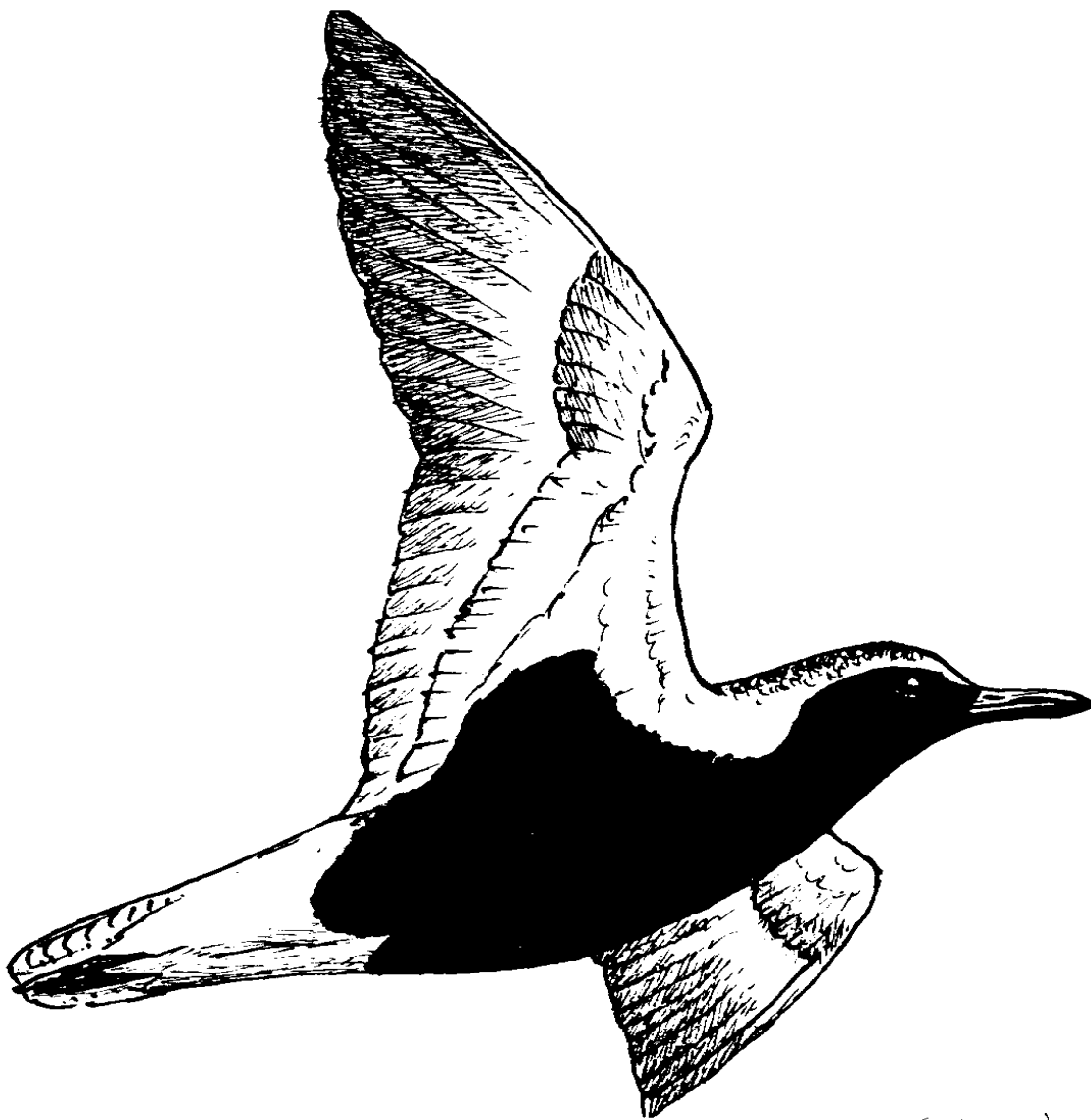


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VICTORIAN WADER STUDY GROUP INC.

MISSION STATEMENT

The principal aim of the Victorian Wader Study Group is to gather, through extensive planned fieldwork programs, comprehensive data on waders and terns throughout Victoria on a long-term basis.

This scientifically collected information is intended to form a factual base for conservation considerations, to be a source of information for education of a wider audience, to be a means of generating interest of the general community in environmental and conservation issues, and to be a major contribution to Australian, Flyway and Worldwide knowledge of waders and terns.

FORMATION/BACKGROUND

The wader banding fieldwork, which led to the formation of the Victorian Wader Study Group, commenced in December 1975. The Group was formally named in late 1978 and incorporated in 1986.

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Summary of VWSG Activities to September 2007

Clive Minton

Introduction

Members of the Victorian Wader Study Group are in the field for an average of 75 days each year. Most of this is associated with catching and banding activities, but in addition time is spent on population surveys, searches for leg-flagged birds and just generally looking at waders and enjoying being out of doors, especially in coastal areas. The main results of the fieldwork, and information which results from it in the form of banding recoveries and flag sightings, are summarised each year in a Bulletin distributed to members and all those who have assisted the Group in a variety of ways. The Bulletin also contains some scientific papers (usually also published elsewhere) and some more light-hearted articles.

In addition to field work members contribute many extra hours organising field trips, helping with equipment maintenance and development, making thousands of leg flags, entering data onto the computer record system, obtaining permits, responding to conservation concerns, maintaining the web site, analysing data and writing both popular and scientific articles about the groups work.

This note at the beginning of the Bulletin summarises some of the results of all this hard work for the benefit of readers who do not have the time or interest to look at every page!

Banding

The number of waders caught in 2006 (8143) was very similar to that in 2005. This brings the total number of birds caught by the Group since it started banding in 1975 to 207,512. The largest catch during the year was 961, mostly Red-necked Stint, at Werribee Sewage Farm in mid-December.

As usual good numbers of a wide variety of species were caught. Particularly pleasing totals were 590 Curlew Sandpiper, 457 Ruddy Turnstone, 443 Sanderling, 355 Bar-tailed Godwit, 334 Banded Stilt, 296 Red Knot, 29 Great Knot and 21 Whimbrel. The Banded Stilt were all chicks at a small colony in The Coorong, South Australia. The first time this species has been known to breed there. This breeding attempt may be the result of the major deterioration in water conditions which has led to very saline water - ideal for brine shrimp and chironomid larvae that are a major food of the Banded Stilt. The 21 Whimbrel were a surprise catch at Rhyll in late March, just before the birds left on migration.

The capture of 217 Pied Oystercatcher and 51 Sooty Oystercatcher meant that the Group again met its target for this species (150, 50 respectively). Disappointments during the year were no catches at Inverloch, for the second consecutive year, and at Barralliar Island (Western Port).

Banding on the coasts of the south-east of South Australia again contributed significantly to the satisfactory result for 2006. This year two visits were made, one in early March (674 caught) and the other in mid-April (559 caught). The extra visit was to gather more information on pre-migratory departure weight gains.

2007 has started satisfactorily. There was a particularly productive visit to South Australia in early March with a record 937 birds being caught in a week. This included a record total of 720 Sanderling, including 493 in one catch. An innovation in 2007 was a week-long visit to King Island to augment the Group's annual total of Ruddy Turnstone. Three hundred and seven birds were caught, including 241 Ruddy Turnstone. Several flagged birds from mainland Australia were seen and records of several overseas-flagged birds collected from a local ornithologist. It is planned to make a return visit to King Island, probably in March 2008.

Avian Influenza

The Group again assisted the Department of Primary Industries and the World Health Organisation in collecting cloacal swabs and blood samples to screen for avian-borne diseases. More than a thousand waders have now been tested and none has proved positive to the H5N1 influenza virus. A small number birds tested positive for having been exposed to other strains of avian influenza, a similar scenario to human populations. The Group is grateful to DPI/WHO for making financial contributions to the Group as for assisting in this work.

Recoveries

The lists of recoveries in this year's Bulletin are rather thinner than usual because a large number of reports have not yet been formally processed by the Australian Bird and Bat Banding Scheme (ABBBS) into their Recoveries Database. Until that has been done we do not receive an official Recovery Report. Nevertheless there are still some many valuable and interesting recoveries in the lists. We now have been able to include the full details of the Russian-banded Red Knot caught in Corner Inlet in June 2005. This was the first direct proof that Victorian birds are from the *rogersi* race breeding in Chukotka, in the far north-east of Siberia. There have subsequently been several flag sightings supporting this. Another highlight was the recovery of an 18 year old Ruddy Turnstone, which unfortunately perished soon after arriving at Broome in north-west Australia on its migration southwards to Victoria. Nevertheless this bird will have flown at least 400,000 km. on migration alone during its lifetime, further than from the Earth to the Moon. Another pleasing feature was three large batches of birds from Victoria recaptured together by other wader study groups. These involved eight Red Knot in New Zealand, eight Red-necked Stint in the Yellow Sea, China, and ten Sanderling in South Australia. Ten or 20 years ago we would have been very excited with just one such recapture!

Flag Sightings

One of the most exciting aspects of the VWSG's work is receiving notification of colour-flagged waders which have been seen elsewhere. With such a large number of people throughout the flyway now interested in searching for flagged birds and reporting them hardly a day goes by without an email reporting a distant flag sighting. In the last year a massive 2090 sightings of Victorian-flagged birds and 179 sightings of South Australian-flagged birds have been received. It is difficult to select highlights but the most significant probably include

- a) a Red-necked Stint close to the breeding grounds in Chukotka, north-east Siberia (41.05° 131.716'). This is the first Victorian Red-necked Stint to be reported from that region and means that we have now received reports from the full spread of the Red-necked Stint breeding range in northern Siberia, right across to the Taimyr Peninsula in the west – a longitudinal spread of 70°. Interestingly two

Sanderling, one from NWA and one from SA, were reported at the same location on the same day.

- b) a further 206 sightings of flagged Bar-tailed Godwit in Alaska, more than twice the number from any previous year. These are made all the more exciting by the subsequent USA/NZ satellite transmitter studies confirming that these birds fly directly across the Pacific to New Zealand (and presumably to Australia) on southward migration – a journey of over 11,000 km.
- c) three Eastern Curlew sightings in Japan in March, one as early as 11th March. Eastern Curlew do not normally start leaving Victoria until 5th March, so this bird had probably only just arrived after an 8000 km. flight. Because Eastern Curlew breed in the southern part of Siberia they can commence breeding earlier than other waders and so they are the first species to depart (and return) each year.
- d) an amazing accumulated total of 121 sightings in New Zealand emanating from only 11 Bar-tailed Godwit flagged in South Australia. The majority are probably from the eight marked in November 2004 (see last two VWWSG Bulletins). Obviously multiple sightings of some birds are involved – not surprising considering the intensity of wader observations in New Zealand.
- e) sightings of six different species of Victorian-flagged waders at Saemangeum on the west coast of South Korea. This just further emphasises the importance of this now, unfortunately, reclaimed area and the likely negative implications of the loss of Saemangeum for a wide range of species.

Breeding Success

A core objective of the fieldwork program of the VWWSG each summer is the collection of data to enable an assessment to be made of the relative breeding success of the main wader species which spend the non-breeding season in Victoria. The proportion of juvenile birds in cannon-net catches is used as the measure. Overall the Arctic breeding season of 2006 seems to have been a particularly poor one, possibly the worst overall of the 29 seasons for which data has been collected in Victoria. Ruddy Turnstone, Sanderling and Great Knot had almost total breeding failures and Curlew Sandpiper were only a little better. The results for Sharp-tailed Sandpiper and Red-necked Stint were also not particularly good, being slightly below the long-term average. Only Bar-tailed Godwit and Red Knot appear to have had reasonable breeding seasons. This poor overall result is not too serious given that the preceding year was a particularly good breeding season but Red-necked Stint badly need an exceptionally good breeding season to make up for the recent run of below average success. It won't be long now before we shall start to get information from our fieldwork on how the 2007 breeding season panned out. Initial feedback from Russia suggests that conditions in the Arctic might have been conducive to quite a good season.

Terns

Comprehensive breeding population, breeding success studies and banding studies continued on terns during the year. Caspian Terns had a reasonably good breeding season and there were further recoveries and flag sightings from their non-breeding areas in northern NSW and in south-east Queensland. The Crested Tern population seems to have plateaued at around 5000 pairs. There was a slight increase in numbers at The Nobbies to a record of 3150 pairs. Unusually, there were three

recoveries/flag sightings in south-east Queensland, whereas most reports in the non-breeding season normally come from the New South Wales north coast. We received our first recovery report of a Common Tern from Korea – presumably on its way back from its breeding grounds in central Siberia. And an unusual Little Tern recovery was an adult bird which had been banded at its nest in The Coorong in November 2006, seen and photographed at its nest near Port MacDonnell in January 2007 and then captured in that area in March! Perhaps most surprising of all was the catching of 378 Whiskered Tern, mixed in with the wader flocks at Werribee Sewage Farm, over a three-day period in late December.

Analysis and Publications

Considerable progress has been made during the last year in publishing data generated by the Group (see lists later in this Bulletin). One of these papers, published in the special edition of the Australasian Wader Studies Group journal, *Stilt* 50, was a detailed account of the history of the Victorian Wader Study Group since its first fieldwork activities in December 1975. This article is reproduced in this Bulletin. Many further analyses are in progress. Many of these utilize data in the Banding Database and the Leg-flag Database into which Heather Gibbs and Ken Gosbell have put an enormous amount of effort. Nevertheless the Group overall is still very short of people with the skills and the time to analyse our vast accumulation of data and put it into an acceptable form for publication. Increasingly therefore we are having to rely on experts from around the world to assist in this process.

Regular reports on our activities in a more ‘popular format’ were provided to the AWSG publication *Tattler* as well as *VicBabbler* the newsletter of BA Vic. Presentations were also made at the AWSG Shorebird Conference in Newcastle. Roger Standen is thanked for all his efforts in regularly updating the VWSG web page to provide a public profile for the group.

Equipment

The cannon-netting equipment of the Group is in better condition now than it ever has been in the 30 years since this technique was introduced. Paul Buchhorn and Rod McFarlane put a great deal of effort into this. Graeme Rowe assisted with electrical and other repairs. Additionally we are now well provided for with good ancillary equipment, such as radios and processing equipment, thanks to financial contributions in recent years from Coast Action/Coast Care and from the Victorian Department of Sustainability and Environment.

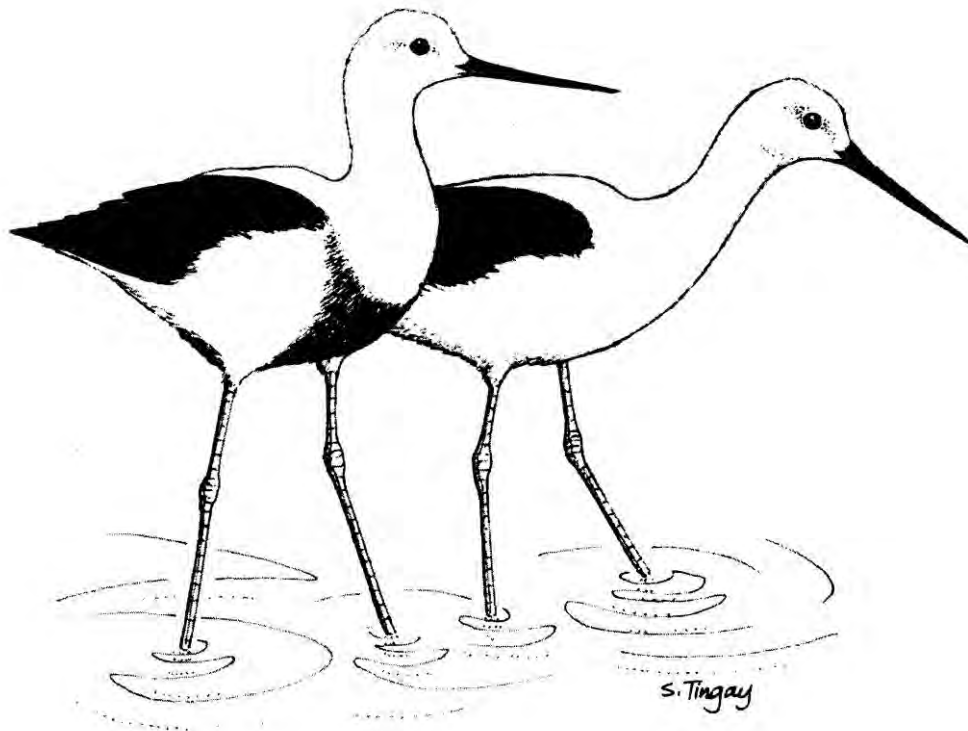
Malcolm Brown and Doris Graham, assisted by a hard core of volunteers, organised the supply of leg-flags that we use in the field. Unfortunately the manufacture of the UV stabilised plastic (Darvic) used for making the flags has ceased and a world wide search is underway for a suitable replacement.

Finances

The Group’s finances remain in a satisfactory situation and this year, for the first time for several years, income actually slightly exceeded expenditure. This situation is brought about by careful control of expenditure, but even more is the result of generous external contributions (detailed elsewhere) and contributions from members.

Acknowledgements

These have been detailed in each Bulletin in most past years. Rather than repeating them again perhaps can we just re-emphasize that everything achieved by the Group is only possible because of the huge and varied assistance provided by persons outside as well as within the Group. These range from landowners to government organisations and to individual members of the Group. All the acknowledgements given in the 2006 Bulletin are still relevant in the current year. A key to success is also the dedicated efforts of members who contribute to the often arduous fieldwork sometimes carried out under distinctly unpleasant weather conditions.



Total Number of Waders Caught – VWSG 2006

Species	New	Retrap	Total
Bar-tailed Godwit	316	39	355
Whimbrel	18	3	21
Common Greenshank	12	2	14
Terek Sandpiper	4	0	4
Ruddy Turnstone	283	174	457
Great Knot	28	1	29
Red Knot	287	9	296
Sanderling	355	88	443
Little Stint	1	0	1
Red-necked Stint	3887	982	4869
Sharp-tailed Sandpiper	351	24	375
Curlew Sandpiper	532	58	590
Pied Oystercatcher	147	70	217
Sooty Oystercatcher	39	12	51
Banded Stilt	334	0	334
Pacific Golden Plover	13	1	14
Red-capped Plover	15	1	16
Double-banded Plover	48	3	51
Masked Lapwing	6	0	6
	6676	1467	8143

Table prepared by Helen Vaughan & Clive Minton



**Total Waders Caught by Species
1975 to December 2006 - VWSG**

Species	New	Retrap	Total
Latham's Snipe	347	14	361
Black-tailed Godwit	4	-	4
Bar-tailed Godwit	3810	492	4302
Short-billed Dowitcher	1	0	1
Whimbrel	46	3	49
Eastern Curlew	814	72	886
Marsh Sandpiper	2	-	2
Common Greenshank	510	62	572
Terek Sandpiper	37	1	38
Grey-tailed Tattler	38	3	41
Ruddy Turnstone	2934	1089	4023
Great Knot	644	83	727
Red Knot	4633	681	5314
Sanderling	3451	1244	4695
Little Stint	8	-	8
Red-necked Stint	106334	29594	135928
Long-toed Stint	1	-	1
Pectoral Sandpiper	2	-	2
Sharp-tailed Sandpiper	8582	417	8999
Curlew Sandpiper	24703	4764	29467
Cox's Sandpiper	1	-	1
Broad-billed Sandpiper	5	-	5
Pied Oystercatcher	2402	1256	3658
Sooty Oystercatcher	766	218	1004
Black-winged Stilt	38	-	38
Banded Stilt	486	-	486
Red-necked Avocet	368	5	373
Pacific Golden Plover	265	25	290
Grey Plover	155	23	178
Red-capped Plover	671	184	855
Double-banded Plover	3625	998	4623
Lesser Sand Plover	115	11	126
Greater Sand Plover	31	3	34
Black-fronted Plover	57	4	61
Hooded Plover	28	1	29
Red-kneed Dotterel	136	11	147
Masked Lapwing	181	3	184
37 Species	166251	41261	207512

Table prepared by Helen Vaughan & Clive Minton

New and Retrapped Waders Caught Each Calendar Year by VWSG

Calendar Year	New	Retrap	Total
*1975	9	-	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
1996	5263	1035	6298
1997	4366	1050	5416
1998	8083	1408	9491
1999	6515	1591	8106
2000	10350	2594	12944
2001	4839	1320	6159
2002	10421	2162	12583
2003	8495	2854	11349
2004	5110	1224	6334
2005	6320	1893	8213
2006	6678	1467	8143
Totals to end 2006	166251	41261	207512

Average annual total for '79-06 = 7411

* Not included in calculation of average

Table prepared by Helen Vaughan & Clive Minton

Total Waders Caught Each Six Months

1979-2006 - VWSG

Calendar Year	Jan to June	July to Dec.	Total
1975	-	-	9
1976	-	-	620
1977	-	-	494
1978	-	-	1338
1979	4289	3633	7922
1980	4127	3200	7327
1981	2113	3317	5430
1982	2394	2176	4570
1983	2882	621	3503
1984	2654	2663	5317
1985	3972	1152	5124
1986	5000	4201	9201
1987	3135	3774	6909
1988	5235	5481	10716
1989	3854	3167	7021
1990	1661	4383	6044
1991	2376	1698	4074
1992	3357	2156	5513
1993	5287	6132	11419
1994	2789	3803	6592
1995	1521	1812	3333
1996	1802	4496	6298
1997	1913	3503	5416
1998	5568	3923	9491
1999	4142	3964	8106
2000	5987	6957	12944
2001	3851	2308	6159
2002	8174	4409	12583
2003	3033	8316	11349
2004	1288	5046	6334
2005	5003	3210	8213
2006	5192	2951	8143
Total	102599	102452	207512

Table prepared by Helen Vaughan & Clive Minton

Location of Waders Caught in Victoria and South Australia

	To Dec 2005	2006	Total
Victoria			
Werribee	58838	1817	60655
Western Port/ Flinders	53071	2347	55418
Queenscliff/ Swan Bay	29672	91	29783
Anderson Inlet (Inverloch)	22228		22228
Corner Inlet	22528	2068	24596
Sandy Point/ Shallow Inlet	1774	156	1930
Laverton	956	-	956
Mud Islands	753	-	753
Killarney Beach	426	-	426
Geelong (Point Henry/ Belmont Common)	257	-	257
Bendigo SF	143	-	143
Seaford Swamp	98	-	98
Braeside/ Croyden	79	-	79
Gippsland Lakes	40	-	40
Toowong	10	-	10
South Australia			
Canunda, Carpenter Rocks, Brown Bay, Beachport, Coorong	8586	1664	10250
Total	199459	8143	207602

Table prepared by Helen Vaughan & Clive Minton

The King Island participants 2007 (Photo by Mavis Burgess)



Numbers of waders processed by the VWSG each month to December 2006.

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 that were not fully processed. The table is used to plan fieldwork, with the object of obtaining useable data (preferably on at least 50 birds of each age 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	51	44	0	0	0	0	0	0	106	99	35	61	396
Short-billed Dowitcher	0	0	0	0	0	1	0	0	0	0	0	0	1
Black-tailed Godwit	1	0	0	0	0	1	0	0	0	1	1	0	4
Bar-tailed Godwit	521	534	685	99	24	582	127	286	77	254	276	441	3928
Whimbrel	3	0	37	0	0	1	0	0	1	4	3	0	49
Eastern Curlew	16	148	19	0	22	18	13	75	175	124	180	100	890
Common Greenshank	42	135	122	0	0	0	0	0	0	37	176	60	572
Marsh Sandpiper	0	0	0	0	0	0	0	0	0	0	0	2	2
Terek Sandpiper	17	2	1	1	2	0	1	1	0	1	1	12	39
Grey-tailed Tattler	31	0	1	3	0	4	0	0	0	0	1	1	41
Ruddy Turnstone	359	431	883	703	39	23	77	58	75	138	597	517	3900
Great Knot	192	83	26	0	0	29	21	6	16	110	74	130	687
Red Knot	819	390	302	201	2	412	469	139	85	965	532	284	4600
Sanderling	376	587	1772	385	0	0	1	5	0	265	414	463	4248
Little Stint	1	2	0	0	0	0	0	0	0	0	1	4	8
Red-necked Stint	2643	1507	6493	2348	546	749	1032	700	891	1939	3457	3461	25768
Long-toed Stint	0	0	0	0	0	0	0	0	0	1	0	0	1
Pectoral Sandpiper	0	2	0	0	0	0	0	0	0	0	0	0	2
Sharp-tailed Sandpiper	1763	795	237	2	0	0	0	16	525	523	531	2572	6964
Curlew Sandpiper	1487	1361	1688	231	223	128	266	478	261	1114	906	1357	9500
Broad-billed Sandpiper	1	2	0	0	0	0	0	0	0	0	0	2	5

CONTINUED NEXT PAGE

Numbers of waders processed by the VWSG each month to December 2006 continued.

