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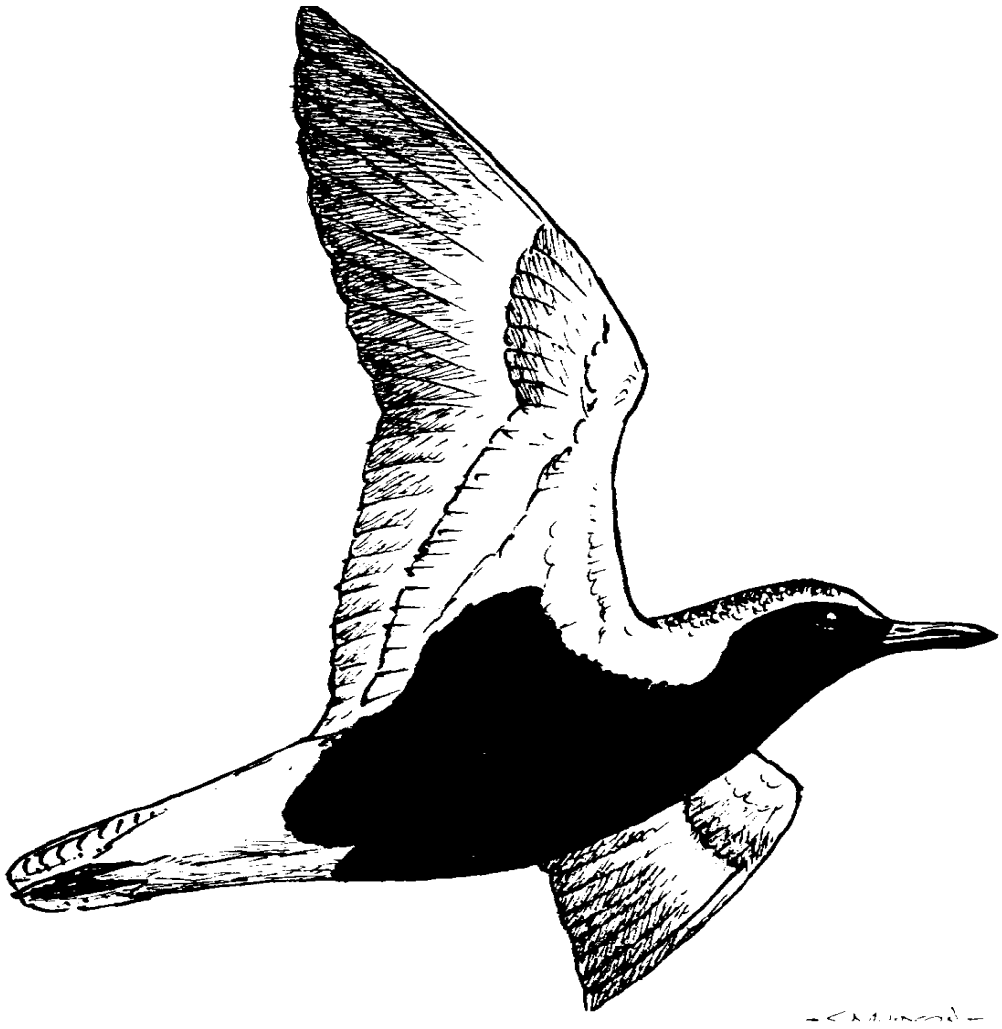

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VICTORIAN WADER STUDY GROUP INC.

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 the East-Asian Australasian 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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Student	$10.00

This bulletin is usually published on the date of the Annual General Meeting and contains reports and cumulative records of fieldwork of the Victorian Wader Study Group VWSG with articles, field notes and other material. Contributions are welcome. Please consult the editor or assistant editor on questions of format. Line illustrations are reproduced from the Australasian Wader Studies Group journal "Stilt" with permission of the editor unless otherwise indicated.

VWSG WEB SITE www.vicnet.net.au/~vwsg

Our web site is maintained by Roger Standen

Summary of VWSG Activities in 2011/12

Clive Minton

Introduction

No two years are the same as far as Victorian Wader Study Group activities and results are concerned. The highlights (and lowlights!) vary considerably but there are always enough matters of interest to more than fill the annual Bulletin. This is prepared each August for the benefit of VWSG members and those who have helped the Group throughout the year in a variety of ways. It also acts as a permanent record which is quite often used as a source of information by those writing scientific papers or those (often government conservation bodies) seeking information relating to many years ago (e.g. the numbers of breeding terns on the central Victorian coast over the last 30+ years).

