0	0	19
Eastern Curlew	16	27	1	0	22	16	2	43	147	99	135	72	580
Common Greenshank	1	0	120	0	0	0	0	0	0	0	82	22	225
Terek Sandpiper	13	2	0	1	2	0	0	1	0	1	1	12	33
Grey-tailed Tattler	28	0	0	3	0	3	0	0	0	0	0	0	34
Ruddy Turnstone	100	131	133	27	1	7	0	1	12	21	402	73	908
Great Knot	96	1	7	0	0	0	0	0	16	58	40	129	351
Red Knot	194	68	181	34	2	57	151	81	76	468	263	183	1758
Sanderling	12	49	242	0	0	0	0	0	0	1	6	161	471
Little Stint	1	0	0	0	0	0	0	0	0	0	1	1	3
Red-necked Stint	2346	1161	4487	1871	507	570	461	364	463	1397	2728	2661	18956
Long-toed Stint	0	0	0	0	0	0	0	0	0	1	0	0	1
Pectoral Sandpiper	0	1	0	0	0	0	0	0	0	0	0	0	1
Sharp-tailed Sandpiper	1178	733	117	2	0	0	0	9	519	335	277	1194	4364
Curlew Sandpiper	822	926	1136	144	222	125	215	411	178	873	662	908	6622
Broad-billed Sandpiper	1	2	0	0	0	0	0	0	0	0	0	0	3
Pied Oystercatcher	83	94	175	220	262	237	172	82	102	37	9	25	1500
Sooty Oystercatcher	3	0	40	27	62	25	44	14	0	1	0	0	216
Black-winged Stilt	0	6	0	0	0	0	0	0	0	4	2	6	18
Red-necked Avocet	39	0	0	0	0	0	0	67	2	46	46	36	236
Pacific Golden Plover	21	27	30	1	0	0	0	0	0	28	47	39	193
Grey Plover	1	14	4	3	0	2	0	0	2	41	17	0	84
Red-capped Plover	38	77	55	114	203	79	65	16	8	11	12	5	683
Double-banded Plover	0	2	144	257	755	857	950	898	1	0	0	0	3864
Lesser Sandplover	54	1	12	7	3	2	2	0	0	0	15	12	108
Greater Sandplover	21	0	3	0	0	1	1	0	0	0	1	0	27
Black-fronted Dotterel	0	7	0	0	11	16	6	9	2	0	4	7	62
Hooded Plover	0	0	0	0	0	15	0	0	0	0	0	0	15
Red-kneed Dotterel	0	10	0	20	0	44	11	16	12	8	22	0	143
Masked Lapwing	4	6	77	0	0	13	0	0	0	4	18	11	133
Cox's Sandpiper	0	0	0	0	0	0	0	0	0	0	1	0	1
													43159

Victorian Wader catches 1975 to 31 December 1995

Species	New	Retrap	Total
Pied Oystercatcher	1085	423	1508
Sooty Oystercatcher	197	20	217
Masked Lapwing	131	3	134
Grey Plover	79	6	85
Pacific Golden Plover	190	21	211
Red-kneed Dotterel	133	11	144
Hooded Plover	15	1	16
Lesser Sandplover	101	9	110
Double-banded Plover	3047	958	4005
Large Sandplover	24	3	27
Red-capped Plover	547	176	723
Black-fronted Plover	52	4	56
Black-winged Stilt	18	0	18
Red-necked Avocet	235	2	237
Ruddy Turnstone	724	184	908
Eastern Curlew	541	39	580
Whimbrel	19	0	19
Grey-tailed Tattler	33	1	34
Common Greenshank	174	50	224
Terek Sandpiper	31	1	32
Latham's Snipe	217	4	221
Long-billed Dowitcher	1	0	1
Bar-tailed Godwit	1236	64	1300
Red Knot	1687	135	1822
Great Knot	317	33	350
Cox's Sandpiper	1	0	1
Sharp-tailed Sandpiper	4557	165	4722
Pectoral Sandpiper	1	0	1
Little Stint	3	0	3
Red-necked Stint	56010	16766	72776
Long-toed Stint	1	0	1
Curlew Sandpiper	17935	3579	21514
Sanderling	468	5	473
Broad-billed Sandpiper	3	0	3
34 Species	89813	22663	112476

Wader Banding Totals - Victoria 1995

Species	New	Retrap	Total
Pied Oystercatcher	48	38	86
Grey Plover	6	0	6
Masked Lapwing	1	0	1
Lesser Sandplover	7	3	10
Double-banded Plover	52	1	53
Red-capped Plover	2	0	2
Ruddy Turnstone	191	38	229
Eastern Curlew	83	9	92
Common Greenshank	1	0	1
Latham's Snipe	108	3	111
Long-billed Dowitcher	1	0	1
Bar-tailed Godwit	44	0	44
Red Knot	48	6	54
Great Knot	3	1	4
Sharp-tailed Sandpiper	222	6	228
Red-necked Stint	1493	432	1925
Curlew Sandpiper	351	86	437
Sanderling	47	2	49
18 species	2708	625	3333

Location of Waders Caught in Victoria

	to Dec.94	1995	Total
Werribee	42958	8	42966
Western Port	27310	799	28109
Queenscliff/Swan Bay	17817	1465	19282
Anderson Inlet (Inverloch)	11068	301	11369
Corner Inlet	8058	189	8247
Altona	955	0	955
Canunda/Carpenters Rocks/Brown Bay	161	460	621
Killarney Beach	426	0	426
Bendigo SF	143	0	143
Geelong (Point Henry Belmont Common)	25	96	121
Seaford Swamp	98	0	98
Braeside/Croyden	61	15	76
Mud Island	35	0	35
Seaspray (Lake Reeve)	18	0	18
Toowong	10	0	10
Total	109143	3333	112476

VWSG Wader Catches January - June 1996

Species	New	Retrap	Total
Pied Oystercatcher	127	75	202
Sooty Oystercatcher	50	16	66
Pacific Golden Plover	6	0	6
Lesser Sandplover	13	1	14
Red-capped Plover	1	0	1
Ruddy Turnstone	79	9	88
Eastern Curlew	1	0	1
Grey-tailed Tattler	2	1	3
Latham's Snipe	1	0	1
Bar-tailed Godwit	164	2	166
Red Knot	58	0	58
Great Knot	35	1	36
Sharp-tailed Sandpiper	16	0	16
Red-necked Stint	557	54	611
Curlew Sandpiper	309	31	340
Sanderling	149	44	193
16 species	1568	234	1802



Annual Wader Banding Totals by VWSG in Victoria

Calender Year	New	Retrap	Total
1975	9	0	9
1976	616	4	620
1977	482	12	494
1978	1296	42	1338
1979	7436	486	7922
1980	6121	1206	7327
1981	4561	869	5430
1982	3774	796	4570
1983	2875	628	3503
1984	4272	1045	5317
1985	4073	1051	5124
1986	7144	2057	9201
1987	5350	1559	6909
1988	8019	2697	10716
1989	5437	1584	7021
1990	4094	1950	6044
1991	3224	850	4074
1992	4652	861	5513
1993	8831	2588	11419
1994	4839	1753	6592
1995	2708	625	3333
Totals to end 95	89813	22663	112476

Average annual total for '79-95; 6472

Fieldwork Programme 1996

The programme of fieldwork undertaken in 1995, and the planned programme for 1996, were published in the last VWSG Bulletin, Number 19, Summer 1995.

Anyone requiring a copy of the programme, or able to take part in fieldwork activities, should contact Clive Minton on 03-9589-4901 (phone or fax).

Recoveries of Banded Waders

Pied Oystercatcher

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
?	3+	8.5.93	Manns Beach Corner Inlet	* 3.10.95	Bourunda Beach, NSW	345 NE
101-03694	3+	13.8.94	Barry Beach	*22.1.95 to 21.2.95 *23.10.95	Forster, NSW Forster, NSW	911 NE
100-99532	2	21.3.92	Corner Inlet	*11.6.96	Bithry Inlet, NSW	361 NE
101-03689	3+	9.7.94	Altona	*17.11.95	20k N. of Kingston, SA	470 WNW
?	?	5.8.89	Stockyard Point	*17.11.95	20k N of Kingston, SA	530 WNW
101-03572	3+	27.2.93	The Gurdies Western Port	*18.1.96	King Island, Tasmania	243 SW
101-03546	1	6.6.92	Barry Beach	*18.1.96	King Island, Tasmania	266 SW
100-82080	2+	8.3.80	Werribee SF	*10.3.96	St. Leonards	20 ESE

* All the above reports emanated from birds recognised by their individual colour band combinations. The birds without specific band numbers could only be assigned to a particular banding date as only an incomplete band combination was seen.

It is interesting that the bird reported at Forster, NSW, in January 1995 (the longest ever recorded movement for this species) has remained there. It was paired when seen in October 1995, but is not known to have actually bred.

The two birds seen by Iain Stewart near Kingston, South Australia, are the furthest westward movements so far for Pied Oystercatchers from Victoria.

The St. Leonards bird was recovered 16 years after banding and was a minimum of 18 years old. In June 1996 two other old Pied Oystercatchers were retrapped at Long Island, Hastings. One was 17 years old and the other at least 17 years old. There were many other sightings and recaptures of birds which had moved lesser distances than the examples given above. A comprehensive analysis of movements is currently in progress.

Hooded Plover

Band	Age	Date banded	Location banded	Date of retrap	Location found
051-18440	2+	22.6.86	Inverloch	8.4.96	Inverloch

This bird was recaptured by Mike Weston almost ten years after it was banded at the same location. Minimum age was 11.5 years. This is the second very old Hooded Plover to be recaptured in the last year see Bulletin 19.

Ruddy Turnstone

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
051-59478	1	29.11.91	Killarney Beach	8.2.96	Stony Point, Port MacDonnell SA	140 W
051-59541	1	1.12.91	as above	8.2.96	as above	as above

It appears that Ruddy Turnstones may also exhibit some mobility along the coast, though not to the same extent as Sanderling. Note however that both were banded as juveniles, which have a less strong attachment to a site than adult migrant waders from the northern hemisphere.

Grey-tailed Tattler

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
Japan 5A10322	1+	29.9.93	Obitsu Estuary Kisarazu, Japan 35° 25'N139° 54'E	18.1.96	Manns Beach Corner Inlet	8268 S

This is the first recorded movement of a marked Grey-tailed Tattler into/out of Victoria. It is one of a number of recaptures or flag sightings (blue for Japan) in eastern Australia in the 1995 - 96 summer emanating from the recent significant Tattler banding programme in Japan. This is the southernmost limit of the Grey-tailed Tattlers' non-breeding range with less than 50 individuals normally reaching Victoria. Only 37 have been caught by the VWSG (to June 1996).

Red Knot

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
051-40159	2	5.6.93	Queenscliff	14.9.95	Finnis River, NT	3156 NNW
051-28857	2+	16.3.91	Albany, WA	29.10.95	Queenscliff	2405 E

The recapture at Finnis River in the Northern Territory is the first indication of a possible entry route through northern Australia of Red Knot coming (presumably) to Victoria. The recapture of the bird from Albany, Western Australia, is rather more baffling. Had it changed its non-breeding area in 1995? This species really is an enigma. It is going to need significant further banding and leg-flagging at a range of locations to elucidate the pattern of movements.

Great Knot

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
061-57363	1	29.10.95	Queenscliff	21.4.96	Maroom, Maryborough, Queensland	2000 NE

This bird was seen to have an orange leg-flag and was aged as a first year bird. As only one juvenile was banded by the VWSG in 95/96 it could therefore be specifically identified. An interesting partial northward movement of a first year bird.

Red-necked Stint

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
034-58204	1	13.2.93	Yallock Creek	30.8.95	Obitou Estuary, Japan	8206 N
034-99335	1	17.6.95	Barry Beach	12.6.96	Torey Lakes, Daurский NR, Transbaikal, Russia 50° 0'S 118° 41'E	10100 N
034-98687	2+	11.12.94	Stockyard Point	12.6.96	as above	as above

The first bird was cannon netted in Japan. The Japanese are becoming increasingly active in the wader field. Previous recoveries and flag sightings of Red-necked Stints in Japan indicate that it is on the migration route from the breeding grounds for a proportion of the birds from Victoria.

The second two recoveries indicate, for the first time, a possible overland route taken by Red-necked Stints between the northern Chinese coasts and their breeding grounds in north central Siberia.

Curlew Sandpiper

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
041-67254	2+	9.4.91	Conlu Island, North Vietnam	24.1.93	Werribee SF	7681 SE
041-69239	2+	13.2.93	Yallock Creek	-.5.95	Chongming Island, Shanghai, China	8154 NNW
Taiwan B 17568	2+	29.4.95	Ta-Tu-Hsi, Taichung Taiwan	14.1.96	Stockyard Point, Western Port	7428 SSE
041-68076	2+	29.11.92	Inverloch	29.1.96	Ballina, NSW	1302 NE

The recapture of the bird banded in North Vietnam only recently came to light as it was not recognised as such - because it was banded with an Australian band during an AWSG visit to Vietnam. The Taiwan banded Curlew Sandpiper caught at Stockyard Point is the second from that country to be caught at that location in recent years. The bird recaptured in January at Ballina in northern NSW appears to have changed its non-breeding area.

Sanderling

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
041-60451 -60455 -60522 -60542 (4 birds)	2+	2.3.91	Killarney Beach, Port Fairy	10.12.96	Brown Bay, 15k E of Port MacDonell, SA	135 W
041-60384	2+	as above	as above	11.2.96	as above	as above

In addition to the above, 16 Sanderling banded at Canunda National Park, SA, on 28.11.93 were recaptured at Brown Bay (75k SE) on 10.11.96. These retraps are further evidence for the considerable mobility of Sanderlings between coastal locations. This is in contrast to most other species of Palaearctic migrant waders. It may be an adaptation to the variability of feeding conditions on an active ocean shoreline. It certainly accounts for the previous baffling intermittent appearances/absences of Sanderling at "known" sites.

Clive Minton

Sightings of Leg-flagged Waders from Victoria

Report Number 4

Listed below are the reports received of the sightings of orange leg-flagged birds away from their banding locations in Victoria (and the south east coast of South Australia for Sanderlings and Ruddy Turnstones). This list follows those published earlier in VWSG Bulletins 17 to 19, the last of these being in December 1995. It contains all reports received up to 30 June 1996. Note however that many reports take some time to reach here and that there are probably sightings related to the northward migration in March/May still to be received. These will be incorporated into subsequent bulletins/listings.

To put the sightings into context the attached table (prepared by Petina Pert) shows the number of each species orange flagged (to 31.12.95) since this procedure commenced on a trial basis on 30 December 1989. A comparison between the flag sighting rate and conventional recovery rates is the subject of a separate article elsewhere in this bulletin.

Large Sandplover

17.12.95 and 28.1.96	Manly Boat Harbour Moreton Bay, Queensland	Arthur and Cheryl Yeates
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This could possibly be the same individual as seen in Moreton Bay the previous summer, especially considering only nine Large Sandplovers have been orange leg-flagged in Victoria.

Ruddy Turnstone

19.8.95	Yatou Estuary, Narashino, Chiba, Japan 34° 37'N 135° 28'E	per Japanese Bird Migration Research Centre
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This is the first report of a VWSG banded Ruddy Turnstone in Japan.

Eastern Curlew

3.4.95	Daimyojin River, Toyo, Ehime, Japan 33° 57'N, 133° 05'E	per Japanese Bird Migration Research Centre
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This is the same as the incomplete record referred to as "250 km W of Tokushima" in leg-flag sighting Listing No.3

Bar-tailed Godwit

27.12.95	Karaka, Manukau Harbour, New Zealand (2 birds)	Tony Harbraken
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After a year without any sightings in New Zealand it is nice to get some further records.

Red Knot

2.1.95	Jordan's, Kaipara Harbour, New Zealand (3 birds)	D. Lawrie
19.12.95	Karaka, Manukau Harbour, NZ	S. Davies
27.12.95	as above	D. Lawrie
14.1.96	Miranda, Firth of Thames, NZ	N. Green
20.1.96	Jordan's, Kaipura Harbour, NZ	A. Riegan
21.1.96	as above (2 birds)	Tony Harbraken

Another good crop of New Zealand sightings. It is a pity that neither VWSG or the NZWSG have been able to make any major catches of Red Knot in recent years in order to better understand the nature of the significant movements of Red Knot between Victoria and New Zealand.