	J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
Pied Oystercatcher	112	218	357	479	635	745	522	286	146	38	15	52	3605
Sooty Oystercatcher	6	70	82	94	201	306	201	55	0	1	0	0	1016
Black-winged Stilt	1	9	0	0	0	0	1	12	0	4	2	9	38
Banded Stilt	0	0	0	0	0	0	0	0	0	0	0	151	151
Red-necked Avocet	39	0	0	0	0	0	3	67	76	46	47	89	367
Pacific Golden Plover	40	27	60	2	0	0	0	0	0	28	62	65	284
Grey Plover	14	14	4	6	0	9	0	0	2	87	42	1	179
Red-capped Plover	41	85	61	114	210	110	77	26	12	22	24	11	793
Double-banded Plover	0	2	200	274	757	956	1053	936	1	0	0	0	4179
Lesser Sand Plover	54	5	13	7	3	2	2	0	0	1	15	12	114
Greater Sand Plover	21	3	6	0	0	1	1	0	0	0	1	0	33
Black-fronted Dotterel	0	7	1	0	11	16	7	9	2	0	4	8	65
Hooded Plover	0	0	1	0	0	15	0	0	0	0	0	0	16
Red-kneed Dotterel	0	10	0	20	0	44	11	17	12	8	23	1	146
Masked Lapwing	5	6	87	14	4	13	4	1	1	5	21	18	179
Cox's Sandpiper	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL	8656	6479	13138	4983	2679	4165	3889	3173	2464	5815	7442	9884	72767

Table prepared by Helen Vaughan & Clive Minton

Numbers of Waders Leg Flagged in Victoria (orange)

Species	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
Latham's Snipe	0	0	0	0	40	0	110	56	70	0	2	0	0	0	0	0	0	0	278
Black-tailed Godwit	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	0	4
Bar-tailed Godwit	0	1	157	6	64	0	43	173	16	84	388	324	196	80	208	256	223	320	2539
Whimbrel	0	0	0	0	16	0	0	0	0	2	0	2	0	1	0	0	4	18	43
Eastern Curlew	0	0	8	0	73	88	87	4	37	35	91	27	18	18	38	0	20	0	544
Marsh Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Common Greenshank	0	0	21	21	51	0	1	109	131	19	0	0	0	1	41	24	0	12	431
Terek Sandpiper	0	0	2	2	2	2	0	0	0	0	0	1	0	1	0	0	0	3	13
Grey-tailed Tattler	0	0	0	0	0	0	0	3	1	0	0	0	0	1	0	0	0	0	5
*Ruddy Turnstone	0	99	188	37	35	1	194	129	194	372	75	54	34	22	20	154	1	31	1640
Great Knot	0	0	2	0	4	0	3	36	31	21	21	53	38	78	3	20	3	28	341
Red Knot	0	0	302	26	88	1	52	59	295	289	175	334	377	681	54	176	246	274	3429
*Sanderling	0	0	163	0	191	1	47	328	148	342	51	118	36	37	26	140	64	104	1796
Little Stint	0	0	0	1	0	0	0	0	0	0	1	0	1	0	2	0	0	1	6
Red-necked Stint	0	799	1259	2516	2282	1661	1384	3065	1434	3224	4215	6038	2570	5792	5839	3489	4502	3363	53432
Pectoral Sandpiper	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Sharp-tailed Sandpiper	0	4	250	111	71	21	69	145	155	474	212	105	18	670	1068	421	299	329	4422
Curlew Sandpiper	146	462	367	1255	808	839	469	753	270	633	770	1162	417	373	517	51	164	524	9980
Cox's Sandpiper	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Broad-billed Sandpiper	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	3
Black-winged Stilt	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	14	0	0	20
Banded Stilt	0	0	0	0	0	0	0	0	0	0	0	151	0	0	0	1	0	0	152
Red-necked Avocet	0	0	0	0	5	0	0	0	27	0	0	46	0	6	0	56	0	0	140
Pacific Golden Plover	0	10	10	1	0	0	0	6	0	10	13	0	14	0	0	0	0	0	64
Grey Plover	0	0	0	1	0	0	6	0	22	0	0	21	0	24	1	2	9	0	86
Red-capped Plover	0	0	0	0	0	19	0	0	29	3	10	2	2	12	4	6	10	1	98
Double-banded Plover	0	0	0	0	0	8	0	0	0	40	24	98	3	90	19	46	18	21	367
Lesser Sand Plover	0	0	0	14	6	8	9	13	0	4	1	0	0	0	0	0	0	0	55
Greater Sand Plover	0	0	0	0	3	6	0	0	0	2	4	0	1	0	0	0	0	0	16
Black-fronted Dotterel	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Red-kneed Dotterel	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	3
Masked Lapwing	0	0	0	0	0	0	1	0	4	0	0	2	5	4	1	12	1	1	31
32 Species	146	1375	2729	3992	3739	2656	2475	4881	2867	5554	6053	8538	3735	7895	7844	4870	5565	5030	79944

*Includes Ruddy Turnstone and Sanderling flagged with orange (only) in the south east of South Australia between 1993 and 1998. Table prepared by Helen Vaughan & Clive Minton.

Numbers of Waders Leg Flagged in South Australia (orange/yellow)

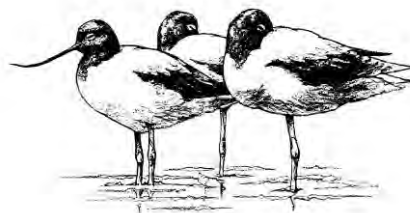
Species	1999	2000	2001	2002	2003	2004	2005	2006	Total
Latham's Snipe	0	0	4	0	0	0	0	0	4
Grey-tailed Tattler	0	1	0	0	0	0	0	0	1
Bar-tailed Godwit	0	0	0	3	0	8	0	0	11
Ruddy Turnstone	234	226	73	193	76	141	74	256	1275
Red Knot	0	0	0	0	0	1	0	11	12
Sanderling	63	420	2	315	328	76	220	250	1674
Red-necked Stint	126	383	22	319	163	93	174	465	1745
Sharp-tailed Sandpiper	0	2	0	27	7	73	27	21	157
Curlew Sandpiper	24	11	0	190	13	2	103	8	351
Banded Stilt	0	0	0	0	0	0	0	334	334
Pacific Golden Plover	0	2	0	0	1	0	16	13	32
Red-capped Plover	0	0	1	7	5	0	7	4	24
Double-banded Plover	0	0	4	5	1	0	0	27	37
Black-fronted Plover	0	0	0	3	0	0	0	0	3
Hooded Plover	0	0	0	0	1	0	0	0	1
Masked Lapwing	0	0	0	0	4	2	2	4	12
Total	447	1045	106	1062	599	396	623	1395	5673

Table prepared by Helen Vaughan & Clive Minton

VWSG FIELDWORK PROGRAM
January to December 2007

DATE	PLACE AND OBJECTIVES	HIGH TIDE	
Tues 2 Jan	Barry Beach Red-necked Stint	09:54	2.39
Sun 7 Jan	Werribee S.F. Sharp-tailed Sandpiper, Curlew Sandpiper, and Red-necked Stint	06:55	0.85
Wed 10 Jan to Thur 11 Jan	Yallock Creek/Stockyard Point Curlew Sandpiper and Red-necked Stint	06:24 06:51	2.69 ^{10th} 2.62 ^{11th}
Fri 12 Jan	Barralliar Island Curlew Sandpiper and Red-necked Stint	07:17	2.56
Sat 27 Jan to Sun 28 Jan	Werribee S. F. Sharp-tailed Sandpiper, Curlew Sandpiper, and Red-necked Stint	09:21 09:59	0.88 ^{27th} 0.88 ^{28th}
Sat 3 Feb	Sandy Point Sanderling	13:22	1.12
Fri 9 Feb to Sun 11 Feb	Yallock Creek/Stockyard Point Curlew Sandpiper and Red-necked Stint	18:54 to 07:07	2.54 ^{9th} to 2.58 ^{11th}
Wed 14 Feb to Fri 16 Feb	Corner Inlet Red Knot, Bar-tailed Godwit, etc.	08:07 to 09:29	2.33 ^{14th} to 2:21 ^{16th}
Tue 20 Feb	Flinders Ruddy Turnstone	14:58	1.34
Wed 21 Feb to Fri 23 Feb	Corner Inlet Red Knot, Bar-tailed Godwit, etc.	15:55 to 18:00	2.21 ^{21st} to 2.48 ^{23rd}
Sat 24 Feb to Sun 25 Feb	Barry Beach Small waders, Oystercatchers	18:53 to 06:26	2.53 ^{24th} to 2.57 ^{25th}
Sat 3 Mar to Sat 10 Mar	South Australia Sanderling and Ruddy Turnstone	14:00 to 16:23	0.65 ^{3rd} to 1.04 ^{9th}
Sun 18 Mar to 25 Mar	King Island Ruddy Turnstone and Oystercatchers	11:19 to 17:17	1.08 ^{18th} to 1.60 ^{27th}
Thur 19 Apr to Wed 25 Apr	South Australia Ruddy Turnstone and Sanderling	13:46 to 17:06	1.35 ^{19th} to 0.99 ^{24th}
Wed 18 April	West Head, Flinders (Clive) Sooty Oystercatcher	13:30	2.81
Thur 19 April	Toora Beach (Susan) Pied and Sooty Oystercatcher	12:20	2.30
Wed 2 May	Long Island, Hastings (Clive) Pied Oystercatcher	13:26	2.57
Sat 5 May	Charles Hall Road near Yanakie (Susan) Pied and Sooty Oystercatcher	15:05	2.33
Wed 16 May	Rhyll, Phillip Island Nature Park (Roz & Jon) Pied Oystercatcher	12:02	2.74
Sat 2 June	Stockyard Point (Birgita) Pied Oystercatcher	14:16	2.87
Sun 3 June	Roussac Point (Roz) Pied and Sooty Oystercatchers	14:25	2.34
Thurs 14 June to Sun 17 June	Corner Inlet (Clive) Wintering waders (Stay at Rosemary Davidson's at Yanakie)	10:42 to 14:07	2.43 to 2.55
Sun 1 July	Fairhaven (French Island) (Clive) Pied Oystercatcher	13:44	2.78

Fri 6 July to Sun 8 July	AWSG Shorebird Conference Newcastle, NSW		
Sun 15 July	Barry Beach (Susan & Roz) Pied & Sooty Oystercatchers	12:35	2.35
Sun 12 August	Stockyard Point (Birgita & Roz) Pied Oystercatcher	12:01	2.57
Sun 30 September	Yallock Creek (Clive) Sharp-tailed Sandpiper & Red-necked Stint	15:08	2.69
Sat 13 October	AGM (Clive & Pat's house) 10am – 10pm 10am Equipment maintenance 4pm AGM 7pm Talks <i>Small charge to cover meal costs applies</i>		
Sat 20 October to Sun 21 October	Swan Island, Queenscliff (Clive & Roz) Red Knot & Bar-tailed Godwit Net setting Friday evening	06:28	1.31
Fri 2 November	Mud Islands (Clive) Crested Tern - breeding adults Caspian Tern - chicks	(11:24)	0.44 (low tide)
Sat 3 November to Sun 4 November	Sand Island, Queenscliff (Clive & Roz) Red Knot & Bar-tailed Godwit Net setting Friday evening	06:54 07:47	1.36 1.27
Sun 2 December to Wed 5 December	Australasian Ornithological Congress, Perth, WA. Wader Symposium		
Mon 10 December	Mud Islands (Clive) Crested Tern - chicks	(12:45)	1.11) (low tide)
Sat 15 December	Sandy Point (Susan & Roz) Sanderling	16:19	1.20
Tues 18 December	The Nobbies, Phillip Island Nature Park (Roz & Jon) Crested Tern chicks – meet 9.30am at Nobbies <i>Set nets pm for Yallock Creek. Stay overnight at Pat Macwhirters, Tooradin</i>	(12.06)	0.33) (low tide)
Wed 19 December	Yallock Creek (Clive) Small waders <i>Net setting Tuesday evening</i>	07:48	2.63
Fri 21 December	Corner Inlet (Susan) Crested & Caspian Tern chicks	(08:17)	2.54)
Fri 28 December to Sun 30 December	Werribee SF (Clive & Roz) Small waders (Stay at Cocoroc Hall, Werribee) Net setting pm 27 December	07:15 to 08:25	0.88 to 0.87



Recoveries of Waders Banded in Victoria

Clive Minton, Roz Jessop and Maureen Fitzgerald

Each year recoveries are reported which gradually help piece together the migration routes of each species. While some of these are birds found by members of the public, usually dead or dying, others may be from hunters – especially in Russia, the majority nowadays are birds recaptured alive by other bird banders. All reports of movements of birds away from their banding location are processed into the National Bird Banding Recoveries Database by the Australian Bird and Bat Banding Scheme (ABBBS) office in Canberra. Detailed below are recoveries for which reports have been received by VWSG from ABBBS during the last year. There are many more recoveries which we know of still in the pipeline waiting in the backlog at ABBBS. Hopefully these will be cleared during the next year so that they can be published in the 2008 VWSG Bulletin. Sightings are listed north to south.

Eastern Curlew

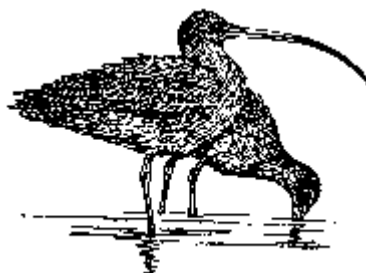
Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
091-29223	2	06/12/97	Inverloch, Andersons Inlet VIC	01/05/06 (shot)	Shimanovskiy Dist., Ushakovo, Amursko, Russia	10229N

This recovery is in the breeding area in south-east Siberia from which several previous recoveries and flag sightings have been reported. Few Eastern Curlew have been banded in recent years but as it is a very long lived species recoveries continue to slowly accrue.

Ruddy Turnstone

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
051-29689	2	18/11/89	Swan Island, Queenscliff, VIC	08/09/06 (found dying)	Cable Beach, Broome, WA	3139 NW

This bird was presumably on its way back to Queenscliff when it succumbed at Broome, probably as a result of a difficult migratory flight. But as the bird was eighteen years old it had had a good innings. During its lifetime it would have covered more than 400,000 km. on its migratory journeys – greater than the distance from the Earth to the Moon!



Red Knot

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
TA41940	Chick	13/7/04	Chukotsk, Russia	24/06/05	Corner Inlet VIC	11575 SSW
052-38921	3+	22/10/05	Queenscliff VIC	10/09/06 (shot)	Khabarovsk, Russia	10372 N
052-38853	1	22/10/05	Queenscliff VIC	12/06/06	Beachport, SA	425 W
052-38633	1	23/01/05	Corner Inlet VIC	18/06/06	Miranda, Firth of Thames, New Zealand	2495 E
052-22753	1	21/12/01	Stockyard Point VIC	25/11/06	-"	2611 E
052-24292	1	25/07/02	Corner Inlet VIC	-"	-"	2495 E
052-29515	3+	22/10/05	Queenscliff VIC	-"	-"	2687 E
052-29529	2+	07/11/05	-"	-"	-"	-"
052-38984	1	-"	-"	-"	-"	-"
052-29721	1	05/02/06	Corner Inlet VIC	-"	-"	2495 E
052-29740	1	-"	-"	-"	-"	-"
052-29763	1	-"	-"	-"	-"	-"
052-38514	2	22/08/04	Yanakie, Corner Inlet VIC	06/01/07	Manukau Harbour, New Zealand	-"

This is a wonderful collection of Red Knot recoveries. The recapture in Corner Inlet of the bird banded as a chick in the north-eastern part of Siberia was the first direct proof of the breeding area of Red Knot which visit Victoria. The other recovery in Russia illustrates a migratory stopover location. Recaptures (and flag sightings) of our Red Knot in New Zealand are frequent and are mainly the result of birds which spend their first year in Australia moving across the Tasman Sea to become "residents" of New Zealand for subsequent non-breeding seasons. The catch at Miranda on the Firth of Thames on 25th November 2006 was outstanding, however, because it contained **eight** Red Knot previously banded in Victoria. Less usual was the recapture, by VWSG member Maureen Christie and her team, of a first year Red Knot which was spending part of the winter at Lake George. Several other Victoria-flagged Red Knot were seen with it (see Flag-sighting Report). Immature Red Knot range more widely than most species during the austral winter.



Red Knot (Photo by Doris Graham)

Sanderling

Band	Age	Date Banded	Location Banded	Date Recaptured	Location Recaptured	Km Moved
042-30588	2+	25/03/01	Sandy Point, Shallow Inlet VIC	15/04/06	Brown Bay, 15 km. E of Port MacDonnell, SA	472 W
042-44564	2+	28/01/05	-"	-"	-"	-"
042-46218	1	31/01/06	-"	-"	-"	-"
042-44110	1	18/12/04	-"	15/04/06 05/03/07	-"	-"
042-44340	1	28/01/05	-"	04/03/07	-"	-"
041-97688	1	24/02/98	Corner Inlet VIC	05/03/07	-"	529 W
042-30606	2+	25/03/01	Sandy Point, Shallow Inlet VIC	-"	-"	472 W
042-44081	2+	18/12/04	-"	-"	-"	-"
042-44457	2+	-"	-"	-"	-"	-"
042-46771	2+	23/12/06	-"	-"	-"	-"
042-46820	2+	-"	-"	-"	-"	-"
042-46860	2+	-"	-"	-"	-"	-"
042-46903	2+	-"	-"	-"	-"	-"
042-46916	2+	-"	-"	-"	-"	-"

The list is entirely composed of birds which had moved from the Victorian Sanderling flock locations at Sandy Point and Corner Inlet to join the Sanderling flocks in the Port MacDonnell area in the south-east of South Australia. Sanderling are the most mobile of all migratory wader species within their non-breeding range, often changing locations quite markedly, sometimes even within the same season. Ten Victorian birds were caught in South Australia on 5th March 2007 and no less than five of these had been banded only two and a half months earlier (23rd December 2006) at Sandy Point, Shallow Inlet. Also of note is juvenile 042-46218 caught in Victoria in January 2006 and present in SA by April 2006.

We are aware of several overseas recoveries of Sanderling waiting to be processed, including recoveries in Taiwan and Russia.

Red-necked Stint

Band	Age	Date Banded	Location Banded	Date Recaptured	Location Recovered	Km. Moved
036-10521	3+	05/10/03	Yallock Creek VIC	25/07/06 (shot)	Popova Island, Primorskiy, Russia	9129 N
036-06304	2+	08/09/02	-"	26/08/06	Huanghuangang Shore, Hebei Province, China	8965 NNW
036-07581	1	27/12/02	Werribee Sewage Farm VIC	24/08/06	-"	8921 NNW
036-02364	2+	-"	-"	-"	-"	8921 NNW
036-11622	1	29/03/04	Barry Beach, Corner Inlet VIC	-"	-"	9045 NNW
036-14712	2+	05/12/04	Inverloch VIC	-"	-"	9016 NNW
036-16656	1	23/07/05	Barry Beach, Corner Inlet VIC	-"	-"	9045 NNW
036-04864	2+	07/01/06	Stockyard Pt VIC	-"	-"	8983 NNW
036-05836	2+	05/02/06	off Mann's Beach, Corner Inlet VIC	-"	-"	9058 NNW
035-80743	2+	12/02/01	Stockyard Pt VIC	14/04/06	Brown Bay, SA	412 W
036-07020	1	28/11/02	Inverloch VIC	15/04/06	-"	433 W
035-15714	2+	29/12/04	Werribee VIC	-"	-"	322 W

This list contains a wonderful collection of eight Red-necked Stint recaptured in the Yellow Sea, China, in late August 2006. We had little data in earlier years on the southward migration route of Red-necked Stint, but information is now accruing which shows that China is again an important stopover area for this species, as it is on northward migration. The bird reported from Russia was also on southward migration, in south-east Siberia. The recaptures in South Australia add to data from earlier years suggesting that some Red-necked Stint which spend the non-breeding season in Victoria move to South Australia before commencing their northward migration across the Australian continent in April.

Pied Oystercatcher

Sightings of colour banded or flagged Pied Oystercatcher for the year July 2005 to June 2006

Location Sighted	State	*Total sightings	Number of Individuals identified	Number of sightings not identified
Albifrons Island	VIC	5	5	1
Barralliar Island	VIC	3	3	0
Barry Beach	VIC	16	16	0
Bateman's Bay	NSW	12	6	0
Bateman's Bay - Cullendulla	NSW	3	3	0
Bateman's Bay - Surfside	NSW	2	2	0
Bithry Inlet	NSW	1	1	0
Blackfellow Caves	SA	1	1	0
Brou Lake - Narooma	NSW	10	8	0
Canunda National Park	SA	1	1	0
Cape Banks Lighthouse	SA	2	0	2
Churchill Island	VIC	5	3	0
Crofts Bay	NSW	1	0	1
Cunningham Arm – Lakes Entrance	VIC	1	1	0
Danger Point	SA	2	2	0
French Island	VIC	1	1	0
Gerloff Bay	SA	1	0	1
Killarney Beach	VIC	2	2	
King Island	TAS	1	1	0
King Island Burgess Bay	TAS	1	1	0
King Island Cotton Flats	TAS	1	1	0
King Island Fitzmaurice Bay	TAS	4	1	3
King Island Naracoopa	TAS	2	2	0
King Island Nine Mile Beach	TAS	1	1	0
King Island Sea Elephant	TAS	1	1	0
King Island Surprise Bay	TAS	6	4	3
King Island Whalebone	TAS	8	6	1
Lake Merimbula	NSW	1	1	0
Lake Mori Discovery Bay	VIC	1	0	1
Levy Point Warrnambool	VIC	1	1	0
Livingstones Bay	SA	2	2	0
Mallacoota	VIC	1	1	0
Mallacoota Narbethong	VIC	1	1	0
Manns Beach	VIC	1	0	1
Marawah	TAS	4	4	0

Moruya River Bridge	NSW	1	1	0
Mots Beach – Snowy River mouth	VIC	1	1	0
Mouth Murray River	SA	1	1	0
Mud Islands	VIC	5	1	3
Nene Valley	SA	3	1	2
Ordnance Point	TAS	2	2	0
Phillip Island Thorny Beach	VIC	8	4	0
Phillip Island Watt Point	VIC	1	1	0
Piccaninny Ponds	SA	1	1	0
Port Albert	VIC	2	2	0
Port Fairy East Beach	VIC	24	9	0
Port Fairy Leura Bay	VIC	1	1	0
Port Fairy Mills Reef	VIC	26	7	0
Port Fairy Town Beach	VIC	26	9	2
Portarlington	VIC	1	1	0
Queenscliff	VIC	9	8	1
Reef Island	VIC	2	2	0
Rhyll Fisherman's Point	VIC	5	5	0
Rhyll Observation Point	VIC	4	3	1
Shoalhaven River mouth	NSW	1	1	0
Sir Richard Peninsula	SA	1	1	0
Snipe Island Coorong	SA	1	0	1
St Leonard's saltpan	VIC	3	3	0
Stanley Godfrey's Beach	TAS	2	2	0
Stockyard Point	VIC	55	27	8
Stoney Drain	SA	2	1	0
Susses Inlet Canal Estate	NSW	1	1	0
Toora Beach	VIC	5	4	0
Tuross Lake	NSW	2	0	2
Wallagoot Lake	NSW	1	1	0
Warrnambool – Merri Creek mouth	VIC	3	2	0
Werribee Sewerage Farm	VIC	2	2	0
Wingan Inlet	VIC	1	1	0
Grand Total		309	189	34

*Note that some birds are seen more than once, so the number of individuals seen can be less than the total sightings

The above recoveries further illustrate that Pied Oystercatcher from Victoria range widely into Tasmania, South Australia and New South Wales. Most of this movement information comes from the sighting of individually colour-marked birds. Some birds are seen multiple times supplying information about site fidelity and breeding. Sites most frequently checked and yielding sightings include Port Fairy by Tom McRae, Stockyard Point by Dave Cropley, King Island by Mavis and Nigel Burgess and the New South Wales coast by Dimitris Bertzeletoa and Mike Crowley. The SA SE coast is regularly checked by members of Friends of the Shorebirds South-east but few identifiable birds are found.