A number of matters vie for pride of place in this year's report. A selection is given below, in no particular order of priority.

a) Geolocator activities were expanded to include Eastern Curlew and Sanderling as well as being continued on Ruddy Turnstone. Yet more exciting results are emerging and some of these are covered in a separate article in this Bulletin. The most unexpected recent development in the geolocator field has been the recognition that we can closely monitor what the birds are doing on their breeding grounds. The start of incubation, its sharing between the sexes, the duration of incubation, the hatching success, the re-laying of second clutches after an earlier nesting failure, and the overall hatching success of the population can now be determined from the light-level geolocator records. Ken Gosbell is the VWSG "wizard" on this, laboriously and ingeniously extracting this information from hours of work sitting in front of his computer.

b) The largest catch by the VWSG since the early 1990s was made at Barralliar Island in Western Port on 1 February 2012. It contained 1660 Red-necked Stints and 218 Curlew Sandpipers.

c) Another notable catch was 172 Red-necked Avocets (and three Banded Stilts) at Yallock Creek, Western Port, on 2 January 2012. This species was particularly widespread last summer as a result of a population increase achieved during the good breeding conditions in inland Australia over the last three years. One of these Avocets has already been seen more than 1000km away on the northern New South Wales coast.

d) The 2012 autumn/winter Oystercatcher banding programme went particularly well with a record 255 Pied Oystercatchers caught and a satisfactory 64 Sooty Oystercatchers. Catching success was greatly aided by new decoys crafted by VWSG members Marj Reni and Allan Clarke.

e) The usual good crop of recoveries and flag-sightings showed movements to many different countries between southeast Australia and northern Siberia. The highlight was the exchange of Red Knots with Russian Pavel Tomkovich, with the VWSG recapturing one of his young birds at Stockyard Point in early May 2012 and him returning the compliment by catching one of our adult Red Knot breeding in Chukotka, northeast Siberia, later that same month.

f) There were some exciting movements recorded of leg-flagged Banded Stilts with some clearly showing that there is more interchange of birds between the West Australian and South Australian populations than originally thought. Another Banded Stilt highlight was the sighting of an adult at the Lake Eyre South breeding colony in April 2012 with a metal band which had been put on in a large cannon-net catch of

Banded Stilts at Werribee Sewage Farm in December 2000. This Banded Stilt must now be at least 14 years old.

g) The Group extended its range of activities westwards in South Australia with a visit to the Streaky Bay area of the Eyre Peninsula in November 2011. A good variety of waders was banded and flagged. There have been quite a number of sightings in that area in previous years of birds flagged in South Australia and Victoria – particularly Sanderling. It is hoped to continue occasional visits to the Eyre Peninsula in the future.

h) Tern breeding success along the Victorian coast was again monitored closely in 2011/12. Crested Terns had poor breeding success this year at The Nobbies (due to failed food supply at a critical time) but had a record year at Corner Inlet both in terms of number of pairs breeding and fledging success. A good sample of banded adults at The Nobbies colony was recaptured this year for the first time for many years. Analysis shows that the colony is now largely self-sufficient, whereas in its early years it was mostly composed of birds which had originally been hatched at the Mud Islands colony. Twenty-four year old Crested Terns were recaptured at all three colonies.

i) Small terns produced an unusual crop of long-distance movements. Fairy Terns, which are normally relatively sedentary, showed movements from The Coorong into Victoria. Furthermore two chicks form the New South Wales coast turned up at Werribee Sewage Farm only a month after fledging, still with their parents in attendance. One of the very few Little Terns which breed in South Australia, and which had been banded at Danger Point near Port MacDonnell as a chick, turned up in Moreton Bay, Queensland. Most Little Terns from the southern part of Australia make movements to the northern part of Australia in the winter.

Now for some amplification of achievements and results of the past year.

Banding

The total of 5121 waders caught in 2011 was a slight increase from the totals achieved in the last two years. However it is the fifth successive year where the total has been below the long-term average (7053). This is the result of a deliberate policy of concentrating fieldwork activities on a range of species which are less frequently caught and reducing our overall annual total of Red-necked Stint. Time spent trying to deploy and, especially, retrieve geolocators also leads to lower catch totals.

Particularly good catch totals were achieved during the year for our monitoring program for Ruddy Turnstone (743) Sanderling (482), Banded Stilt (332), Bar-tailed Godwit (284) and Eastern Curlew (46). 2011 was a good year for Pied Oystercatcher also (177) but only seven Sooty Oystercatchers were caught, well below the 50 per annum minimum target.

Other highlights of the catching in the last year have already been given in the Introduction section.

Recoveries, retraps and flag-sightings

The usual varied selection of recoveries of our marked birds or recaptures by us of waders banded elsewhere have accrued during the past year (the highlights were the two Red Knot reports already mentioned in the Introduction).

The flag-sighting reports are less comprehensive than usual because of the withdrawal of government funding to support the work (carried out for several years by Heather Gibbs) of entering records into the Flag Sightings Database. Her work was able to be continued, albeit at a lower level, through funds kindly provided by the Australasian Wader Studies Group.

The most exciting flag sightings reported during the year are given in the Introduction and in the various Flag Sighting Reports.

The new engraved flags made from bi-coloured plastic sheet from Poland have proved to be extremely successful with no signs of wear. Because of the difficulty of forming these engraved blanks into flags (it needs hot air rather than hot water) we have decided to buy already-formed flags from the Polish manufacturer. These are more expensive but the quality is excellent and the flags certainly appear to have much better long-term durability.

Terns

Most of the main highlights of the past year have been given in the Introduction section. The Crested Tern breeding population on the central Victorian coast seems to now be plateauing out at 6-7000 pairs. This is a huge increase from the 1000 pairs breeding in the mid-1980s when our conservation actions at Mud Islands commenced. It is a clear demonstration of the benefits of informed intervention/habitat management.