Red-necked Stint

5.6.96 to 12.6.96	Tory Lakes, Daurskiy NR Transbaikal, Russia 50° 0'S 115° 41'E (At least 10 different birds seen)	Dr. Oleg Goroshko via Pavel Tomkovich
21.8.94	Nikko River, Nagoya, Aichi, Japan 35° 25'N 136° 50'E	per Japanese Bird Migration Centre
5.9.94	as above	as above
19.8.95	Shiokawa Estuary, Tahara, Aichi, Japan 35° 25'N 137° 19'E	as above
20.8.95	Tofutou Lake, Abashiri, Hokkaido, Japan 43° 58'N 140° 50'E	as above
17.8.95	Hasaki, Kashima - gun, Ibaraki, Japan 35° 45'N 140° 19'E	as above
20.8.95	Shiokawa, Toyohashi, Aichi, Japan 34° 41'N 137° 19'E	as above
17.4.96	Phan, Thiet, Bien Thuan, S. Vietnam	Hanno Stamm
13.10.95 to 13.2.96	Lake Ellesmere, New Zealand	Colin Hill
29.10.95	Bowen, Queensland	Frank Harrison

8.11.92	Tullakool Saltworks, NSW	Tom Wheller
18.4.93	as above	as above
7.5.95	as above (2 birds)	as above
25.4.96	as above (5 birds)	as above
14.4.96	Five Boughs Swamp, Leeton, NSW	Keith Hatton
21.1.96	Carpenters Rocks, SA	Adrian Boyle
28.1.96	Port MacDonnell, SA	Robert Farnes
31.1.96	Port MacDonnell, SA	Adrian Boyle
20.4.96	Adelaide Saltworks, SA	Martin Bragg
1.11.95	Ocean Grange, Lakes NP, Vic.	Thierry Roland
22.10.95	Port Augusta, SA	P.A.Langdon

The sightings in southern Siberia in early June are especially exciting, indicating for the first time a possible migration route across the continent from the northern Chinese coast to the western parts of the Red-necked Stint breeding areas in the north of Siberia.

This is an unprecedented number of Red-necked Stint sightings from Japan. That country appears to be an important location on the migration route of the Red-necked Stint, at least on southward migration. Equally more evidence is gradually collecting of the importance of the Vietnam area as a stopover region for the smaller waders on northward migration.

These and previous sightings of Red-necked Stints at locations in New South Wales (and in South Australia) in April and May suggest that a few birds may abort their long overland single flight crossing to the northern coasts of Australia at a much earlier stage than expected. This could possibly be the result of encountering unexpected adverse weather conditions after setting off on their northward migration.

One wonders whether the further sightings at Lake Ellesmere - there have been regular sightings since 1990 - all refer to the same bird!

Curlew Sandpiper

22.4.95	Likas Bay, Sabah. East Malaysia	A. Greensmith
5.12.95 to 7.12.95	Stockton, NSW	Renee Ferster Levy
24.12.95	Botany Bay, NSW	Phil Straw
21.2.96	Botany Bay, NSW	Coral Smith

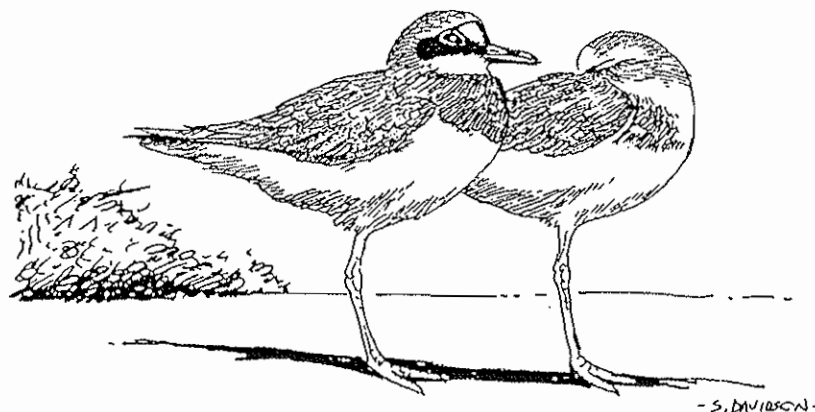
This is the first Curlew Sandpiper report in Sabah. The remaining records refer to three (or two) examples of birds which had probably changed their non-breeding area.

Sanderling

7.8.94	Torinoumi, Watari, Miyagi, Japan 38° 02'N 140° 55'E	per Japanese Bird Migration Research Centre
16.8.94	as above	as above
28.7.95	Kido River, Kujukuri, Naruto, Chiba, Japan 35° 40'N 130° 24'E (2 birds)	as above
30.7.95	Gannosu, Higashi-ku, Fukuoka, Japan 33° 40'N 130° 24'E	as above
15.8.92	Yotogonyu Beach, Maki, Niigata, Japan 37° 51'N 138° 53'E	as above (and Minoru Kashiwagi)
15.8.93	as above	as above
4.1.96	Moreton Island, Queensland	Peter Driscoll
28.10.95	South Ballina, NSW	Bo Totterman
16.11.95	Mouth of the Murray River, SA (4 birds)	Iain Stewart

Another marvellous collection of sightings, especially those in Japan. This species has the highest leg-flag sighting rate - probably because of its habit of frequenting sandy (as opposed to muddy) beaches and because of its relative tameness and 'open flock' feeding mode. Japan is clearly a major stopover site on southward migration. The bird in Queensland had apparently changed its non-breeding area. The movement along the coast to the Murray River mouth is a further indication of this species mobility (220 kilometres from the nearest banding site at Canunda National Park). Numerous sightings of flagged Sanderling have also been made by Robert Farnes at the Fitzroy River Mouth in western Victoria - midway between the Killarney Beach (Port Fairy) and South Australia (Brown Bay and Canunda NP) flagging and banding sites.

Clive Minton



Summary of Victorian Waders (orange) Leg-flagged by VWSG

Species	1989	1990	1991	1992	1993	1994	1995	TOTAL
Masked Lapwing	0	0	0	0	0	0	1	1
Grey Plover	0	0	0	1	0	0	6	7
Lesser Golden Plover	0	10	10	1	0	0	0	21
Lesser Sandplover	0	0	0	14	6	8	9	37
Double-banded Plover	0	0	0	0	0	8	0	8
Large Sandplover	0	0	0	0	3	6	0	9
Red-capped Plover	0	0	0	0	0	19	0	19
Red-necked Avocet	0	0	0	0	5	0	0	5
Ruddy Turnstone	0	99	188	37	35	1	194	554
Eastern Curlew	0	0	8	0	73	88	87	256
Whimbrel	0	0	0	0	16	0	0	16
Common Greenshank	0	0	21	21	51	0	1	94
Terek Sandpiper	0	0	2	2	2	2	0	8
Latham's Snipe	0	0	0	0	40	0	110	150
Bar-tailed Godwit	0	1	157	6	64	0	43	271
Red Knot	0	0	302	26	88	1	52	469
Great Knot	0	0	2	0	4	0	3	9
Cox's Sandpiper	0	0	0	1	0	0	0	1
Sharp-tailed Sandpiper	0	4	250	111	71	21	69	526
Broad-billed Sandpiper	0	0	0	0	0	1	0	1
Little Stint	0	0	0	1	0	0	0	1
Red-necked Stint	0	799	1259	2516	2282	1661	1384	9901
Curlew Sandpiper	146	462	367	1255	808	839	469	4346
Sanderling	0	0	163	0	191	1	47	402
TOTAL	146	1375	2729	3992	3739	2656	2475	17112

Pied and Sooty Oystercatchers

The main 'winter' activity of the VWSG since 1988 has been a concentrated banding programme on Pied and Sooty Oystercatchers. This study commenced when an earlier study on Double-banded Plovers was completed and was partly in response to the view that part of the VWSG fieldwork effort should be expended on "resident" Australian waders rather than being concentrated wholly on migrant species.

Moderate numbers of Pied Oystercatchers have been banded each year in the period 1979-83 and a simple colour marking programme (colour indicating banding location) was introduced. In 1989 this was changed to an individual colour banding system. Since that time (to 30th June 1996) Pied Oystercatcher and Sooty Oystercatchers have been individually marked (see table below)

Number of Pied and Sooty Oystercatchers marked with individual colour combinations at each location

Location	Master colour	Pied Oystercatcher	Sooty Oystercatcher
Corner Inlet	Yellow or Dark Green	394	192
Stockyard Point	Red	181	0
Werribee SF/Altona	Blue	132	4
Long Island , Hastings and Fairhaven	White	91	0
Rhyll	Orange	41	1
Queenscliff	Light Green	22	1
Inverloch (discontinued)	Dark Green	2	0
Total		863	198

There has been a commensurate increase in the number and value of subsequent sightings of these birds and this data (many hundreds of records) is now being put onto computer by Angela and Roz Jessop prior to a comprehensive analysis of movement patterns.

As mentioned previously in VWSG bulletins Pied and Sooty Oystercatchers have turned out to be more mobile than the 'resident' term appears to imply. Pied Oystercatchers banded in autumn and winter in Port Phillip Bay, Western Port and the Corner Inlet complex have been recorded in spring/summer at coastal locations as far west as Kingston (in the south east of South Australia), as far east as Mallacoota (East Gippsland), and south to the northern shores of Tasmania. Three birds have even travelled into New South Wales, to Sydney and Newcastle, much further than previously expected. Even on a more local scale much mixing of birds occurs between flocks at different locations - on one occasion a catch at Rhyll, Phillip Island, contained birds previously banded at six other locations.

Sooty Oystercatchers are also mobile, though over somewhat shorter distances and with a stronger tendency to move out to the Bass Strait islands in the breeding season.

The success of the 1996 "special effort" can be seen in the table below. Although the catching season began very late, on the 18th of May, due to equipment and people being away in NW Australia on the AWSG Wader Study Expedition it has been the most successful ever. By the 18th June 268 Oystercatchers had been caught - due to a productive midweek and weekend blitz by a dedicated core team. And there are still several locations to visit in July and August before the season finishes.

It is particularly beneficial to have colour marked individuals this year because of the opportunity to search more systematically for such birds on their breeding grounds around the coasts during the "Hooded Plover Survey" scheduled for November 1996. Because colour bands are difficult to see, especially if they are old, faded or stained, it is desirable to carry a telescope if possible in order to maximise the chance of obtaining an accurate sighting. To identify an individual it is necessary to record

Left leg Three colour bands. It is necessary to read the order (top to bottom).

Right leg Two colour bands (of the same colour) above a metal band
(which often looks white)

On a few individuals the above protocol is reversed (ie. metal on left leg + three colours on right leg).

Please report ALL sightings of colour banded birds to Clive Minton (address inside the front of this bulletin)

Numbers of Pied and Sooty Oystercatchers caught by VWSG

Year	Pied Oystercatcher			Sooty Oystercatcher			All Totals
	New	Retrap	Total	New	Retrap	Total	
1976	1	0	0	0	0	0	1
77	2	0	2	0	0	0	2
78	0	0	0	0	0	0	0
79	45	3	48	0	0	0	48
80	39	13	52	1	0	1	53
81	52	18	70	0	0	0	70
82	27	18	45	1	1	2	47
83	23	23	46	2	0	2	48
84	4	10	14	0	0	0	14
85	6	17	23	0	0	0	23
86	0	0	0	0	0	0	0
87	12	1	13	5	0	5	18
88	164	31	195	37	1	38	233
89	145	58	203	22	2	24	227
90	56	36	92	14	2	16	108
91	148	42	190	26	3	29	219
92	121	32	153	76	9	85	238
93	109	59	168	12	2	14	182
94	83	24	107	1	0	1	108
95	48	38	86	0	0	0	86
* 96	127	75	202	50	16	66	268
Totals							
	1212	498	1710	247	36	283	1993

* to 30/06/96.

Clive Minton

Tern Banding

The summer of 1995 - 96 has seen further progress with the range of studies of terns in Victoria. Breeding numbers and banding details are given below, by species. Recoveries reported since the last bulletin are listed separately.

Crested Terns

The 1995 - 96 summer was quite good for breeding pairs, but not up to the record numbers of the previous year.

Location	Nests	Chicks banded
Mud Island, Port Phillip Bay	1700	1518
The Nobbies, Phillip Island	75	34
Clonmel Island, Corner Inlet	410	357
Totals	2185	1909

The Mud Island colony was at its normal location and size. There was no fledged chicks on the banding date of 17th December, suggesting a slightly later start (10 days?) to the breeding season than normal. It was also noticeable that the crops of chicks were less full than usual, indicating possible lower food supply than normal. This could be connected with the huge mortality of small fish in southern coastal waters early in 1995.

Shortage of food may also be the cause of an unprecedented mortality of large chicks in the colony in late January. A group of ornithologists visiting Mud Island on the 4th of February picked up 22 banded Crested Tern chicks in and around the colony, all fairly freshly dead and well feathered/close to fledging.

The huge colony which appeared at the Nobbies on the west end of Phillip Island in 1994/95 almost completely disappeared in 1995/96. Only 75 pairs attempted to breed, with only moderate success. The food shortage was apparently noticeable in the nearby Little Penguin colonies and this again could have contributed to the decline. It will be particularly interesting to see what transpires in future years.

The Crested Terns at Corner Inlet moved their location, this time to the west end of Clonmel Island (Port Albert Entrance) where the Caspian Terns have bred in recent years. The incipient dunes there have fortunately now built up to a size where most nests could be placed above the level of the normal November/December storm tides, and breeding success therefore was good.

In an attempt to ascertain the correct age of first breeding of Crested Terns 1021 of the chicks banded at Mud Island were marked with metal bands covered with a bright orange heat-bonded coating, thanks should be given to Tim Gunn for his efforts in this project. Similar cohorts of young will be colour marked with a different colour each year. Systematic searching of the colonies each year should reveal when these colour marked birds, of known age, first return to breed.

This exercise was shown to be even more necessary and desirable in the light of the results of catching 33 banded breeding adults (by hand net) at the Mud Island colony on 17th December. The ages of these birds were;

Age	Number of birds
4	1
5	6
7	11
8	5
9	1
12	1

All except the 12 year old bird (from South Australia) had been originally banded as chicks at the Mud Island colony. Since approximately the same number of chicks (1000 - 1500) have been banded at the Mud Island colony in the last seven years the above pattern of ages for breeding birds suggests that most do not breed for the first time until they are five to seven years old. The only published data on Australian Crested Terns (HANZAB Vol 3) suggests that first breeding takes place at the age of two!

Determination of the age of first breeding is of more than academic interest - it is a fundamental parameter of the population dynamics of a species. A bird needs to survive to breeding age before it becomes a contributor to the population ie. before it starts to offset population losses due to death. The longer the period is the greater future reproductive success will need to be if a stable population is to be maintained. It looks as if it will take a further seven years before age of breeding can be accurately determined for Mud Island Crested Terns.

Caspian Terns

Caspian Terns continued to fare poorly in 1995/96. The Colony at Mud Island has now reduced to less than ten pairs (used to be 20 pairs) - only six nests were seen in November/December 1995, and no chicks were banded there.

The colony in Corner Inlet was again on the west end of Clonmel Island, this time in company with Crested Terns. Only about 30 pairs were seen and these had only moderate success. Only seven chicks were banded, but this was partly because visits were at times when chicks were not of suitable age for banding.

If this species does not return to its former level of breeding success some permanent decline in the Victorian breeding population is likely. The situation will be monitored closely.

Fairy Terns

No Fairy Terns were known to have bred at Rams Island, Western Port, in 1995/96 and none bred in Port Phillip Bay. At Corner Inlet some nesting attempts were made but as far as is known these were not successful due, as usual, to storm tides and wind blown sand.

Cannon netting

A visit to the Gippsland Lakes on the 26th - 28th January 1996 was extremely successful in catching good samples of the two main target species - Little Tern and Common Tern - on Albifrons Island, Ocean Grange. The traditional site at Point Wilson, Spermwhale Head, was not suitable for catching due to the sand spit having been almost washed away. An attempt at another site - a new earth island risen out of the lake opposite Lochsport - was not successful.

Totals caught were:

Species	New	Retraps	Total
Common Tern	182	38	220
Little Tern	117	28	145
Crested Tern	3	0	3
White-winged Black Tern	2	0	2
Fairy Tern	1	0	1
Totals	305	66	371

This is the best ever annual total for Little Terns and slightly above the annual average for Common Terns. It brings the totals now caught (including retraps) since the study commenced seven years ago to 1634 Common Terns and 659 Little Terns (see table below):

Summer	Common Tern	Little Tern
88-89	101	131
89-90	531	109
90-91	113	29
91-92	211	69
92-93	125	51
93-94	59	73
94-95	274	52
95-96	220	145
Totals	1634	659

All Common Terns were given an orange leg-flag (signifying banded in Victoria) and all Little Terns an individual '3 leg-flag' colour combination.

There were many interesting retraps of both species going back to the first birds banded there in 1989. To these can be added the many hundreds of sightings of

leg-flagged Little Terns by Jim Reside and his team from Bairnsdale. These are now enabling a good picture to be built up of movements and site faithfulness in east Gippsland of both the local breeding and northern hemisphere visitor populations of Little Tern.