Sooty Oystercatcher

Sightings of colour banded or flagged Sooty Oystercatcher for the year July 2005 to June 2006

Location Sighted	State	*Total sightings	Number of Individuals identified	Number of sightings not identified
Barry Beach	VIC	2	2	
Cape Portland	TAS	1	1	
Flinders	VIC	20	12	0
Flinders Ocean Beach	VIC	2	2	0
King Island Christmas Island	TAS	1	1	
King Island Naracoopa	TAS	1	1	
Little Musselroe Bay	TAS	1	1	
Perkins Island - Shipwreck	TAS	1	1	
Phillip Island Cowrie Beach	VIC	1	1	
Phillip Island Flynn Reef	VIC	3	2	
Phillip Island Magic Lands	VIC	1	1	
Phillip Island Summerland Beach	VIC	1	1	
Phillip Island Thorny Beach	VIC	2	2	
Phillip Island Woolshed Bight	VIC	1	1	0
Sandy Point Waratah Bay	VIC	2	1	
St Andrews Beach	VIC	2	2	
Toora Beach	VIC	7	6	
Wilson's Prom Squeaky Beach.	VIC	1	1	
Wilson's Prom. Tidal River Beach	VIC	1	1	
Wilson's Prom. Waterloo Bay	VIC	1	1	

*Note that some birds are seen more than once, so the number of individuals seen can be less than the total sightings

Although some Sooty Oystercatcher from Victoria occasionally move into South Australia or southern New South Wales the main direction of movement is southwards into the Bass Strait islands and Tasmania. Sites most regularly yielding sightings include Flinders by Penny Johns and King Island by Mavis and Nigel Burgess.

Double-banded Plover

Band	Age	Date Banded	Location Banded	Date Recaptured	Location Recovered	Km. Moved
C66469	2+	24/09/05	Tasman River, New Zealand	03/05/06	Nelson VIC	2511W

This is another example of a New Zealand breeding bird from the centre of South Island moving to south-east Australia in winter.



Recoveries of Waders Banded in South Australia

Clive Minton, Roz Jessop, Maureen Christie and Iain Stewart

Each year valuable recoveries accrue, particularly for Sanderling and Ruddy Turnstone, from the VWSG banding activities in the south-east of South Australia. Those which have been received during the past year and processed into formal Recovery Reports by the Bird Banding Office are detailed below. There are several other recoveries which we know of which are still in the backlog waiting to be processed at ABBBS. These will be published in next year's Bulletin. Recoveries are listed geographically from north to south. ELF means "engraved leg flag", which can be read in the field on a live bird.

Bar-tailed Godwit

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
072-82025	1	21/10/02	Stoney Point, Port MacDonnell SA	18/10/06 (found dead)	Wollongong, NSW	986 ENE

This bird probably succumbed soon after it arrived back in Australia after its 11,000 km. flight directly across the Pacific from Alaska. It is one of three banded on 21st October 2002. Another of these birds has frequently been reported in South Island, New Zealand. Godwit undoubtedly are the most productive species to band and flag in South Australia (see Flag-sighting Report)!

Ruddy Turnstone

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
052-24609	3+	21/10/02	Stoney Point, Port MacDonnell SA	22/8/06 (recaptured)	Changhua, Taiwan	7233 NNW
052-49609	2+	14/04/06	Port MacDonnell SA	30/8/06 (ELF seen)	Changhua, Taiwan	7224 NNW

As in previous years most recoveries overseas are from Taiwan. It seems to be a principal staging area for Turnstone in Asia on both northward and southward migration.

Sanderling

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
041-91698	2+	06/02/95	Brown Bay, Port MacDonnell SA	15/4/06 (recaptured)	Brown Bay, Port MacDonnell SA	0 [11 years]
042-44700	2+	15/3/05	-"	03/09/06 (band read on live bird)	Hotatsushimizu – Cho, Ishikawa-ken, Japan	7667 N
042-46293	1	05/03/06	-"	26/07/06 (shot)	Popova Island, Primorskiy, Russia	9051 N

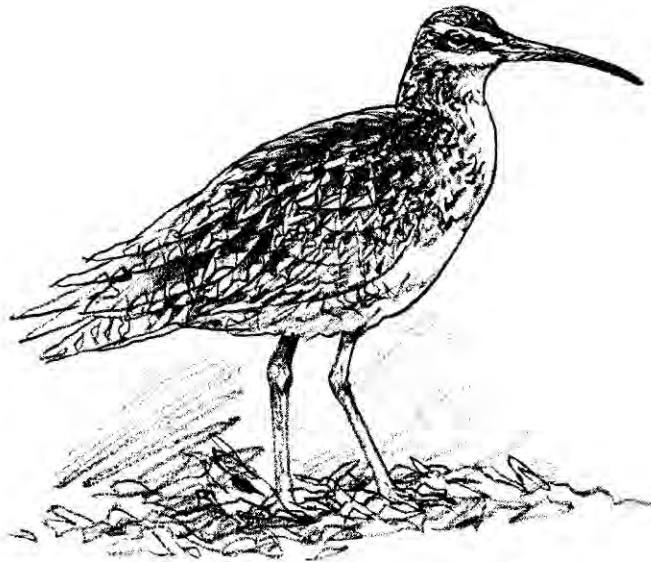
Three nice recoveries. The ones in Russia and Japan were birds on southward migration. Sanderling seem to have a more southward migration route through Asia than any other wader species coming to Australia. It was nice to recapture a Sanderling more than 11

years after it had originally been banded. It was at exactly the same location and is now a minimum of 13 years old.

Double-banded Plover

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
C66449	2+	1/11/04	Tasman River, New Zealand	05/04/05 11/05/05 23/07/05 29/03/06 23/07/06 07/03/07 (seen)	Carpenters Rocks SA	2569 W

The old favourite turned up again in 2007. Banded as a breeding adult in the centre of South Island, New Zealand in 2004 it has been seen in each of the last three austral winters in the Carpenter Rocks area. It is recognised by its unique combination of colour bands.



Sightings of Waders Leg-flagged in Victoria

Report Number 14

Clive Minton, Roz Jessop and Heather Gibbs

Almost all waders newly captured in Victoria each year are given an orange leg flag. In 2006 a further 5030 were flagged bringing the total since flagging commenced in late 1990 to 80,000 (see earlier table). This report summarizes the sighting reports received during the last year away from the flagging locations, and also gives specific details on some of the most interesting and significant records. The summary table of sightings below is referred to throughout the report.

Table 1. Total number of sightings of Victorian – flagged waders August 2006 to September 2007

Species	New Zealand	Australia	USA- Alaska	China (mainland)	Korea	Japan	Hong Kong (China)	Taiwan (China)	Indonesia	Russia	Mongolia	Thailand	Total
Bar-tailed Godwit	419	26	206	81	117	15							864
Red Knot	732	73		20	1	1				4			831
Red-necked Stint		103		81	1	8	29	9	9	6	3	1	250
Curlew Sandpiper		51		3	1	1	6	7	7				76
Sanderling		5		2		6	1			5			19
Sharp-tailed Sandpiper		8		1	1	3		2					15
Great Knot		4		2	5			1					12
Eastern Curlew		4		1	1	3							9
Ruddy Turnstone	2	3						4					9
Grey-tailed Tattler						1							1
Greater Sand Plover		1											1
Banded Stilt		1											1
Red-necked Avocet		1											1
Double-banded Plover	1												1
Total	1154	280	206	191	127	38	36	23	16	15	3	1	2090

The total number of sightings (2090) was of a similar level to the previous year. As usual, more than half were the result of the extremely active searching for flags carried out in New Zealand on Red Knot (732) and Bar-tailed Godwit (419). Another highlight was 206 sightings of Bar-tailed Godwit in Alaska, nearly double the level of any previous year. The number of sightings in mainland China (191) continues to increase as a result of the more widespread and sustained interest in waders there, especially around the Yellow Sea. Flag sightings in Korea were again at a high level (127), partly as a result of the teams of people visiting the Saemangeum reclamation area and surrounds in April and May. The

number of flag sightings in Russia (15) was also higher than normal. Three more reports from Mongolia are most welcome, as is a rare report from Thailand.

Detailed below are particularly interesting sightings, as well as comments on other records which have been received for each species. **Note that sightings are listed geographically from north to south.**

Bar-tailed Godwit *Limosa lapponica*

Overseas

01/06/2007	1	Yukon-Kuskokwim Delta, Alaska, USA	Declan Troy	11911 NE
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The above sighting was the only one reported from Alaska on northward migration. On arrival in the second half of May/early June, birds seem to disperse inland quickly giving few opportunities for observations of flags. The other 205 records (summary table) were of birds seen at their assembly points on the coast prior to their southward migration directly across the Pacific Ocean. They were seen between August 4th and September 17th, 111 in August and 94 in September.

In contrast all 81 sightings in mainland China, 15 in Japan and 117 in Korea were on northward migration in April and May. The earliest records were April 1st in Japan and Korea and April 7th in mainland China. The latest records were May 13th in China and Japan and May 21st in Korea.

Sightings in Queensland (20) and NSW (six) were almost all during southward migration from September to early November. There was the usual huge number of sightings in New Zealand (419) and these were spread throughout the year. The 28 sightings between mid-April and mid-September relate to birds which are still not sufficiently mature to migrate back to the breeding grounds.

Eastern Curlew *Numenius madagascariensis*

Australian

12/08/2006	1	Pine Rivers, Moreton Bay, QLD	Floss Wainwright	1409 NE
12/08/2006	1	Manly Harbour, QLD	Kath Shurcliff, David Houghton and Heather Smith	1399 NE
26/08/2006	1	Kooragang Dykes, Kooragang Island, near Newcastle, NSW	Ann Lindsey, Liz Crawford, Chris Herbert, Sue Rostas	837 NE
26/08/2006	1	Great Sandy Mathieson Homestead, QLD	John Knight	1591 NE

Overseas

11/03/2007	2	Estuary of Ohse-river, Nobeoka-shi, Miyazaki-ken, Japan, Japan	Yutaka Nakamura	7970 N
16/03/2007	1	Fukuda-chou, Iwata-shi, Shizuoka, Japan	IMAI Atsushi	8113 N
02/04/2007	1	Yochari, Kanghwa (Lat and Long approx.), Korea	Park, Geon-seok	8619 N
20/03/2006	1	Yalujiang Nature Reserve, China (mainland)	Bai Qingquan	8914 N

The overseas sightings are all of birds on northward migration to their breeding grounds in south-east Siberia. The Eastern Curlew is the earliest wader to migrate northwards each year and four of the five overseas records were in March. The earliest, on 11th March in Japan, was almost certainly of a bird which had just arrived after a direct flight from Victoria, as data collected in earlier years showed that the first major exodus was usually around 5th March.

The sightings in Queensland were all on southward migration and illustrate the relatively early return dates of this species.

Grey-tailed Tattler *Heteroscelus brevipes*

Overseas

07/08/2006	1	Sone Estuary and Tidal Flat, Kitakyushu, Fukuoke, Japan	Unknown observer	8118 N
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Few Grey-tailed Tattlers are banded/flagged in Victoria so it is pleasing to receive a sighting from Japan, the main stopover location for this species in Asia.

Ruddy Turnstone *Arenaria interpres*

Overseas

23/08/2006	2	Chi-Ku, Tainan County, Taiwan (China)	Po-Chun Chen	7277 NW
27/08/2006	1	Yung-Hsing, ChangHua County, Taiwan (China)	Chung-Yu Chiang	7357 NW
04/05/2007	1	HanBou (Hanpou), ChangHwa County, Taiwan (China)	TWSG	7363 NW
27/09/2006	1	Parengarenga Harbour, Far North Cape, North Island, NI NZ	Rob Schuckard and Willie Cook	2522 E
21/11/2006	1	Farewell Spit, Bushend Point, South Island, SI NZ	David Melville	2418 E

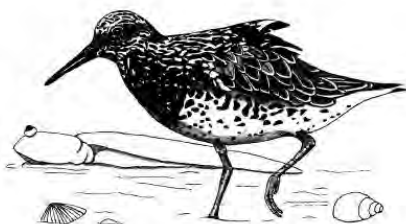
It is nice to receive further examples of the onward movements of some Turnstone from Australia to non-breeding areas in New Zealand. The sightings in Taiwan (China) further illustrate that this is a preferred stopover for this species.

Great Knot *Calidris tenuirostris*

Overseas

17/04/2007	1	Yubu Island, Korea	Sarah Dawkins	8444 N
17/04/2007	1	Yubu Island, Korea	Danny Rogers	8444 N
19/04/2007	1	Gomso Bay, Korea	Nial Moores, Danny Rogers	8401 N
20/05/2007	1	Simpo, Korea	Danny Rogers	8428 N
20/05/2007	1	Yubu Island, Korea	Ann Lindsey	8444 N
22/04/2007	1	Yalu Jiang, China (mainland)	Tony Habraken	8915 N
07/05/2007	1	Yalu Jiang Nature Reserve, China (mainland)	Bai Qingquan	8914 N
17/04/2007	1	HanBou (Hanpou), ChangHwa County, Taiwan (China)	TWSG	7363 NW

The records in Korea further show that the Saemangeum area is an exceptionally important stopover site, especially on northward migration, for Great Knot. There are also two sightings from the other main known stopover site in the Yellow Sea, at Yalu Jiang, China.



The four records within Australia mostly relate to birds on southward migration through Queensland.

Red Knot *Calidris canutus*

Australian

20/07/2007	3	Lake George, near Beachport, SA	Maureen Christie and Lorraine Moore	444 W
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Overseas

10/07/2006	3	Russkaja Koshka, mudflats, Chukotka, Russia	T.Heinicke	11790 N
25/07/2006	1	Russkaja Koshka, marsh NW of camp, Chukotka, Russia	T.Heinicke	11791 N
20/04/2007	1	Mouth of Shigenobu R., Iyo, Ehime, Japan	Taniguchi Akira	8087 N
20/04/2007	1	Maehiang-Ri, Hwasung-kun, Kiongkido, Korea	Shim, Kyu-Sik	8521 N

The most unusual Red Knot sightings were four from close to the breeding grounds of the *rogersi* race in the far north-east of Siberia. Direct and indirect evidence suggests that the majority, if not all, of the Red Knot which visit Victoria are of this race.

Sightings of Red Knot on migration through Asia are very much less frequent than those of Bar-tailed Godwit, Great Knot and several of the smaller species of wader. In spite of the extensive cover of Korea, only one flagged Red Knot was seen there this year, and there was also only one sighting from Japan. There were 20 records from mainland China between April 12th and May 16th (see summary table).

A massive 732 sightings of Red Knot came from New Zealand. These were spread throughout the year. Forty in the mid-April to mid-September period relate to birds which were still immature and not old enough to migrate back to the breeding grounds.

Most of the 73 records within Australia relate to birds on southward migration in September/October through Queensland. However three relate to birds seen together in July at a brackish lake in South Australia. These would almost certainly have been first-year birds banded at Swan Island, Queenscliff or at Corner Inlet during the previous spring/summer. Red Knot are well known for their mobility, and particularly their habit of going walkabout ("fly about") during the winter months.

Sanderling *Calidris alba*

Overseas

06/06/2006	1	Chaivo Bay, Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	10053 N
08/06/2006	1	Chaivo Bay, Northern Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	N
02/08/2006	1	Chaivo Bay, Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	10067 N
05/08/2006	1	Chaivo Bay, Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	10066 N
05/08/2006	1	Chaivo Bay, Northern Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	N
10/08/2006	1	Binghai, Nanhui, Shanghai, China (mainland)	Yuan Xiao	8046 N
13/08/2006	1	Shanyutan tidal flat, estuary of Minjiang River, Changle City, c. 1 hour from Fuzhou City, China (mainland)	Zhu Lichao	7597 NW
21/05/2007	1	Mai Po Marshes, Hong Kong (China)	Yu Yat Tung	7464 NW

This year produced a valuable crop of sightings from Russia, all of birds on migration. Sightings in China are not common. Not included in the table are the more usual sightings on southward migration in Japan, and movements between states in south-east Australia.

Red-necked Stint *Calidris ruficollis*

Overseas

29/07/2006	2	Chkalov Island/ Sea of Okhotsk / Amur Estuary region, Russia	Vladimir Pronkevich; Andrey Averin; Alexey Antonov	10170 N
30/07/2006	1	mouth of Heilongjiang River, Russia	Unknown observer	10138 N
02/08/2006	1	'Pier number 10', near Anadyr Airport, Chukotka, Russia	Ken Kraaijeveld	11778 N
26/07/2007	1	Chkalov Is., Schastia Bay, Sea of Okhotsk, Khabarovsk Region, Russia	Falk Huettmann, Andrey Averin and Alexey Antonov	10170 N
27/07/2007	1	Chkalov Is., Schastia Bay, Sea of Okhotsk, Khabarovsk Region, Russia	Falk Huettmann, Andrey Averin and Alexey Antonov	10170 N
23/07/2006	1	eastern Mongolia, Mongolia	Martin Gilbert	10084 N
29/07/2006	1	eastern Mongolia, Mongolia	Martin Gilbert	10202 N
07/08/2006	1	eastern Mongolia, Mongolia	Martin Gilbert	10198 N
05/05/2007	1	Mokpo Culture and Art center, Korea	Dr. Kim Seok-Yee and Andreas Kim	8319 N
27/08/2005	1	Huai Sawai (inland, in Buri Ram Province in NE Thailand), Thailand	Phillip Bruner	About 6000 NW

It was nice to have six more sightings of Red-necked Stint from Russia, including one close to the breeding grounds in Chukotka in the far north-east of Siberia. Three more sightings in Mongolia are a further indication that this country is an important migratory stopover location for Red-necked Stint on both northward and southward migration. Surprisingly there was only one flagged Red-necked Stint observed in Korea, although there was the usual crop of birds observed on southward migration in Japan (eight). The record in inland Thailand is unique and indicates how far westwards some Red-necked Stint may be during their southward migration.

Sharp-tailed Sandpiper *Calidris acuminata*

Overseas

16/05/2007	1	Haemi stream, Seosan landfill area, Korea	Cho, Heung-sang	8524 N
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This sighting in Korea is one of only seven birds seen overseas during the year. The other records were in Taiwan (China), mainland China and Japan.

Double-banded Plover *Charadrius bicinctus*

Overseas

04/11/2006	1	Big Beach, Shotover River near Queenstown, New Zealand	Lucy Hardy	2111 SE
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This sighting was from the breeding areas in the centre of the South Island, New Zealand, where the birds which spend the winter in Victoria originate.

Greater Sand Plover *Charadrius leschenaultii*

Australian

12/11/2006	1	Thompson Beach, near Dublin, SA	Andrew Plimer and Anthony Overs	719 NW
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This bird must have been banded some years ago, as very few now occur in Victoria and none have been flagged since 2001.

Banded Stilt *Cladorhynchus leucocephalus*

Australian

28/01/2007	1	Cheetham Wetlands / Saltworks Pt Cook Rd Laverton, VIC	Bernie McCarrick	31 NE
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This bird was seen only 30km from where it was originally marked, Werribee Sewage Farm, six years previously. Almost certainly it had travelled around considerably, including to South Australia, in the interim.

Banded Stilt flock at the Coorong 2005



Sightings of Waders Leg-flagged in South Australia

Report Number 7

Clive Minton, Roz Jessop, Maureen Christie, Iain Stewart and Heather Gibbs

Orange / yellow flagging of all waders caught in SA has been continued during the last year. The record total of 1395 (see earlier table) was boosted by 334 young Banded Stilt marked as a result of the first ever recorded breeding attempt in the Coorong. But record numbers of Red-necked Stint (465) and Ruddy Turnstone (258) were also flagged, bringing the overall total to 5673 since Orange/Yellow flagging commenced in 1999.

Species	Australia	New Zealand	China (mainland)	Russia	Taiwan (China)	Hong Kong (China)	Japan	Korea	Total
Sanderling	58		4	6		1	4		73
Bar-tailed Godwit		39							39
Ruddy Turnstone	11		2		6	1		3	23
Red-necked Stint	15		1	1		1			18
Curlew Sandpiper	9				1	2			12
Red Knot		11							11
Banded Stilt	2								2
Pacific Golden Plover	1								1
Total	96	50	7	7	7	5	4	3	179

The number of sightings (179) reported during the year was similar to the previous year (164). This time Sanderling (73) dominated but there were still a considerable number (39) of Bar-tailed Godwit flag sightings emanating from the eight birds flagged in November 2004. For the first time, sightings of Red Knot, Banded Stilt and Pacific Golden Plover marked in South Australia were reported. Eighty three of the flag sightings were overseas, with New Zealand dominating because of the high resighting rates there for flagged Bar-tailed Godwit and Red Knot.

Selected flag sightings are given in detail in the lists below, together with comments on flag sightings reported for each species.

Bar-tailed Godwit *Limosa lapponica*

All 39 flag sightings of Bar-tailed Godwit were in New Zealand – 33 in South Island and six on North Island. This brings to 121 the total number of sightings of SA flagged Bar-tailed Godwit in New Zealand. All have arisen from just eleven flagged birds, with most being from the eight juveniles marked on 23rd November 2004 in Brown Bay near Port

MacDonnell. This is an amazing return rate, obviously involving multiple sightings of the same birds over a prolonged period.

Ruddy Turnstone *Arenaria interpres*

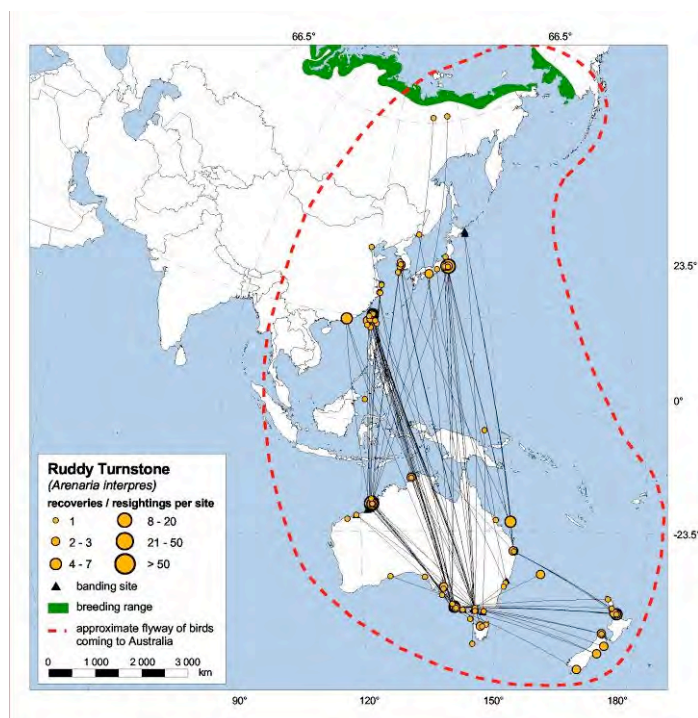
Australian

29/01/2005	1	East Island Ashmore Reef (sand bar 1 km east of), WA	George Swann, Kimberley Birdwatching	3317 NW
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Overseas

05/05/2007	1	shoreline near airport, Korea	Jake Mac Lennan	8339 N
12/05/2007	1	Airport, Korea	Maureen Christie	8337 N
18/05/2007	1	Airport, Korea	Peter Nebel	8337 N
02/10/2006	1	Shijing in Nan'an, Fujian province, China (mainland)	Guotai Dong	7317 N
09/05/2007	1	BinHai, Nanhui, Shanghai, China (mainland)	Michael Yuan	7901 N
30/04/2006	1	Lian-Yung Estuary, I-lian County, Taiwan (China)	Ming-Lang Tsai	7226 N
06/05/2006	1	Wu-Chiang-Hsi Estuary, Chin-Men, Taiwan (China)	Yu-Huang Chen	7304 N
07/05/2006	1	Tzu-Hu, Chin-Men County, Taiwan (China)	Ssu-Jen Bai	7307 N
22/08/2006	1	Lun-Wei, Changhua County, Taiwan, Taiwan (China)	Taiwan Wader Study Group	7206 N
27/08/2006	1	Yung-Hsing, ChangHua County, Taiwan (China)	Chung-Yu Chiang	7190 N
28/08/2006	1	HanBou (Hanpou), ChangHwa County, Taiwan (China)	Chung-Yu Chiang	7198 N
03/05/2007	1	Po Toi Island, Hong Kong (China)	Geoff Welch	7228 NW

There were six more sightings of flagged Ruddy Turnstone in Taiwan (China), a principal stopover location for this species in Asia. The sightings were equally divided between northward and southward migration. There were three sightings in Korea, but they could all have referred to the same individual bird.



Four different SA-flagged Ruddy Turnstone were seen during the first VWSG visit to King Island, in Bass Strait, in mid-March. It is most likely that some of these were birds that had been caught when on migration through SA, though others could be of birds which had changed their non-breeding area.

Map of Ruddy Turnstone flag sightings (from Stilt 50)

Sanderling *Calidris alba*

Australian

24/09/2003	1	Ashmore Reef, WA	George Swann, Kimberley Birdwatching	3333 NW
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Overseas

28/07/2005	1	Chaivo Bay, Northern Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	N
30/05/2006	1	Chaivo Bay, Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	10069 N
06/06/2006	2	Chaivo Bay, Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	10057 N
02/08/2006	1	Chaivo Bay, Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	10070 N
25/08/2006	1	Chaivo Bay, Sakhalin I., Russia	Andrej Y. Blokhin & Ivan M. Tiunov	10070 N
09/09/2006	2	Shanyutan tidal flat, estuary of Minjiang River, Changle City, c. 1 hour from Fuzhou City, China (mainland)	Zhu Lichao	7432 N
10/05/2007	2	Changle, Fuzou, Fujian, China (mainland)	Chen Lin	7430 N
06/05/2007	1	Pak Nai/Lau Fau Shan area, Hong Kong (China)	Martin Hale	7253 NW

Another very nice crop of six sightings from Sakhalin Island in eastern Siberia. The records covered both northward and southward migration with two birds still being on northward migration as late as 6th June. Sanderling sightings from China are not common, and it is pleasing therefore to have four sightings from mainland China and one from Hong Kong.