It was nice to get two unusual reports of movements of terns during the past year. A Common Tern was recovered on its breeding grounds at 62 deg. North in inland Siberia – our greatest movement yet for this species (11,172km). An orange-flagged Whiskered Tern from Werribee Sewage farm was seen at Roebuck Plains near Broome. This individual was almost certainly part of the Asian-breeding population of Whiskered Terns which comes to Australia for its non-breeding season each year.

Breeding Success

After two successive good breeding seasons it is not surprising that the 2011 arctic breeding season was not particularly good for most species. Only Red Knot showed a reasonable proportion of young birds in catches during the 2011/12 austral summer.

A detailed examination of all our "percentage juvenile" data has recently been undertaken by Yaara Rotman, a member of Marcel Klaassen's team at Deakin University. It appears that the VWSG/AWSG data, and data from elsewhere in the world, strongly support the view that the traditional three-year lemming/predator cycle has now largely disappeared. It may never have been as pronounced in waders coming to Australia as it was in Curlew Sandpipers going to Africa and in some wildfowl "wintering" in Western Europe.

Our results will also be examined critically in the near future to see if they give any evidence of breeding success reductions associated with poorer migration/refueling conditions in the Flyway, particularly on the shores of the Yellow Sea.

Finances

The finances of the VWSG remain in a satisfactory condition even though expenditure incurred on items such as geolocators and engraved leg flags has been at a high level. Members' financial support has again been critical.

The VWSG has had to use some of its accumulated funds to support the continuation of "typing help" to Clive Minton. This, again, used to be supported by the Federal Government but this financial support ceased and these funds ran out a couple of years ago.

Acknowledgements

As always the VWSG's operations depend on the input of time, effort, funds etc. by a wide variety of people – both members and others. The list of helpers/donors is too long to give in full, but mention is made in various places in this Bulletin of particularly critical help in key areas. A fuller acknowledgement is always given at the Annual General Meeting, which usually takes place at Clive's house in Melbourne in August/September each year. Thanks again to everyone who contributed to VWSG activities in any way during the past year.

Total Number of Waders Caught by Species
VWSG 2011

SPECIES	New	Retrap	Total
Australian Painted Snipe	1	0	1
Bar-tailed Godwit	242	42	284
Eastern Curlew	38	8	46
Ruddy Turnstone	454	289	743
Great Knot	4	0	4
Red Knot	50	0	50
Sanderling	441	42	483
Little Stint	1	0	1
Red-necked Stint	2391	375	2766
Sharp-tailed Sandpiper	112	3	115
Curlew Sandpiper	48	5	53
Pied Oystercatcher	118	59	177
Sooty Oystercatcher	4	3	7
Black-winged Stilt	2	0	2
Banded Stilt	332	0	332
Pacific Golden Plover	1	1	2
Grey Plover	1	1	2
Red-capped Plover	7	0	7
Double-banded Plover	37	1	38
Hooded Plover	7	0	7
Masked Lapwing	0	1	1
21 Species	4291	830	5121

Table prepared by Helen Vaughan and Clive Minton

Good catch samples were obtained during the year for Ruddy Turnstone, Sanderling, Banded Stilt, Bar-tailed Godwit, Pied Oystercatcher and Eastern Curlew. Numbers of Sharp-tailed Sandpiper and Curlew Sandpiper caught were low because of the almost complete absence of these at the coastal catching locations in the 2010/11 season (when many birds of these two species remained at ephemeral wetlands inland). The Sooty Oystercatcher total was also very poor – seven against our annual minimum target of 50.

It was nice to catch another Little Stint – our ninth. The Australian Painted Snipe was our first – a rehabilitated bird at Shepparton.

Total Waders Caught by Species
1975 to 31 December 2011 – VWSG

Species	New	Retrap	Total
Latham's Snipe	347	14	361
Australian Painted Snipe	1	0	1
Black-tailed Godwit	4	0	4
Bar-tailed Godwit	5168	671	5839
Short-billed Dowitcher	1	0	1
Whimbrel	47	6	53
Eastern Curlew	860	80	940
Marsh Sandpiper	2	0	2
Common Greenshank	535	64	599
Terek Sandpiper	37	1	38
Grey-tailed Tattler	38	3	41
Ruddy Turnstone	4793	2132	6925
Great Knot	693	89	782
Red Knot	5090	739	5829
Sanderling	5029	1803	6832
Little Stint	9	0	9
Red-necked Stint	118147	31933	150080
Long-toed Stint	1	0	1
Pectoral Sandpiper	2	0	2
Sharp-tailed Sandpiper	9771	439	10210
Curlew Sandpiper	25748	4869	30617
Cox'sSandpiper	1	0	1
Broad-billed Sandpiper	5	0	5
Pied Oystercatcher	2805	1441	4246
Sooty Oystercatcher	954	352	1306
Black-winged Stilt	46	0	46
Banded Stilt	872	0	872
Red-necked Avocet	368	5	373
Pacific Golden Plover	266	26	292
Grey Plover	177	30	207
Red-capped Plover	698	185	883
Double-banded Plover	3734	1005	4739
Lesser Sand Plover	115	11	126
Greater Sand Plover	31	3	34
Black-fronted Plover	57	4	61
Hooded Plover	38	2	40
Red-kneed Dotterel	136	11	147
Masked Lapwing	187	4	191

Table prepared by Helen Vaughan and Clive Minton

The total of birds caught by VWSG over the last 37 years has now climbed to 232,735. Of the 186,813 newly banded birds 63% were Red-necked Stint and 14% were Curlew Sandpiper. Sharp-tailed Sandpiper was a distant third (5%). More than 1000 birds of nine species have now been banded, with a total of 38 different species banded altogether.