It is hoped these Gippsland Lakes tern studies can be further enhanced in the future by the granting of a cannon net licence to a member of the 'Bairnsdale Group' so that they can operate more flexibly than the 'once or twice a year' visits by VWSG members.

Clive Minton

Recoveries of Banded Terns

Common Tern

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
051-59607	2+	25.1.92	Spermwhale Head, Lakes NP	11.4.95	Lakes Entrance (found dying)	21 NE

This is a rather late date for a Common Tern still to be in Victoria. Maybe its illness caused it to be delayed.

Little Tern

Band	Age	Date banded	Location banded	Date of retrap	Location found	km moved
041-59282	2+	13.1.90	Spermwhale Head, Lakes NP	25.10.95	Botany Bay NSW	537 NE
041-83741	2+	30.01.94	as above	24.11.95	as above	536 NE
?	2+	25.1.92	as above	8.12.95	Culburra NSW	433 NE
?	?	since 1991	as above	6.3.96	Kooragang Is., Stockton, NSW	837 NE

All the above reports emanate from observations of colour flags on live birds in the field. In the case of the last two birds incomplete flag combinations prevented specific identification of the individual.

041-59282 had been sighted or retrapped five times in the Gippsland Lakes between January 1990 and October 1994. It had the plumage characteristics of a visitor from the Northern Hemisphere and was probably on its way back to Gippsland. The other birds could also have still been on late passage to, or early return from, Victoria or could have been birds which had changed their non-breeding area.

Crested Tern

Recoveries of chicks banded at Mud Island, Port Phillip Bay

Band	Date of banding	Method of recovery	Recovery date	Recovery location	km moved
071-97428	16.12.89	found dead	7.1.96	Altona	47 N
071-97599	16.12.89	dying	14.2.96	Cape Woolamai	62 SE
072-14532	15.12.90	dying	31.12.95	Phillip Island	43 SE
072-46654	18.12.94	dead	21.9.95.	Safety Beach	21 E
072-47297	18.12.94	dead	2.1.96	Phillip Island	63 SE
072-47218	18.12.94	dying	15.1.96	Paynesville	262 E
072-46861	18.12.94	dead	28.3.96	Port Fairy	218 SW
072-37296	18.12.94	dead	3.4.96	Clifton Springs	19 NW
072-65158	17.12.95	dying	12.2.96	Balnarring	39 E
072-49707	17.12.95	dying	13.2.96	Sussex Inlet, NSW	619 NE
072-65566	17.12.95	dead	11.3.96	Narooma, NSW	528 NE
072-65665	17.12.95	dead	25.3.96	Inverloch	92 SE
072-49869	17.12.95	dead	10.5.96	Brighton	50 NNE
?	17.12.95	seen	18.2.96	Port Fairy	218 W
?	17.12.95	seen	2.3.96	Kurnell, NSW	748 NE

The last two birds were recognised by their orange coloured metal band (see section on tern banding).

The two recoveries at Port Fairy are the exceptions, in showing westerly movements. One was only two months after banding. There were also three long movements up into New South Wales within two and a half months of banding. 072-49707 was particularly quick, probably covering the 619 kilometres in only about four weeks after fledging - not bad for a young bird still partly dependent on its parents for food.

In addition there has been the following recovery of a young bird which was almost certainly reared on Mud Island, although it was actually banded as a recently fledged juvenile.

Band	Date of banding	Method of recovery	Recovery date	Recovery location	km moved
071-51057	24.1.81	Released alive	2.3.96	Dromana	21 E

At 15 years old this is the oldest recovery so far of a Mud Island bird.

The following bird was caught (with a hand net) breeding at Mud Island on 17.12.95. Most Crested Terns return to breed at their natal colony but this one had clearly decided to spread its wings (or genes).

Band	Date of banding	Banding location	Recovery date	Recovery location	km moved
072-71263 pullus	21.12.85	Coorong SA	17.12.95	Mud Island	521 SE

Recovery of a chick banded at the Nobbies, Phillip Island

Band	Date of banding	Method of recovery	Recovery date	Recovery location	km moved
072-48566	22.12.94	dead	11.5.96	Lake Macquarie Rathmines NSW	843 NE

This is the normal main wintering area for Victorian Crested Terns.

Clive Minton

Sightings of Colour Marked Terns

Sightings of colour flagged Little Terns, which can be individually identified, and colour banded Crested Terns, which can be assigned to a particular banding date/location, are included in the "recoveries" section of this bulletin.

Other sightings - of orange flagged Common Terns - are detailed below.

Common Tern

7.11.95	Bournda, NSW	Far South Coast Birdwatchers
1.1.96	Ballina, NSW	Bo Totterman
19.1.96	Corner Inlet, Vic.	Clive Minton

All the above birds would have been banded at the Gippsland Lakes since January 1991. The sighting at Bournda is consistent with the timing of the passage of Common Terns down the east coast of Australia, many probably on their way back to Gippsland. However the Ballina bird seems to have remained further north in the summer of 95/96. Movements of Common Terns between the Gippsland Lakes are quite regular.

Clive Minton

Little Tern Banding at the Gippsland Lakes 1989-96

Two populations of Little Tern are present in the Gippsland Lakes those which breed in the northern hemisphere (Japan) and birds which breed locally. In the austral summer local birds are in breeding plumage whereas the northern hemisphere birds are not. In the autumn the two groups are more difficult to distinguish in the field as the Australian birds are coming out of breeding plumage and the northern birds going into breeding plumage. However, in the hand, Australian can be identified as they are part way through a conventional primary moult whereas northern birds are either moulting in two places or have completed a total primary moult.

To conserve the Little Tern in the Gippsland Lakes the Little Tern Taskforce was formed in 1987.. Initially there was only a single breeding colony at Rigby Island near Lakes Entrance. This represented the entire breeding stock for East Gippsland. The colony was protected by electric fences and a strict "no-entry" policy was enforced to protect eggs and chicks from potential predators such as gulls. During the following two breeding seasons 1987/88 and 1988/89 breeding was the most successful ever recorded.

It soon became apparent that in order to successfully conserve the Little Tern in the Gippsland Lakes more information was required on its life style. In 1989 a banding project was initiated and the VWSG called on for assistance in catching birds due to its cannon netting prowess. The objectives of this study are:

- a) to gather morphological data on the Little Tern (currently being analysed to determine if the two populations are physically different)
- b) to investigate the movements of adults and fledglings both immediately following the breeding season and throughout the year.
- c) collect information on nest site and estuary fidelity and details of breeding behaviour.
- d) try to gain an understanding of all aspects of migration of the two groups of Little Terns present in the Gippsland Lakes including flock sizes, stopover locations and eventual destinations.

As the effects of capture banding and colour marking on Little Terns were unknown a conservative target of no more than 20% of the population, was set. Birds were to be caught at post-breeding roosts to minimise disturbance to the breeding colony - a departure from the usual tactic when studying colonially breeding birds of catching chicks at the colony.

Banding and colour flagging

The original banding site was Point Wilson, at the eastern end of Spermwhale Head in the Gippsland Lakes National Park, an important post-breeding roosting site for adult and fledgling Little Terns. However after successive floods in 1990 and 1991 most of the Point Wilson sand spit was washed away and new banding sites had to be found. Albifrons Island, Tambo River Mouth, Mitchell River Cut, Storm Point, Seagull Pint and Lochsport mud islands are now monitored as potential catching sites.

Birds caught during cannon netting sessions are "fully processed" and given a sequence of three colour flags to allow individual identification in the field. A metal band plus one colour flag are placed on one leg and two colour flags on the other leg. The colour on the leg with the band changes when colour combinations run out and does not designate location as with Pied and Sooty Oystercatchers. During the first two years of the banding study

celluloid colour bands were used but soon proved to be unsuited to continual exposure to sand and sun, becoming faded and brittle with many falling off after only a few months. PVC colour flags were then used and although some colours fade (eg. yellow and blue) the material proved much more durable. Loss of colour flags was evident for the first time during the 1996 season (after five years) with a number of birds (15) recorded with one or two colour flags missing.

Out of eight consecutive years of cannon netting (1989-96), only one 1993, was unsuccessful. A total of 612 birds have been banded and of these 199 have been resighted (see tables below)

Total number of Little Tern caught in the Gippsland Lakes 1989-96

Banding year	Number banded
1989	131
1990	93
1991	25
1992	66
1993	0
1994	73
1995	79
1996	145
Total	612

Numbers of northern and southern Little Terns caught in the Gippsland Lakes 1989-96

Race	Total banded	%	Total resighted	% resighted
Northern	341	56	105	31
Southern - adults	194	32	72	37
Southern - juveniles	56	9	6	11
Undetermined	21	3	16	76
Totals	612		199	

Movements of Little Terns belonging to the Northern race

The confirmation that birds belonging to the northern race present in Australia during our summer breed in Japan was provided by 041-59331. This bird was banded in 1990 and recaptured in 1991 and January 1994 and seen in June 1994 in the Gippsland Lakes. Then June 1994 it was captured at a breeding colony in Japan. The straight line distance between banding and recapture locations being some 8145 km. It has subsequently been sighted in October and November 1994, January and November 1995 and February 1996.

Five northern race Little Terns were seen by Clive Minton at various locations along the New South Wales coast in September 1994. Subsequently four of these birds were seen in the Gippsland Lakes during the 1994/95 summer. This may indicate that Little Terns move down the coast when migrating from their breeding grounds.

Birds in breeding plumage appear at the Gippsland Lakes in October/November (eg. 041-60431 seen at Tamboon Inlet on 03/11/95) but by late November transitional and non-breeding plumages predominate. Birds appear to start moulting into breeding plumage as

early as February (eg. 041-59290 seen in breeding plumage on 04/02/96) with adults in breeding plumage departing in March.

Movements of Little Terns belonging to the Southern Race

Colour flagging has indicated that movements between breeding colonies in Gippsland has been both eastward and westward. Movements during the breeding season are mainly in response to colony collapses and after breeding birds tend to move from East Gippsland to the Gippsland Lakes.

One of the most significant movements has been of adult breeding Little Terns banded in East Gippsland to breeding colonies in New South Wales. One bird banded in 1991 was sighted on two occasions at Forster in northern NSW during the 1992/93 breeding season at a breeding colony where it raised two chicks.

Birds banded as juveniles have been sighted at their natal colonies at one year old in breeding plumage. Breeding has been confirmed for one bird aged two years.

Future Banding

Now that multiple colonies are producing fledgling it may be possible to consider regular banding of chicks and adults at selected colonies. Colour marking of fledglings could do much to answer questions on local movements following dispersal from the breeding sites, overwintering grounds and the return of survivors to the breeding colonies. Currently only five percent of fledglings produced have been banded and most of those were in the first two years of the study.

Strategies need to be developed to increase the proportion of southern race birds caught. The capture rate of northern race birds remains much higher than that for the southern race. You can help the tern study by encouraging all birders and bird groups to accurately report all sightings of marked birds.

Jim Reside

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Summary of Overseas Movements of Waders caught by VWSG

The list below is a compilation of all recoveries ("to") and controls ("from") of waders caught by the Victorian Wader Study Group (between 1975 and mid 1996) which show a movement between Victoria and overseas.

Recoveries relate to birds banded by the VWSG and subsequently reported, via the Australian Bird and Bat Banding Office, at an overseas location. Controls refer to birds originally banded overseas and subsequently recaptured by the VWSG in Victoria.

The lists only include birds where the metal band number was specifically identified. Colour band and colour leg-flag sightings, where the colour code was of a generic (eg. location) nature have not been included.

To date (June 1996) there have been 114 overseas recoveries and 33 controls from overseas involving birds caught by the VWSG. The table below shows the overseas recovery rates from each species. Note that in species with only a small number of recoveries the figures will not be a particularly accurate reflection of recovery rates. Also because many of the birds banded are still alive, and some will subsequently be recovered, the 'real' overseas recovery rates will be slightly higher than indicated.

	Birds banded by VWSG	Overseas recoveries	Overseas recovery rate
Lesser Sandplover	101	1	0.99%
Double-banded Plover	3047	22	0.72%
Ruddy Turnstone	724	2	0.28%
Eastern Curlew	541	1	0.18%
Bar-tailed Godwit	1236	1	0.08%
Red Knot	1687	22	1.3%
Great Knot	317	3	0.95%
Sharp-tailed Sandpiper	4557	3	0.07%
Red-necked Stint	56010	25	0.04%
Curlew Sandpiper	17935	34	0.19%

"Birds banded' to the end of 1995. Recoveries to June 1996.

The overall overseas recovery rate of the 87,397 migrant waders banded up to the end of 1995 is 0.13%. Rates for individual species varied from 0.04% for Red-necked Stints to 1.3% for Red Knot. Surprisingly the largest waders (Eastern Curlew and Bar-tailed Godwit) did not show the highest rates - even though the larger band, large body size and the greater propensity to be hunted often results in higher recovery rates for the larger species in Europe.

Overall the overseas recovery rate of VWSG waders is an order of magnitude lower than for waders in some other parts of the world, especially Europe. The Wash

Wader Ringing Group (Eastern England) has for example had 2509 overseas recoveries (and 1512 controls of overseas banded waders) from 225,808 waders banded (35 years to the end of 1994) - a recovery rate of 1.1%. This difference is partly related to the much larger distances to “get overseas” from Victoria. It also relates to factors such as the differences in human population density, coastal accessibility, language, script, educational level and climate (rate of decomposition of a dead bird) between the flyways.

There are also consequent differences in modes of recovery of European and Australian banded waders. Almost none of the latter are reported through “the general public” (even within Australia). The majority of the overseas recoveries have come from recaptures by banders in other countries (eg. Red Knot or Double-banded Plovers in New Zealand) or by bands being collected by bird banders and other ornithologists from hunters (eg. in China). The highest recovery reporting rates of VWSG banded birds come from Red Knot (1.3 % due to the catching efforts of the NZ Wader Study Group) and Great Knot (0.95% due to the heavy hunting pressure near Shanghai and the efforts of the Chinese ornithologists to collect bands). The interpretation of recovery patterns therefore has to take into account the potential biases from such influences.

In the light of the low ‘natural’ recovery rate of waders in the East-Asian Australasian flyway it will be particularly beneficial to the rate of collection of migration route and stopover site data if:

- (a) banding activities are developed to give a more widespread and comprehensive network throughout Asia.
- (b) efforts by scientific and conservation bodies are maintained, preferably increased, to collect and report bands from hunters.

Summary of VWSG wader recoveries

Lesser Sandplover	<i>To</i>	China (1)	Total 1
Double-banded Plover	<i>To</i>	New Zealand (22)	Total 22
	<i>From</i>	New Zealand (24)	Total 24
Ruddy Turnstone	<i>To</i>	Taiwan (1) Papua New Guinea (1)	Total 2

The bird which went to Taiwan was subsequently recaptured again back in Australia giving a “double journey” recovery.

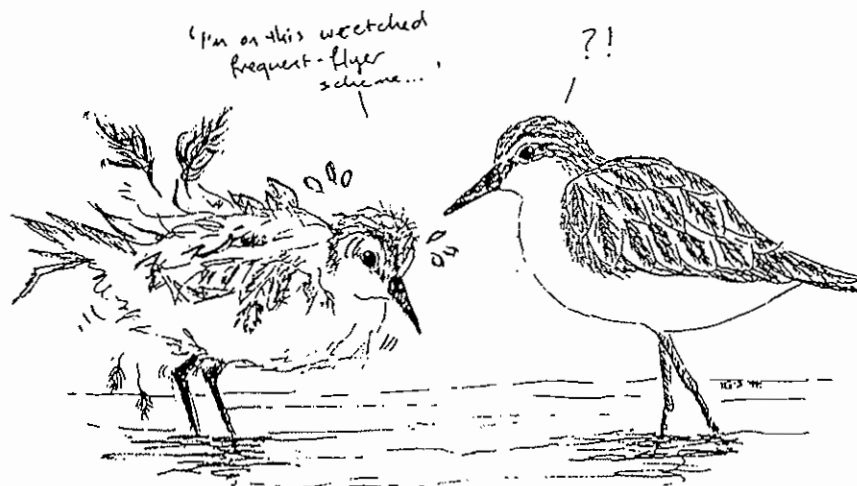
Eastern Curlew	<i>To</i>	China (1)	Total 1
Grey-tailed Tattler	<i>From</i>	Japan (1)	Total 1
Bar-tailed Godwit	<i>To</i>	New Zealand (1)	Total 1
Red Knot	<i>To</i>	New Zealand (16) China (3) Russia (2) Korea (1)	Total 22
Great Knot	<i>To</i>	China (3)	Total 3
Sharp-tailed Sandpiper	<i>To</i>	Russia (1) Taiwan (1) China (1)	Total 3

Red-necked Stint	<i>To</i>	China (8) Russia (7) Vietnam (5) Japan (2) Indonesia (2) Malaysia (1)	Total 25
	<i>From</i>	Hong Kong (1)	Total 1
Curlew Sandpiper	<i>To</i>	China (16) Hong Kong (6) Russia (5) Indonesia (3) Taiwan (1) Vietnam (1) Thailand (1) India (1)	Total 34
	<i>From</i>	Taiwan (2) Vietnam (1) Thailand (1) Hong Kong (1) Russia (1) Singapore (1)	Total 7

Total overseas recoveries (to) 114

Total overseas controls (from) 33

Clive Minton



Summary of Overseas Sightings of Waders Leg-flagged (orange) by the VWSG

Detailed lists of sightings of waders orange leg-flagged in Victoria have been published in VWSG bulletins 17 - 20, List numbers 1 - 4, 1993-96. Below is a brief summary of the overseas sightings for each species.