There were also a number of flag sightings around Australia, the furthest being a bird at Ashmore reef off the northern coast of Western Australia on 24th September.

Red-necked Stint *Calidris ruficollis*

Overseas

27/07/2007	1	Chkalov Is., Schastia Bay, Sea of Okhotsk, Khabarovsk Region, Russia	Falk Huettmann, Andrey Averin and Alexey Antonov	10164 N
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This bird would have been on southward migration from its Arctic breeding grounds when seen in the south-west corner of the Sea of Okhotsk in late July.

There were the usual interstate movements of Red-necked Stint, mostly involving birds which were probably still on migration, though the timing of some suggested a change of non-breeding location.

Curlew Sandpiper *Calidris ferruginea*

All nine Australian flag sightings reported in the last year were from Western Australia. The three overseas sightings were birds on northward migration in Hong Kong (two) and Taiwan (one), China.

Pacific Golden Plover *Pluvialis fulva*

Australian

15/09/2007	1	The Spit Reserve, WTP, Werribee, VIC	John Stirling	396 E
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It will be interesting to see whether this bird remains during the summer with the flock at Werribee Sewage Farm or whether it was just calling in on migration on its way back to South Australia.

Banded Stilt *Cladorhynchus leucocephalus*

Australian

20/03/2007	1	Cheetham Wetlands / Saltworks Pt Cook Rd Laverton, VIC	Bernie McCarrick	420 E
28/01/2007	1	Cheetham Wetlands / Saltworks Pt Cook Rd Laverton, VIC	Bernie McCarrick	457 E

It is nice to have confirmation that some of the Banded Stilt occurring on the eastern side of Port Philip Bay were chicks from the Coorong breeding attempt in late 2005 / early 2006.



Banded Stilt at the Coorong in 2005 (Photo M. Christie)

Tern Recovery Report 2006/07

Clive Minton and Roz Jessop

Listed below are some of the recoveries which have been reported during the last year for terns banded by the VWSG. The list is incomplete because of a backlog of recoveries waiting to be processed by the Bird Banding Office. In cases where sufficient information is available on particularly interesting recoveries some details are still presented here but will be amplified in a future VWSG Bulletin.

Many sightings of flagged terns which have also moved their location are detailed in a separate article in this Bulletin. These particularly relate to Caspian Terns.

Caspian Tern

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	KM moved
091-44598	Nestling	21/12/04	Clonmel Island, Corner Inlet VIC	01/08/06 (found dying)	North Stradbroke Island, QLD.	1201 NE

This recovery in south-east Queensland is in the area where most Victorian Caspian Terns migrate to for the winter.

Crested Tern

Recoveries of Crested Terns banded as chicks at Mud Islands, Port Phillip Bay.

Band No.	Date Banded	Date Recovered	Location Recovered	Method of Recovery	Km. Moved
073-05857	16/12/00	27/09/05	Mud Islands VIC	Found dead	Nil (but nearly 5 years old)
072-27658	18/12/93	11/11/05	Troubridge Island, S.A.	Breeding in Colony	709 WNW
072-66743	21/12/96	01/02/06	Torquay VIC	Found dying	39 W
073-32812	6/12/05	04/05/06	San Remo VIC	Found dying	63 E
073-20832	23/12/03	12/7/06	San Remo VIC	Found dying	63 E
072-72974	21/12/96	16/9/06	Mornington VIC	Found dying	25 E
072-47367	18/12/94	4/10/06	Phillip Island VIC	Found dead	53 E
073-32938	8/12/05	3/11/06	Port Melbourne VIC	Found dying	49 N
072-65124	17/12/95	15/12/06	The Nobbies VIC	Found dead in colony	42 E
072-66601	21/12/96	21/12/06	The Nobbies VIC	Found dead in colony	42 E
073-44654	30/11/06	29/12/06	Off Swan Is, Queenscliff VIC	Found sick	6 W
073-44773	18/12/06	2/01/07	Queenscliff VIC	Found dead	7 W
072-97467	11/12/99	13/01/07	Point Lonsdale VIC	Found dead	9 W
072-32083	6/12/05	22/01/07	Nelson VIC	Alive	329 W

The most unusual recovery in the above list is 072-27658. This is now breeding at a location in South Australia 700 km. from its natal colony. It is 12 years old and could well have been present breeding there since it first started breeding (typically at age four or

five). In contrast 072-47367 was also 12 years old and was recovered dead near the Phillip Island Crested Tern colony, only 50 km. from its birthplace.

073-32083 was another bird which made an unusual westerly movement. However it was still an immature at this stage.

Note the two birds recovered at Queenscliff soon after banding at Mud Islands. They could barely have fledged by the recovery date. SEE CRESTED TERN BREEDING AND RECOVERY REPORT ELSEWHERE IN THIS BULLETIN.

Recoveries of Crested Terns banded as chicks at The Nobbies, Phillip Island and later found dead, or with injuries leading to death, except where specified

Band No.	Date Banded	Date Recovered	Location Recovered	Method of Recovery	Km. Moved
073-46270	1/01/06	16/04/06	Bryans Lagoon, Tas.	Found dead	494 SSE
073-43826	20/12/05	25/5/06	Mallacoota VIC	Found dead	424 E
073-06749	19/02/00	16/7/06	Sussex Inlet, NSW	Killed by fox	609 NE
073-41904	20/12/05	20/7/06	Newport VIC	Found dying	77 NNW
073-26444	18/12/03	19/08/06	Merimbula, NSW	Found dead	457 ENE
073/27237	18/12/03	20/9/06	Phillip Island VIC	Found dead	0 --
073-43425	20/12/05	30/09/06	Cape Woolamai VIC	Found dead	21 E
072-98138	30/12/99	7/10/06	Woolamai Beach VIC	Found dead	19 E
073-40915	20/12/04	22/10/06	Kilcunda VIC	Found dead	28 E
072-86720	15/12/98	29/10/05	Troubridge Island, S.A.	Breeding at colony	750 WNW
073-45335	20/12/05	10/11/06	Brighton, QLD.	Found dead	1450 NE
073-46268	10/1/06	9/12/06	Wynnum, QLD.	Alive	1441 NE
073-41682	31/12/04	22/12/06	The Nobbies VIC	Found dead	0 --
073-19893	16/12/02	4/01/07	Newhaven VIC	Found dying	23 E
073-07876	17/12/01	8/01/07	Newhaven VIC	Found dead	19 E
072-73385	22/1/97	09/05/07	Lighthouse Beach, NSW	Found dying	1050 NE

073-46270 had made a southward movement of nearly 500 km. into Tasmania within three months of being banded. There have been similar examples of this movement in previous years. It is somewhat unexpected given that most birds move northward for the winter to the northern New South Wales coast.

072-73385 is an example of this. Victorian-banded Crested Terns rarely reach Queensland (as opposed to Caspian Terns which regularly do) so two recoveries in the same year are unusual. Both were only one year old birds and had clearly remained on their "wintering grounds" during their first summer.

The bird which had moved to breed at the Troubridge Island colony in South Australia was 750 km. from its natal area.

Banded as chicks off Manns Beach, Corner Inlet

Band No.	Date Banded	Date Recovered	Location Recovered	Method of Recovery	Km. Moved
072-29198	5/03/93	7/12/04	Troubridge Island, S.A.	Breeding in colony	892 WNW
073-49071	21/12/06	20/03/07	Lakes Entrance VIC	Found dead	132 NE

Not many recoveries arise from Crested Tern chicks in Corner Inlet as the colony is much smaller than The Nobbies and Mud Islands colonies and also breeding productivity is much lower. It is interesting that one of the two recoveries reported in the last year is a bird which was breeding at a South Australian colony 890 km. from Corner Inlet.

Banded as adult at Albifrons Island, Gippsland Lakes

Band No.	Date Banded	Date Recovered	Location Recovered	Method of Recovery	Km. Moved
072-29486	27/01/96	2/12/05	Troubridge Island, S.A.	Breeding in colony	942 W

Yet another record of a Victorian banded Crested Tern breeding at the Troubridge Island colony in South Australia. However this one was not banded as a chick and could well have been a wandering immature or migrating adult from South Australia when it was first banded in the Gippsland Lakes.

Little Tern

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km. Moved
042-00573	2+	13/3/99	Albifrons Island, Lakes N.P. VIC	25/11/06 (seen at colony)	Tathra, NSW	239 NE
042-39717	2+	?/11/06 (at breeding colony)	The Coorong, S.A.	?/1/07 (seen at nest) 06/03/07 (recaptured)	Piccaninny Ponds, Brown Bay, S.A. Danger Point, Port MacDonnell, S.A.	150 E

The first recovery is yet another example of a bird banded in late summer in the Gippsland Lakes been found breeding at a colony in New South Wales in a subsequent summer. The New South Wales breeding population appears to make a significant post-breeding dispersal into Victoria in late summer.

The second bird appears to have changed its breeding location quite markedly within the same breeding season. It was banded by David Paton at a nest in The Coorong, South Australia, in November 2006, was later seen and photographed at a nest in Brown Bay (close to the Victorian border and at least 150 km. east) in mid-January 2007 and then later recaptured in the same area in early March. It now carries an individual colour-band combination, so hopefully it can be tracked further in the future.

Common Tern

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km. Moved
052-02752	2+	23/1/00	Lochsport, Lakes N.P. VIC	22/2/07 (recaptured)	Off Mann's Beach, Corner Inlet VIC	100 SW
051-19855	2+	25/1/97	Spermwhale Head, Lakes NP VIC	30/8/00 (?)	Wonsom, Gangwon, North Korea	c.8500 N

The first record is another example of a movement between the Gippsland Lakes and Corner Inlet. Common Terns seem to move between these two locations quite regularly, even within the same season.

The second recovery is the VWSG's first ever tern (or bird!) to be reported from **North Korea**. We are still awaiting full details. It was presumably on its way back to Australia from its probable breeding area in central Siberia.

Pacific Gull

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km. Moved
111-28032	2+	24/11/2004	Port Welshpool	13/08/2006	Barry Beach, Corner Inlet	7

Pacific Gulls only seem to move relatively short distances during their lifetime.



Little Tern chicks in SE South Australia (photo M. Christie)

Tern Breeding and Banding Report 2006/07

Clive Minton, Roz Jessop and Susan Taylor

The VWSG long term tern studies continued in 2006/07, with the usual particular emphasis on determining breeding populations and breeding success, and banding chicks, at colonies along the Victorian coast. These studies commenced in 1979 and have been comprehensive since the mid-1980s, providing a valuable record of breeding population levels and breeding success over an extended period. Details of the results of each breeding season can be found in each annual VWSG Bulletin.

Caspian Tern

Location	Breeding Pairs	Chicks Banded
Mud Islands	20	13
Corner Inlet	63	30
Totals	83	43

The number of breeding pairs, and breeding success, at the Mud Islands colony was similar to recent years. The colony has been almost constant in size for more than 20 years. Breeding success is normally only modest with an average of only 10 – 15 chicks successfully fledged (and banded) in most years. Nesting again started early with seven nests already containing eggs on 11th September. There were 15 nests by 28th September and the first chick had already hatched. The remaining nesting pairs all had nests by 9th October.

In contrast the colony at Corner Inlet has more variable numbers and breeding success from year to year. The timing of nesting there is also later, with no chicks yet hatched in the 47 nests which were present on the west end of Clonmel Island on 19th November. Only a single visit to band chicks was possible, due to weather/boat transport limitations, but it was estimated overall that there were 63 breeding pairs on 21st December, when 43 chicks were banded. Given the relatively settled summer it is probable that quite a lot more of the 56 eggs still present then produced fledged chicks successfully.

Crested Tern

Location	Breeding Pairs	Chicks Banded	Banded Adults retrapped at nest	Sightings of colour-banded adults*
Mud Islands	1300	588	441	96 (422)
The Nobbies	3150	2364	238	--
Corner Inlet	610	444	--	--
Totals	5060	3396	679	96 (422)

*Number of birds scanned is in brackets

The number of pairs of Crested Tern at the three colonies monitored annually appears to have plateaued out at about 5000 after the phenomenal growth from less than 1000 pairs in 1985. As usual there was some variation in the numbers at each colony. The number at Mud Islands decreased further, to 1300 pairs, after much higher levels in the last three years. In contrast the colony at Corner Inlet – this year on the east end of Dream Island –

had the highest population (610 pairs) for many years. The Nobbies colony reached a new peak of 3150 pairs.

Crested Terns breed rather later than Caspian Terns. At Mud Islands the Crested Terns were however again earlier than normal, though similar to 2005. There were four nests on 4th October and this had grown to 200 nests by 23rd October. By 30th October there were 1073 nests. No eggs were laid after 30th November. This more detailed than usual data was partly gathered by Caroline Wilson who was carrying out her Honours studies from Deakin University at the Crested Tern colony. The Crested Terns at The Nobbies hadn't laid on 25th October and there were only 140 nests with eggs on 3rd November. New pairs seemed to keep joining the colony and laying their single egg at least up until the third week in December.

Breeding success at The Nobbies was very good, though not all of the estimated 2800 chicks fledged were banded. The Corner Inlet colony also did exceptionally well, with no storm tides or wind-driven sand causing problems this year. Again, all the later hatching chicks were not banded because it was not possible to arrange a boat at the right time. In contrast the Mud Islands colony had an unusually poor breeding season. Only 588 chicks were hatched and banded and it is estimated that many of these perished before fledging (perhaps only about 400 fledged successfully.) The causes of this poor breeding success are not clear. It is difficult to explain how two banded but unfledged juveniles were found on the shores of the bay at Queenscliff, eight kilometres from the colony.

Melbourne University student Dan Weller undertook an honours project analysing the Crested Terns diet from regurgitants collected by VWSG over the last few years at Mud Islands and the Nobbies and investigating the frequency and depth of dives made by the terns at the Nobbies – a copy of his thesis abstract is included later.

The studies aimed at determining the age at which Crested Terns first breed were continued at the Mud Islands and Nobbies colonies in the 06/07 season. Good numbers (679) of banded adults were re-trapped at the nest. This was however offset by a smaller effort than usual going into the sighting of colour-banded birds at the nest.

Fairy/Little Tern

No breeding Fairy Tern colony was located at Corner Inlet during November and December 2006. No visits were possible in January because of boat logistical problems but during a wader banding visit in mid-February there were no residual signs of Fairy Terns having bred. It is likely that if any did breed they, again, did not do so successfully.

It also appears that again Fairy Terns did not nest in Western Port in the 06/07 summer.

Other Tern & Gull Banding

Small numbers of adult terns are occasionally caught in cannon-nets as a by-catch to wader banding. In 2006 there was only one Caspian Tern and four Crested Terns but a huge catch of 378 Whiskered Terns over three days at Werribee Sewerage Farm in late December. These were all in full breeding plumage and almost certainly had collected at Werribee because their usual breeding areas in western and northern Victoria and probably further inland were in an unsuitable condition for breeding because of the extreme drought.

Eleven Pacific Gulls were caught by the Group and given large engraved metal bands on behalf of Bruce Robertson's long-term studies of this species in Gippsland.

Sightings of Victorian-flagged Terns 2006/07

Clive Minton, Roz Jessop and Heather Gibbs

During the past year, a further 34 sightings of terns flagged in Victoria have been reported. 26 of these were Caspian Terns. This brings to 563 the total number of sightings to date of terns flagged in Victoria.

Table 1. Total number of sightings of Victorian – flagged terns to September 2007

Species	Australia	NSW	QLD	Vic	SA	Tas	WA	Japan	Philippines	Taiwan (China)	Total
Caspian Tern	152	27	99	23	1	1	1				152
Crested Tern	50	11	5	20	11	3					50
Common Tern	300	219	64	17				3	1		304
Little Tern	49	37	12					6		1	56
Fairy Tern	1	1									1
Total	552	295	180	60	12	4	1	9	1	1	563

The above table is a revised version of that shown on page 52 of last year's VWSG Bulletin. It contains the additional birds seen in the last year and also a corrected totals column. All the comments made in last year's Bulletin are still relevant, because the detail in each of the boxes was correct.

Listed below are **all** flag sightings reported this year for each species, together with relevant comments.

Caspian Tern

Banded at Mud Islands, Port Philip Bay

Australian

21/02/2007	1	The Lakes National Park, VIC	Jim Reside	259 E
02/03/2007	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell	656 NE
05/03/2007	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell	656 NE
24/03/2007	1	Narooma estuary, NSW	Mike Crowley	528 NE
14/04/2007	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell and Jacqueline Deveraux	656 NE
16/04/2007	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell and Jacqueline Deveraux	656 NE
29/04/2007	1	Lake Wollumboola, near Culburra, NSW	Joy Pegler	649 NE
13/08/2007	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell	656 NE

Banded at Clonmel Island, Corner Inlet

Australian

22/04/2006	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell and Jacqueline Deveraux	550 NE
28/04/2006	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell and Jacqueline Deveraux	550 NE
13/08/2006	1	Fishermans Island, Moreton Bay, QLD	David Edwards, Ken Cowell and Floss Wainwright	1391 NE
10/09/2006	1	Fishermans Island, Moreton Bay, QLD	David Edwards, Ken Cowell and Floss Wainwright	1391 NE
23/09/2006	1	Kooragang Dykes, Kooragang Island, near Newcastle, NSW	Ann Lindsey, Chris Herbert and Liz Crawford	784 NE
20/10/2006	1	Penrhyn Inlet in Botany Bay, NSW	Graham Buchan	654 NE
03/11/2006	1	Great Sandy Mathieson Homestead, QLD	John Knight	1587 NE
31/12/2006	2	Buckley's Hole Sandspit, Bribie Island, QLD	Michael Strong	1417 NE
04/02/2007	1	Buckley's Hole Sandspit, Bribie Island, QLD	Michael Strong	1417 NE
04/03/2007	1	Toorbul, near Bribie Island, QLD	Dez Wells and Deborah Metters	1420 NE
05/03/2007	1	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell	550 NE
25/04/2007	1	Toorbul Sandfly Bay roost, QLD	Roy Sonnenburg Birds Australia/QWSG	1421 NE
29/06/2007	3	Shoalhaven Rivermouth, Shoalhaven Heads, NSW	Rex Worrell	550 NE
05/07/2007	1	Mathieson Homestead, near Hervey Bay, QLD	John Knight	1587 NE
26/08/2007	1	Tabourie lake, NSW	Julian Robinson	480 NE

Six of the seven birds from Mud Islands were subsequently seen in NSW. In contrast the eighteen sightings of birds from the Corner Inlet colony were equally divided between Queensland and NSW. All these records confirm that the northern NSW coast and south-east Queensland are the areas to which most Victorian Caspian Terns move during the austral winter.

Crested Tern

Banded at Mud Islands, Port Philip Bay

Australian

14/01/2007	1	West Head, Flinders, VIC	Penny Johns	35 SE
31/03/2007	1	Buckley's Hole Sandspit, Bribie Island, QLD	Dez Wells and Deborah Metters	1469 NE
24/05/2007	1	Woolgoolga, NSW	Klaus and Margit Hein	1194 NE
18/07/2007	1	Boat Harbour near Cronulla, NSW	Ricki Coughlan	741 NE
27/08/2007	1	Mornington, Vic	Ashley Herrod	25 E

These records are a by-product of the use of coloured enamel-coated metal bands on Crested Tern chicks for the prime purpose of determining the age at which they first pair and breed. As all of these were put on at the Mud Islands colony, the origin of these birds is known. Reports of Victorian-marked Crested Terns in Queensland are not frequent, with most only going as far as the coast of the northern half of NSW for the austral winter.

Common Tern

Banded at Gippsland Lakes

Australian

27/01/2006	1	Flat Rock Beach, North of Ballina, NSW	Bo Totterman	1152 NE
10/11/2006	1	Corindi River Estuary, Red Rock, NSW	Greg Clancy	1025 NE
11/01/2007	1	Brooms Head reef, near Brooms Head, NSW	Greg Clancy	1066 NE

It is now seven years since significant numbers of adult Common Terns were cannon netted and flagged in the Gippsland lakes. It is pleasing that some of these are still surviving and returning each year from their central Siberian breeding grounds. Passage occurs along the east coast of Australia, and two of the above sightings suggest that not all birds return each summer to the Gippsland Lakes.

Dan Weller. 2007. **Inter-colony movements of the Crested Tern (*Sterna bergii*) as a result of food resource quality and availability.** Honours, University of Melbourne.

Crested Terns in Victoria breed in two major colonies at Phillip Island and Mud Islands. The Phillip Island colony, located at the Nobbies, has increased from no birds in 1994 to 5600 birds in 2007, and is now the largest colony in Victoria. As the majority of these birds are tagged, I knew that many of them were originally from the Mud Islands colony. I identified and considered several hypotheses for this movement, and decided that spatial differences in food resource availability were the most likely cause. In this study, diet of nesting terns from both islands were examined. Through detailed diet analysis of regurgitates collected from terns from each colony in 2001-2007, I found significant differences in the mean lengths and weights of prey fish between sites and breeding seasons, with larger and heavier fish being caught by birds from the Nobbies in general. Using a condition index, linking fish length and weight, I also found significant differences in prey fish condition between both sites and years, with fish in better condition being caught by birds at the Nobbies in all breeding seasons. System productivity, estimated from cumulative fish biomass: fish length relationships, was also different between the two sites, with a higher proportion of relatively larger fish present in dietary samples from birds at the Nobbies indicating enhanced movement of energy up trophic levels. There were no significant differences in species richness between sites and between breeding seasons. In addition, I undertook a descriptive study of the birds diving behaviour using miniature time-depth data recorders, in an attempt to uncover the extent to which they access the water column, their daily feeding patterns, and maximum dive depth. I recorded a strictly diurnal foraging pattern, an average dive depth of 0.83m, and a deepest dive of 3.74m, which are consistent with the prey composition of the birds' diet. The differences observed in fish condition, weight and length and also system productivity support the hypothesis that differences in prey availability, quality and abundance are influencing the shift in numbers of breeding birds between sites. The variability in spatial and temporal distributions of prey fish and their relative condition is likely to persist in future breeding seasons.

South Australian Team Report – July 2006-June 2007

Maureen Christie

Friends of the Shorebirds South-east

Little Tern

The highlight of our year has been the successful fledging of a clutch of Little Tern chicks at Danger Point. Little Terns only visit the coast of the Lower South East in small numbers. For the last three summers a small number of pairs have nested here. In the first season, the summer of 2004/5, the only nest found was destroyed. In 2005/6 our group maintained a daily vigil but, despite two pairs hatching out young, no chicks survived to fledging.

In the summer of 2006/07 hopes were high, with a nest being found on 28th December 2006 at Danger Point and a second nest at Piccaninny Ponds, approximately 10 kms apart. Monitoring was organised and, in co-operation with rangers from the Department of Environment and Heritage (DEH), Mt Gambier, temporary fencing was erected at both sites. Both pairs hatched chicks.

The Piccaninny Ponds chicks were lost soon after hatching sometime between 18th when they were observed by Jean, a member of Friends of the Shorebirds South East and 22nd January, 2007 when we found no trace of the nest, eggs, chicks or adults. We have no way of positively knowing what caused the loss of these chicks, but high overnight tides are thought to be the most likely cause. When examining photographs he had taken of this pair, Paul Van Loon discovered that one tern had a metal band. Unfortunately most of the numbers were too indistinct to be read with confidence. On 26th January a banded bird, thought to be the same bird was observed showing a great deal of interest at a scrape on Danger Point, however no nest resulted.

The nest at Danger Point found on the 28th December was successful, from an above average sized clutch of three eggs, with three chicks hatching on 6th and 7th January. All three chicks were banded soon after hatching. It was hoped that they could also be flagged with individual codes. Unfortunately, at the time of banding, the chick tarsus was not long enough to comfortably take two flags. On the 22nd January the tarsus was still too short and on the 26th January, they were flying!

But, we were to be given a second chance with one of the chicks. During the annual VWSSG expedition in March, 2007, four Little Terns were caught as part of a Sanderling catch at Danger Point. Two were retraps, one being one of the Danger Point chicks banded a few months earlier, and the other an adult that had been banded at the Murray River mouth, in the Coorong. The two unbanded birds were adults. All four were given individual colour codes consisting of an orange flag over the metal band on the right tarsus with two different coloured flags on the left tarsus.