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	6676	1467	8143
2007	4689	924	5613
2008	4611	1317	5928
2009	3965	831	4796
2010	3006	759	3765
2011	4291	830	5121
Totals to end 2011	**186813**	**45922**	**232735**

Average annual total for 1979 – 2011 = 7053 (* excluded)

Table prepared by Helen Vaughan and Clive Minton

The overall catch of 5121 in 2011 was again at the lower end of the range of catches, with only six lower in the 33 years since cannon-netting was introduced in 1979. The lower level of catches in recent years is mainly the result of the targeting of the less frequently caught/less numerous species at the expense of Red-necked Stint. The VWSG's peak catching year was 2000 when 12944 waders were caught. The average yearly catch is 7053 but the last time this total was reached was in 2006.

Overall retraps form 19.7% of the birds caught. There is some variation from year to year, depending on the mix of species. In 2011 the percentage of retraps was 16.2%, whereas it had been 20.1% in 2010.

Total Waders Caught Each Six Months
1979-2011 – VWSG

Calendar Year	January to June	July to December	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
2007	3646	1967	5613
2008	3812	2116	5928
2009	2726	2070	4796
2010	2136	1629	3765
2011	1967	3154	5121
Totals to end 2011	**116886**	**113388**	**232735**

Note: Six month data are not available for years 1975 - 1978.
Table prepared by Helen Vaughan and Clive Minton

The proportion of the annual catch which occurs in the different halves of the year can vary quite widely. Sometimes this is because of catching success whereas at other times it may more reflect catching effort (e.g. if we have been away in north-west Australia or elsewhere at particular times). The low figure for the first half of 2011 was mainly the result of the absence of so many Sharp-tailed and Curlew Sandpipers at our regular coastal catching sites (because they were inland). In only five previous years has the catch in the first half of the year been lower. The total for the second half of 2011, in contrast, was the highest since 2005. It was particularly aided by a catch total of 1333 at Werribee Sewage Farm between the 28 and 30 December.

Location of Waders Caught in Victoria, South Australia and Tasmania

	To Dec 2010	2011	Total
Victoria			
Werribee	65243	1333	66576
Western Port/Flinders	58594	113	58707
Queenscliff/Swan Bay	31975	0	31975
Corner Inlet	29517	762	30279
Anderson Inlet(Inverloch)	22228	36	22264
Sandy Point/Shallow Inlet	2670	83	2753
Laverton	956	0	956
Mud Islands	757	0	757
Killarney Beach	426	0	426
Barwon Heads	16	674	690
Other	627	1	628
South Australia			
Canunda/ Carpenter Rocks/ Brown Bay/Beachport/Coorong	13389	1791	15180
Tasmania			
King Island	1253	328	1581
North East Tasmania	53	0	53
Total	227704	5121	232825

*Other includes Geelong (Point Henry/Belmont), Bendigo Sewerage Farm Seaford Swamp, Braeside/Croyden, Gippsland Lakes and Toowong

Table prepared by Helen Vaughan and Clive Minton

The VWSG catching programme each year attempts to cover all the main wader habitats on the Victorian coast between Corner Inlet and Port Phillip Bay, with additional catching programmes in the south-east of South Australia (commenced in 1993) and King Island, Tasmania (commenced in 2007). The proportion of birds caught at Werribee Sewage Farm is steadily decreasing as only one main visit is now made there each year. In the initial years of the VWSG all waders were banded there (mist-netting) and for many years after cannon-netting was introduced (1979) up to half the annual catch total emanated from Werribee. The diversification into species other than Red-necked Stint/Curlew Sandpiper/Sharp-tailed Sandpiper, and to other locations, is deliberate and has been most successful. Nevertheless Werribee still remains our key location for annual monitoring of breeding success (via percentage juveniles in catches) and survival rates (from recaptures of previously banded birds) of these three species. To date 29% of VWSG birds have been caught at Werribee, 25% in Western Port and 13% at Queenscliff/Swan Bay and also in Corner Inlet.

Numbers of waders processed by the VWSG each month to December 2011.