It is emphasised that the totals given are the number of actual sightings reported. No attempt has been made to judge the number of individual birds involved, even though in many cases some duplication must have occurred. This is most likely at Hong Kong, watched almost daily in the migration season, and with the Red-necked Stint and Red Knot records in New Zealand. In contrast almost all the Red-necked Stint and Sanderling records from Japan probably relate to different individuals. The 10 reports in southern Siberia in June 1996 are considered by the observer to be related to 10 individual birds.

This list will serve as a basis for comparison with the summary of overseas recoveries (see elsewhere in this bulletin) as well as assessing future flag sightings. A summary of sightings within Australia, which are valuable in assessing migration routes and strategies into and out of Australia, will be included in the 1997 VWSG Bulletin.

Large Sandplover	Hong Kong (2)	Total 2
Lesser Sandplover	Hong Kong (1)	Total 1
Ruddy Turnstone	Japan (2) Hong Kong (1)	Total 3
Eastern Curlew	Japan (3)	Total 3
Bar-tailed Godwit	New Zealand (9) Japan (1)	Total 10
Red Knot	New Zealand (66) Taiwan (1)	Total 67
Sharp-tailed Sandpiper	Indonesia (1)	Total 1
Red-necked Stint	Hong Kong (33) New Zealand (13) Japan (12) Russia (12) Taiwan (5) Brunei (2) Vietnam (2) Indonesia (1) Thailand (1)	Total 81
Curlew Sandpiper	Hong Kong (47) Russia (1) Taiwan (1) Sabah E. Malaysia (1)	Total 50
Sanderling	Japan (19) Russia (1)	Total 20

Total overseas sightings 238

Comparison of Flag Sightings versus Recoveries for Waders Marked in Victoria.

Experimental colour plastic leg-flagging of waders commenced on a trial basis in Victoria in December 1989 and was introduced on a comprehensive scale during 1990. Since then an orange leg-flag has been placed on the right tibia (occasionally tarsus, especially on Sanderling and Ruddy Turnstone) of most migrant and resident waders caught, subject to manpower/time constraints at the time of catching. Recaptures of flagged birds have shown that the markers are durable and an interim analysis indicated a retention rate of over 90% during the first three years. For totals see the following table.

Reports of sightings of flagged birds, both within Australia and overseas, have flooded in and details have been listed in VWSG Bulletins 17-20. Similarly reports are regularly received via the banding office in Canberra of birds which have been recovered, by other banders or by members of the public, where the metal band has been the prime source of the record (a conventional recovery).

Sufficient time has now elapsed for a comparison to be made of the relative reporting rates by the two methods ie. 'flag sightings' versus 'recovery reports'. For this analysis only birds flagged or banded in the period 1990 - 1995, and sighted or recovered in the same period, have been included. Sightings within Australia include only those outside of Victoria. Only Palaearctic migrant waders (the majority of birds banded/flagged) are included in the analysis ie. residents and the Double-banded Plover (from New Zealand) are excluded. The table below shows the comparisons.

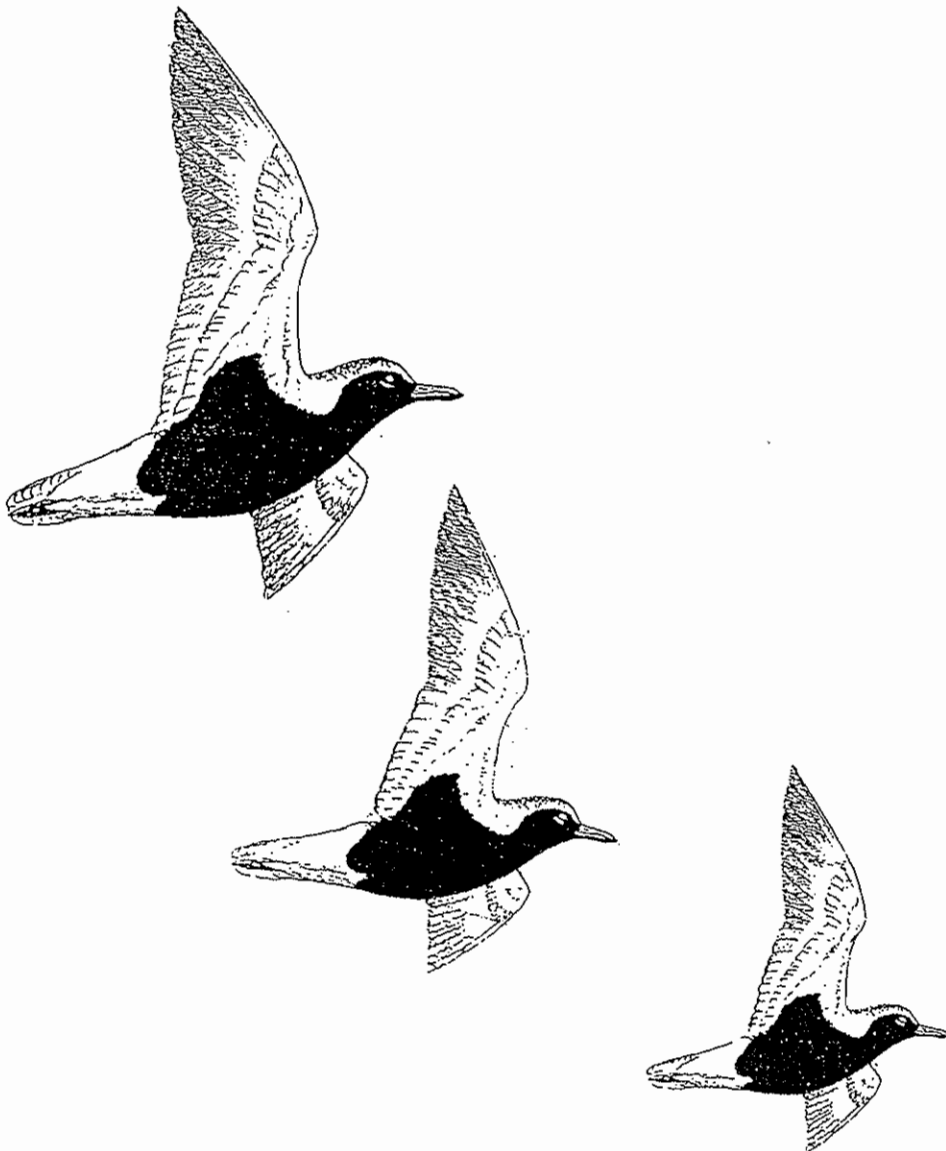
Comparison of Flag Sightings versus Recoveries for waders in Victoria and reported between 1990 and 1995.

	Number	Recovered	
		Overseas	Within Australia
BANDED	27043	18 (0.067%)	7 (0.026%)
		Sighted	
		Overseas	Within Australia
FLAGGED	17079	195 (1.14%)	174 (1.02%)
RATIO	<u>Flag sighting</u>		
	Recovery reporting	17 times	39 times

There is clearly a far higher rate of reporting of movements emanating from Victoria via flag sighting reports than via conventional recovery reports received through the Bird Banding Office. The above figures - 17 times higher for overseas and a

massive 39 times higher for reports within Australia - probably exaggerate the true difference because the data may include an unknown number of multiple sightings of the same leg-flagged bird (eg. Red-necked Stints and Curlew Sandpipers at Mai Po, in Hong Kong). Nevertheless it is clear that enormous benefits have derived from the colour flagging programme particularly in relation to delineating migration routes and stopover sites on migration. The leg-flagging programme will therefore be continued in the future.

Clive Minton



Analysis of Overseas Movements of Red-necked Stints and Curlew Sandpipers

Sufficient overseas recoveries, controls and leg-flag sightings of Red-necked Stints and Curlew Sandpipers have now occurred for an initial analysis to be made of their migration routes between Victoria and their Siberian breeding grounds.

Full details of all such records reported to June 1996 have been given in VWSG bulletins 1 - 20, with a comprehensive summary also included in this Bulletin. The maps show the overseas locations relating to these reports, as indicated below.

	Overseas Recoveries	Controls from Overseas	Overseas Flag Sightings
Red-necked Stint	25	1	81
Curlew Sandpiper	34	7	50

In this report "control" refers to a bird originally banded elsewhere (overseas) and subsequently captured (and released) by the VWSG in Victoria. The date of original banding is, in this case, used in the analysis, as opposed to the date of recovery.

Each species is now considered separately, although there are many common factors in their migrations.

Red-necked Stint

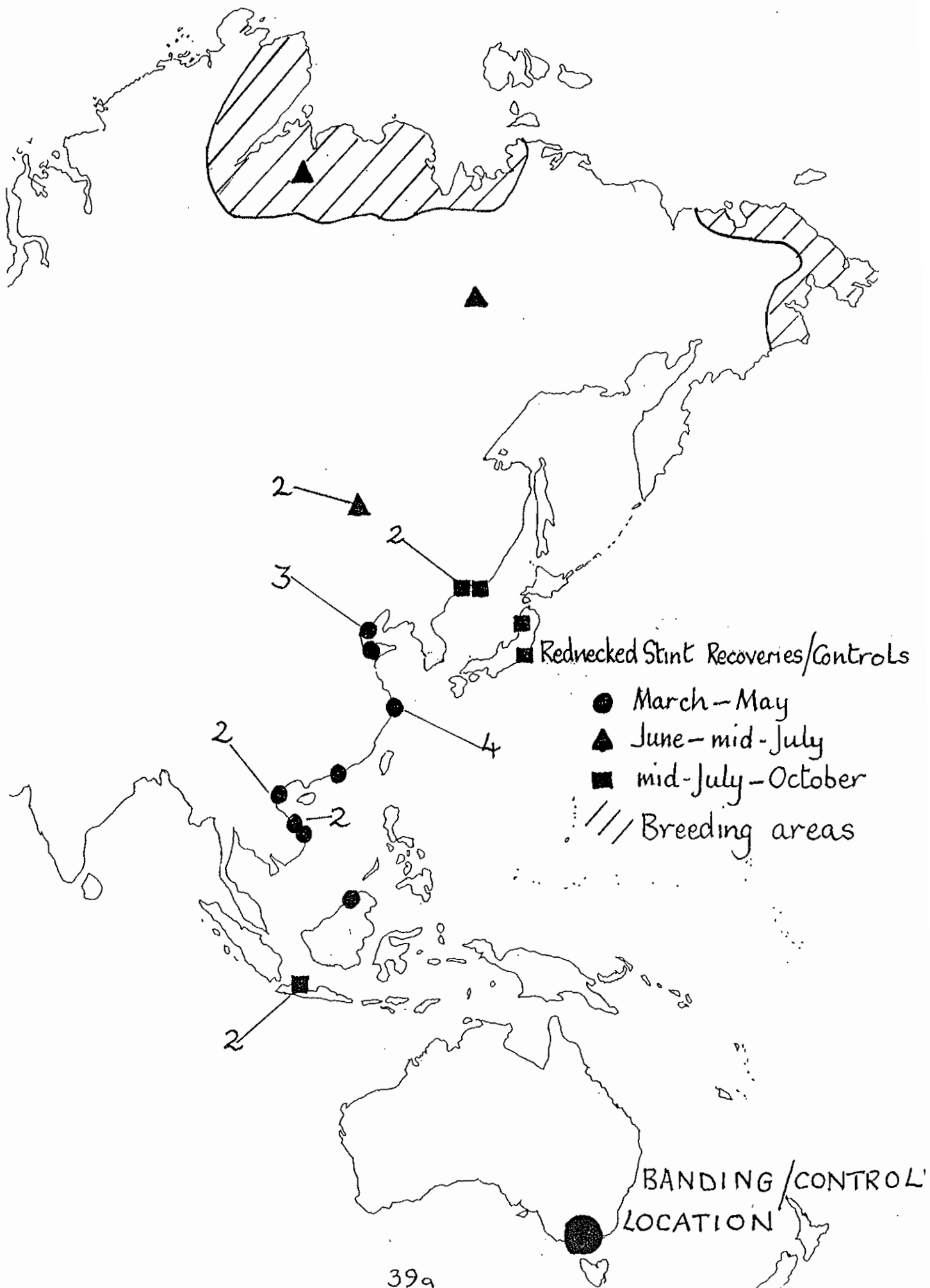
Fourteen of the Red-necked Stint recoveries, and the single control, relate to birds on their northward migration (map 1). The Chinese coast (8 reports) and Vietnam (5) feature strongly as migratory stopover locations - with a wide spread of sites.

There is only one record at an intermediate site (Sabah) between the north coast of Australia and these destinations. This suggests that many birds may overfly this area - necessitating an exceptionally long (4000 km) single stage flight for a bird so small (average weight 29 g).

There were four recoveries in Russia during the June/July breeding season. One was within the western zone of this species' discontinuous breeding range and the others look to have been heading for that area via an overland route from the north Chinese coast.

On southward migration the recovery pattern is markedly different. This suggests that both the route and the main stopover sites are different from the northward migration. Thus there are recoveries on the southward part of the Russian coast (near Vladivostok) and two in nearby Japan. There are no recoveries in China or Vietnam. Further south the two reports in Indonesia may indicate that stopovers in the countries and islands of South-East Asia can be made en-route for the northern shores of Australia.

MAP 1



The pattern of leg-flag sightings largely follows and reinforces the migration pattern, suggested by the recoveries (map 2). A rather wider spread of northward migration routes is apparent - from Thailand in the west to Japan in the east. But the main feature is again the "Chinese" coast, albeit represented by a massive 32 sightings in Hong Kong and 5 in Taiwan. There is also a nice batch of 10 sightings supporting a final overland route across Siberia to the western breeding grounds from the northern Chinese coast. On southward migration Japan again features strongly with 11 of the 13 reports.

An unexpected feature of the Red-necked Stint records is the 13 flag sightings at Lake Ellesmere, near Christchurch, on the South Island of New Zealand. At least two individuals are known to have been involved, and maybe more as the records were spread over a five year period. Red-necked Stints are not numerous in New Zealand but clearly at least some of those which do reach there pass through Victoria on migration. The sightings in New Zealand occurred between October and February, with one sighting (possibly a first year bird) in April.