The Coorong banded tern is of particular interest. David Paton reported that it was caught at a nest with eggs, breeding within a colony with Fairy Terns at the Murray River mouth on 30th November 2006. The breeding colony failed, probably due to foxes and extreme weather conditions, and disbanded in early January 2007. There was great excitement in our group when the numbers on this bird's band were found to match the three readable numbers on Paul's photograph of the Piccaninny Ponds birds mentioned above. This was deemed sufficient to make a positive identification for the Piccaninny Ponds bird.

Disturbance Project

In collaboration with the DEH, Jeff Campbell has co-ordinated a study of disturbance at Danger Point and Pethers Rocks - *Limestone Coast Shorebird Disturbance Project*. This study was funded by a National Heritage Trust grant obtained through the Shorebird Conservation Project co-ordinated by WWF-Australia. The project was modelled on a similar project conducted at Roebuck Bay. Field work has been completed, and the report expected in August.

Counting

Summer and winter AWSG shorebird population monitoring (PMP) counts have been completed. We participated in the AWSG annual summer count of the Coorong and Coastal Lakes and conducted a winter count of the Coastal Lakes.

Annual summer and winter counts have been undertaken at two PMP sites since 1981 and for the Coastal Lakes since 2002. Historical data has been reviewed as part of the *Limestone Coast Shorebird Disturbance Project*. The commencement of the *Shorebirds 2020* project is timely, with our group hoping to work with them in setting future objectives. Questions we hope to resolve include whether we should continue with the Coastal Lakes counting in favour of counting previously neglected areas such as Lake Bonny. Alternatives include continuing with Lake George, commencing Lake Bonney, but only counting other lakes each fifth year. We are also keen to discuss techniques that are suitable for counting 'open-ended' sites.

The field work for our special project on Lake Hawdon South has been completed. Field work consisted of counting waders and mapping the water's edge once a month for a year. It is hoped that next year will see the report completed.

Banding and Flagging

Partly because of commitments to projects in other parts of the flyway, little banding was completed by our team during the past year. We only set the net on six occasions, and banded a total of 44 individuals. However, few Ruddy Turnstone are caught over-wintering, and a catch of 19 Turnstone on 6th August 2006 was significant. This catch included three different stages of moult – V¹⁰, R¹⁰, and a mix of V's and R's (V=Very old, R=Replacement, O=Old). There were six retraps (four with V¹⁰, two with a mix of V's and R's). All had been aged as 'juvenile' in the period March/May. Having celebrated a birthday on 1st August, all were judged age 'two' or birds in their second year of life. It was interesting to note that the retrap moult of 5⁵ O⁵ on 2nd May was unchanged as R⁵ V⁵ on 6th August. The age of over-wintering Turnstone continues to be perplexing, and so even small catches are useful.

Although we may have banded few waders for the period, we received a welcome number of flag reports. These are discussed in a separate article, but I would like to mention here several sightings that aroused considerable excitement in our group. The first internationally flagged waders seen in the lower south east of South Australia (SE) – two Sharp-tailed Sandpiper flagged in Chongming Dao and seen by Bob Green at Stony Point September 2006. A Tasmanian flagged Red-necked Stint was seen on 20th April at Nene Valley – only a few weeks after it was flagged on King Island. It was in a flock of 500 Red-necked Stint which also included four Victorian and several SA flagged birds. A Banded Stilt flagged as a chick in the Coorong was seen on two occasions at Cheetham Saltworks, Laverton, Victoria supporting the concept that birds in SA and Victoria are part of the same meta population. There continues to be a constant flow of sightings of SA flagged waders seen overseas – see SA flag sighting report. A personal highlight was seeing a SA flagged Ruddy Turnstone on the mudflats at Saemangeum in South Korea in May.

Ruddy Turnstone Engraved Flags

This project continues, with 109 engraved flags being added this year, giving a total of 630 for SA. Unfortunately the lettering on the first 200 flags used is fading badly, often making sightings difficult, if not impossible. The second batch of flags had very shallow engraving and many of these are illegible. In some instances, no trace of the ink remains. The engraving on later flags has been both deeper and wider and is proving much easier to read in the field. We hope to trial a new ink next year to improve the longevity of the numbers on these flags.

The project commenced in November, 2004. Whenever possible, observations are made monthly across the study area, stretching from Piccaninny Ponds in the east to Nora Creina in the west. With no juveniles flagged during the 2006/07 summer, a lean winter was anticipated. Because of a

combination of favourable weather and tide conditions a much better coverage of the section Piccaninny Ponds to Green Point was possible than is usually achieved in winter. This was fortuitous as the few Turnstone that remained over winter favoured this section of the beach. Last winter the largest single flock observed was 120, with flocks of 50 to 60 not uncommon. This winter we often found no Turnstone at all and estimated that there were fewer than 20 over wintering in our study area. A flock of eleven included four with engraved flags. All flags were read and the individuals identified. One was flagged as a 'juvenile' in April 2006, two had been flagged as 'age two' in August 2006, and the fourth had been flagged as an adult in March 2007. Until now, it had been assumed that all Turnstone returned north after their first, juvenile, winter here.

Public Relations Work

The group has provided input into various forums. Jeff Campbell is our representative on the Recreational Vehicles Working Group and on the Grant District Council Environment Committee. I am a member of the Lower South East Natural Resources Management Group. We have been given the opportunity to participate in community consultations in relation to the establishment of Marine Parks in South Australia. Press reports and radio interviews are conducted as the opportunity arises.

During September/October/November a Waders Festival was organised by the Tourism Authority. Marcia Lorenz, acting as a member of various Beachport organisations, organised an extremely successful exhibition, talk and excursion. The exhibition is now permanently housed in the Beachport Historical Museum.

Conclusion

The South Australian Team has had a successful year. Modelled on the successful VWSG working bee cum social gathering cum formal meeting formula, our Annual General Meeting, held in February, was well attended.

Thankyou to the members of the group who have worked hard to produce these results. Thankyou too, to the members of both the Regional and District Offices of the Department of Environment and Heritage who have provided encouragement and practical help.

Table 1. South Australian team catches 1 August 2006 to 31 July 2007.

DATE	PLACE	Sanderling	Ruddy Turnstone	Red-necked Stint	Curlew Sandpiper	Sharp-tailed Sandpiper	Banded Stilt	Other		TOTALS
06.08.06	Port MacDonnell		19							19
10.09.06	Port MacDonnell			9		1				10
26.09.06	Stony Point					5				5
04.01.07	Piccaninny Ponds							**1	Pied Oystercatcher	1
07.01.07	Danger Point							**3	Little Tern	3
16.01.07	Nene Valley		5							5
24.01.07	Nene Valley									*
26.01.07	Danger Point							**1	Red-capped Plover	1
03.04.07	Deep Creek							**1	Hooded Plover	1
24.04.07	Nene Valley									*
Sub Totals			24	8		6		6		44
Previous	1.12.00 – 30.6.06	26	289	327	17	101	334	60		1154
TOTALS TO DATE		26	313	335	17	107	334	66		1199

*net set, no catch made. ** chicks/'runners'

Table 2. Total number of waders & terns caught per month by the SA Team - 1 December 2000 to 31 July 2007

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTALS
Ruddy Turnstone	5		1	110	38	16	46	56	39	1	1		313
Red Knot				1		12							13
Sanderling		17	2	2				5					26
Red-necked Stint		34	34	39	4	20	49	62	27	43	1	23	336
Sharp-tailed Sandpiper									6	101			107
Curlew Sandpiper						2	7	5		3			17
Pied Oystercatcher	1			1							2	8	12
Sooty Oystercatcher				3									3
Banded Stilt	185	149											334
Red-capped Plover	1	4	1	4				5		1		1	17
Double-banded Plover			4	1		4							9
Black-fronted Dotterel			3										3
Hooded Plover				1								3	4
Little Tern	5												5
TOTALS	197	204	45	162	42	54	102	133	72	149	4	35	9

King Island Report 2007

Clive Minton & Roz Jessop

Introduction

This visit, by a small team from the Victorian Wader Study Group from 18th to 25th March 2007, arose out of a series of email communications in late 2005/early 2006 from Nigel and Mavis Burgess (Nigel is, amongst other things, the Tasmanian Parks and Wildlife Ranger on King Island). They reported numerous sightings of Victorian colour-banded/flagged Pied and Sooty Oystercatchers, but, in passing, they also mentioned the large population of Ruddy Turnstones which inhabit the island.

Turnstones are one of the core study species of the VWSG but there is only one regular catching site in Victoria (Flinders). Most of the annual sample over the last ten years has been obtained through special visits to the south east of South Australia and by Maureen Christie's catching efforts with a local team. The opportunity to try and augment our annual Turnstone sample from southeast Australia by visiting King Island was therefore explored and a date when birds were tending to congregate prior to northward departure was chosen.

Logistics

The visit was greatly facilitated by Penny Johns' cousin, Angus Roberts, who is captain of the Patrick/Toll cargo ship which visits the island twice a week. He agreed to allow us to use his free car space to transport Clive Minton's vehicle, filled with the cannon-netting equipment, to/from King Island.

Twelve VWSG members (it was going to be 14 but two had to cancel at the last minute) flew from Moorabbin Airport to King Island on the afternoon of Sunday the 18th March (returning in the late afternoon of Sunday 25th March). Eight people stayed in a rented house in Currie, the "capital" of King Island situated half-way down its west coast. The other four members of the team stayed in a house at the very south of the island (Red Hut area) kindly loaned by Rosemary Balmford (BA/BOCA/VORG member). They used a rented 4WD for this one hour plus daily travel – mostly gravel roads littered with live (and dead) Wallabies and (at night) hundreds of Brush-tailed Possums.

Catching

The first day was spent in a thorough recce of the central western and south western coasts of the island which local advice indicated held the highest numbers of Ruddy Turnstones. Birds were found on many different beaches and were mostly centred on patches of rotting seaweed. Most of these were on pebbly/stony/rocky beaches but some were in the corners of sandy beaches. Turnstone flocks were typically 30 to 80 with an estimated population in the areas covered of around 1000 birds. A subsequent estimate for the island as a whole, made in conjunction with Nigel and Mavis Burgess and Sarah Lovibond (a University of Tasmania Honours student studying waders/human uses of beaches) was at least 1500 Ruddy Turnstones.

The next five days were spent cannon-netting. On three days two catches were made, on one day just a single catch and on another day (the fourth) we were unsuccessful.

Overall 307 birds were caught of which 241 were Ruddy Turnstone and 60 were Red-necked Stint (see full catch details, below). One of the Ruddy Turnstones had been banded in South Australia – as a juvenile on 11th December 2000 at Brown Bay. This incidentally is the third bird banded on this day to subsequently be recovered. One turned up in North Island New Zealand only a couple of weeks after banding, and another was migrating through Taiwan in May 2006. Like the bird recovered in New Zealand the one we found in Tasmania had an elevated weight when it was originally banded indicating that some juvenile Turnstone were still undertaking their southward migration as late as 11th December.

A banded Red-necked Stint had been marked as an adult on 23rd December 2001 at Stockyard Point in Westernport. This individual had clearly changed its non-breeding area.

The most striking feature of the catching was that there wasn't a single juvenile bird amongst the Turnstones. This supports data obtained earlier in the month in South Australia and indicates that the 2006 Arctic breeding season for Turnstones was a disaster (as it was for Sanderling also). In contrast Red-necked Stints, with 28% juveniles in the King Island sample, had obviously bred successfully in 2006.

Cannon-netting on crisp, dried beds of seaweed presented some significant challenges! We soon resorted to laying the net on a bed of folded covering material/tarps and this worked well. Nevertheless it was still a major task to clean the net after each net firing and in this we were enormously helped by the number of local people who joined our team for many catches.

An unusual technical problem was encountered with one of the four cannons failing to fire on three occasions (different cannon, different position, on each occasion). On one occasion this lost us at least 30 Ruddy Turnstones from the potential catch. We think that the problem was associated with imperfect wiring up/connecting of the “chocolate blocks” but only time will tell whether improved attention to detail in this area has solved the problem.

Sightings of colour marked birds

Over the months prior to our arrival Sarah Lovibond had seen, and often photographed, various colour-marked waders. These included two different Ruddy Turnstones marked in Taiwan and another from Japan. She had also seen several Sanderling flagged in South Australia and Victoria, even though these are present only in very low numbers on King Island.

During our visit we saw four Ruddy Turnstones flagged in South Australia. We managed to read the engraved flag on one of these, were able to catch another (see earlier) but could not read the engraved flag on one of the other birds. We also saw a Ruddy Turnstone with a yellow flag (on tibia) from northwest Australia. And the Victorian-flagged Red-necked Stint was seen in the field before it was eventually captured.

King Island

This beautiful oval shaped island is approximately 60 km. long by 20 km. wide. It has a population of around 2000. The majority of the island is covered by grazed grassland, but there are some extensive areas of bushland, particularly in the south and in the north east. This latter area had been burned extensively by wildfire just three weeks prior to our arrival and some small fires were still burning (particularly in peat areas). The coastline is absolutely beautiful with heavily eroded rocky shores along much of the west of the island but with beautiful white sandy beaches in between rocky outcrops and along most of the eastern coast. There is a good range of birds, including several endemics. Perhaps of most surprise were the small flocks of wild turkeys, the regular sightings of Ring-necked Pheasants and even an occasional wild Peacock!

The Ruddy Turnstone habitat derives from the large quantities of seaweed which are washed up at places on the west coast of the island. As on the coast of the south east of South Australia there are extensive reefs offshore (much utilized by the crayfish industry). Huge quantities of bull kelp are washed ashore and a major industry (supplying most of the world) results from the hand harvesting of this by a small army of “kelpers”. They go out each day and haul onto the backs of trucks the largest pieces of seaweed which are subsequently dried, stoved and crushed to give a gelatine compound (used in beer making and a wide variety of other applications). The widespread gravel roads created by the kelpers certainly greatly facilitated our access to the coastal areas in key locations. It would also appear that the removal of this extremely coarse kelp from the beaches actually helps the Ruddy Turnstones by removing this impenetrable mass of weed and leaving only the much finer seaweed. This then rots well and creates beds of sand-hoppers and their larvae, maggots etc. suitable for the Turnstones to feed on (and presumably to be washed back into the sea by the larger tides to provide rich food for fish).

To add to the beauty of the island we were blessed with the most incredibly calm, sunny, warm weather for the majority of our visit. This was especially remarkable because the 40°S latitude line passes through King Island – so we were on the edge of the “Roaring Forties”. It rained lightly one night, there were a few heavy showers the next day, and quite a strong wind on another day. Otherwise it was heavenly, and of course this greatly helped our catching success.

An added bonus was the gourmet foods which King Island specialises in – cheeses (triple brie!), cream, crayfish, smoked wallaby etc.

Thanks

We were most fortunate that our visit coincided with an initial meeting to consider protection needs for the coastal areas of King Island, and in particular their shorebirds. Four of our visiting team participated in this discussion. Subsequently we were absolutely delighted that so many different local people joined us and helped with our fieldwork activities (about 15 people in total). We hope they will

continue to search for flagged birds in the future and where possible to read the inscriptions on the engraved flags on Ruddy Turnstones.

We thank Nigel Burgess, without whom the visit would never have occurred, particularly for the loan of the trailer to carry our cannon-netting equipment around on the island. Angus Roberts also made our visit possible by kindly transporting our cannon-netting equipment and a vehicle to/from Melbourne. We also greatly thank Rosemary Balmford for the loan of her beautifully situated house at Red Hut. Sarah Lovibond assisted us in a whole variety of ways in the fieldwork and with her car transport. And Dave Ball is thanked very much indeed for the provision of much tasty tucker.

Thanks again to the team – visitors and ‘locals’.

The Future

It is clear that King Island is one of the most important places for Ruddy Turnstones in the east Asian/Australasian flyway. It is also well suited to catching, banding and colour marking birds and for subsequently reading the engraved flags. With around 300 migratory waders now in circulation carrying (for the first time) the orange/blue flag combination it is pleasing that Tasmania will again be contributing to knowledge of migratory movements in the Flyway (following a gap of over 20 years since regular wader banding in the Hobart area ceased).

It would appear scientifically important to make further visits to King Island in the future, preferably annually. And there is considerable enthusiasm in both the visitors and the visited for this to happen. Plan for late March 2008!



“Victorian” Pied oystercatchers on King Island (Photos Mavis and Nigel Burgess)



Catch details
King Island, Tasmania 18-25th March

Date	Location	Species	New	Retrap	Total	Juveniles
20/03/2007	Manuka					
(first catch)	Central Beach	Ruddy Turnstone	24	0	24	0
TOTAL			24	0	24	
(second catch)	Manuka	Red-necked Stint	51	1*	52	15
	North Bay	Ruddy Turnstone	30	0	30	30
* banded in Victoria		Double-banded Plover	2	0	2	2
		Red-capped Plover	1	0	1	1
TOTAL			84	1	85	
21/03/2007	Currie	Ruddy Turnstone	30	1*	31	0
(first catch)	Golf Course	Red-necked Stint	6	1	7	1
*banded in SA		Double-banded Plover	2	0	2	1
TOTAL			38	2	40	
(second catch)	Manuka	Ruddy Turnstone	32	0	32	0
	South Bay					
TOTAL			32	0	32	
22/03/2007	Surprise Bay	Ruddy Turnstone	43	0	43	0
TOTAL			43	0	43	
24/03/2007	Manuka	Ruddy Turnstone	25	3	28	0
(first catch)	Central Bay					
TOTAL			25	3	28	
(second catch)	Currie	Ruddy Turnstone	46	7	53	0
	Golf Course	Double-banded Plover	1	0	1	0
		Red-necked Stint	1	0	1	1
TOTAL			48	7	55	

KING ISLAND TOTALS

SPECIES	NEW	RETRAP	TOTAL	Juveniles
Ruddy Turnstone	230	11	241*	0
Red-necked Stint	58	2	60**	17=28%
Double-banded Plover	5	0	5	1
Red-capped Plover	1	0	1	0
TOTAL	294	13	307	

* Includes one from South Australia

** Includes one from Victoria

7 catches – 4 at Manuka
2 at Currie, Golf Course
1 at Surprise Bay

Ruddy Turnstone sexes = 125 male and 116 female

Shorebirds (and other birds) seen during a trip to southern Africa

Ken Gosbell

In August of this year Carlene and I spent almost a month in southern Africa where we visited parts of Namibia, South Africa and Botswana. While not necessarily a birding trip we made the most of opportunities to visit some prime wader and water bird locations. We saw quite a number of new (to us) resident waders both on the coast and at inland locations. The following contains some brief impressions on several of the areas visited.

Namibia

The coastal strip of Namibia--the Namib Desert--is regarded as one of the oldest and most arid desert regions in the world, and is characterized by a surprising number of uniquely adapted plant and animal species. Some 30kms south of the town of Swakopmund (its German colonial history and character dating back to the days of German South West Africa) lies Walvis Bay, one of the most important areas for shorebirds in southern Africa.

The Walvis Bay lagoon is important, not only for the large numbers of resident species found here, but particularly for the vast numbers of both intra-African and Palaeartic migrants. It is renowned for the large number of both Lesser Flamingo and Greater Flamingo, (each around 43,000 in winter), and has been listed by Ramsar as a Natural heritage site. Between 1997 and 2005, the complex of wetlands supported 156,000 waterbirds in summer – it supports the largest number of waders of any wetland in southern Africa; for 25 species (11 waders), numbers exceeded the 1% thresholds for flyway populations (Wearne and Underhill, 2005). Habitats include the Walvis Bay tidal lagoon, a sewage works wetland, a salt works with extensive evaporation pans, open ocean and shoreline, and the Kuiseb river bed and dune area.

August of course was not the time to view the large numbers of migratory waders although in a day visit we did see some wonderful sights including 46 species of birds and a Black-backed Jackal hunting along the beach. Some highlights included some of our favourites that we see in Australia including Sanderling, Curlew Sandpiper, Ruddy Turnstone, Bar-tailed Godwit, Grey Plover, Ruff etc as well as some welcome new species of Pied Avocet, Common Ringed Plover, Three Banded Plover (pictured below), White faced Plover, Blacksmith Lapwing, Chestnut-banded Plover. Other species included the spectacular sight of thousands of Flamingo (Greater and Lesser), Swift Tern, Sandwich Tern, the 'Near threatened' Damara Tern and the African Black Oystercatcher as well as many others.



The guano platform built over Bird Rock near Walvis Bay is a remarkable structure. The rock over which it is built is about 400 m offshore, about 7 km north of Walvis Bay on the way to Swakopmund. Here there were large numbers of Cape Cormorant returning to roost; also White-breasted Cormorant and Great White Pelican can also be seen. This timber structure, built in the 1930's produces some 650 tonnes of guano each year!

Despite the importance of this region it is subject to similar conservation issues facing many Australian sites. One of the worst examples was a new 'housing development' being established on the arid, dry wind blown beach midway between Walvis Bay and Swakopmund – a prime nesting site for the endemic Damara Tern.

West Coast National Park – South Africa

We visited the magnificent West coast area with Brian Vanderwalt of Brian's Birding; apart from being a keen and knowledgeable shore birder, he was pleased to show us some of the magnificent flora for which the West Coast National Park is so famous, especially at this time of the year. The park surrounds the Langebaan Lagoon, which is a Ramsar site. In winter, the lagoon regularly supports more than 10,500 birds, of which 4,500 are Flamingos and 4,000 are waders. Langebaan Lagoon is the most important wetland for waders in South Africa, regularly accounting for c.10% of South Africa's coastal wader numbers. Once again, while it was not the best time to see migrants it was satisfying to visit one of the sites referred to so regularly in the literature. It is a very beautiful area and has several well placed bird hides on its margins. Red Knot, Marsh and Curlew Sandpiper, Greenshank, Whimbrel, Eurasian Curlew and Bar-tailed Godwit were present in small numbers. New resident species to us were Three-banded Plover and Kittlitz's Plover. Flamingos and the Great White Pelican were in the deeper water.

Okavango Delta – Botswana

A highlight of any trip to southern Africa is the Okavango Delta region in Botswana. The Okavango River (the third largest in southern Africa) spreads out into a complex system of waterways and swamps and supports a huge array of wildlife. About 17% of the country has been set aside for wildlife protection. Apart from the excellent opportunities to view the vast variety of animals, the birdlife was stunning. Of particular interest were water bird species like the African Jacana, Wattled Crane, Blue Crane, Kori Bustard, several of the Korhaan species, Pied Avocet and Black-winged Stilt. Storks included the Yellow-billed, Marabou,



Saddle-billed and African Openbill. Of interest were several lapwings seen in the drier grassland habitat – Crowned Lapwing (shown below), White-crowned Lapwing and the more common Blacksmith Plover.

Southern Africa is an exciting place for those interested in wildlife in general but has some special areas of particular interest to those passionate about water birds. It was pleasing to see that most regions were being protected for the benefit of future generations.

Sharp-tailed Sandpiper *Calidris acuminata*

Graham Beal

More obliging was a superb adult SHARP-TAILED SANDPIPER on the Oare Marshes (Kent) from 10th-11th August 2007 - the first British record since one in Cornwall in 2004.

Once again a Sharp-tailed Sandpiper was the best bird on offer, but this time it was a rare record in the north of the country. One at Sammy's Point will be only the 2nd accepted Yorkshire record, but unfortunately it only remained long enough to allow those within a short radius of the find the opportunity to enjoy its brief stay.

These are excerpts from a weekly bird report from England, as you can see Sharp-tailed Sandpiper are scarce there but here they are probably one of our commonest visitors second to the Red-necked Stint.

Up until December 2005, 6594 had been processed by the VWSG

They prefer the grassy edges of shallow inland freshwater wetlands. They are also found around sewage farms, flooded fields, mudflats, mangroves, rocky shores and beaches. I have seen them roosting on Barralliar Island, Western Port in a mixed flock of waders. At Edithvale wetlands and Seaford Swamp up to 3000 have been recorded some years. Their breeding habitat in North East Arctic Siberia is the peat-hummock and lichen tundra and nests in dense sedgeland the wettest of all sandpipers that breed in the Arctic.

They winter in south east Asia and Australasia although the absence of large numbers in Asia and northern Australia suggests that most of the world population comes to southern Australia. A favourite place for the VWSG to catch these birds is on the saltmarsh at Yallock Creek on Western Port but they are also caught at Queenscliff, Inverloch and of course Werribee. Sharp-tailed Sandpiper occurs as a rare autumn migrant to North America but in Western Europe only as a very rare vagrant.

The Sharp-tailed Sandpiper is a medium sized wader with a straight black bill that has an olive-grey base. It has a chestnut crown and nape, a white eyebrow, and reddish brown upperparts, with each feather having a black centre. The rump and tail are black, with white outer margins visible in flight. The wings have an indistinct white bar. The breast and flanks are white, streaked and speckled black, with a reddish brown tinge on the chest, grading into a white belly and under tail. The legs are olive. Juveniles are easily recognisable by their redder more strikingly marked chestnut crowns but difficult to distinguish from adults after December. Males are larger than females the mean adult wing measurement being male 138.1mm, female 130.2mm.