Number of waders processed * by the VWSG each month to December 2011 * see introductory summary

	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
Australian Painted Snipe	0	0	0	1	0	0	0	0	0	0	0	0	1
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	743	1221	777	99	24	771	127	286	77	334	276	501	5236
Whimbrel	3	0	41	0	0	1	0	0	1	4	3	0	53
Eastern Curlew	23	177	24	0	24	18	21	76	175	131	180	100	949
Common Greenshank	69	135	122	0	0	0	0	0	0	37	176	60	599
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	440	587	2495	1231	39	23	77	77	114	165	843	636	6727
Great Knot	196	87	26	0	0	30	21	6	16	116	74	130	702
Red Knot	902	394	302	201	2	430	469	139	93	1000	545	284	4761
Sanderling	376	1654	2010	385	0	0	1	5	0	265	822	463	5981
Little Stint	2	2	0	0	0	0	0	0	0	0	1	4	9
Red-necked Stint	2735	1694	7030	2508	546	749	1032	895	997	2140	3579	3727	27632
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	1821	942	240	2	0	0	0	16	635	563	701	2810	7730
Curlew Sandpiper	1516	1649	1727	231	223	128	266	514	348	1139	936	1420	10097
Broad-billed Sandpiper	1	2	0	0	0	0	0	0	0	0	0	2	5
Pied Oystercatcher	114	218	407	564	714	860	682	355	146	38	17	60	4175
Sooty Oystercatcher	7	97	86	184	217	341	279	101	0	1	0	3	1316
Black-winged Stilt	1	9	0	0	0	0	1	12	0	4	2	17	46
Banded Stilt	0	0	0	22	0	0	0	0	0	0	0	151	173
Red-necked Avocet	39	0	0	0	0	0	3	67	76	46	47	89	367
Pacific Golden Plover	40	27	62	2	0	0	0	0	0	28	62	65	286
Grey Plover	38	14	4	6	0	9	0	0	2	92	42	1	208
Red-capped Plover	44	89	64	120	210	110	77	28	12	23	25	13	815
Double-banded Plover	0	2	217	309	757	956	1053	964	1	0	0	0	4259
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	3	0	15	0	0	0	0	5	0	24
Red-kneed Dotterel	0	10	0	20	0	44	11	17	12	8	23	1	146
Masked Lapwing	5	6	93	14	4	13	4	1	1	5	21	19	186
Cox's Sandpiper	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL	**9290**	**9079**	**15750**	**5913**	**2776**	**4523**	**4135**	**3569**	**2814**	**6242**	**8439**	**10652**	**83182**

Table prepared by Helen Vaughan and Clive Minton

Numbers of waders processed by the VWSG each month to December 2011

This Table shows the distribution of birds which have been weighed and measured throughout the different months of the year. An objective is to try and obtain a reasonable sample of each species (and each age group of that species) in each month. This is difficult when numbers are low or when species are completely absent (e.g. during the Northern Hemisphere breeding season). It is particularly important to be able to measure the weight cycles which occur in each species during a year. This information enables judgments to be made on matters such as the amount of pre-migratory fat deposited, the body condition on arrival back after migration, weight put on as an insurance policy to help tide birds through the winter etc.

In the early years of the VWSG considerable regard was paid to gaps in this table when planning the fieldwork programme. Most of the potentially fillable gaps have now been filled. There were no notable contributions in this area in 2011. But, interestingly, the only remaining gap in the Red Knot profile (only two birds in May) was filled when 45 Red Knot were caught at Stockyard Point on 6th May 2012.

"Process" includes **any** of the biometric measurements such as wing length, bill length, head + bill length, or weight. If a bird is only aged or only the wing moult is recorded then it is not counted in this tabulation.

Snatching a quick lunch on King Island after a successful catch– April 2012 *(Photo Roz Jessop)*

Numbers of Waders Leg-flagged in Victoria (orange)

	2007	2008	2009	2010	2011	Total
Latham's Snipe	0	0	0	0	0	278
Australian Painted Snipe	0	0	0	0	1	1
Black-tailed Godwit	0	0	0	0	0	4
Bar-tailed Godwit	186	268	351	308	243	3895
Whimbrel	0	1	0	0	0	44
Eastern Curlew	0	0	8	0	38	590
Marsh Sandpiper	0	0	0	0	0	2
Common Greenshank	0	0	25	0	0	456
Terek Sandpiper	0	0	0	0	0	13
Grey-tailed Tattler	0	0	0	0	0	5
Ruddy Turnstone	328	497	238	348	455	3506
Great Knot	36	1	7	0	4	389
Red Knot	248	5	136	17	50	3885
Sanderling	506	261	89	277	439	3368
Little Stint	0	0	0	0	1	7
Red-necked Stint	1727	2754	2055	1496	2043	63507
Pectoral Sandpiper	0	0	0	0	0	1
Sharp-tailed Sandpiper	285	276	496	11	110	5600
Curlew Sandpiper	94	308	122	382	47	10933
Cox's Sandpiper	0	0	0	0	0	1
Broad-billed Sandpiper	0	0	0	0	0	3
Black-winged Stilt	0	6	0	0	2	28
Banded Stilt	0	0	0	54	332	538
Red-necked Avocet	0	0	0	0	0	140
Pacific Golden Plover	0	0	0	0	2	66
Grey Plover	5	0	16	0	1	108
Red-capped Plover	1	6	3	5	7	120
Double-banded Plover	10	45	2	11	37	472
Lesser Sand Plover	0	0	0	0	0	55
Greater Sand Plover	0	0	0	0	0	16
Hooded Plover	1	0	1	1	7	10
Black-fronted Dotterel	0	0	0	0	0	2
Red-kneed Dotterel	0	0	0	0	0	3
Masked Lapwing	1	5	0	0	1	38
Total	3428	4433	3549	2910	3820	98084

***Includes Ruddy Turnstone and Sanderling flagged with orange (only) in the south east of South Australia between 1993 and 1998. T**able prepared by Helen Vaughan and Clive Minton *(Table corrected 01/10/2012)*

This table has now grown too large to give details for every year back to when flagging was commenced by the VWSG in December 1989. Details for earlier years can be obtained from past VWSG bulletins (comprehensive up to that in the 2009 Bulletin).