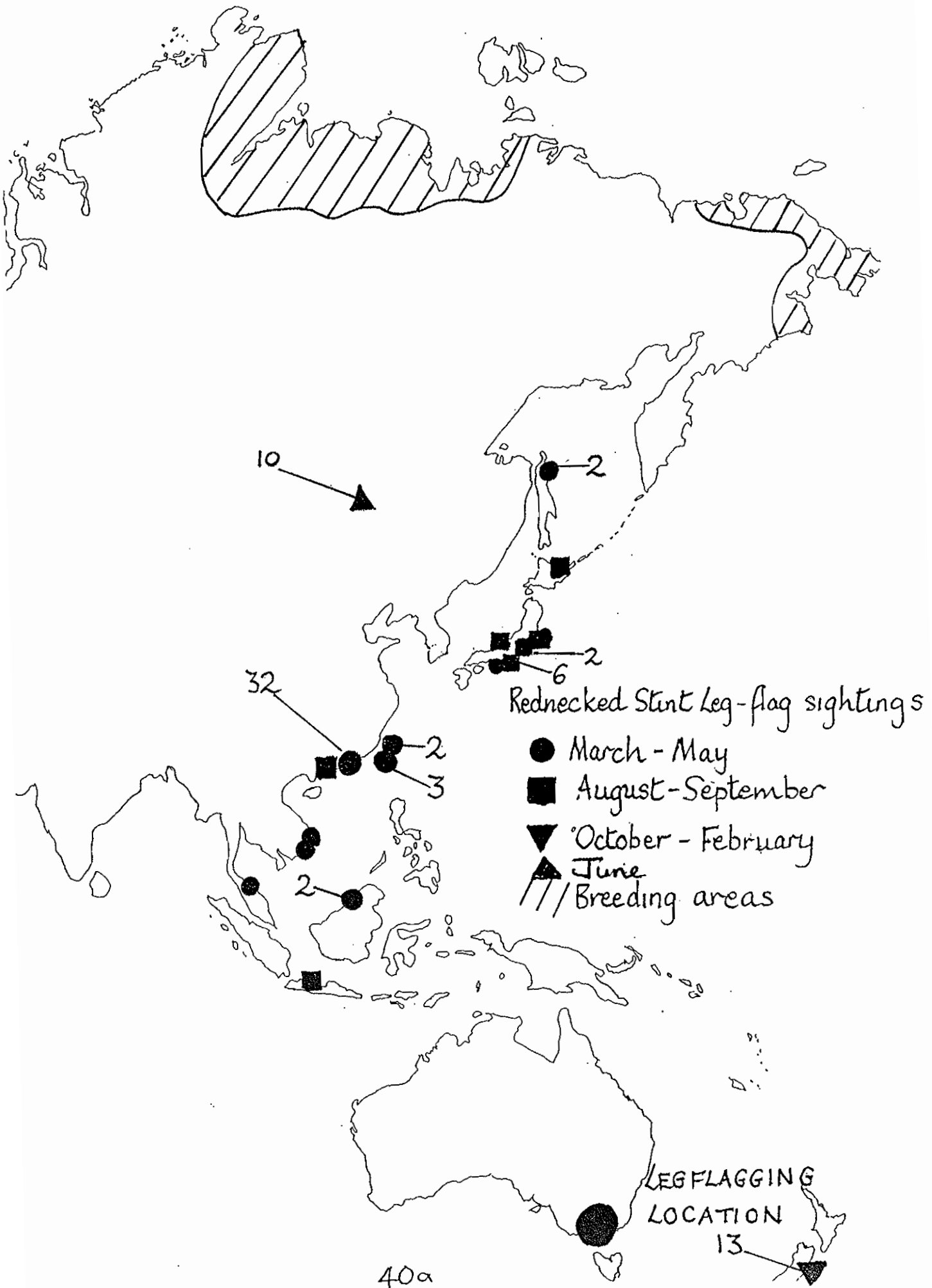
The timing of migration through the flyway is indicated by the dates of recoveries and leg-flag sightings. The first birds on northward migration reach Asia (2 in Vietnam, 2 in Taiwan and 1 in China) at the very end of March. The rest are in April and up until mid-May, with a strong preponderance in May (recoveries 2 in April, 10 in May; flag sightings 16 in April, 27 in May). The 10 flag sightings and 2 recoveries in southern Siberia (close to the junction of Russia, eastern Mongolia and China) between the 5th and 12th of June 1996 indicate that the final overland stages of the migration to the breeding grounds may continue well into June, at least in some years (1996 was a very late spring in Siberia). The timing of southward migration is rather more spread out with one bird reaching the southern end of the Russian coast, near Vladivostok, by the end of July and others not being reported there until September or even October. Most of the southward passage records through Japan were in August and early September, though again one occurred in late July.

These timings are in good agreement with visual/count observations of the timing of departure from, and arrival in, Victoria of the main numbers of Red-necked Stint. They are also consistent with a stopover on the northern coast of Australia on both migrations. Weight gains recorded in Australia are consistent with migration stages of 2-3000 km. but some birds may be achieving ranges greater than this on their departure from northern Australia.

The overall migration pattern of Red-necked Stints spending their non-breeding season in Victoria seems on present evidence, to be as follows.

- 1) departure from Victoria, mainly in April, to a refuelling destination on the north coast of Australia.
- 2) stopover sites in Asia, mainly in Vietnam and along the Chinese coast, reached in one, or two, stages from northern Australia. These sites are used in April and the first part of May.

MAP 2



- 3) departure inland from the northern parts of the Chinese coast across Siberia towards the breeding grounds takes place in the second half of May. The journey across Siberia may take until mid-June, at least in some years.
- 4) most birds will be on the breeding grounds in June and early July. The limited evidence so far suggests the Victorian Red-necked Stints breed in the western parts of the species breeding range in arctic Siberia.
- 5) southward migration starts in July and appears to follow a more easterly route than northward migration, passing particularly through Japan during August and early September.
- 6) there is some evidence for stopovers in south east Asia (3 records in Indonesia) en route to the northern coast of Australia but details of the route taken/stop over strategy in this section of the southward migration are scanty.
- 7) returning adult Red-necked Stints reach Victoria from the last week of August onwards, with most arriving in September. However moult data suggests that adults continue to trickle in until November.

The above summary of the migration of Red-necked Stints from Victoria is clearly subject to potential biases in the recovery, control and flag reporting data. 21 of the 25 recoveries were of birds taken by hunters, and the locations of these will be affected by the differing hunting practices of countries along the flyway (eg. waders are hunted in many Asian countries, but not in Japan). Similarly flag sightings are biased towards locations where birdwatchers are most present eg. in Hong Kong and Japan.

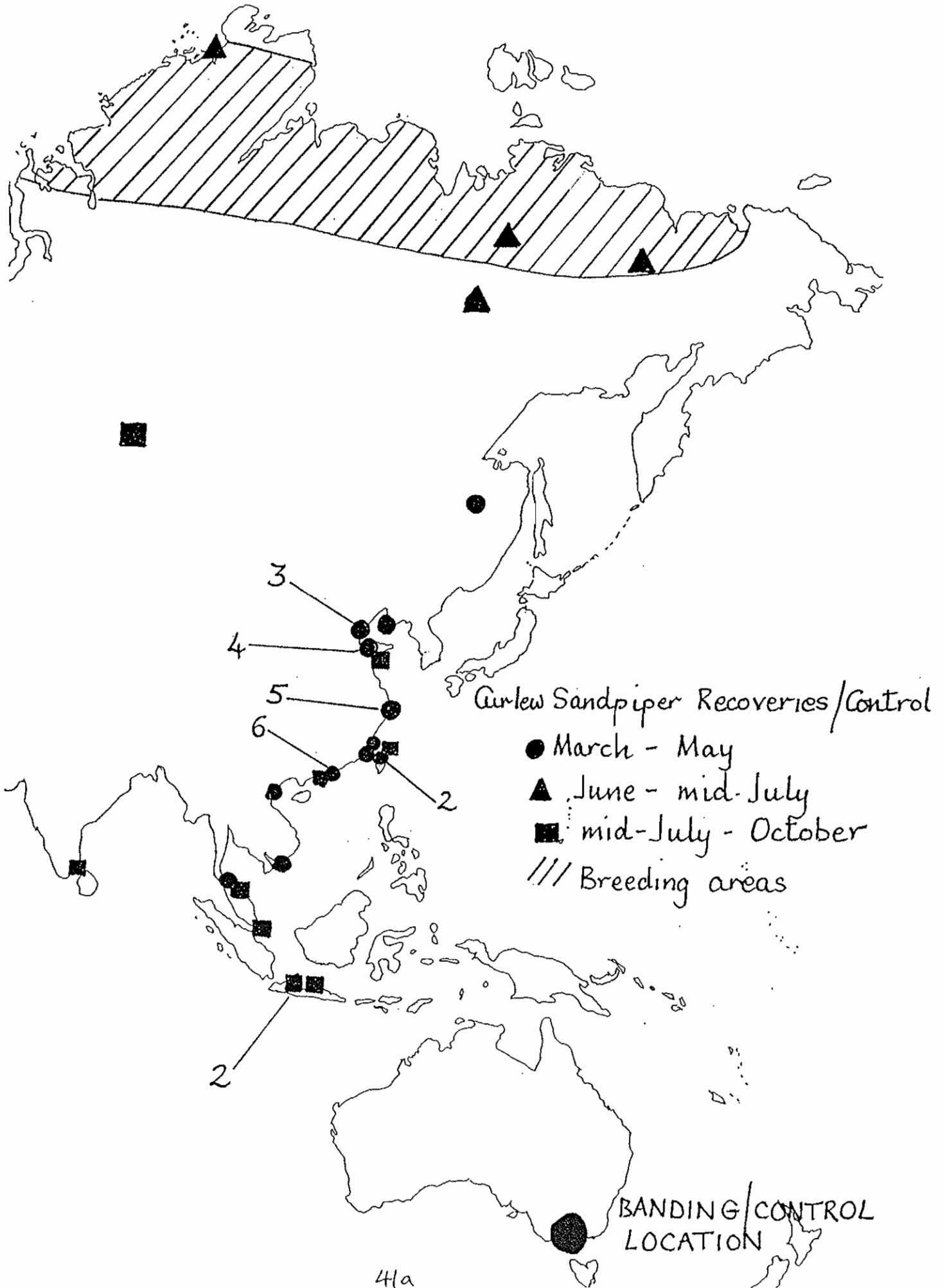
For these reasons, and because of the limited number of recoveries and controls which are currently available it will be some years before a more accurate and definitive migration pattern for Victorian Red-necked Stints can be determined.

Curlew Sandpiper

As with Red-necked Stints the majority of recoveries (24 out of 34) and nearly half the controls (three out of seven) relate to birds on the northward migration (map 3). There is an extremely strong emphasis on the Chinese coast (15 recoveries) and adjacent locations Hong Kong (6) and Taiwan (2). There are only two reports involving Vietnam and one from Thailand. Furthermore there are none from the south east Asian countries such as Indonesia, Papua New Guinea, The Philippines, Sabah, Brunei etc. suggesting that Curlew Sandpipers have an even greater tendency to overfly these once they leave the northern shores of Australia.

There is one recovery inland in eastern Siberia at the end of May indicating a bird which had departed from the coast and was travelling cross country to the breeding grounds. Such departures probably take place from northern China, as in the Red-necked Stint, as there are no coastal recoveries further north than China.

MAP 3



Four birds have been recovered in June on or close to their breeding grounds on the arctic tundra across the northern regions of Siberia. One was at the northern extremity of the breeding range - and well to the west - on the Taimyr Peninsular over 13000 km. from its banding location in Victoria. This banded bird was seen on its breeding territory by Pavel Tomkovich, the leading Russian wader expert, and was induced into the catching area of a spring net by use of another, stuffed, male Curlew Sandpiper, against which it showed considerable aggression.

It thus appears that Curlew Sandpipers visiting Victoria come from across the full range of the breeding areas in Siberia. They overlap in breeding range with those that migrate south-westwards into Europe and Africa, especially those which go to South Africa. This is unusual - normally birds with such widely different non-breeding areas come from discrete, and separate, breeding areas. Maybe one day one will make a mistake and an Australian banded Curlew Sandpiper will turn up in South Africa (or vice versa)!

The route followed by Curlew Sandpipers on southward migration appears to be different to that of the northward migration, again as in Red-necked Stints, although in this case the route is further to the west. A recovery in central Siberia, at a more westerly longitude than even the most westerly breeding season recovery, is an indicator of this trend. Controls from Thailand and Singapore, and a recovery in southern India - together with only three recoveries/controls in China, Hong Kong and Taiwan - are further evidence of the more westerly route of the main southward migration. The most marked difference from Red-necked Stints is that there are no recoveries or controls (or flag sightings) of Curlew Sandpipers from Japan.

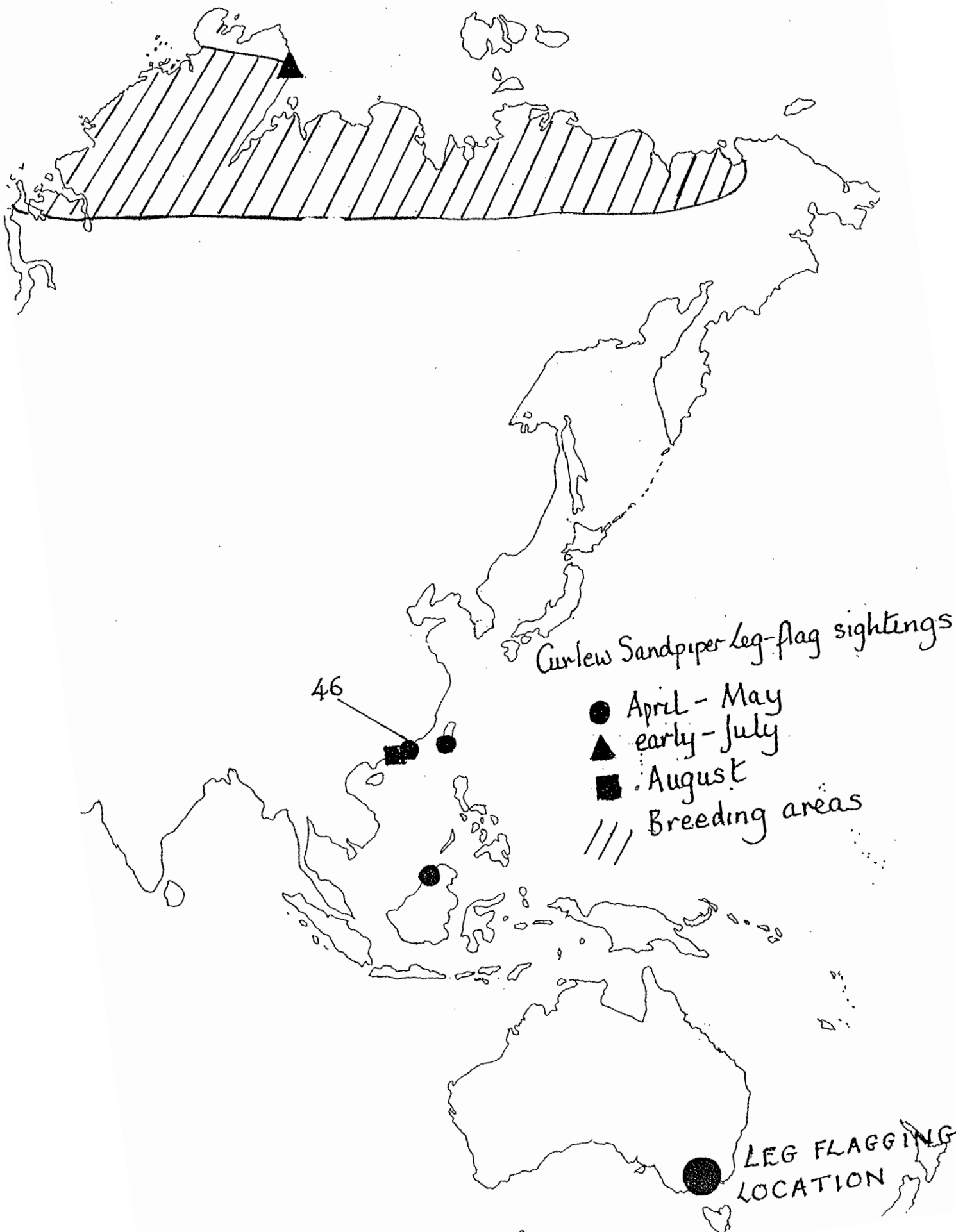
Three recoveries in Indonesia, all on southward migration, suggest that some birds may make a stopover during southward migration in the south east Asian island countries on their way back to northern coastal Australia.

Overseas sightings of orange leg-flagged Curlew Sandpipers are relatively fewer (though still numerous) and much less widespread than for the Red-necked Stint, with 47 out of the 50 being in Hong Kong (map 4). They reinforce however the strong emphasis on the Chinese coast as a stopover area on northward migration. There is a single breeding season sighting, again in the Taimyr Peninsular. The single sighting on southward migration further illustrates the relative paucity of records of Australian banded waders on southward migration compared with northward migration.

There is a tendency for the northward migration of Curlew Sandpipers to pass through Asia slightly earlier on average than Red-necked Stints. Although there are no late March records a relatively greater proportion of reports relate to April rather than May (recoveries/controls - 9 in April, 18 in May; flag sightings 34 in April, 14 in May). The April records tend to be more southerly (Vietnam, Thailand and Hong Kong) than the May records (northern half of the Chinese coast) suggesting at least one refuelling stopover in the region.

Most of the southward migration reports are in August - from as far apart as central Siberia and Indonesia - with only those at the southern end of the range being in

MAP 4



September. The bird from Singapore had been banded there in October, but it was a juvenile and these always migrate later than the adults.

The overall annual migration of adult Curlew Sandpipers can, on the basis of data currently available, be summarised as follows,

- 1) depart from Victoria in March and early April, to reach the central parts of south east Asia [Vietnam, Thailand, and Hong Kong] during April after an appropriate stopover on the northern Australian coastline to fatten up after the journey across the Australian continent.
- 2) a further move up the Asian coastline to stopover sites on the northern half of the Chinese coast during late April and the first half of May.
- 3) departure northwards from the northern Chinese coast in the second half of May across the Siberia to reach the breeding grounds right across the northern part of Siberia by early June.
- 4) return migration by a more westerly route, across Siberia, reaching the Asian coast on a broad front between India and China in August. This migration probably starts in mid July, but there are no July reports to confirm this.
- 5) continuation of the southward migration, via the western parts of south east Asia, to reach the northern shores of Australia in late August and early September.
- 6) after an appropriate stopover in northern Australia migration continues on a direct route to Victoria. The first birds arrive in late August, but the majority not until September, with some lingering into October.