They are very similar to the less common but often overlooked Pectoral Sandpiper *Calidris melanotos*, which has a sharply contrasting breast and white belly. In fact Sharp-tailed Sandpiper are also sometimes called Asiatic or Siberian Pectoral Sandpiper but here affectionately known simply as Sharpie. Their call is described as a dry soft "trit-trit" or "pleep pleep" when taking flight or a musical twitter.

On their breeding grounds, Sharp-tailed Sandpiper eats primarily mosquito larvae otherwise insects, invertebrates, including molluscs and crustaceans, are also part of the diet.

The History and Achievements of the Victorian Wader Study Group

Clive Minton

(Reprinted from Stilt 50: pp 285-294)

The Start

The origin of wader banding activities which ultimately led to the formation of the Victorian Wader Study Group (VWSG) goes back to 1975. David Robertson had recently arrived in Australia from Malaysia, where he had been involved in successful mist netting of waders in salt pans at a local commercially operated salt works. Discovering that little had been done in the way of wader banding in Australia – just a little in the Perth area in the 1960s and in the Hunter area of New South Wales in the 1970s – he set about trying to mist net waders in Victoria.

Several attempts by David and Minnie Robertson at the Cheetham Salt Works, Altona during 1975 were largely unsuccessful and only nine waders were caught. On 7 March 1976 they tried for the first time at North Spit, adjacent to Werribee Sewage Farm (now the Western Treatment Plant) and were immediately more successful. Twenty-six waders were caught that first night followed by 68 on a second visit a week later. Mist netting was carried out in almost every month for the rest of the year resulting in a total catch of 620 birds. Wader banding activities in Victoria were thus launched in earnest.

Mist Netting

The team of people participating in the wader mist netting activities at Werribee was gradually reinforced, mainly by young Monash University students/recent graduates, and mist netting activities continued throughout 1977 and 1978 with a further 1832 birds being caught. The process was an arduous one. Lines of mist nets were set out at intervals in the North Spit Lagoons and these were manned throughout the night, which included a high tide period. Part of the team was deployed almost continuously in extracting birds from the nets, which were spread out over a kilometre or so, and bringing them back in bird bags to banding station. There, protected by a large tent, the rest of the team was involved in banding the birds and recording age, biometric and moult details before releasing the birds. Some people were allowed to take a two hour break for sleep but many would work the whole night through. The process was often assisted by a flagon of port being passed around at regular intervals!

Catch totals were quite variable, often because of wind conditions. Catches of over 400 birds were made twice, the largest being 452 on the night of 24 February 1979. But as cannon netting was gradually introduced the frequency of mist netting declined during 1979 and only occasional mist netting attempts have been made since. The last large mist netting catch was 262 birds on 29 February 1992.

Cannon Netting

The first cannon net for the VWSG was constructed in November and December 1978. The net making-up process, carried out at Werribee Sewage Farm, itself had one small drama when a tiger snake made its way across the open area we were using. One team member, Kevin Bartram, decided he would pick it up but in doing so he was bitten on the thumb. The whole episode was captured by Daphne and Ralph Keller on film. Kevin was driven off to the Geelong Hospital but when no reaction had occurred after three hours it was concluded that no venom had been injected, although blood had come out of the wound, and he returned to the team.

The first cannon net catch, of 8 birds, was made on 31 December 1978 at North Spit, Werribee. Further small trials in early 1979 were followed by a hugely successful concentrated effort at North Spit on the Labour Day weekend of 9–12 March. In five catches in this four-day period, 2333 birds were caught almost all Red-necked Stint (1798) and Curlew Sandpiper (495). Dick Veitch came over from New Zealand especially to take part and on his return home constructed a cannon net and carried out the first cannon netting of waders in New Zealand. Altogether 7922 waders were caught in 1979, with cannon netting lifting catching effectiveness to a much higher level compared with mist netting.

Cannon netting has been carried out ever since, with 199,369 waders being caught to the end of 2005 (Table 1). Catching effort has been consistent over the years though the total number of birds caught each year has varied between 3503 and 12,944, with an average of 7384. Initially most cannon netting was carried out at Werribee, on both the North Spit and the South Spit. Activity has gradually extended to locations throughout coastal Victoria in order to obtain samples from different local populations and to increase the number of species caught in worthwhile numbers. In all, 36 species have now been banded with nine reaching totals of more than 1000 birds (Table 2).

Various sites in Western Port were visited; Yallock Creek was especially productive. Andersons Inlet, at Inverloch, proved difficult to master but eventually has become one of the prime Red-necked Stint monitoring areas. Corner Inlet, which has the largest population and diversity of waders in Victoria (30,000–40,000 birds of 26 species), proved to be a logistical nightmare with boat transport required to reach most sites and with weather conditions frequently being windy. More than one boat has been damaged over the years and twice part of the team has had to be left overnight on offshore islands when darkness overtook the return ferrying activities. Fortunately there was always plenty of covering material for bedding. Wind conditions were so bad on the first major visit in December 1981 that the unnamed island off Manns Beach was ironically christened Dream Island by Annie Rogers, a name which has remained ever since and probably now has become part of the official cartography. On that first visit we actually camped out on Dream Island for four days (a major logistical exercise in itself) and with three days of temperatures in the 40s several people got their feet severely sunburned, one person's swelling to the size of a football!

Subsequently, in order to increase the numbers of Sanderling and Ruddy Turnstone caught, the VWSG spread its activities into the southeast corner of South Australia in 1993 (Christie 2006). Numbers of birds caught in each of the different areas over the years are given in Table 3. Although the Werribee Sewage Farm area is no longer such a dominant component of the fieldwork program, more birds have still been caught there (58,838 – 29% of the total) than at any other location.

Over the years the VWSG has made 1106 cannon netting catches, at an average of 41 per year. The average catch size is 172 but the range is big (from 1 to 2800). In most years at least one catch of over 1000 birds has been made and in 1993, three such catches were made. Well remembered are the 2563 Red-necked Stint caught in one net at Inverloch on 20 November 1993. The team had to wait for more than a nail-biting hour, with the birds sitting in front of the net, for the tide to ebb sufficiently for the net to be fired safely. A team of 30 people was present and all birds were banded and released within four hours, the task being completed in semi darkness.

The Formation of the Group

From the early days the Victorian Ornithological Research Group (VORG) had supported and encouraged the wader catching activities and had adopted these as one of its projects. However when activities expanded rapidly in 1979 as a result of the introduction of cannon netting, it was decided that the Victorian Wader Study Group, a free standing organization, should be formed. This was done at a meeting of regular fieldwork participants on 2 June 1979. David Robertson and Clive Minton were elected as coconvenors, Julie Strudwick as

Treasurer, and Peter Dann, Brett Lane, Ira Savage and Daphne and Ralph Keller were appointed committee members. The first committee meeting took place on 22 June.

It is interesting that the original objectives of the Group, published in the first edition of the Victorian Wader Study Group Bulletin in January 1980 (Minton 1981), are still the same as the core objectives of fieldwork programs at the present time. They are summarized below:

- a) migration routes and stopover sites;
- b) return patterns – site faithfulness;
- c) population turnover;
- d) weights, especially those associated with migration, and moult. It appears that ‘morphometrics’ was unintentionally left out of the specified objectives, even though it has always formed an important part of activities;
- e) moult and age;
- f) survival rates (from capture/recapture data); and
- g) annual breeding success (from the proportion of juvenile birds in catches).

The Mission Statement, formulated later and reproduced below, states that the Group’s principal objective is the collection of information in a scientific manner as a basis for conservation activities.

“The principal aim of the Victorian Wader Study Group is to gather, through extensive planned fieldwork programs, comprehensive data on waders and terns throughout Victoria on a long-term basis. This scientifically collected information is intended to form a factual base for conservation considerations, to be a source of information for education of a wider audience, to be a means of generating interest of the general community in environmental and conservation issues, and to be a major contribution to Australian, Flyway and Worldwide knowledge of waders and terns.

Only ten formal committee meetings were ever held, the last being on 30 March 1983. Since then, although the Group has formally elected officers annually and now has a much larger committee, liaison between committee members has been on a more informal basis via discussions during fieldwork, and by email exchanges and the telephone. The Group was formally incorporated in 1987. Although a separate legal entity it has in effect operated as the Victorian arm of the Australasian Wader Studies Group (AWSG) ever since this was formed in 1981. This arrangement is formalized by an exchange of letters.

People

A great many people have been VWSG members and/or have participated in its fieldwork activities over the years. The total is probably several thousand individuals because cannon netting teams have typically been of 15 to 25 people. Formal membership of the Group has levelled out at around 150 in recent years.

It is impossible to mention individually all those people who have made contributions to VWSG’s success over the years. Some of those involved in earlier days, in addition to the Committee members already mentioned, are listed below.

In the early mist netting activities Margaret Considine, Simon Bennett, Chris Corben, Anita Smythe, Boyd Wykes and David and Penny Paton were regular members of the teams. Also, particularly active from the early days of cannon netting, were John Dawson, Brenda and Mick Murlis, Angela and Roz Jessop, Peter Hermans, Dave Cropley, John and Phil Starks, Berrice Forest, Jeff Davies, and the Rogers family (Ken, Annie, Danny, and Maryam). Mark Barter and Graeme and Margaret Rowe were heavily involved from the mid 1980s onwards, Mike Weston was active for a period (especially whilst he was doing his Honours Degree on Pied Oystercatcher at Werribee), and Doris Graham joined in the early 1990’s and has been a prominent member ever since.

In the early days almost everyone had to learn everything from scratch, including how to extract birds from nets, how to age birds and how to record biometrics and moult. Nowadays the Group has a large proportion of its members capable of undertaking all these activities. Nevertheless there is a steady turnover in participants, with newcomers present at almost every fieldwork session.

Recoveries

One of the most tangible outcomes of VWSG catching and banding activities is the recoveries which are reported of birds which have moved to other locations (Table 4). These now total 487 of 16 different species. The majority have occurred in Asia, particularly at stopover sites used during northward and southward migration. But a small number have also occurred on the breeding grounds and it is these, especially those in the high Arctic, which are always the most exciting.

The long distance record was held for many years by a Curlew Sandpiper which was banded at Werribee S.F. in January 1988 and later recaptured by Pavel Tomkovich in its breeding area in the Taimyr Peninsular, north-western Siberia, on 24 June 1991, a distance of 13,100 km. The circumstances of this recovery were particularly interesting. An aggressive male bird had been noticed carrying a metal band. A stuffed decoy was erected in front of a small spring net. The banded bird immediately attacked the decoy and was captured.

Another surprising recovery which occurred in the early days of the VWSG banding activities also involved a Curlew Sandpiper. It was originally mist netted at Werribee in November 1976 and was recaptured on 29 August 1980 at Point Calimere in south-east India. This is the furthest west at which any wader banded in the flyway has so far been recovered. More recently one of the most important recoveries was a Red Knot banded as a chick in the Chukotsk region, in the far north-east of Siberia, in July 2003. This bird was recaptured at Corner Inlet in July 2004. This was the first direct proof of the location of the breeding grounds of the Red Knot population which visits Victoria.

A total of 68 waders originally banded overseas have been subsequently recaptured in Victoria (Table 5). A further 172 had been banded in Australia more than 200 km from the recapture location. The total of 240 "inward" movements is surprisingly high – nearly 50% of the "outward" recovery movements.

Flag Sightings

The placing of an orange plastic leg flag on the legs of waders caught in Victoria started in December 1990. Mark Barter was the initiator. After some initial scepticism from some members of the group, this new technique was enthusiastically welcomed. The principal objective was to increase the rate at which information was gathered on migration routes. It has proved dramatically successful, with a reporting rate overseas nearly 20 times the recovery rate. An increasing proportion of the birds handled has been given flags and in recent years almost all newly caught birds are now flagged. Up to the end of 2005, 74,914 waders of 32 different species have been leg-flagged (Table 6).

Sightings of flagged birds away from their marking locations have grown rapidly over the years as awareness of flags has become more widespread and people have learned where to report their sightings. A total of 7583 reports had been received up to the end of July 2006, with 5544 of these being overseas, in 15 different countries. They involve 24 different species (Table 7). Nearly half (3448) have been in New Zealand, this being the result of considerable movements of Victorian Red Knot and Bar-tailed Godwit to that country but also because of the enthusiasm and expertise of wader observers there. Most revealing have been the 294 sightings of Bar-tailed Godwit in Alaska as previously there was no direct proof that this is where the Victorian Bar-tailed Godwit went to breed. One of these sightings was in June 2004 at Deadhorse, near Prudhoe Bay, in the northeast of Alaska. This movement was 13,100 km, equalling the record distance moved by the earlier Curlew Sandpiper recovered in northwest Siberia.

There have also been many (2039) flag sightings within Australia of birds that have moved to other states and to locations within Victoria away from the flagging areas (Table 8). The rate of growth in the number of sightings from year to year (Table 9) is only partially as a result of the greater number of flagged birds in circulation. Much more it is related to flag awareness and flag sighting effort in the different countries used by wader populations which are legflagged in the non-breeding season in Victoria.

Terns

Terns have always been an integral part of VWSG activities since 1979. Effort has been concentrated on two areas, the banding of chicks of terns which breed in Victoria and the cannon netting of adults of species which visit from the Northern Hemisphere.

In terms of numbers Crested Tern chicks dominate. More than 30,000 have been banded, mostly since 1985 when habitat management was implemented at Mud Islands in Port Phillip Bay to make available to the terns an area which was safe from storm tides. The result has been spectacularly successful in increasing the number of breeding pairs of Crested Terns in the central section of the Victorian coast, from under 1000 pairs in 1985 to around 5000 pairs in each of the last two years. The greatly improved breeding success of the Mud Islands colony led to its growth and then the initiation of a new colony at The Nobbies on Phillip Island. This has now grown to more than 3000 pairs in ten years.

More than 600 Caspian Tern chicks have also been banded. Recoveries, supplemented in more recent years by flag sightings, have shown that, like the Crested Terns, they mainly migrate to the northern New South Wales coast and southeast Queensland for the austral winter. Much smaller numbers of Fairy Tern chicks have been banded (just over 200) because most nests each year are flooded out by storm tides, resulting in poor breeding success.

More than 2000 fully-grown Common Terns and over 700 Little Terns have been cannon netted in the Gippsland Lakes. Subsequent recoveries and flag sightings have shown that all the Common Terns and most of the Little Terns are from populations which breed in the Northern Hemisphere. The Little Terns come mainly from Japan whilst the Common Tern breeding areas spread up into central Siberia.

Equipment

All the cannon-netting equipment used by the Group derives from a design created in 1967 in England. Some evolution has taken place but in general this has only been minor. Perhaps the most significant change has been the increasing use of small mesh nets from which it is much easier to extract birds. These do, however, have some disadvantages including it not being possible to fire the net successfully into a strong wind and needing to lift the net and captured birds out of any water more quickly for the safety of the birds.

Ira Savage made an enormous contribution to the manufacture and maintenance of the cannon-netting equipment for the first ten or more years of the group. Paul Buchhorn and Rod McFarlane have taken on this role in recent years, including designing and constructing a special trailer to carry equipment into the field.

Firing boxes have evolved, not surprisingly into more and more sophisticated electronic designs. Each new person becoming involved in this area is surprised by the shortcomings in their newly designed product which emerge in the arduous conditions in which the equipment is used. It does appear however that the current design of firing box, which costs more than \$600 to make, is the most reliable yet.

In the early days the Group could not afford portable radios. A field telephone was used for communication between the firing hide and banding station but handkerchiefs or arm signals had to be used for more distant communications. On one occasion at Corner Inlet, the net

was fired when the catching area observer took a handkerchief out of his pocket to blow his nose! Fortunately there was already a nice catch of Bar-tailed Godwit in the catching area.

Perhaps the saddest stories related to equipment concern two large cannon nets which were stolen. One disappeared from a storeroom in the shearing sheds at Werribee where we were allowed to keep our equipment. The other disappeared during the night from a sandy spit on Spermwhale Head in the Gippsland Lakes. We had left an overnight guard sleeping in his car nearby, but he heard nothing. It appears that a small dinghy involved in night time shrimp catching had been pulled across the spit and thereby encountered the well camouflaged net. Finding a 30 x 13 metre net would have been a dream come true for a fisherman. It was suggested that the guard attach a string to his big toe on a future occasion so that he would be awoken by anyone tampering with the equipment. On another occasion a saboteur threw cannons and projectiles into deep water from an overnight stockpile on the end of one of the islands in Corner Inlet.

The VWSG, like all other cannon-net users, has experienced a range of practical problems in the field over the years. Nevertheless it has been a highly successful technique for studies dependent on catching birds

Other Activities

In the early years the VWSG was invited to take its cannon netting equipment to other states in order to assist in the development of banding activities. Successful visits were paid to Tasmania, New South Wales, South Australia and, later, to the Northern Territory. VWSG equipment and many VWSG members were involved in the initiation of wader banding in north-western Australia in August 1981. VWSG members have strongly supported the activities there since then.

VWSG cannon netting equipment has also been loaned out for use over the years for catching a wide variety of other species. These have generally been for situations where researchers have not found it possible to develop other satisfactory techniques for catching adult birds of their study species. Examples include White Ibis, Australian Pelican, Satin Bowerbirds (184 caught, plus a number of other species), and Long-billed Corellas.

The VWSG organized the first state-wide count of waders on 1–2 December 1979. In the early years, organizing these counts was an important VWSG activity, but after the formation of the AWSG, the National Count Coordinator took over responsibility. Nevertheless, a substantial proportion of the persons involved in the twice yearly wader count program in Victoria over the last 26 years have been VWSG members.

The Group has had an active conservation officer for the last 15 years and has regularly provided data and views on issues and provided information for land management purposes. It has also undertaken direct conservation work, the most significant of which was a fox control program, funded by Coast Action/Coast Care, in Corner Inlet.

Finances

The Group has existed fairly frugally for most of its history, with a \$10 annual subscription in 1979 rising to only a \$20 subscription at the present time. Most of the activities of the Group have been financed by the volunteer members themselves. Vital assistance with funding to purchase key pieces of equipment has been provided over the years by the Victorian Department of Sustainability and Environment (and its predecessors) and other generous organisations and individual donors. The result is that the Group now has an excellent range of equipment in good condition and a modest positive bank balance.

Analysis and Publications

The importance of analysing and publishing the data by the Group has been recognised since formation. As early as 1981 the Committee encouraged joint authorship of papers by suggesting that those having significant input whether by major contribution to the fieldwork or by carrying out the analysis or preparing text for the paper be included. Over the years many members of the VWSG have contributed to papers and articles in a wide range of journals and technical publications. A huge effort to computerise the Group's data was put in by Mark and Terry Barter in the late 1980s and early 1990s. Since then Ken Gosbell has organised the input of data by a team of VWSG members. An upgrade of the database program, especially in the data input area, has recently been completed by Heather Gibbs. This has been the foundation for over 250 papers using the VWSG's data which have now been published in the scientific literature. Most of these have appeared in the AWSG journal, *Stilt* (63 papers and 80 reports). However other papers and short notes have appeared in *Emu*, *Ibis*, *Arctic Birds*, the *International Wader Study Group Bulletin* and a range of other journals. The VWSG has also produced a substantial bulletin, 29 issues so far, and 52 papers or technical notes have appeared in this. It is now produced annually but two smaller bulletins were produced in some early years. A further 50 papers using VWSG data are currently in preparation or are planned. Other articles have regularly been produced for the *Birds Australia* magazine *Wingspan*, for *The Babbler* (the quarterly publication of the Victorian group of Birds Australia), and for the AWSG newsletter, *The Tattler*. VWSG activities have occasionally been shown on television, and information on them has been provided frequently to the radio and print media.

Evolution of objectives and activities

There has been a gradual change in the emphasis of VWSG fieldwork over its 29-year history. Initially the main target was to get birds banded in order to discover their migration routes, stopover sites, destinations and return patterns. Achieving this was initially dependent on recoveries and recaptures but movement data have been greatly supplemented by flag sightings over the last 16 years. Whilst the prime interest has always been the migratory waders that breed in the northern hemisphere, the Group did undertake an intensive project for ten years (1979–1988) on Double-banded Plover. Over 400 movements between New Zealand and Australia were recorded and it was shown that only the population breeding in the centre of the South Island came to Australia in the winter. Pied and Sooty Oystercatcher, "resident" species, have also been intensively studied for the past 18 years. These species are more mobile than previously thought with Pied Oystercatcher moving as far northwards as the northern New South Wales coast and as far westwards as the mouth of the Murray River in South Australia. Pied Oystercatcher tend to go southwards, out to the Bass Strait islands, but one went as far as Maatsuyker Island off the south-west coast of Tasmania.

Data on the biometrics and moult of the various species were gradually built up over the years and fieldwork has become increasingly directed at filling gaps in the data. This information, particularly on moult, has also greatly assisted in the correct ageing of birds in the hand. Weight data have also been important in determining migration dates and in helping to predict likely flight distances and destinations.

Around 20% of the waders caught by the Group are retraps of birds banded in earlier years. The oldest Red-necked Stint and Curlew Sandpiper recaptured were close to 20 years old, whilst Pied Oystercatcher, Bar-tailed Godwit and Eastern Curlew reached 22. In most other species, birds of at least 15 years of age have been recaptured. However the average lifespan (3–5 years) of waders is much shorter than this.

During the last 15 years the emphasis of fieldwork programs has gradually moved towards obtaining information on annual breeding success and on survival rates – the key parameters determining population levels. The "summer program" now largely revolves around obtaining adequate catch samples of each species at a range of sites in the November – March period, which is when populations are most stable. The proportion of juvenile/first year birds in

catches is used in an index of their breeding success in the previous northern hemisphere summer. The VWSG now has an invaluable set of catch data stretching back for 28 seasons on Red-necked Stint and 27 seasons on Curlew Sandpiper and nearly as long on several other species. Continuing this data collection will be the main priority into the foreseeable future.

The VWSG will continue to help others in their studies. Most recently this has involved making birds available to veterinary experts for cloacal swabbing and for blood sampling to test for avian-borne diseases, especially the H5N1 strain of Avian Influenza. Another addition to the portfolio of VWSG study techniques in recent years is the collection of blood samples for DNA testing to facilitate sex segregation for some biometric analyses and to examine differential migration patterns of the sexes (the most extreme case being Grey Plover, where almost all the birds in Victoria are females).

Feathers are now being systematically collected for studies based on stable isotope analysis. By analysing feathers which were grown at a known location, this technique is proving an increasingly helpful tool for obtaining more detailed information on the migration of different wader populations and sub-populations.

And the future hope is to be able to use satellite transmitters to track individual birds along their migratory path. The appetite was whetted in 1998 when the VWSG assisted the Queensland WSG by putting satellite transmitters on to eight Eastern Curlew. The hope is that satellite transmitters will soon have been proved to have become small enough to be successfully carried by species such as Bar-tailed Godwit. It is still unclear whether they make a stopover on northward migration between leaving Victoria and arriving on the Chinese coast. It will be fascinating to look back in another ten years' time and see how these new elements of our studies have contributed to knowledge and in what further ways fieldwork has evolved. I am sure that the initiators of wader mist netting activities in 1975 couldn't have foreseen that wader studies would grow and be sustained in such a way that the VWSG has banded more waders in almost every year since then than any other wader banding operation in the world.

Acknowledgements

The achievements of the VWSG would not have been possible without the enthusiastic and sustained efforts of a large number of people over a 29 year period. David Purchase, of the Australian Bird and Bat Banding Scheme, is thanked for his considerable help and encouragement in the early days. The ABBBS and the state wildlife authorities are thanked for granting permits. Landowners – particularly Melbourne Water at Werribee Sewage Farm – are thanked for allowing access. Parks Victoria frequently assisted with boat transport. Various Government bodies, Trusts and individuals have generously provided financial assistance over the years, particularly for the purchase of equipment. Roz Jessop, David Robertson, Ken Rogers, and an anonymous referee are thanked for their comments on a draft of this paper. Heather Gibbs and Helen Vaughan kindly prepared the tables.

References

- Christie, M.** 2007. South Australian Wader Studies – An Overview. *Stilt* 50: 249–276.
Minton, C. 1981. Objectives of the VWSG. *Stilt* 1: 3–4

**Table 1. VWSG Annual Wader Catch Totals
Data to end 2005.**

Calendar Year	New	Retrap	Total
1975	9	-	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
1996	5263	1035	6298
1997	4366	1050	5416
1998	8083	1408	9491
1999	6515	1591	8106
2000	10350	2594	12944
2001	4839	1320	6159
2002	10421	2162	12583
2003	8495	2854	11349
2004	5110	1224	6334
2005	6320	1893	8213
Totals	159575	39794	199369

Average annual total for '79-05 = 7384

Table 2. VWSG Wader Catches 1975 to 31 December 2005.