Overall 98,084 waders have now been flagged by the VWSG. For most species except Red-necked Stint almost all birds caught since 1990 have been flagged. Since 2003 engraved leg flags have replaced colour bands on Pied and Sooty Oystercatchers. Engraved leg flags (instead of plain leg flags) have been universally used on Turnstones since 2005 and on a variety of other species more recently. These leg flags have vastly increased the amount of movements information obtained from catching and banding waders. It is intended that the flagging programme be continued at virtually the 100% level on all species except Red-necked Stint for the foreseeable future. Engraved leg flags are likely to be introduced to further species in the near future.

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

Waders Leg Flagged by VWSG in South Australia (orange/yellow)

Species	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Latham's Snipe	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Grey-tailed Tattler	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Bar-tailed Godwit	0	0	0	3	0	8	0	0	0	0	0	0	0	11
Ruddy Turnstone	234	226	73	193	76	141	74	258	84	141	96	109	268	1973
Red Knot	0	0	0	0	0	1	0	11	0	0	0	0	0	12
Sanderling	63	420	2	315	328	76	220	250	506	244	87	261	439	3211
Red-necked Stint	126	383	22	319	163	93	174	465	54	90	179	208	356	2632
Sharp-tailed Sandpiper	0	2	0	27	7	73	27	21	0	15	0	0	74	246
Curlew Sandpiper	24	11	0	190	13	2	103	8	21	33	1	4	15	425
Banded Stilt	0	0	0	0	0	0	0	334	0	0	0	54	332	720
Pacific Golden Plover	0	2	0	0	1	0	16	13	0	0	0	0	2	34
Red-capped Plover	0	0	1	7	5	0	7	4	1	0	0	2	3	30
Double-banded Plover	0	0	4	5	1	0	0	27	2	0	1	5	29	74
Black-fronted Plover	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Hooded Plover	0	0	0	0	1	0	0	0	1	0	1	1	5	9
Masked Lapwing	0	0	0	0	4	2	2	4	1		0	0	1	14
Total	**447**	**1045**	**106**	**1062**	**599**	**396**	**623**	**1395**	**670**	**523**	**365**	**644**	**1524**	**9399**

Table prepared by Helen Vaughan and Clive Minton

VWSG FIELDWORK PROGRAM January to December 2012

DATE	*PLACE AND OBJECTIVES*	HIGH TIDE	
Mon 2 Jan 2012	Yallock Creek – Red-necked Stint and Curlew Sandpiper Stay overnight at Harewood House, Tooradin	07.25	2.75
Sat 14 Jan & Sun 15 Jan	Stockyard Point – Red-necked Stint and Curlew Sandpiper Stay overnight at Harewood House, Tooradin	07.30 08.54	2.71 2.95
Thurs 19 Jan to Sun 22 Jan	Corner Inlet – Nooramunga - Bar-tailed Godwit, Red Knot. Stay at Manns Beach Village Hall (Nooramunga summer wader count Wed January 18th)	13.28	2.88
Sun 29 Jan to Mon 30 Jan	Queenscliff - Bar-tailed Godwit, Red Knot Camp at Swan Island *2 hours later in Swan Bay.	04.52* 05.23*	1.55 1.51
Sat 4 Feb to Sun 5 Feb	Barry Beach Bar-tailed Godwit and Red-necked Stint	09.20 09.56	2.44 2.48
Sat 11 Feb	Rhyll - Bar-tailed Godwit	16.30	2.78
Sun 12 Feb	Sandy Point - Sanderling	16.19	1.54
Fri 23 Mar to Fri 30 March	South Australia Sanderling and Ruddy Turnstone	14.20 to 17.00	1.11 to 1.09
Sat 7 April to Sat 14 April	King Island - Ruddy Turnstone	12.13 to 17.16	1.48 to 1.63
Sun 22 April	Fairhaven, French Island - Pied Oystercatcher	14.06	2.82
Tues 24 April to Wed 25 April	Roussac Farm and Barry Beach Pied and Sooty Oystercatcher	16.02 16.41	2.48 2.55
Sun 6 May	Stockyard Point Pied Oystercatcher	12.39	2.90
Sun 20 May	Rhyll Pied Oystercatcher	12.43	2.22
Sat 2 June to Sun 3 June	Charles Hall Road & Barry Beach Pied and Sooty Oystercatcher	09.45 to 11.01	2.40 2.43
Tues 19 June to Fri 22 June	Corner Inlet - Nooramunga Bar-tailed Godwit, Pied & Sooty Oystercatcher	13.02 to 15.31	2.32 to 2.56
Mon 2 & Tues 3 July	Corner Inlet winter wader counts		
Tues 3 July	Stockyard Point Pied Oystercatcher	1152	2.90
Thurs 5 to Fri 6 July	Charles Hall Road & Roussac Point Pied and Sooty Oystercatchers	1421 1524	2.63 2.70
Sat 4 to Sun 5 August	Barry Beach - Pied and Sooty Oystercatcher	1351 1456	2.48 2.53
July date to be fixed	Fairhaven - Pied Oystercatcher	?	?
Sat 8 Sept	VWSG AGM (Clive & Pat's house) 10am – 10pm 10am Equipment maintenance 4pm AGM : 7-10pm Talks		
Mid Aug to mid Nov	Inverloch - Retrieval of geolocators from Eastern Curlew. Dates to be finalized near the time, depending or reccies.		
Fri 19 to Sun 21 Oct	Swan Island, Queenscliff Bar-tailed Godwit and Red Knot	1515 to 0456	1.51 to 1.69
Wed 7 Nov	Mud Islands – Caspian Tern (chicks), Crested Tern (adults)	1141	0.56 (LT)
Wed 14 to Thurs 22 Nov	King Island – Retrieve geolocators from Ruddy Turnstone	1207 to 1816	1.33 to 1.38
Wed 28 Nov to Thurs 4 Dec	South Australia - Retrieve geolocators from Ruddy Turnstone and Sanderling	1318 to 1520	0.66 to 0.66
Thurs 11 Dec	Mud Islands Caspian and Crested Tern chicks	1510	0.31 (LT)
Sun 16 Dec	Sandy Point - Sanderling	1436	1.46
Thurs 20 Dec	Corner Inlet – Caspian and Crested Tern (chicks)	1342	0.43 (LT)
Fri 21 Dec	The Nobbies – Phillip Island Crested Tern (chicks)	1423	0.47 (LT)
Fri 28 Dec to Sun 30 Dec	Werribee SF - Sharp-tailed Sandpiper, Curlew Sandpiper and Red-necked Stint (NB afternoon catching opportunities as well as on the 28th and 29th)	0530 to 0649	0.84 to 0.88