Recovery modes again indicate the potential for bias. 23 of the 34 recoveries were birds caught or killed by hunters - in China predominantly but also in Russia, Indonesia, Thailand and Vietnam. Nine of the recoveries, and ofcourse, all the controls were of birds caught by other banders (including seven in Hong Kong). The recovery pattern will thus have been influenced in part by the distribution of hunters, bird banders and bird watchers throughout the flyway.

In summary, the 91 movement records relating to Curlew Sandpipers which spend the non-breeding season in Victoria have enabled an outline of the migration route and stopover areas to be postulated. Much more data will be needed before these can be determined more accurately and before the extent of any biases in the recovery pattern can be assessed.

Clive Minton

The Hooded Plover on Phillip Island

The Hooded Plover *Thinornis rubricollis* is an Australian endemic that is considered rare or in some parts of its range endangered. During the breeding season in the south east of Australia it is found in pairs or small family groups on sandy ocean beaches, reefs, estuary inlets and nearby coastal lakes. During the winter they congregate in small (10-40) or large flocks of up to several hundred (HANZAB Vol. 2).

Since 1980 Hooded Plovers have been surveyed on a regular basis on the beaches around Phillip Island. This article summarises these observations.

Annual and seasonal variation in numbers

The number of Hooded Plovers present on the island has varied annually and seasonally during the last sixteen years (see Table 1).

The number of Hooded Plover present on Phillip Island from 1980 to 1996.

Table 1

Date	Number of Hooded Plover	Source of Count
1980	14	RAOU Biennial Count
1982	26	RAOU Biennial Count
1984	20	RAOU Biennial Count
October 1988	28	RAOU Biennial Count
October 1990	23	RAOU Biennial Count
June 1991	35	Bob Baird
July 1991	35	Bob Baird
October 1991	25	Bob Baird
November 1992	18	RAOU Biennial Count
May 1993	33	Bob Baird
July 1993	18	Bob Baird
September 1993	11	Bob Baird
November 1994	21	RAOU Biennial
November 1995	8	Bob Baird
January 1996	13	Bob Baird

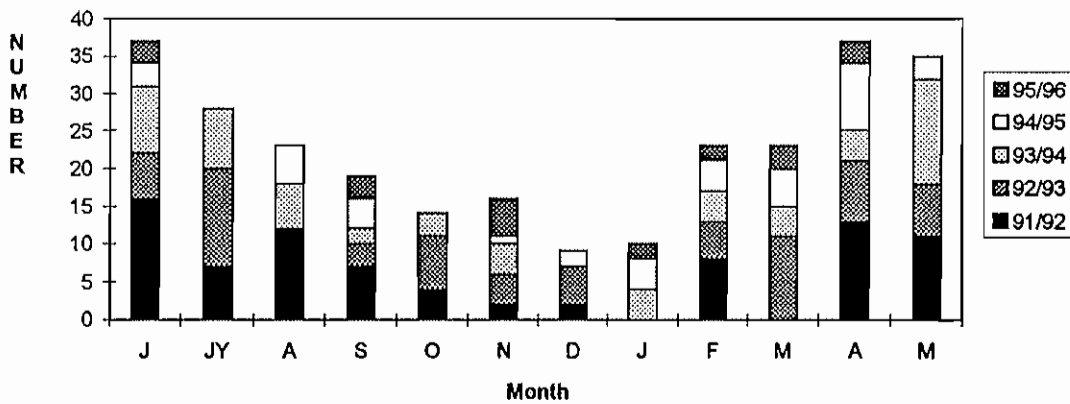
The greatest number of birds recorded was 35 in June and July 1991 the lowest eight in November 1995. Multiple counts in 1991 and 1993 indicate that there is an influx of birds in the winter months. It is possible that local birds are supplemented by birds from the mainland. In May 1993 a flock of 14 individuals was observed at Forrest Caves and a further 4 were seen flying from Flynn's Reef towards Flinders on a westwards course. Their timid behaviour and obvious nervousness of both these flocks suggested they were on passage. They only alighted in small areas of the beach for a few minutes before flying off again westwards. This type of movement has been noted in Victorian birds before flocks form in the winter months

(Schulz and Lumsden 1983; Schulz 1987; Newman and Patterson 1984; Bransbury 1985, Emison *et. al* 1987).

At the moment it is not possible to ascertain if there is a return passage of birds, however it does appear that there is some movement in October as the numbers of non-breeding birds increase. During the summer months numbers are generally low the maximum being 21 in November 1994. In the summer of the following two years the numbers were had decreased to to 8 and 13 respectively.

These trends were also found at Thorny Beach where more frequent counts have been made (Figure 1).

Figure 1. Number of Hooded Plover at Thorny Beach



Throughout the period 1991 to 1996 this beach was monitored regularly and the Figure 1 shows how the numbers increase during the early winter months until they begin to depart in July/August. It is assumed that these birds breed on the mainland and use the beaches around the island as a wintering site.

Breeding

Between 1991 and 1996 up to 20 pairs of Hooded Plovers bred or attempted to breed at several points around Phillip Island (Table 2).

Numbers of eggs and fledglings counted at various sites 1991-96

Beach	91/92		92/93		93/94		94/95		95/96	
	Eggs	F/dg	Eggs	F/dg	Eggs	F/dg	Eggs	F/dg	Eggs	F/dg
Woolamai	NR	NR	2	0	3	1	4	1	0	0
ANZACS	0	0	0	0	3	0	0	0	1	0
Woolamai Safety	0	0	0	0	0	0	6	0	0	0
Forrest Caves	NR	1	15	1	7	0	3	0	1	0
Smiths East	3	0	0	0	0	0	0	0	0	0
Berry's	NR	NR	9	0	3	0	5	0	3	0
Hutchinson	NR	NR	0	0	0	0	6	0	3	0
Thorny	NR	NR	3	0	15	2	11	3	0	0
Kitty Miller	NR	NR	0	0	2	0	0	0	4	0
Summerlands	NR	NR	3	0	0	0	5	1	3	0
Cowrie	3	0	5	2	0	0	0	0	0	0
Flynn's Reef	NR	2	3	0	0	0	0	0	5	0
Farm Beach	NR	NR	3	0	2	0	2	0	6	0
Salt-water Creek	3	3	0	0	0	0	0	0	0	0
Observation Point	3	0	0	0	0	0	0	0	0	0
TOTALS	NR	NR	43	3	35	2	42	5	26	0

F/dg are those that fledged and NR are those times when records were not kept

During the four year period between 1991 and 1996 15 sites were utilised some regularly while others only once. The most important site was Forrest Caves which has been used every breeding season (Table 2). Possibly Berry's Beach and Farm Beach were also used but these areas were not recorded in the first season. Of the other areas, Woolamai, Thorny and Summerlands were used three times, Anzacs, Hutchinsons, Kitty Miller, Cowrie and Flynn's beaches were all used twice while breeding was recorded once for Woolamai Safety, Smiths East, Saltwater Creek and Observation Point.

The breeding records at Thorny Beach show that this area has the greatest number (29) of eggs and this is therefore a highly significant site.

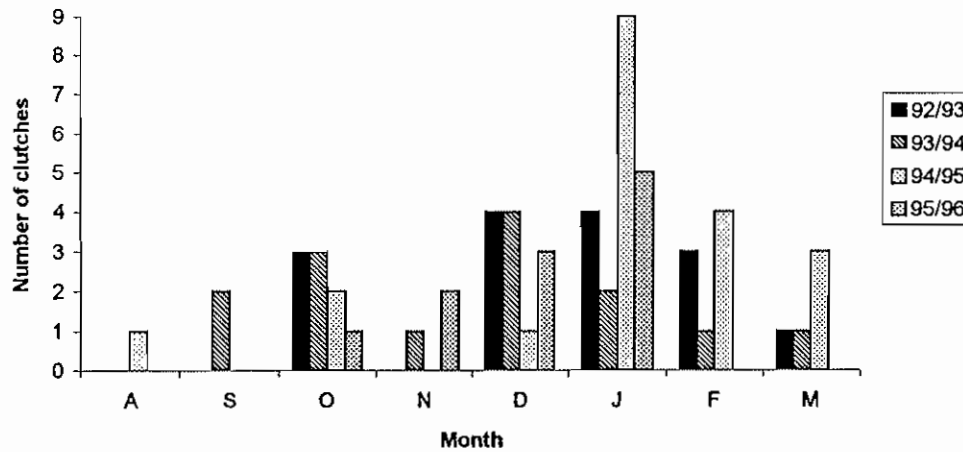
Victorian Hooded Plovers nest on, or adjacent to, ocean beaches (HANZAB Volume 2) and the Phillip Island population is no exception. 67 per cent of the nests that were discovered were on a sandy substrate either on a relatively flat beach, 43%, or on a sand bank adjacent to the sea 24%. Interestingly 33% of nests were placed on pebbly substrate, the pebbles surrounding the nests being between 40 and 100 mm's in diameter. This has only been recorded once before though no mention of the size of stones is noted (Horey 1981)

The nests were generally placed between one half a metre and one and a half meters above high tide though the nests on sand banks were two and a half to three and a half metres above high tide. Most nests were placed between two and five metres of the high tide line, three nests were between 9 and 10 meters and in two extreme cases they were placed 27 metres and 57 metres away.

In common with the rest of the Victorian population (Australian Nest Record Scheme [Aust. NRS]) the breeding season normally ranges from August to March. The peak

of egg laying occurs in December and January and the clutches discovered in February and March are probably second broods.

Figure 2; The distribution of clutches throughout the breeding season



In common with the rest of the Victorian population breeding results were generally very poor over the whole period. Between 1992 and 1996 of 131 eggs that were laid only 23 chicks hatched and of these only 10 chicks were fledged. As far back as 1982 only one of 12 breeding pairs were successful in raising young and this was a single chick and the rest failed due to human disturbance (Lane 1987). This pattern has unfortunately continued through the survey period until 1996 there were no successful nests. Generally the main cause of failure in most beach nesting species is inundation by high tides (McGarvie and Templeton 1974, Murlis 1989, Stewart 1989, Aust. NRS) however controllable factors are the most common cause of loss on Phillip Island. These controllable losses include depredation by domestic dogs, 26%, human interference 7% including two cases where eggs and chicks were handed into Penguin Reserve Rangers, Livestock trampling 8.7% and motor vehicle disturbance 1.5%. Uncontrollable losses due to extreme high tides accounted for 14% while foxes took care of a further 17.5%. A further 9.5% of nests had outcomes that were unknown. It therefore appears that as far as the breeding population of Phillip Island is concerned 43.2 % of loss is, with co-operation, preventable.

During the 1995/1996 breeding season no Hooded Plovers succeeded in fledging any chicks on any beach on Phillip Island. On Flynn’s Reef and Farm Beach wire guards were placed around the nests to protect the nesting birds. These had a mixed result as the Farm Beach eggs hatched but were later lost probably to a fox. The Flynn’s Reef site was inundated by a very high storm surge. No other eggs hatched. Predation by foxes caused two losses, seven were attributable to human factors including dog walking and possible illegal camping. The other two clutches were lost to unknown causes. The 1995/96 breeding season was the worst on record and to compound the disaster 54 % of the clutches were lost to avoidable circumstances, namely human disturbance.

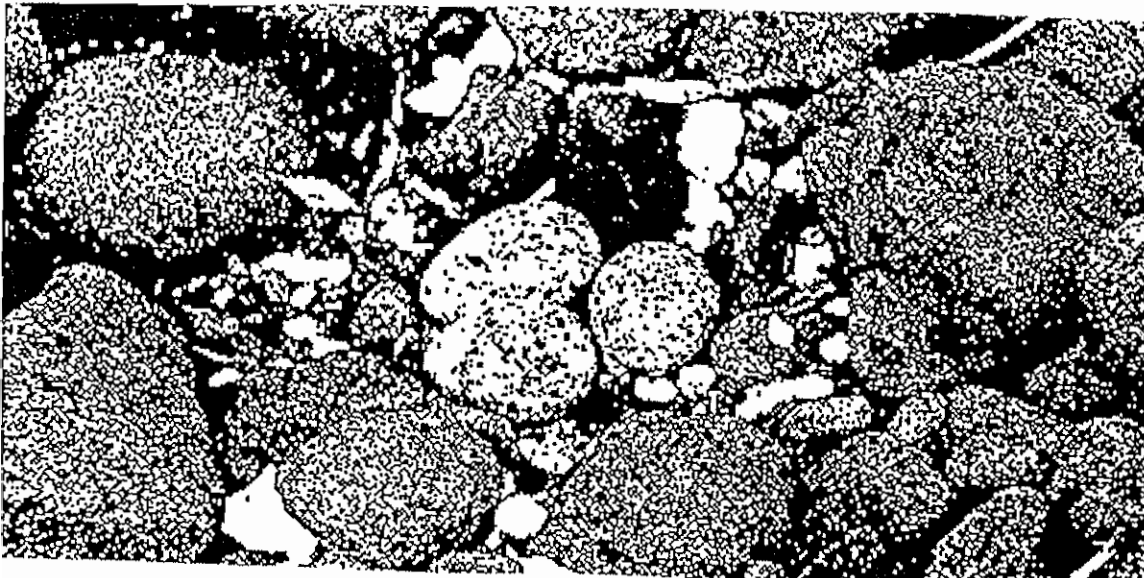
To try to ensure the continued presence of this species on Phillip Island the Phillip Island Hooded Plover Study Group was formed under the auspices of the then Department of Conservation, and Natural Resources. During their May 96 meeting a number of measures were agreed upon to try and improve the Hooded Plovers breeding success. These were:

- a) the reinvigorating of negotiations with the owner of the farmland adjoining Thorny Beach to fence off his land to curtail stock wandering onto the beach.
- b) continue to trial wire mesh cages even though some concern was raised about the attraction they caused to the public in the light of two adults being captured at Flynn's Beach and brought in to the Penguin Reserve. Less conspicuous cages would be designed and the possibility of notices on the cages warning the general public of their uses would be explored.
- d) when the new Phillip Island Nature Park and the managing agency for public land on the island becomes clear, raise the issues of implementation of effective dog restrictions will be raised with the managing agency.

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Bob Baird and Peter Collins



Hooded Plover nest - Berries Beach, 1992. *Bob Baird*

Hounding the Hoodies

Once again I find myself studying in the Department of Zoology at the University of Melbourne. I have forsaken Pied Oystercatchers, the subject of my honours research, for Hooded Plovers *Thinornis rubricollis*, as the study animal for my PhD project. This means I have three to four years of study, and it is a wonderful opportunity to conduct a medium term study on a rare species endemic to Australia's southern shores.

The hooded Plover is currently considered rare, but the status needs revision in light of recent findings. These findings include; (1) the suggestion of a population decline, indicated by the AWSG biennial Hooded Plover counts, (2) the suggestion of two subspecies rather than one, (3) recent taxonomic changes at generic level. During my study I will address these issues, and this mostly involves catching Hooded Plovers, measuring them and taking samples for genetic analysis. In addition it includes counting Hooded Plover populations, in conjunction with the AWSG and the WA Group. Colour banding will provide information on movements, mortality, social structure, and many important factors such as age of first breeding. Nearly 100 birds have been colour banded in Victoria. Two VWSG birds have been recaptured, both at least 10 years of age, supporting the idea that the adults are long lived. Adults have moved up to 30 km, ad juveniles well over 40 km. But the results are still rolling in, and every colour band sighting tells a story.

REPORTING COLOUR BANDS

information that should be recorded and reported includes (1) Date (2) Time (3) Location [as exact as possible] (4) Sequence of colour bands [which leg and wether each colour is on top or underneath] (5) How many Hooded Plovers the colour banded bird is with (6) any other information [eg. age]

Colours used in this study are (1) Red (2) Dark Blue (3) Yellow (4) Light Green (5) Orange (6) Black (7) White

Band configuration each bird has one metal band and three colour bands. On one leg there is a single colour band above a metal band. On the other leg there are two colour bands which can be different colours or the same colours.

Contact information. Please send all sightings to Michael Weston by phone on 031 9870-1586 (after hours, or a message on the answering machine) or 03 9882-4334 or 03 9882-2622. Alternatively, post full details to Michael Weston, 28 Craig Road, Donvale, Victoria, 3111. Please leave your full contact details including postal address and phone numbers.