Species				New	Retrap	Total
Latham's	Snipe	<i>Gallinago</i>	<i>hardwickii</i>	347	14	361
Black-tailed	Godwit	<i>Limosa</i>	<i>limosa</i>	4	-	4
Bar-tailed	Godwit	<i>Limosa</i>	<i>lapponica</i>	3494	453	3947
Short-billed	Dowitcher	<i>Limnodromus</i>	<i>griseus</i>	1	-	1
Whimbrel		<i>Numenius</i>	<i>phaeopus</i>	28	-	28
Eastern	Curlew	<i>Numenius</i>	<i>madagascariensis</i>	814	72	886
Marsh	Sandpiper	<i>Tringa</i>	<i>stagnatilis</i>	2	-	2
Common	Greenshank	<i>Tringa</i>	<i>nebularia</i>	498	60	558
Terek	Sandpiper	<i>Xenus</i>	<i>cinereus</i>	33	1	34
Grey-tailed	Tattler	<i>Heteroscelus</i>	<i>brevipes</i>	38	3	41
Ruddy	Turnstone	<i>Arenaria</i>	<i>interpres</i>	2651	915	3566
Great	Knot	<i>Calidris</i>	<i>tenuirostris</i>	616	82	698
Red	Knot	<i>Calidris</i>	<i>canutus</i>	4346	672	5018
Sanderling		<i>Calidris</i>	<i>alba</i>	3096	1156	4252
Little	Stint	<i>Calidris</i>	<i>minuta</i>	7	-	7
Red-necked	Stint	<i>Calidris</i>	<i>ruficollis</i>	102447	28612	131059
Long-toed	Stint	<i>Calidris</i>	<i>subminuta</i>	1	-	1
Pectoral	Sandpiper	<i>Calidris</i>	<i>melanotos</i>	2	-	2
Sharp-tailed	Sandpiper	<i>Calidris</i>	<i>acuminata</i>	8231	393	8624
Curlew	Sandpiper	<i>Calidris</i>	<i>ferruginea</i>	24171	4706	28877
Cox's	Sandpiper	<i>C. acuminata</i>	<i>x C. ferruginea hybrid</i>	1	-	1
Broad-billed	Sandpiper	<i>Limicola</i>	<i>falcinellus</i>	5	-	5
Pied	Oystercatcher	<i>Haematopus</i>	<i>longirostris</i>	2255	1186	3441
Sooty	Oystercatcher	<i>Haematopus</i>	<i>fuliginosus</i>	747	206	953
Black-winged	Stilt	<i>Himantopus</i>	<i>himantopus</i>	38	-	38
Banded	Stilt	<i>Cladorhynchus</i>	<i>leucocephalus</i>	152	-	152
Red-necked	Avocet	<i>Recurvirostra</i>	<i>novaehollandiae</i>	368	5	373
Pacific Golden	Plover	<i>Pluvialis</i>	<i>fulva</i>	252	24	276
Grey	Plover	<i>Pluvialis</i>	<i>squatarola</i>	155	23	178
Red-capped	Plover	<i>Charadrius</i>	<i>ruficapillus</i>	656	183	839
Double-banded	Plover	<i>Charadrius</i>	<i>bicinctus</i>	3577	995	4572
Lesser	Sand Plover	<i>Charadrius</i>	<i>mongolus</i>	115	11	126
Greater	Sand Plover	<i>Charadrius</i>	<i>leschenaultii</i>	31	3	34
Black-fronted	Dotterel	<i>Charadrius</i>	<i>melanops</i>	57	4	61
Hooded	Plover	<i>Charadrius</i>	<i>rubricollis</i>	28	1	29
Red-kneed	Dotterel	<i>Erythrogonys</i>	<i>cinctus</i>	136	11	147
Masked	Lapwing	<i>Vanellus</i>	<i>miles</i>	175	3	178
36 Species				159575	39794	199369

**Table 3. Location of Waders Caught in
Victoria and South Australia**

	To Dec 2004	2005	Total
<i>Victoria</i>			
Werribee	57991	847	58838
Western Port/ Flinders	49033	4038	53071
Queenscliff/ Swan Bay	28876	796	29672
Anderson Inlet (Inverloch)	22228		22228
Corner Inlet	21008	1520	22528
Sandy Point/ Shallow Inlet	1587	187	1774
Laverton	956		956
Mud Islands	753		753
Killarney Beach	426		426
Geelong (Point Henry/ Belmont Common)	257		257
Bendigo SF	143		143
Seaford Swamp	98		98
Braeside/ Croyden	79		79
Gippsland Lakes	40		40
Toowong	10		10
<i>South Australia</i>			
Canunda/ Carpenter Rocks/ Brown Bay/ Beachport	7761	825	8586
Total	191246	8213	199459

**Table 4. Recoveries >200km from banding location for birds banded in Victoria.
Data taken from the ABBBS database as of 27 July 2006.**

Species	New	China	Russia	Hong Kong	Taiwan	Vietnam	Indonesia	Japan	Malaysia	India	Korea	Mongolia	North Korea	Papua New Guinea	Solomon Is	Thailand	Vanuatu	Total Overseas	NSW	VIC	SA	Tas	WA	QLD	NT	Total Aust.	Total
Pied Oystercatcher																		0	73	27	16	13				129	129
Red-necked Stint		18	11		2	5	2	2	1			1						42		18	8	29	19		1	75	117
Curlew Sandpiper		20	8	8	1	2	4			1						1		45	7	7	3	2	22			41	86
Red Knot	43	7	4								1							55					3	1	1	5	60
Double-banded Plover	27																	27								0	27
Sanderling			1					2										3			20		2			22	25
Bar-tailed Godwit	4	1													1	1		7	1					1		2	9
Great Knot		6	1										1					8						1		1	9
Ruddy Turnstone					3			1						1				5				1				1	6
Eastern Curlew		1	3					1										5								0	5
Sharp-tailed Sandpiper		3	1		1													5								0	5
Sooty Oystercatcher																		0		1	1	3				5	5
Grey Plover		1																1								0	1
Lesser Sand Plover		1																1								0	1
Pacific Golden Plover																		0						1		1	1
Red-necked Avocet																		0		1						1	1
Total	74	58	29	8	7	7	6	6	1	1	1	1	1	1	1	1	1	204	81	54	48	48	46	4	2	283	487

**Table 5. Waders recaptured in Victoria which had been banded elsewhere (or >200 km away in Victoria).
Data taken from the ABBBS database as of 27 July 2006.**

Species	New Zealand	Japan	Taiwan (China)	Hong Kong (China)	China (mainland)	Korea	Russia	Singapore	Thailand	Vietnam	Total Overseas	VIC	Tas	WA	NSW	SA	QLD	NT	Total Aust.	Total
Red-necked Stint		1		1	1						3	18	24	16	4	4	1		67	70
Curlew Sandpiper	2		4	2			1	1	1	1	12	7	14	10	11	3	2	2	49	61
Double-banded Plover	43										43								0	43
Pied Oystercatcher											0	27				1			28	28
Sanderling		1									1			1		8			9	10
Red Knot	3					1					4			2		1	1		4	8
Sharp-tailed Sandpiper											0				7				7	7
Latham's Snipe		3									3				2				2	5
Lesser Sand Plover											0				2				2	2
Bar-tailed Godwit											0					1			1	1
Great Knot											0						1		1	1
Grey-tailed Tattler		1									1								0	1
Red-necked Avocet											0	1							1	1
Ruddy Turnstone		1									1								0	1
Sooty Oystercatcher											0	1							1	1
Total	48	7	4	3	1	1	1	1	1	1	68	54	38	29	26	18	5	2	172	240

Table 6. Waders Leg-Flagged in Victoria (orange)

Species	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Latham's Snipe	0	0	0	0	40	0	110	56	70	0	2	0	0	0	0	0	0	278
Black-tailed Godwit	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	4
Bar-tailed Godwit	0	1	157	6	64	0	43	173	16	84	388	324	196	80	208	256	223	2219
Whimbrel	0	0	0	0	16	0	0	0	0	2	0	2	0	1	0	0	4	25
Eastern Curlew	0	0	8	0	73	88	87	4	37	35	91	27	18	18	38	0	20	544
Marsh Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Common Greenshank	0	0	21	21	51	0	1	109	131	19	0	0	0	1	41	24	0	419
Terek Sandpiper	0	0	2	2	2	2	0	0	0	0	0	1	0	1	0	0	0	10
Grey-tailed Tattler	0	0	0	0	0	0	0	3	1	0	0	0	0	1	0	0	0	5
*Ruddy Turnstone	0	99	188	37	35	1	194	129	194	372	75	54	34	22	20	154	1	1609
Great Knot	0	0	2	0	4	0	3	36	31	21	21	53	38	78	3	20	3	313
Red Knot	0	0	302	26	88	1	52	59	295	289	175	334	377	681	54	176	246	3155
*Sanderling	0	0	163	0	191	1	47	328	148	342	51	118	36	37	26	140	64	1692
Little Stint	0	0	0	1	0	0	0	0	0	0	1	0	1	0	2	0	0	5
Red-necked Stint	0	799	1259	2516	2282	1661	1384	3065	1434	3224	4215	6038	2570	5792	5839	3489	4502	50069
Pectoral Sandpiper	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Sharp-tailed Sandpiper	0	4	250	111	71	21	69	145	155	474	212	105	18	670	1068	421	299	4093
Curlew Sandpiper	146	462	367	1255	808	839	469	753	270	633	770	1162	417	373	517	51	164	9456
Cox's Sandpiper	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Broad-billed Sandpiper	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	3
Black-winged Stilt	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	14	0	20
Banded Stilt	0	0	0	0	0	0	0	0	0	0	0	151	0	0	0	1	0	152
Red-necked Avocet	0	0	0	0	5	0	0	0	27	0	0	46	0	6	0	56	0	140
Pacific Golden Plover	0	10	10	1	0	0	0	6	0	10	13	0	14	0	0	0	0	64
Grey Plover	0	0	0	1	0	0	6	0	22	0	0	21	0	24	1	2	9	86
Red-capped Plover	0	0	0	0	0	19	0	0	29	3	10	2	2	12	4	6	10	97
Double-banded Plover	0	0	0	0	0	8	0	0	0	40	24	98	3	90	19	46	18	346
Lesser Sand Plover	0	0	0	14	6	8	9	13	0	4	1	0	0	0	0	0	0	55
Greater Sand Plover	0	0	0	0	3	6	0	0	0	2	4	0	1	0	0	0	0	16
Black-fronted Dotterel	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
Red-kneed Dotterel	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	3
Masked Lapwing	0	0	0	0	0	0	1	0	4	0	0	2	5	4	1	12	1	30
32 Species	146	1375	2729	3992	3739	2656	2475	4881	2867	5554	6053	8538	3735	7895	7844	4870	5565	74914

*Includes Ruddy Turnstone and Sanderling flagged with orange (only) in the south east of South Australia between 1993 and 1998.

Table 7. Total Number of sightings, by species/country, of Victorian-flagged waders to 31 July 2006.

Species	New Zealand	Australia	Hong Kong (China)	USA	China (mainland)	Korea	Japan	Taiwan (China)	Indonesia	Russia	Mongolia	Malaysia	Vietnam	Brunei	East Timor	Thailand	Total
Red Knot	2420	314	4		17	5	5	18		2							2785
Bar-tailed Godwit	980	153		294	87	200	56										1770
Red-necked Stint	30	783	214		136	13	50	101	45	35	25	4	2	1	1	1	1441
Curlew Sandpiper		345	376		17		1	44	22	2		1	1				809
Sanderling		172	13		5	4	109	4	1	2							310
Great Knot		77	4		8	20	2	6									117
Sharp-tailed Sandpiper		53	2		5	9		11	1								81
Eastern Curlew		43			4	12	16	3		1							79
Ruddy Turnstone	11	33	1		1	5	4	18									73
Greater Sand Plover		14	9					1					1				25
Grey Plover		2			1	1	19										23
Lesser Sand Plover		15	1														16
Red-necked Avocet		13															13
Black-tailed Godwit		5			1	2		1									9
Double-banded Plover	7	1															8
Terek Sandpiper		1	1		1	3											6
Grey-tailed Tattler		5					1										6
Common Greenshank		1						1									2
Broad-billed Sandpiper		1						1									2
Banded Stilt		2															2
Latham's Snipe		1															1
Whimbrel		1															1
Pectoral Sandpiper		1															1
Pied Oystercatcher		1															1
Pacific Golden Plover		1															1
Red-capped Plover		1															1
Total	3448	2039	625	294	283	274	263	209	69	42	25	5	4	1	1	1	7583

Table 8: Total number of sightings within Australia of Victorian-flagged waders away from the flagging location. Data to 31 July 2006.

Species	SA	WA	QLD	NSW	Vic	TAS	NT	Total (Aust)
Red-necked Stint	215	193	47	76	161	77	14	783
Curlew Sandpiper	61	153	31	60	15	25		345
Red Knot	60	55	111	69	1	7	11	314
Sanderling	99	18	4	11	32	4	4	172
Bar-tailed Godwit		22	92	35	3	1		153
Great Knot	7	5	53	2		1	9	77
Sharp-tailed Sandpiper	9	6	10	11	13		4	53
Eastern Curlew	2		28	11		2		43
Ruddy Turnstone	17	6		4		4	2	33
Lesser Sand Plover			14	1				15
Greater Sand Plover			13	1				14
Red-necked Avocet				4	9			13
Black-tailed Godwit		2		3				5
Grey-tailed Tattler			5					5
Banded Stilt	2							2
Grey Plover		1			1			2
Latham's Snipe					1			1
Whimbrel			1					1
Common Greenshank				1				1
Terek Sandpiper			1					1
Pectoral Sandpiper				1				1
Broad-billed Sandpiper					1			1
Pied Oystercatcher				1				1
Pacific Golden Plover				1				1
Red-capped Plover					1			1
Double-banded Plover					1			1
Total	472	461	410	292	239	121	44	2039

**Table 9: Total number of sightings of Victorian-flagged waders each year.
Data to end July 2006.**

Year	New Zealand	Australia	Hong Kong (China)	USA	China (mainland)	Korea	Japan	Taiwan (China)	Indonesia	Russia	Mongolia	Malaysia	Vietnam	Brunei	East Timor	Thailand	Total
1990	1		4														5
1991	10	18	1				2										31
1992	25	39	2				10	1	1					1			79
1993	18	88	53				8	2	1							1	171
1994	14	76	26				7	1		2			1				127
1995	13	37	7				13	3		1		1	1				76
1996	23	39	10				26	1		11			1				111
1997	23	52	28		2	4	34	8	2	1							154
1998	41	135	96		1	7	32			1							313
1999	70	128	55	14	3	8	36	12		8	1						335
2000	95	150	50	1	2	13	24	18	1	5	16	1	1				377
2001	173	187	55	18	7	10	31	19		1	1						502
2002	342	194	43	22	32	18	17	21		2							691
2003	572	206	50	74	4	4	8	26		1		1					946
2004	378	228	61	53	107	21	10	36	6	3	7	1					911
2005	1091	281	53	112	88	38	5	52	51	5		1					1777
2006	559	181	31		37	151		9	7	1					1		977
Total	3448	2039	625	294	283	274	263	209	69	42	25	5	4	1	1	1	7583

Australasian Shorebird Conference, Newcastle, NSW, 2007
Conference Outcomes

Ken Gosbell

The conference had a theme of '**Migratory Shorebirds in a Threatened Flyway**'. Through a series of excellent presentations on Migration Studies including the use of satellite technology, Threats to habitats, Shorebird population studies, Management of shorebird sites and the Challenges for government and communities, the delegates were updated on a number of issues related to the study and conservation of shorebirds. Shorebird specialists who joined the conference from China, South Korea, Japan, Thailand and New Zealand provided valuable insight into the pressures on habitats in other parts of the Flyway.

The Conference concluded that migratory shorebird populations continue to be under major threat because of the reclamation and loss of thousands of hectares of coastal habitat each year at the critical stopover locations in the Yellow Sea.

The meeting requested the Australasian Wader Studies Group (AWSG) committee, working with Birds Australia, to make representations to the Australian Government on this issue. The bilateral Migratory Bird Agreement meetings proposed for early 2008 in Australia, and the Ramsar CoP 10 in November 2008 in South Korea, provide significant opportunities for the Australian Government to promote collaborative activities to address habitat loss in coastal area in China and South Korea.

In addition to the approaches to the Australian Government, AWSG agreed to take the following action:

- Continue its engagement in collaborative shorebird conservation projects with non-government organizations in South Korea
- Actively contribute to the development of the Flyway Partnership and its program of activities
- Seek the reactivation of the Australian Wetland Alliance to provide for coordination of Australian NGO input into the 2008 Ramsar CoP in South Korea
- Seek assistance of the International Wader Study Group to raise awareness of the impact of coastal reclamation on shorebirds and to discuss a joint program of action for the Yellow Sea
- Continue the publication and distribution of the Tattler in a Flyway newsletter on shorebirds
- Support the development of the Asia-Pacific Shorebird Network to increase communication between shorebird researchers and conservationists in the region
- Re-develop the AWSG web site to increase awareness of shorebirds and their conservation needs

The Conference also heard of habitat loss that is occurring at some Australian coastal sites (such as the Hunter estuary) and in inland South-eastern Australia. Members requested the AWSG Committee approach the Commonwealth Government to discuss how the EPBC act could better address the loss of shorebird habitat loss in Australia.

Conservation Report 2006/07

Doris Graham

Again this has been a busy year in conservation areas of concern for the VWSG, in Victoria, South Australia, Tasmania and South Korea.

In Victoria, by far the most work has been the preparation of several submissions to the Port of Melbourne Channel Deepening Project review; see VWSG Bulletins 2005 and 2006. Submissions were also made to the Draft Management Plan for the Mushroom Reef Marine Sanctuary and to a proposal for huge extensions to the Port of Hastings.

We responded also to two interstate requests for assistance, one in relation to a proposal to extend commercial harvesting of beach-cast seagrass near Port MacDonnell, South Australia and the other a proposal near Hobart to create a huge marina and housing development on/in Ralph's Bay. We also responded to continuing requests to send written support to the Government of South Korea to try to stop, then to undo the embayment of the Saemangeum Estuary. I see the job of Conservation Coordinator also to encourage others who care about conservation of avian fauna to write short letters to the appropriate authorities. I do this through personal contacts and our email list of members operated by Roz Jessop, and where appropriate through the email membership list of Birds Australia-Victoria.

These notes will give you an idea of the points we made which contradicted our agreement with what was planned.

The needs of migratory birds in Australia can be summarized as being those needed to recover from their last long migration and prepare for their next. While in Australia these birds are carnivorous and feed on several types of invertebrates in/on mudflats. They require wetlands that provide a plentiful and long lasting food supply and where they are protected from predators and disturbance. Given these two criteria they can do the rest, to enable them to be ready for the next years' migration.

Therefore while in all my submissions I have to detail this life style of waders before I comment on the project in hand, and since this report is being made to you all who are very familiar with the needs of this very special group of birds, I will briefly highlight the project component that I consider will damage the habitats of these birds. They are protected by international treaties and agreements such as the Bonn Convention, Ramsar Convention, the Japan Australia Migratory Birds Agreement (JAMBA), the China Australia Migratory Birds Agreement (CAMBA) and the recently signed Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA), and Australian Federal acts such as the Environment Protection and Biodiversity Conservation Act as well as state acts such as the Flora and Fauna Guarantee Act. The international agreements are made by the Commonwealth which then devolves to the States the responsibility of putting them into practice. Often if not always, this means that Parks Victoria is the manager, and that there always seems to be a shortage of manpower to perform the required actions to carry them out to the protection of the fauna they are devised to assist.

Port of Melbourne Channel Deepening Project

This mammoth project is based on the economic assumption that larger and more ships will be required to enter the Bay and the Port of Melbourne to keep the port competitive with others around Australia.

This involves dredging of the Yarra River from the docklands to its mouth, part of the northern and of the southern shipping channels and deepening the entrance to the Bay, by scouring of the rock.

Results of these activities that are likely to affect waders and terns will come from:

- a) The generation of silt by dredging, will lead to turbidity plumes which will settle on the seagrass, which will suffocate it thus damaging/killing these plants which play a major part in maintaining the health of saltwater bays and estuaries, such as Swan, Port Phillip and Western Port. Since seagrass also provides fish and invertebrate nurseries the invertebrate population and quality of the food supply may decline.
- b) The substantial increase in the size of the Entrance will certainly allow increasing volumes and speed of water to enter the Bay. Whether this will increase inter-tidal levels has not been determined but it will undoubtedly change the hydrological aspects of Swan Island, Mud Islands and the Great Sands to their north. In the worst-case scenario all sand may be removed from Mud Islands, destroying the roosting and feeding sites for the waders and the breeding habitats of the 1300 breeding pairs of Crested and 12 or 15 pairs of Caspian Terns.
- c) Dredging will continue 24 hours per day for up to two years, and the noise and lights required will very likely disturb the breeding of Crested and Caspian Terns and the White-faced Storm Petrels on Mud Islands, also the Australasian Gannets on Pope's Eye and Wedge Light.
- d) Fish populations are forecast to decrease through seagrass destruction, therefore food for terns and the gannets will decrease leading to poor breeding successes.

Draft Management Plan for the Mushroom Reef Marine Sanctuary- submitted July 2006

This 80 ha area to the high tide mark, situated on the open Bass Strait coast, near the Western Entrance to Western Port and just to the west of Flinders contains our main site for catching Ruddy Turnstone in Victoria (Penny Johns, personal communication).

Here, a flock of up to 50 Turnstone are regularly seen feeding on the rocks at low tide, then as the tide rises moving onto the inter-tidal beach zone where they feed voraciously on invertebrates among beach-cast seaweeds and seagrasses. They then roost on the unproductive sand left exposed, as the tide also engulfs their food stocks.

Also regularly seen feeding from sand, rock pools and from the rocks are resident species such as up to 40 Sooty Oystercatcher, and on the beach one pair of Hooded and several pairs of Red-capped Plover and migratory wader species of up to 60 Red-necked Stint and 50 or so Double-banded Plover. Water birds such as Pied and Black-faced Cormorants plus the seabirds - Silver, Pacific and Kelp Gulls are almost always present, and often Australasian Gannet are seen plunge-feeding for fish just beyond the MS boundary.

The area owes its categorization because it contains the "most diverse inter-tidal invertebrate community in Victoria which can be relatively easily visited by large numbers of visitors".

Our main concern was that the declaration of this area as a MS will seal its fate as has happened within one year at Ricketts Point (RP). Since RP was declared a MS the area above low tide has been decimated of its rich invertebrate communities on the rocks by excessive "loving and sharing" of its valuable inhabitants by visitors. These visitors are mainly large numbers of school children being taught the life cycles and beauty of the amazing creatures in, on and among the rocks. Two of our members Rod McFarlane and Helen Vaughan are quantifying these effects and have already found that the numbers of adult and immature Crested Terns have decreased from category "many"- up to hundreds, to "none or few", i.e. are often absent altogether.

We therefore cited this example and made the point strongly that unless visitations by the public to each of the newly declared Marine Parks and Sanctuaries are strictly monitored that their value to all birds will cease. We did not feel competent to discuss the underwater components of this Plan.

Port of Hastings Corporation Land Use and Transport Strategy

This is a huge project to enlarge this port and associated industrial precinct to allow larger and more ships to use this terminal. These activities will greatly impact on both marine and terrestrial environments.

A submission was made to add our concerns to those of many other local and environmentally concerned groups.

Western Port is the third most important site in Victoria for migratory waders, supporting up to 15,000 birds of up to 37 species each summer.

It is a very fragile shallow inlet with water circulation patterns making the whole Bay extremely vulnerable to damage by turbidity following requisite dredging, plus oil and chemical spills as well as invasions by marine pests, all likely components of the workings of a large port.

These would impact on the extensive mud flats in the north of the Bay. Seagrass is crucial to the ecology of the Bay (Victorian National Parks Association Inc submission). It is important in stabilizing sediments, nutrient cycling, and provides nursery areas and habitat for fish and habitat for molluscs, worms and other invertebrates. It is these invertebrates that waders depend on for food.

Further, deposition of silt on the plants will smother these sensitive organisms ending in death. It is being already damaged and regeneration if any is very slow. Extensive areas of mangroves and wetlands will also be destroyed, likely ending in the loss of the Ramsar classification of the whole of Western Port.

Interstate Concerns

South Australia

Commercial harvesting of Beach-cast Seagrass and Marine Algae

We were asked by Maureen Christie, Secretary, Friends of Shorebirds Southeast S.A. (FOS/SE), to comment on the Draft Management Plan for the above project.

We, the VWSG, visit the Friends' Group twice yearly, to assist them in a concentrated week of catching shorebirds on some of the beaches potentially involved in the proposed fishery business. There we count, catch, band, flag and monitor weights and age characteristics of several species of migratory waders: Ruddy Turnstone, Red-necked Stint and Sanderling and often Sharp-tailed Sandpiper.

It is obvious that if this project goes ahead as presented that severe damage could be done to the life cycles of shorebirds dependent as they all are on the invertebrates inhabiting the extensive amounts of seagrass and marine algae deposited by the tides along substantial distances of this coast.