Recoveries of Waders Relating to Victoria

Clive Minton, Roz Jessop and Maureen Christie

Each year we try to publish in the VWSG Bulletin a selection of the most notable recoveries of waders which have been reported. A recovery is when the metal band number and the full details of the origin and subsequent report of the bird are known, irrespective of whether the bird be dead or alive when found. It contrasts with a flag-sighting report when only the general area of flagging is known and the exact marking date is unknown.

The tables below give selected recoveries of VWSG-banded birds which have been reported in the 2011/12 year. It also contains birds carrying bands put on elsewhere which have subsequently been recaptured by the VWSG. The list covers all areas of VWSG fieldwork activities – Victoria, King Island (Tasmania), and the southeast of South Australia (including, this year, Streaky Bay on the Eyre Peninsula).

It should be noted that not all recoveries which have occurred in the last year were available for inclusion in the lists below. This is because there is a backlog of processing records in the Australian Bird Banding office and also in VWSG flag database operations.

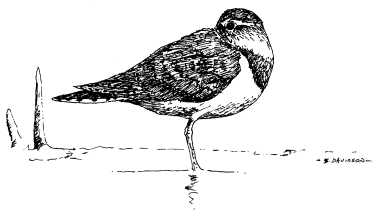
Bar-tailed Godwit

Band No.	Banding details			Recovery details			
	Age	Date	Location	Date	Location	Condition of Bird	Movement
074-63725	2nd Year	28/6/10	Corner Inlet	6/5/12	North Sakhalin, RUSSIA	Shot	10241km N
072-29361	Adult	18/1/96	Corner Inlet	26/3/12	Kooragang, NSW	Alive	784km NE

The recovery at the north end of Sakhalin Island, off the east coast of Siberia, on the early date of 6/5/12 is unprecedented. Bar-tailed Godwits from Victoria are normally still at their main staging site in the Yellow Sea at this time. This bird had probably made an unscheduled stopover on its flight from the Yellow Sea to the breeding grounds in Alaska.

The recovery in late March on the northern New South Wales coast is more likely to be of a bird which had changed its non-breeding area away from Victoria. Northward-migrating Bar-tailed Godwits do not normally make any further landfall in Australia once they leave their non-breeding areas on northward migration.

There have been many other recoveries of Bar-tailed Godwits in the last year identified by their engraved leg flags. These have been both in New Zealand – their alternative non-breeding area – and in Asia, on migration. Because these listings are not currently up to date details will be carried over to a future VWSG bulletin.



Ruddy Turnstone

Band No.	Banding details			Recovery details			
	Age	Date	Location	Date	Location	Condition of Bird	Movement
052-60513	1st Year	21/3/11	Port MacDonnell, SA	1/12/11 7/4/12	King Island, TAS	Alive	328km SE
051-94382	Adult	2/4/99	Nora Creina, SA	1/12/11	"	"	439km SE
052-22366	2nd Year	28/9/10	Blackfellows Caves, SA	30/12/10	Marion Bay, TAS	"	831km SE
052-22308	Adult	23/4/09	Carpenter Rocks, SA	26/5/12	Ilian, TAIWAN	Found dead	7226km N

Three of the birds listed refer to birds making movements within Australia. All potentially relate to individuals which have changed their non-breeding area.