Another conservation problem is disturbance, and this is another major focus of my work. This involves a lot of hide watches, and the use of some sophisticated remote nest monitoring equipment. The results of this work are too preliminary to report, but the use of the remote monitoring equipment looks very promising, and is very appealing to the overworked field biologist! The study is now in full swing, and we are discovering something interesting every week. I urge you to support the project if you can, Ways in which you can help are presented below. If you want to help in other ways please contact me.

Ways you can help this project, and consequently help the Hooded Plover;

- * check all HP you see for colour bands and report them immediately
- * participate in the AWSG national HP count on or around the 9th and 10th of November
- * send in details of any sightings of HP away from open ocean beaches (including historic records).
- * report sightings of food items, nest destruction or success, chick mortality etc.
- * volunteer to help enter data onto computer
- * report any conservation issue relevant to HPs

Michael Weston

Feathers

*Man has always envied the plumage of birds,
tried to emulate their purity and effortless flight;*

Icarus made wings to fly to the sun

Noah used the dove for peace

he has sought to acquire their magic through theft;

Maori cloaks of Kiwi feathers for authority

Kurdatche boots of Emu feathers used by the magic man

Birds of paradise headdresses for tribal elders

Eagle feathers for strength to Indian braves

The Word transcribed by quill

Feathers to adorn septa

He has woven myth and legend about these avian ancestors

Gondwana's Genyornis newtoni beset by reptilians

The Dodo of childlore

Giant Moa destroyed by Maoris

Emus divided feathers.....

He has plundered and pilfered;

Feathers for the flights of arrows of destruction

Duck and Swansdown for comforters and pillows

Ornaments for Scottish bonnets

Muttonbird squab garrotted for down and oil

Yet despite his mighty brain, his obeisance to technology, his stealth and connivance, man has not an iota of avian grace, beauty, stamina, endurance. How does puny man measure up to the Red-necked Stint ~ twice yearly this tiny bird flies uneringly, unflaggingly, between Corner Inlet and Siberia,

The fragile feather.....

Yarram 1996

Teri Allen

Kaleidoscope of Impressions: Broome 1996

Left Gippsland in cold, wet, windy conditions for the last two weeks of the AWSG N.W. Australia expedition - to be decanted at dusk in Broome's suffocating heat, to a brilliant sunset and cyclone warnings. Then I had the misfortune to pitch the tent in the dark on an ant highway.

Wader Beach: flanked by deeply eroded aeolian cliffs and sage coloured shrubbery, salmon sand, spiked within outcrops of rock, merged with an aquamarine sea.

Roebuck Bay 4 - 6 pm, migration monitoring: an eerie stillness, a hushed expectancy, as birds shifted and sorted, peeled away. Under the mangroves mudskippers slid over soft grey mud to the incessant clacking of navy and orange fiddler crabs.

Glen, the photographer for Attenborough, painstakingly stalked the team, even filming the firing from a birds eye view, from a mangrove directly in front of the net.

No catch for two days as the birds were very edgy, possibly due to the cyclone - which incidentally disturbed the insects, myriads of them and produced a little evening rain and hot sticky days. It also brought a scurf of mangrove pods along the tide line, redolent of cold saveloy.

Sanctuary - the netted-in shade house had us trapped as in a meat cool store. At night we were surveyed by a thousand eyes: moths, geckos, spiders, frogs, mosquitoes, stick insects and one enormous green phasmid with green and gold striped legs. Outside the chalet an enormous orb spider and partner waited patiently, while green tree frogs haunted the shower blocks.

Evening sessions were an info-fest: films on tundra bird and animal life, a lemming talk, Yasuo's brilliantly illustrated talk on Painted Snipe, Pavels superb slides (especially of the Spoonbill Sandpiper), Ray Chatto's informative diatribe on the NT coastline.

Duty teams excelled under the vigilant Jan Mangan and Doris Graham: tacos, roast, borsch, sausages and buckwheat, vodka, wineculminating in the Coconut Well alfresco.

Goodbye to the red stained trend and onto the bore-water frayed - Anna Plains station and Eighty Mile beach; bustards, shell paradise, joys of bore bathing, shimmering mud-flats, 5000+ Red Knots in breeding plumage, the roaring of the incoming tide, flaring sunrises and sunsets, the Russians bathing pool, hermit crabs, mustering the birds, tiger cowries, watermelon.....

And then the beetles came, small, brown, suffocating..... and the mini willywilly which flattened four tents.....and sharks cruised the shoreline.....and the 44^o degree heat plummeted to 37^o C under the shade cloth.....and black coral fans ripped from the reef littered beach.

Under a balmy sky on the last evening came vodka sips and singing: Russian folksongs, English tunes, Japanese melodies, Tony's tom-tom tones and "Waltzing Matilda" led by the Poms as well as Wendy's "Old Shep".

Yet the warmest memories are for the feel of a bird, the magic of massed flocks, the miracle of migration and ofcourse the camaraderie.

Thank you all Terri Allen

Bird Banding

A perfect day

rippleless, smooth, sunny ~

a time for leisured calm

Feet crunch the oyster shell

one team prepares the cannons,

bent-backed, rust - greased:

another runs the net, furls, sets ropes, covers;

the third erects the hide, camouflages;

On the lazy air calls linger.

Who has the hammer ?

Are the cannons ready ?

Less sand there!

Lines are unrolled, cannon trenches dug, projectiles positioned.

Knees are sore, shell-rubbed.

hands chapped from shovelling sand and shell shards

Inquisitively a lone gull investigates

Target? 110 Oystercatchers

The hide ~

a camouflage mesh ceiling and front,

coarse sand floor.,

seventeen bodies huddled intimately,

It's close crowded.

Graeme scowls over the electric's,

Glimpsed outside:

pigface empurpled on the mound

yellow grot fringing the lagoon,

tide inexorably creeping,

smoke - haze of hills,

Clive talks in a low voice on the radio

to twinklers Tim and Roger,

to be interrupted by the piping of Oystercatchers,

Flocking ~ silence!

Infinite patience ~ decoys out,

Closer, closer.....

Misfire.

Failure.

Green ~ flecked

the lagoon is an oval mirror,

fringing silvery tussocks spiking inland,

Now the focal point is Clives trailer

where a small group confers

then steps out to measure the net site

Ant - like the troops cluster

to set out and hold a projectile post-mortem

Bed net is stretched to dry,

a scrim on the white-shelled shore,

Brown mudflats adrift

before a shimmering silver-blue sea,

the Prom looms benignly,

purple- blue serrations sawing the azure sky.

Barry Beach 1995

Teri Allen

Field Outings for Oystercatchers, May 1996

On the morning of the 18th May, on a perfect Autumn day, nine of us gathered at Stockyard Point, Western Port, with the intention of catching Pied Oystercatchers.

One net was set at a new high tide roost, on the end of a sandy spit. Further to the east into Pioneer Bay, discovered by Clive on his "recce" the previous day.

We retired back to where we had left our belongings by the four wheel drive and trailer and while having lunch various recollections and stories were told about the recent Broome trip, for the benefit of those like myself who were unable to attend. Clive also told us of banding news, forthcoming events and plans for the future.

Approximately 40 Oystercatchers had gathered at the usual roost and some colour band combinations were read through a telescope. We also spotted a Crested Tern carrying an orange leg-flag showing we had banded this bird at Mud Island last December.

It was soon decided that we should move to the firing position, but as we proceeded no less than four Whistling Kites decided to circle over and do aerobatics disturbing the birds which flew across to Blue Gum Point, on French Island, from where they were not expected to return. With things looking grim we still got in position, after some decoys were put into place, and more memories and stories of Broome were shared while we waited for high tide.

It seems like luck was with us as another raptor was active over French Island. A White-bellied Sea-eagle obligingly sent the Oystercatchers back to us which soon arrived and settled at the normal roost site with some other waders. They were quickly twinkled on to us and a catch was made.

All birds were banded, processed and colour banded, some retraps having their discoloured or damaged bands replaced. While this was in progress we were treated to a fly past of 700 Red-necked Avocets.

The final tally was 66 of which 36 were retraps some, interestingly, from Corner Inlet, Rhyll and Werribee.

Two days later, on Tuesday 21st, four of us travelled to near Foster, in South Gippsland to meet with 16 locals to catch at a place known locally as "Black Swamp" on Corner Inlet. This is an area, next to Neville Roussacs farm, where for several years he has been observing Oystercatchers and recording any that were colour banded.

Things went smoothly for this new site (even the local Wedge-tailed Eagle kept away). Except for last minute changes to the net position, while the birds were trying to roost on the sandy spit, and later while banding and processing we had a visit from two members of the Foster Constabulary investigating an explosion!

The total on that overcast but pleasant day was six Sooty and 48 Pied of which four were retraps. It was noticed that the colour bands had not discoloured in comparison to those on Western Port birds.

Graham Beal

Glossary of Cannon Netting Terms revised version

The original of this occurred in a VWSG Bulletin 15 years ago. Definitions are from The Collins unabashed version of the Aylesbury Dictionary of English/Strine.

Air Shot. Close but not close enough often caused by funny eye syndrome usually through glare or over enthusiasm. Basically it means catching a lot of fresh air and very little else.

Broome. A migration end of the line area for hundreds of wader people from all over the place. Recent Australian vagrants have included rare examples from all states and territories except Tasmania. International vagrants have fled from their breeding grounds from Russia, Canada, South east Asia and Japan and of course the normal crop of overwintering Poms. I believe there are some birds here to.

Camouflage. A very important piece of net setting. Not too much and not too little is the general rule. It seems to be designed so that unsuspecting members of the public can wander unawares into extreme danger. The birds don't seem to mind but doing this makes cannon netters feel better.

Cannon. Exactly as it means in any normal dictionary except that here the object is not to fire cannon balls.

Catching area. Very similar to an old fashioned leprosarium. An area to be avoided like the plague especially if you fly.

Chocolate blocks. Neither chocolate, unfortunately, or a block. These are guaranteed against working properly when connected in the proscribed manner. In theory they are used as connectors to get the electric from here to there. They do work on occasion.

Circuit tester. Tests circuits. Easily left on and a mine of mis-information. Can under extreme circumstances be used albeit accidentally to fire a cannon net, see air shot.

Colour band. Normally seen in flocks of waders that come in fetching orange and if you are a cool Oystercatcher a wide range of startling combinations. Also known as jewellery it is much sought after by international and national scopers

Covering material. Obviously material used to cover things in this case birds. It can be Giorgio Armani clothes or more normally the tattiest piece of junk people can lay their hands on. However recent technology has produced **Green shade-cloth**. Works a treat and showers people underneath with copious amounts of sand for their troubles.

Donger. When you can't find something to hit something with call for this invaluable implement. No one is sure what it is but something always turns up that you can hit the other thing with.

Dropper. Two meanings for this. The first is a person who comes out with the VWSG for the first time about 2 hours after the net has fired. The second is a ludicrous piece of wire that tries its best to become detached from where it should be.

Firing box. Lethal. Packs one hell of a wallop. If it is working well that's great but is a constant source of foul language and bad moods, as well as the occasional pick you up after it has discharged through the operative. Safety note, make sure you do not pick up the unfortunate operative if he is still in rigor around the box.

Good team effort. This is used when a most valuable catch is made. Rare privilege to hear this.

Grot. VWSG clothes after a weekend in the field. The term is also used by people to describe their mood as well as the amazing variety of slimy smelly stuff that is used to camouflage the nets.

Hide. Needs to be as thick as an elephants when you make an innocent mistake. Also a good idea when the mistake loses a most valuable catch.

Jiggler. This again has two meanings. The most prosaic is a piece of string pulled just hard enough to break. If it doesn't break it attracts Oystercatchers and Red-capped Plovers into the danger area. Less exciting is the person who is in the unfortunate position

of having a full bladder when instructions are sent out for everybody to be ready as we are just about to fire.

Jump rope. An obsolete piece of elastic that never leaves the back line. Apparently it enables the net to go further than expected.

Keeping cage. The most cumbersome back-breaking piece of equipment. They are specially designed to snag on every thing including legs arms and other pieces of vital anatomy. Yours as well as others. Invaluable though for breaking in potential cannon netters. If they can carry a dozen of these they are welcome any time.

Leader. a.k.a. the boss, sir and a few other things that libel laws prevent this publisher from repeating. What the leader says goes or until he turns his back. Everybody should be doing something is generally a sign for a smoko (spelling of last word obscure). Also must have qualities of leadership in being first to fall over on the way to the net when it is fired but still manage to get there ahead of the majority.

Meal break. A mythical occurrence like the appearance of blue moons. The saying grab it while you can is often applied.

Oojahmahthingy. Conspecific with thingos, doohdahs and whatchamacallits. A generic name for anything that will come in handy especially if it happens to be several kilometres away and therefore only accessible to the fittest of the team.

Peep. The Americans call all small nondescript waders peeps. This has nothing to do with its real definition, it is in fact what you are not allowed to do in the firing position.

Processing. The nitty gritty of catching birds. This entails getting a variety of birds in a compromising position and then they defecate over you. This leads to more effective camouflage and an easy passage to the bar or Macdonald's.

Projectile. Rather a weighty lump of metal that if not attached gives a rather spectacular good impression of a ground to air missile. Retrieving same leads to endless glee especially if you are on the shore and the rest are up to their neck in mire looking for it.

Recce. Short for reconnaissance a rather quaint term for birdwatching while pretending to do something useful. More effective if you can't get your bearings once the tide has gone out. After all you only perform this activity when the tide is in.

Retrap. The excitement of catching old birds and foreign ones happens every so often. The strict definition should encompass an I.Q. test on some of these birds together with the handbook of where not to stand on a sunny day.

Runners. The myth that this is for the younger generation is a noble one. The transportation system from net to keeping cage is a job for fit healthy people or alternatively those who don't understand what is going on. Remember everybody should be doing something.

Scribe. The most important job in the Cannon netting world. It is up to the scribe to be able to write in Black pen reasonably legibly and to spot that Stints don't have head/bills of more than 60 centimetres.

Twinkling. An art form in many guises from neck deep in water to belly crawl on disemboweling shells. The general position should be bum up head down but there are many variations depending on a twinklers assets. The object is to get the birds into a position where they can be caught. Occasionally it happens when the Twinkler finds him/herself in this position. This is camouflage at its most effective.

VWSG. An odd assortment of people who really should know better. All at some time have been Mintonised and are now under specialist care. Be warned it could happen to you. Actually if you are reading this it probably already has.

Thanks Clive for the original idea.

Some Thoughts on Oystercatchers and Foxes

As a relative newcomer to the VWSG, I enjoy this time of year when our attention changes from the great variety of migratory waders to focus mainly on the two species of Oystercatcher.

These delightful birds wait calmly in the net, relative to other species. They are easy to extract, lie placidly during banding, patiently put up with processing - even though they get more bands than other birds. They only vent their spleen by disdainfully 'crapping' on the unsuspecting processor and flying off vigorously on completion of the process. So far this season good catches have been made of both Sooty and Pied Oystercatchers at Stockyard Point and Corner Inlet on 14-18 June.

They are such noticeable birds with their bright orange red bills and distinctive calls that we are inclined to forget that their total populations are so small - approximately 9000-10,000 Pied and only 4000 Sooty. However both are considered secure in their range, although they are rare in NSW.

While catching on Corner Inlet islands, particularly obvious were the fox prints where we were netting. Foxes are obviously capable swimmers. The Red Fox was introduced into Australia for sport in the 1850's and has had a devastating effect on the native fauna. As we all know, they are now common urban as well as rural residents.

Clive Minton informed me that efforts have been made on Dream Island (Corner Inlet) to control the population with 1080 bait but since the cessation of the campaign the fox population there has increased. There is also an intensive campaign on Phillip Island where foxes are the primary cause of land mortality of Little Penguins.

At Corner Inlet we witnessed the aerial acrobatics of a majestic pair of White-bellied Sea-eagles. Our second largest raptor species is considered rare in Victoria and is listed under the Flora and Fauna Guarantee Act 1988 as a threatened species. Although it may never have occurred in large numbers, there are about 25 pairs around Corner Inlet and a total Victorian population of 100 breeding pairs. Their decline has been caused by coastal forest habitat destruction, food fish reduction, human disturbance, shooting and possible indirect poisoning during control programmes for foxes. But we are told current 1080 baiting methods attempt to minimise risks to non-target species.

Once again at Corner Inlet we had great assistance from the NR & E (this years new name for DCNR) with boats people and marvellous hospitality from Rosemary and Alistair Davidson.

Tim Allen of the Marine and Coastal Network reminded me that Coast Action/Coast Care grants up to 10000 dollars are available for groups undertaking coast conservation works such as fencing, feral animal control to protect penguin rookeries and Oystercatcher nests, (Gippsland area contact Kath Gosden on 051 825 155).

John Walmsley (the cat hat man) of Earth Sanctuaries, Williams Road Mylor SA 5153 has built very effective feral proof fences with loose netting and a flat strip at ground level to inhibit burrowing animals.