Decomposing beach-wrack is one of the best sources of invertebrates, worms, insects and crustaceans, which is the specialized diet of migratory and resident shorebirds.

Furthermore we questioned what criteria was planned to monitor the short and long-term physical effects the harvesting of large quantities of beach-wrack would have on the health of the ocean and the beach structure and composition. This harvesting will in fact, deprive the associated ocean of the nutrients from the decay processes ongoing once these rich underwater flora become stranded, which will in turn affect its flora and fauna, as well as those of the beach.

As well the structure of the beaches themselves will be affected maybe detrimentally by the physical cycling out from and back into the ocean of this material during the normal tidal cycles and subsequent storm events.

We emphasized that birds are considered the best indicators of environmental changes and are easy to count and while not approving of this project suggested that finances be allotted to provide expenses for this regular monitoring of birds using the beaches could be monitored.

Tasmania

Proposal to develop Ralph's Bay, Lauderdale as Marina and Canal Housing Estate

This proposal was first submitted for public comment in March 2004. Since then there has been massive ongoing community opposition, causing changes but not cancellation of the project. Because Ralph's Bay, Lauderdale is prime habitat for hundreds of Pied Oystercatcher, and of Hooded and Red-capped Plover plus other migratory shorebirds such as Red-necked Stint and Curlew Sandpiper we were asked to support this opposition. This we have done each time the design of the project has been altered.

South Korea

Birds Korea is still appealing for assistance to try to have the closure, in April 2006, of the 40,000ha of tidal wetlands of the Saemangeum Estuary rescinded. The closure of this estuary on the south west coast of South Korea to the sea has resulted in the loss of a critical feeding area due to the death of thousands of molluscs and invertebrates. The long term effects of these actions are being monitored by the AWSG.

Acknowledgements

My thanks to Roz Jessop, Maureen Christie, and members of the Blue Wedges and Western Port and Peninsula Protection Council Inc.

Observation Point, Rhyll – the largest Bar-tailed Godwit roost in Western Port (Photo R. Jessop)



Saemangeum, Republic of Korea – One year on

HOW YOU CAN HELP

Ken Gosbell

It is now over one year since the completion of the 33 km sea wall which cut off the life giving tides to 40,000ha of tidal mudflat at Saemangeum, Republic of Korea, on 21 August 2006. Huge numbers of migrant birds are expected to perish due to the world's largest land reclamation project, which has all but destroyed their most important refuelling station. A government research body last year warned that the level of parts of the Yellow Sea could rise up to 30cm because of the reclamation project. This would cause other tidal land to be flooded.

Several bird species including Spoonbill Sandpiper and Nordmann's Greenshank, already near extinction, are affected, and numerous species, from shellfish to fish to birds are being harmed by the drainage of the Saemangeum Wetland. Although not designated as a Ramsar site, prior to this destruction it met multiple criteria of the Ramsar Convention for designation as a protected wetland.

The Saemangeum is the regions most important refuelling stopover for probably 400,000 migrating waders negotiating a 25,000 km round trip between Australia and New Zealand and breeding sites in Alaska and Siberia including 30% of the world's Great Knot. At the height of migration this month, 200,000 waders of at least 25 species will seek food on the Saemangeum in a single day.

In April/ May 2006, the international Australasian Wader Studies Group, a special interest group of Birds Australia, joined Birds Korea, a local conservation group, in the Saemangeum Shorebird Monitoring Program (SSMP). This is a joint three year program 2006-2008, designed to monitor and publicise the impacts of this massive reclamation project on populations of migratory shorebirds, both by counting shorebirds in the Saemangeum area, Gomso Bay and Geum Estuary on northward migration in April and May, and by comparing this data with related research programs being conducted in Australasia. The data generated are being made freely available and are also published in various forms. The 2007 Program is now underway and is already reporting huge changes in the estuary and its use by birds and people.

Some 50 people from nine countries are participating in this survey including six from Australia. One of the participants, Ken Gosbell, Chairman of the Australasian Wader Studies Group, describes the scene this year as depressing. "To have previously seen this estuary full of the bustle of shorebirds feeding on shellfish and worms in the mud and sand and people gaining their livelihood from the tidal flats contrasts with the desert like habitat of today. The wall has blocked the life-giving ebb and flow of the sea, boats are stranded waiting for a tide that will never come and the mudflats are strewn with mile upon mile of litter. The Saemangeum really was the jewel in the crown yet all around me the place is dying."

The threatened species of Spoon-billed Sandpiper and Nordmann's Greenshank face further decline as their remaining populations rely on the tidal-flats of the Yellow Sea and on Saemangeum in particular. More than 100,000 Great Knot have been seen at Saemangeum and these birds could be too poorly fed this year to survive their final flight north.

A chink of light still glimmers, however, for the birds whose fate seems almost sealed. Sluice gates have been built into the Saemangeum wall, which if kept open would save at least part of the wetland. In addition, the adjoining Geum estuary, also planned for reclamation, must be preserved.

The AWSG and Birds Australia together with Birds Korea urge the Australian government and the world community to offer support to South Korean authorities in conserving and managing Saemangeum. The groups are also encouraging people to write to the South Korean embassy in Australia calling for the sluice gates to be kept open and for the Geum to be preserved.

Park Meena, the national coordinator of Birds Korea, said: "International appeals to the South Korean authorities would underline just how precious Saemangeum is. The Ministry of Agriculture claimed that the Saemangeum birds will just move to neighbouring estuaries but the birds there are already fighting over food and at least one of these other estuaries is also slated for reclamation.

“The Saemangeum area could be a huge lure for eco-tourists from all over the world if it was restored. The birds are still coming and parts of the site are still alive so there is a chance we can save it. If the sluice gates were opened the tides would return, restoring life to the mudflats and bringing food both to the birds and people with whom they co-exist.”

Saemangeum has always been a haven for migratory birds as they make their long journey to the breeding grounds. This year, however, while World Migratory Birds Day is celebrated around the globe, bird experts from around the world are at Saemangeum, this year monitoring the impacts on birds of the loss of this vast wetland.

The Future: What We Can Do To Help

(Anne Lindsey AWSG Conservation Officer)

The futures of Saemangeum and the Geum Estuary now hang in the balance. At Saemangeum, if reclamation continues as planned, the site will lose all of its conservation values for shorebirds. However, with appropriate management of the sluice gates, it might be possible to maintain intertidal flats of international significance to shorebirds.

The neighbouring Geum estuary is also an excellent shorebird site of international importance, and with the probable loss of Saemangeum, it has become the most important shorebird site remaining in Korea. It will only retain its international importance if the reclamation plans for the estuary (not yet far advanced) are cancelled.

South Korea is one of over 130 countries which have signed the Ramsar "Wise Use of Wetlands" Convention, an inter-governmental convention dedicated to the conservation of wetlands and their biodiversity. The next Ramsar Conference of the Parties (COP10) will take place in South Korea in 2008. The Conference, and the time leading up to it, offer an outstanding opportunity for the international community to add their voice to that of domestic protestors, increasing pressure on the South Korean government and on all governments to review and renew their commitment to the genuine conservation of wetlands and the birds that such wetlands support.

To be heard in South Korea, please write a letter or email to the South Korean embassy or consulate in the country where you live, also sending a copy to the embassy or consulate of your country in South Korea.

The letter or email does not have to be long, but should be respectful, and accurate. An example is available for download via www.birdsaustralia.com. Please amend, and add your own personal voice.

The letters should be addressed to the Republic of Korea's embassy in your country. Delivery by post (or better still, in person) is preferred. The Australian address is:

The Ambassador
The Embassy of the Republic of Korea
113 Empire Circuit,
Yarralumla, ACT 2600

If possible, please also send a copy of your letter to Doris Graham the conservation officer of the VWSG.

Further information can also be found at:

www.birdskorea.org/saemref.asp

www.birdsaustralia.com.au

Publications and Presentations using VWSG data

Compiled by Roz Jessop

NEWSLETTERS

- “**The Tattler**”, Newsletter for the East Asian-Australasian Flyway. Copies can be downloaded from the AWSG web page <http://www.tasweb.com.au/awsg/>
Clive Minton: Increased links between Australia and New Zealand. January 2007.
Ken Gosbell & Maureen Christie: AWSG Survey of the Coorong, South Australia, February, 2007. April 2007.
Clive Minton, Rosalind Jessop, Chris Hassell: Arctic Waders Breeding Success Based Birds Caught in Australia. April 2007.
Clive Minton: North-west Australia Wader & Tern Expedition 2007. April 2007.
- “**VicBabbler**”, quarterly newsletter of the Birds Australia – Victoria Regional Group of Birds Australia. Clive wrote articles for each issue.

ABSTRACTS OF ORAL PRESENTATIONS AT CONFERENCES/WORKSHOPS

Australasian Wader Studies Group Conference, Newcastle July 2007

The Red Knot Conundrum

**Clive Minton, Ken Kraaijeveld, Birgita Hansen, Roz Jessop,
Heather Gibbs, Adrian Riegen, Chris Hassell,
Tony Habraken, Ian Southey**

The Red Knot is the most intensively studied wader in the world yet new facts about its migrations are still being discovered and many mysteries still remain. Two subspecies occur in the East Asian-Australasian Flyway. *Rogersi* breed in Chukotka, in the far north-east of Siberia, and most are thought to spend the non-breeding season in eastern Australia and New Zealand. *Piersmai* breed in the New Siberian Islands, off the north coast of Siberia, with some also possibly nesting on the adjacent mainland in Yakutia. They are thought to mainly spend the non-breeding season in north-west Australia.

The slow accumulation of recoveries and the more recent much larger number of flag sightings have shown that the link between breeding origins and non-breeding locations is more complex. This is most strongly demonstrated by the now extensive data showing quite a marked link between Red Knot in north-west Australia and in New Zealand. *Rogersi* probably occur quite extensively in north-west Australia, at least at certain times of the year. And there is now growing evidence that some *piersmai* visit New Zealand. The movement patterns have added complexity with growing evidence that some immature birds from south-east Australia, and even New Zealand, may move northwards in winter to north-west Australia. And in addition to the well established pattern of many young Red Knot spending their first (and sometimes second also) year in south-eastern Australia before crossing the Tasman to establish their regular non-breeding area in New Zealand it now appears that some immature birds in north-west Australia may behave similarly.

Biometrics of Red Knot caught in south-east and north-west Australia have been examined, including birds sexed by DNA, but do not appear to assist in the elucidation of movement patterns and in the determination of the non-breeding ranges of the two subspecies. This is probably the result of the quite small bill and wing length differences of the two subspecies and the fact that mixed populations occur in the sampling locations. Stable isotope and

further DNA work are being considered to see if these can assist the resolution of this conundrum.

***Migration Routes of Waders Spending the non-breeding Season in Australia –
Particularly Illustrating the Key Role of the Yellow Sea***

**Clive Minton¹, Johannes Wahl, Rosalind Jessop, Chris Hassell,
Peter Collins and Heather Gibbs**

Over 250,000 migratory shorebirds have been banded in Australia over the last 45 years. Colour flagging was introduced in 1990 and about 126,000 birds were also colour flagged. To date 534 banded birds have been recovered and 3903 flag sightings made overseas.

An analysis of the recoveries and flag sightings of 26 species of migratory wader which visit Australia showed that the migration pattern of almost every species was different. Almost all species however used at least some part of the Chinese coast as a stopover location, particularly on northward migration. There was a tendency for birds with non-breeding areas in eastern Australia to use a more easterly route through Asia than birds from Western Australia. In some species the northward and southward migration routes were markedly different. The breeding grounds of some Arctic waders which spend the non-breeding season in Australia has been demonstrated by recoveries and flag sightings and covers a very wide geographic range, from 98°E to 149°W. However, for species such as Greater Sand Plover, Black-tailed Godwit, Sanderling and Ruddy Turnstone few, if any recoveries or sighting in the breeding areas have been made. Some individual birds recovered had travelled over 13,000 km. from the banding location.

Examples of migratory routes of species such as Red-necked Stint, Curlew Sandpiper, Sharp-tailed Sandpiper, Great Knot, Red Knot, Bar-tailed Godwit, Black-tailed Godwit, Eastern Curlew, Asian Dowitcher, Sanderling, Ruddy Turnstone, Terek Sandpiper, Grey-tailed Tattler, Greater Sand Plover, Lesser Sand Plover, Grey Plover, Pacific Golden Plover, and Double-banded Plover were given. More extensive information can be found in Minton, C., Wahl, J., Jessop, R., Hassell, C., Collins, P. & Gibbs, H. (2006). Migration routes of waders which spend the non-breeding season in Australia. *Stilt* 50: 162-175.

PAPERS USING VWSG DATA

Baker, A., Pereira, S. L. Rogers, D. E. Elbourne, R. & Hassell J. 2007. Mitochondrial DNA evidence show the Australian Painted Snipe is a full species, *Rostratula australis*. *Emu* in press.

Branson, N., & Minton, C. M. 2006. Measurements, weights and primary wing moult of Oriental Plover from North-West Australia. *Stilt* 50: 235-241.

Campbell, J. & Anderson, R. 2007. Shorebird disturbance on the beaches of the Limestone Coast, 2006-2007. Part A in Shorebirds on the beaches of the Limestone Coast in the South East of South Australia a report prepared by Friends of Shorebirds SE for the Shorebird Conservation Project / WWF Australia. August 2007.

Campbell, J. & Minton, C. 2007. First record of the Short-billed Dowitcher in Australia. *Journal of Field Ornithology*.

Christie, M. 2006. South Australian wader studies – an overview. *Stilt* 50: 249-276.

Christie, M. & Jessop R. 2007. Shorebird sites of the Limestone Coast South Australia. Part B. in Shorebirds on the beaches of the Limestone Coast in the South East of South Australia a report prepared by Friends of Shorebirds SE for the Shorebird Conservation Project / WWF Australia. August 2007.

Gosbell, K. & Christie, M. 2006. The Breeding of Banded Stilt and Red-Necked Avocet in the Coorong, South Australia: December 2005 – February 2006. *Stilt* 50: 277-284.

- Gosbell, K. & Clemens, R. 2006. Population monitoring in Australia: Some insights after 25 years and Future Directions. *Stilt* 50: 162-175.
- Hurt, A., Hansbro, P., Selleck, P., Olsen, B. Minton, C., Hampson, A. & Barr, I. 2006. Isolation of avian influenza viruses from two different transhemispheric migratory shorebird species in Australia. *Arch. Virology* 151: 2301-2309.
- Minton, C. 2006. The history of wader studies in north-west Australia. *Stilt* 50: 224-234.
- Minton, C. 2006. The history and achievements of the Victorian Wader Study Group. *Stilt* 50: 285-294.
- Minton, C., Wahl, J., Jessop, R. Hassell, C., Collins, P. and Gibbs, H. 2006. Migration routes of waders which spend the non-breeding season in Australia. *Stilt* 50: 135-157.
- Riegen, A., Vaughan, G., Woodley, K. Postill, B., Guangming, Z., Tao, W., & Dongyu, S. 2006. The fourth full shorebird survey of Yalu Jiang National Nature Reserve. 13-23 April 2006. *Stilt* 50: 47-53.
- Rogers, K.G. & Gosbell, K. 2006. Demographic models for Red-necked Stint and Curlew Sandpiper in Victoria. *Stilt* 50: 205-214.
- Rogers, D. I., Hance, I., Paton, S., Tzaros, C., Griffioen, P., Herring, M., Jaensch, R. Oring, L.W., Silcocks, A. and Weston M. 2005. *The breeding bottleneck: Breeding habitat and population decline in the Australian Painted Snipe*. Pp 15-23 in Straw (Ed) Status and Conservation of Shorebirds in the East Asian-Australasian Flyway; Proceedings of the Australasian Shorebirds Conference 13-15 December 2003, Canberra Australia. Wetlands International Global Series, 18, International Wader studies 17. Sydney, Australia.
- Rogers, D.I., Moores, H., & Battley, P.F. 2006. Northwards migration of shorebirds through Saemangeum, The Geum Estuary and Gomso Bay, South Korea in 2006. *Stilt* 50: 73-89
- Rogers, D. I., Rogers, K.G. and Barter, M.A. 2005. *Measuring recruitment with telescopes: a pilot study of age ratios on Australian non-breeding grounds*. Pp 63-72 in Straw (Ed) Status and Conservation of Shorebirds in the East Asian-Australasian Flyway; Proceedings of the Australasian Shorebirds Conference 13-15 December 2003, Canberra Australia. Wetlands International Global Series, 18, International Wader studies 17. Sydney, Australia.
- Soloviev, M., Minton, C., Tomkovich, P. 2007. *Breeding performance of tundra waders in response to rodent abundance and weather from Taimyr to Chukotka, Siberia*. Pp 131-137 in Boere, G., Galbraith, C. & Stround, D. (eds), Waterbirds Around the World. The Stationary Office Limited. Scotland.
- Straw, P., Gosbell, K. & Minton, C. 2007. Shorebird research in the East Asian-Australasian Flyway: Looking to the future. Pp 328-331, in Boere, G., Galbraith, C. & Stround, D. (eds), Waterbirds Around the World. The Stationary Office Limited. Scotland.
- Taylor, S. & Minton, C. 2005. A census of the breeding population of Pied Oystercatcher *Haematopus longirostris* in Corner Inlet Victoria. *Stilt* 49: 41-43.

VWSG Financial Report

Rosemary Davidson and Clive Minton

The Victorian Wader Study Group had a satisfactory year financially. Details of income and expenditure are given in the table.

Overall income (\$11,391) exceeded expenditure (\$7004). This is the first time this has happened for several years. This was partly because we have now passed the peak in costs of our renewal and refurbishment of equipment. Our expenditure on these major items has therefore reduced. Also our income was buoyed by generous donations from a number of members and by kind contributions from the Department of Sustainability and Environment in Victoria and from the Coast Action/Coast Care program. We were also again helped by Parks Victoria, French Island, who purchased a batch of safety electric fuses to assist our cannon-netting.

The VWSG now has satisfactory financial strength to cope with foreseen needs and unforeseen circumstances.

Victorian Wader Study Group Inc.
ABN 12 724 794 488

Income & Expenditure Statement for the year ended 30 June 2007

<i>INCOME</i>		<i>EXPENDITURE</i>	
Subscriptions	\$2,420.00	Printing Bulletin	\$1,573.00
Bank Interest	\$1,275.23	Postage, stationary, photocopying, telephone calls	\$353.70
Surplus from AGM food	\$295.00	Incorporation fee	\$37.60
	\$45.00		
Surplus from Yanakie stay			
Donations: B.Abbott, C. Allen, M.Anderson, M.Cameron, B.Dickson, P.& M. Gibbs, A.Gutowski, D.Howard, P.Jenkins, I. & E Miller, H.Phillipson, M.Preston, J.Stoney, D.Thomas, J.&C.Walmsley, I. Veltheim.	\$480.00	Ethics permit (South. Australia) Mann's Beach rental Miscellaneous expenses Port. Albert . Coastguards- donation Payment for OYC sexing	\$60.00 \$40.00 \$68.55 \$60.00 \$30.00
	\$4,515.23	Sub-total	\$2,222.85
Sub-total		<i>Equipment:</i> New radios & batteries Trailer expenses	\$1,093.30 \$52.00
		Colour bands & engraved flags Cannon repairs & new projectiles	\$1,973.30 \$233.20
Sale of Equipment		Glue, webbing, tape, grease etc. Decoys Fuses Balance repairs Spanner	\$560.24 \$105.50 \$571.00 \$94.00 \$99.00
Delaware Bay net (remainder)	\$189.11		
Pied OYC flags	\$62.00		
	\$251.11	Sub-total	\$4,781.24
Grants & Contracts			
WHO Influenza Centre: help with Avian Influenza Studies Dept. Primary Industries: Influenza sampling	\$350.00 \$1,275.00		
DSE South Gippsland: Grant for Corner Inlet Studies	\$2,000.00		
DSE Coast Action / Coast Care: Grant for consumables and Equipment - C. Inlet Project	\$3,000.00		
	\$6,625.00		
	\$11,391.34		\$7,004.09
TOTAL INCOME		TOTAL EXPENDITURE	
Cash Balance 1/07/2006		Cash Balance.30/06/07	
Petty Cash	\$58.90	Petty Cash	\$11.45
Westpac Account	\$988.20	Westpac Account	\$766.67
Macquarie Account	\$25,360.30	Macquarie Account	\$28,621.29
	Total		Total
	\$26,407.40		\$29,399.41
Unpresented cheques	\$363.20	Unpresented cheques	\$15.15
	\$1,964.69		\$896.20
			\$21.30
NET TOTAL	\$24,079.52	NET TOTAL	\$28,466.76

WWSG MEMBERSHIP LIST

Bev & Geoff Abbott
Charles & Jocelyn Allen
Malcolm Allen
Terri Allen
Mark Anderson
Peter Anton
Allen Archbold
Robyn & Steve Atkinson
David Ball
Mark & Terry Barter
Graham & Jenny Beal
Lauren Beasley & Digger Jackson
Rob & Gail Berry
Suzanne & John
Brandenberger
Malcolm & Judy Brown
Paul & Anna Buchhorn
Bill Bygott
Margaret Cameron
Jeff & Sarah Campbell
Rob Clemens
Smathie Chong
Maureen Christie
Alan Clarke & Marj Reni
Bretan Clifford
Pete Collins
Mike Connor
Dave Cropley
Mark Cullen
Rosemary Davidson
Michael Dawkins
John Dawson
Julie Deleyev
Xenia Dennett
Jill Dening
Barbara Dickson
Lee Duclos
Andrew Dunn
John Eckert
Dianne Emslie
Alice Ewing
Jon Fallaw & Becky Hayward
Maureen & Robin Fitzgerald
Tim Gale & Lisa Collins
Dave Gerard
Colin Gibbs
Heather Gibbs
Peter & Melanie Gibbs
Ken & Carlene Gosbell
Andrew & Kath Gosden
Kathryn Goyen
Doris Graham
Nicole Grenfell
Patrick-Jean Guay
Angie Gutowski
Birgita Hansen
Neville & Robin Hatten
Peter Haward

Peter Hermans
Margaret & David Hollands
Vivien Holyoake
Damian Howard
Tania Ireton
Peter Jenkins
Roz Jessop
Penny & Murray Johns
Steve Johnson
Irma Kluger
Ken & Femie Kraaijeveld
Joy Knight
Tessa & Angus Lamin
Brett Lane
Janet Limb
Rodney Long
Moira Longden
Sue & Andy Longmore
Andrew & Sam Lowther
Richard & Debbie Loyn
Meg Macmillan
Bernie McCarrick
Geoff & Joan McDonald
Rod McFarlane & Helen Vaughan
Pat McWhirter
Ila Marks & Eric Miller
Brian Martin
David Melville
Clive & Pat Minton
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Lorraine Moore
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Brenda Murlis
Mathew Northward
Priscilla Park
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Heather & David Phillipson
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Susan Quirk
Jim, Jenny, April & Shane Reside
Roger & Annabel Richards
Bruce Ridgeway
Bruce Robertson
Ken, Annie & Danny Rogers
Neville & Nancy Roussac
Graeme & Margaret Rowe
Liz Sarrailhe
Charles Silveira
Howard Simco
Jenny Skewes
Charles Smith
Ron & Shirley Smith
Roger Standen
Will & Angela Steele
Iain, Sandy, Sally, Anna & James Stewart

John Stoney
Bob Swindley
Sally Symonds
Naoko Takeuchi
Susan Taylor
Deryn Thomas
Leon Trembath
Lyn Turner
Stephanie & Lindsay Tyler
Megan Underwood
Paul & Kay Van Loon
Inka Veltheim
John & Caroline Walmsley
Keith Ward
Jim & Anthea Whitelaw
Jean & David Wilbraham
Ross Williamson
Prue Wright
Dallas & Jude Wyatt

Bulletins also sent to

Dept. of Primary Industry
Australian Bird & Bat Banding Scheme
Birds Australia
Bird Observers Club of Australia
Broome Bird Observatory
CSIRO Library, ACT
Dept. of Defence, Swan Is. Queenscliff
Eyre Bird Observatory
French Is. Head Ranger FINP
Highland Ringing Group, Scotland
Hong Kong- Geoff Carey
Japan- Kiyoko Ozaki Bird Mig. Res. Cent.
Korea- Jin Young Park
Melbourne Water (Werribee Sew. Farm)
National Library- ACT
NRE Geelong
NSW Wader Study Group
NWA WSG- Chris Hassell
NZWSG- Adrian Riegan
Queensland Wader Study Group
Phillip Island Nature Park
Parks Victoria, Foster
Parks Victoria, Queenscliff
Parks Victoria, Wonthaggi
Senckenbergische Bibliothek
Taiwan Dr W H Fang
Victoria Museum
Victorian Ornithological Research Group
Victorian State Library
Wash Wader Ringing Group

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