"A rare bird or flower need remain no rarer than the people willing to venture their skill in building it a habitat" Aldo Leopold

Roger Richards

The Twinkle

"This is Clive to base camp."

"We need someone to push these birds into the catching area."

Yes its time to **twinkle**.

Almost all members of the VWSG have at some time carried out some form of twinkle for Clive. My first Twinkle was at Queenscliff on my first VWSG outing. It was a time when Clive was younger and fitter because he was with me crawling along the wet sand trying to move some unco-operative Oystercatchers into the catching area. It failed, so we then tried Red-necked Stint instead with a positive result not to mention being very close to the net when it fired. A great introduction into wader banding.

Thankfully I have been called on often since this first outing to Twinkle. Its my experience that the Twinkler treads a very fine line between being a hero if the Twinkle works to wasting many hours of hard work if the Twinkle fails.

The Twinkler often gets wet, covered in sand or spends hours out in the wind, rain or sun, sometimes with no idea of what is going on or when the net is to be fired. Its a bit like being a pawn on a chess board being moved into place to achieve a result.

Things have improved since the purchase of new radios. Now Twinklers can hear what is going on and hankies being waved out the hide is considered primitive. The Twinkler can take exacting instruction from Clive. A little left, and little right, stop, get down, move forward, move back and always keep the aerial vertical. On the other hand there is often more to Twinkling than taking instructions. Having a feel for how far or fast one can push or move birds is also important.

An easy Twinkle is simply "running around like a mad chook" recent instructions given at Corner Inlet 1996, to crawling slowly along the beach, walking birds into the catching area. Many is the time I have left a trail on the beach like a pregnant turtle preparing to lay eggs. Once on a Corner Inlet island I had water lapping around me while the instructions were to lie flat, do not move and "keep the radio dry". I knew a good place to put the radio so as to keep it dry.

Another occasion early one morning at Western Port saw me traversing a drain to move birds back to the catching area. Although it was simply a "run around Twinkle" I had to swim the drain and of course again "keep the radio dry".

Twinkles can happen in boats such as a recent Twinkle at Hastings this year or in the pouring rain such as Barry Beach in 1995 when Doris Graham and I got completely drenched in a summer storm. Rain drops the size of golf balls and a gale force wind that almost blew us all away. The catch was unsuccessful and again the radios had to be kept dry and vertical.

Sometimes the impossible is asked of you, such as Broome's Roebuck Bay 1996 when Clive wanted me to slice bunches of 200-300 birds from a flock of 2000-3000. The catching area was a distance from the Twinkle and kites were about but it all went well, luckily. Ultimately the Twinklers job is made easy by Clive's fantastic ability to nearly always set the net in an area where the birds want to go. A big part of wader banding that is often not considered.

All Twinkles are serious, a challenge, fun and play a big part in the catching process. So if your called on to Twinkle, give it your all, plunge into the sand, water or adverse weather, listen for instructions and most importantly "**keep the radio dry and the aerial vertical**".

Malcolm Brown

OLD-TIMER

Hugo Phillipps

I had met him in a tavern, the old Esplanade Hotel
(And if you live around there, then you doubtless know it well)
That looks out above the old St Kilda pier;
I had gone inside for shelter from the winter rain that day,
As a cold front rolled in rudely from across Port Phillip Bay,
And at the bar I bought a pot of beer.

And his face was wild and wizened, with his hair all white and wiry,
While his nose was red and thickened, and his eyes deep-set and fiery,
And they flickered as he looked upon the fire.

His back was bent by labour and his fingers gnarled by gripping,
As they trembled to the flavour of the brew that he'd been sipping,
And he mumbled words of horror, dark and dire.

He sounded like a seaman now retired from seafaring;
Maybe it was the smell of the old rags that he was wearing,
Or the way he lurched to get a bag of chips.
There was something in his manner (or the way he clacked his dentures)
That suggested that he'd been through some quite frightening adventures,
On the coast or on the ocean, sailing ships.

'Nasty weather out there still' then I for conversation offered,
And he glared at me in silence until a beer was proffered,
Then waved towards the grey and wind-whipped Bay.
'Call that nasty?' scoffed the gaffer; 'why, you must be joking'
(He paused to spray his chips around while indignantly choking)
'Let me tell you of a *really* nasty day.'

'I am a wader-bander, which is what you might have guessed
'From my debonair demeanour and the way that I am dressed,
'And my delicate and dainty taste in food.
'But a wader-bander's life is not all luxury and fun,
'All cultured couth and subtleties; when all is said and done,
'It can be sometimes rugged, rough and rude.

'We were down at Corner Inlet, for the weekend at Mann's Beach,
'With wader roosts and feeding grounds within our easy reach,
'Camping in a rusty old tin shed.
'We arrived, unpacked our bags, then sorted out the colour-flags,
'Fried up onions, beans and snags, before taking to our swags;
'But the radio warned of weather up ahead.

'All that night the wind was rising as the surging Southern Ocean
'Sent the moonlit storm-clouds scudding over tea-tree scrub in motion,
'Set the shed's door rattling in its frame.
'We could hear the mangroves thrashing and the beach waves loudly splashing;
'More distant was a roaring of the ocean rollers crashing;
'From the barrier sandbanks there it came.

'We lay in rows of sleeping bags and tried to find some rest,
'While listening to the Ocean's roar, and to our beans digest
'With the sound of thunder coming near.
'Then there came a vast explosion as the lightning hit our shed,
'As of giant cymbals crashing to arouse the very dead,
'Brought us starting up in primal fear.

'We saw the ghastly glare illumine cracks between our iron walling,
'While the rusted, pitted ceiling with electric sparks was crawling,
'Pallid faces staring up in fright.

'Yet there was one still asleep, and still within his dreams exploring
'Wader places and adventures catching waders; loudly snoring,
'Louder than the lightning in the night.

'Then the dawn came, grey and dripping, grimly through the mangroves groping,
'While we chewed on toast and comflakes, red-eyed, rough, and barely coping,
'All except the one who'd slept:
"Come on! Come on! Let's get going! Sun is up and light is growing!"
"Waders out there - for us waiting! Tide still out but soon inflowing!"
'Outwards, dazedly, we crept.

'Still the sky was dark and sullen, and we kept our fearful eyes on
'Still more flickering streaks within the storm clouds on the west horizon,
'While we put the net sets in the boat.
'Out across the troubled Inlet and the rolling waves we puttered;
'Out upon the dark horizon storm clouds roiled and thunder muttered
'At our brave-hearted banding band afloat.

'Out to where the curving sandbars stand against the Ocean's pounding,
'Where our overloaded tinnies in the shallows started grounding,
'Heaved our nets and cannons to the land;
'There the wind was gusting, veering, with the grains a carpet, lifting,
'Rustling round our aching ankles; the whole island slowly shifting,
'Flowing finger islets formed of sand.

'But the birds - they would not gather on that tideline or the spit,
'Would not fill their eyes and feathers with the blowing dust and grit,
'Maybe they were cleverer than us.
'Off they went in skeins and flocklets, looking for some other shelter;
'While we stood and watched their streaming, fleeing low all helter-skelter
'From the close impending cumulus.

'As the storm-bank rolled towards us like an army of the night,
'Hastily we stuffed the net-bags, fled the island's shores in fright,
'Across the frothing water,
'Across the screaming wind and current in the shadow of the cloud
'Cloak of darkness shot with lightning, wrapping us within its shroud -
'Banders to the slaughter.

'Tinnies loaded high with iron, floating low with little freeboard,
'Fighting fitfully the current's foaming waves all washing seaward,
'Slowly, slowly did we creep,
'Knowing that within our vessel were our cannons and black powder -
'Ingredients (with us and lightning) for a feast of human chowder
'For the creatures of the Deep.

'Yes, we did return; you see me sitting here beside you now;
'Back we came at last to our tin shed but, please, don't ask me how,
'Back with our full number.
'Maybe that night the thunder rolled, maybe the ghastly lightning flashed;
'I did not hear the one who snored, I did not feel the rain that lashed,
'For I was lost in slumber'.

With that he paused and looked with meaning at his sadly empty glass,
Giving me the chance to ask him when such things had come to pass
Way back in days of yore.

He gazed at me in real surprise and dropped his lower lip:
'Why, that was just a month ago - our annual Mann's Beach trip -
'And I'm only twenty-four!'

White-faced Storm Petrels - at 3am - a personal perspective

A memorable sunset was fading as Clive Minton, Mark Barter, Nicole Grenfell and I completed setting mist nets across Blind Bight, on the inland side of Swan Island, Queenscliff. Luckily the tide was low enough to avoid the water coming into my new chest-high waders, when I overbalanced backwards.....ugh..... and for us all to extricate our feet, albeit with some difficulty, from calf deep mud which clutched at themthe dark side of mist netting waders.

The site was a new one and we were all excited about the prospect of catching good numbers of birds, flocks of which we had seen flying along the shore on previous visits.

We returned to our cars and erected our tents close by, but well hidden by fifteen foot high bushes, and Clive set up the processing equipment and lights in the porch of his. After dinner, as no bird had been caught we closed the nets and retired to our tents. Mark volunteered to open the nets at midnight, monitor them frequently and to wake us up if there was need.

I slept soundly, until I heard muffled voices from the direction of Clive's tent. Trying to ignore the obvious signs that we had caught something I continued to fight the inevitable waking up process, until four words came clearly to my ears....."White-faced Storm Petrel".....in a flash my head was out of the tent and I heard myself calling, "Have we really caught a White-faced Storm Petrel?" After a seemingly long pause came a calm reply " No....two". My mind raced back to my recent trip to Antarctica, where I saw many Antarctic, Cape/Pintado Petrels - a delight to watch, wheeling and gliding, up and down ,high and low over the huge waves and among the ice flows ,then, ,to investigate the ship more closely flying beside us and over our bow. Further south the glorious all white Snow Petrels were shyer and less numerous than the others, and mostly stayed in front of the ship but I had not seen a White-faced Storm Petrel .

Back to reality. I call quickly, "Please do not release them yet, I'm coming over." "Don't bother" replied Clive "I'll bring one over to you. I grabbed a thick jumper, it was very cold outside, and managed to be in a sitting position in my sleeping bag when Clive arrived seconds later. And there it was, securely held in the ringer's grip--- a wonderfully sleek, deep grey-and-white bird, with a pretty head and white forehead, dark grey stripe through, and thick white stripe above its eye, a white chin and underparts.

"Clive" I exclaimed "It is so small, but please don't give it to me I am sure to let it go " Memories of an explosive oystercatcher and visions of a wild petrel chase around my tent if it escaped!!!. " No you won't" says Clive handing it to me and departing, leaving me alone with this delightful creature,---the bright and shiny side of mist netting. The bird was totally alert and very feisty, and I kept well away from its black razor sharp bill, and it was 3 o'clock on Saturday morning, 22nd December 1995.

My mind was racing ,to hold so fleetingly such a perfect piece of the bird world and questions tumbled into my conscientiousness---from where had this bird flown, and where was it going and why? Was it a threatened species and had the VWSG caught one before? Where do they breed and do they migrate? Was it male or female, and how old was it?

As Nicole and I had not seen the species before we were given the privilege of processing one each, but without banding or marking the birds as the VWSG does not cover seabirds in their parameters. Then they were released back into their own world--- we had caught them, adored them, learnt from them and given them back their freedom unharmed. Nicole and I will treasure this experience for a very long time.

White-faced Storm Petrels *Pelagodroma marina* were mist netted by the VWSG at Werribee in 1978/79. They are amongst the smallest of seabirds. They breed in burrows off the south-east and south-west coasts of Australia; they used to breed on Mud Island but then the Silver Gulls moved in. After breeding they move up the coasts into the tropics for the winter.. Interestingly no birds banded in Australia have ever been recovered so their exact wintering grounds are speculation. Several authors of field identification guide books state that they rarely follow ships and occasionally "walk on water"

Doris Graham

Membership List at June 30th 1996

Rick Aitchison
Khalid Al Dabbagh
Richard and Margaret Alcorn
Charles Allen
Terri Allen
Stephen Ambrose
George Appleby
Lisa Barter
Mark and Terry Barter
Graham Beal
Mark Bennett
Adrian Boyle
Rob and Gail Berry
Pat Bingham
Malcolm and Judy Brown
Prue Brown
Margaret Cameron
Jeff and Sarah Campbell
Jo Chadwick and Anthony Mitchell
Allen Clarke and Marj Reni
Rohan Clarke
Mike Connor
Dave Cropley
Rosemary Davidson
Steven Davidson
Michael Dawkins
John Dawson
Ren De Garis
Lee Duclos
Andrew Dunn
Dianne Emslie
Jon Fallaw and Becky Hayward
Melinda Ford
Dave Gerrard
Gail, Colin and Heather Gibbs
Doris Graham
Nicole Grenfell
Tim Gunn and Petina Pert
Angie Gutowski
Peter Hermans
Vivian Holyoake
Peter Houston and Marguerite Cordell
Tania Ireton
Angela Jessop
Ros Jessop and Pete Collins
Mathew Kennedy and Tracy Neilson
Irma Kluger
Leona Knight
Brett Lane
Rowena Langston
David Legg
Laurie Living
Moiria Longden
Sue and Andy Longmore
Richard and Debby Loyn
Jan Mangan
David Melville
Clive and Pat Minton
Ida Minton

Chris and Helen Morris
Emma Moysey
John Munro
Brenda and Mick Murtis
Pat McWhirter
Luke Naismith
Rory O'Brien
Priscilla Park
Hugo Phillipps
Heather Phillipson
Murray Portbury
John Pratt
Phillip Pratt
Thomas Putt
Roger Richards
Ken, Annie and Danny Rogers
Diane and Bob Ross
Neville and Nancy Roussac
Graeme, Margaret, Chris and Michael Rowe
Ira Savage
Clinton Schipper
Charles Silveira
Howard Simco
Terry South
Will and Angela Steele
Tony Stokes
Bob Swindley
Susan Taylor
Dale Tonkinson
Lyn Turner
Mark Walker
Keith Ward
Mike Weston
Norman Wettenhall

Copies are also sent to

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A.N.C.A. Canberra
Bird Observers Club of Australia Library
CSIRO library, ACT
Department of Conservation & Environment
Victoria.
Queensland Wader Study Group
Royal Australasian Ornithologists' Union
Broome Bird Observatory
Barren Grounds Bird Observatory
Eyre Bird Observatory
Rotamah Bird Observatory
Senckenbergische Bibliothek
Victorian Ornithological Research Group
Wash Wader Ringing Group
Landowners on whose properties the
Group operates in Victoria

**Financial statement from 1st July 1995 to 30th June 1996.
Victorian Wader Study Group Inc.**

INCOME	\$	Expenditure	\$
Subscriptions	984.80 (1365.00)	Printing Bulletin	449.00 (710.00)
Donations;		Postage	130.44 (109.45)
South Gippsland BOC	122.00	Stationary and Photocopying	22.15 (64.35)
Esso	2500.00 (2500.00)	Publicatlons	49.00
Other	5.00	Bank Charges /Govt Fees	47.96
Trading Table	66.25 (45.20)	Payments from Advantage	
Screen Savers(H.Gibbs)	30.00	Saver to Bonus Saver	3600.00
AGM Excess	105.00 (150.00)		
Sale of net to NT		Sub-Totai	4298.55
Conservation Comm.	3742.00 (348.00)		
Interest		Equipment*	
Advantage Saver	8.48 (19.76)	Trailer Reg., windbreak poles,tape,shackles,	
Bonus Saver	76.51	grease,paint,glue,repairs to firing box and	
Term Deposit	119.63	stools, spades, aprons & items for NT Cons.	
Payments to Bonus Saver	3600.00	Comm.net	3835.09
		Radio repairs	630.63
Sub-Total	11358.97	Powder coating frames	76.30
		Winch for boat trailer	54.00
Cheques and Cash in hand		Trailer tyres	170.00
1/7/195	4.56		
		Sub-Total	4766.02
Cash in Bank at 1/7/95			
Advantage Saver 3533.66		Cash and Cheques in hand	
Term Deposit	2075.10	30/6/96	39.33
		Cash in Advantage Saver A/C	
Sub-Total	5613.32	30/6/96	662.66
		Cash in Bonus Saver A/C 30/6/96	3674.30
		Term Deposit	2194.73
		Sub-Total	6571.02
		Cheques unrepresented in	
		94/95	1366.70
Total	16972.29	Total	16972.29

***Cost of equipment and repairs**

Net for NT Conservation Commission	
Hardware	937.00
Netting,inc. Labour	1574.00
Electrics	536.00
4 Keeping Cages inc.	
Labour	360.00
Shade Cloth	335.00
Total	3742.00

Equipment and repairs for VWSG
1024.02

Rosemary Davidson
Hon. Treasurer

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