The recovery in Taiwan is unusual because the bird was found dead. Many sightings of live birds in Taiwan carrying engraved leg flags from southeast Australia are made each year, but time has prevented this year's crop from being downloaded and "processed "in time for this year's bulletin.

A paper on movements of Ruddy Turnstone determined from recoveries and flag-sightings is currently in preparation (by Roger Standen). It will be a basis for comparison with Ruddy Turnstone movement data determined from the geolocator program.

Red Knot

Band No.	Banding details			Recovery details			
	Age	Date	Location	Date	Location	Condition of Bird	Movement
HS008084 Moscow	Chick	2/7/11	Chukotka, RUSSIA	6/5/12	Stockyard Point	Alive	11568km SSW
052-50051	1st Year	22/2/07	Corner Inlet	25/5/12	Chukotka, RUSSIA	Breeding	11575km N

Amazingly, the above list shows that we exchanged Red Knot recoveries with Russia in May 2012. Birgita Hansen and Roz Jessop headed up a VWSG team which recaptured the Russian-banded bird at Stockyard Point on 6 May. Via a series of mobile phone calls and emails we were able to get the banding information from Pavel Tomkovich in Moscow while the team still had Red Knot in the hand at Stockyard Point! It had been marked as a chick in July 2011 in Pavel's Red Knot study area, which is in the same region of Chukotka, north-east Siberia, as used by the remaining breeding population of Spoon-billed Sandpipers.
Pavel travelled to this region on 16 May and on 20 May saw an orange-flagged Red Knot (consorting with a New Zealand-flagged Red Knot). Five days later he caught the bird, revealing it had been banded as a 1st year bird in Corner Inlet in February 2007.
We have previously caught only one Russian-banded Red Knot. There has been a handful of previous flag sightings of Victorian-flagged Red Knot in Chukotka but no previous recoveries. So May 2012 was a red letter month for Victorian Red Knot!

Sanderling

Band No.	Banding details			Recovery details			
	Age	Date	Location	Date	Location	Condition of Bird	Movement

042-54335	Adult	27/2/08	Port MacDonnell, SA	29/8/09	Ishikawa, JAPAN	Alive	8350km N

The above is yet another record of one of our banded Sanderling where the metal band number was read/photographed in the field by a skilled Japanese ornithologist. Many of our Sanderling use the coasts of Japan as their main stopover location on southward migration.

Red-necked Stint

Band No.	Banding details			Recovery details			
	Age	Date	Location	Date	Location	Condition of Bird	Movement
2AD-44076 Japan	Juv	27/8/10	Hokkaido, JAPAN	15/11/11	Streaky Bay, SA	Alive	863km S
036-051983	1st Year	11/1/06	Barry Beach	18/9/11	Broome, WA	Alive	3269km NW
036-50951	Adult	28/12/07	Werribee SF	14/9/11	Broome, WA	Alive	3099km NW
036-04531	Adult	28/12/05	"	"	"	"	"
036-21964	Adult	17/12/06	"	13/8/11	Changwa, CHINA	"	7347km NW

The above contains a mixture of recoveries, including three Victorian birds which were retrapped at Broome on southward migration in mid-September 2011.

Our first venture westwards to the Eyre Peninsula on the central south coast of South Australia was rewarded with the capture of a Japanese-banded Red-necked Stint.

Curlew Sandpiper

Band No.	Banding details			Recovery details			
	Age	Date	Location	Date	Location	Condition of Bird	Movement
042-56822	Adult	7/1/09	Werribee SF	28/8/11	Broome, WA	Alive	3099km NW
042-31574	1st Year	10/3/02	Werribee SF	16/8/11	Hebai, CHINA	Alive	8914km NNW

The list shows two birds reported on southward migration. One was in the Yellow Sea in mid-August and the other had already reached Broome by the end of August.

Pied Oystercatcher

Band No.	Banding details			Recovery details			
	Age	Date	Location	Date	Location	Condition of Bird	Movement
101-26662	1st Year	21/6/08	Corner Inlet	9/1/12	Port Macquarie, NSW	Alive	977km NE
101-31086	3rd Year	6/5/11	Barry Beach	15/9/11	Kooragang, NSW	Alive	809km NE
101-22064	3rd Year	13/9/03	Stockyard Point	11/9/11	Bundjalung NP, NSW	Alive	1255km NE

This is a highly selective list which only includes birds which have moved from Victoria to the New South Wales coast north of Sydney. All other inter-state movements relate to the southern New South Wales coast and islands in Bass Strait (e.g. King Island).

Banded Stilt

Band No.	Banding details			Recovery details			
	Age	**Date**	**Location**	**Date**	**Location**	**Condition of Bird**	**Movement**
083-02581	Adult	28/12/00	Werribee SF	8/4/12	Lake Eyre South, SA	Breeding	1182km NW

This bird was at the breeding colony in Lake Eyre South when its metal band number was read in the field by Reece Pedler and his team. As it was a minimum of two years old when banded it is now at least age 14.

There were eight sightings of flagged Banded Stilts reported during the last year away from their marking area. Although these are technically not recoveries it is more convenient to cover them in this section in conjunction with the recovery listed above.

Three of the movements involved birds originally banded at the breeding colony in Lake Torrens in 2010 / 11 moving to Western Australia. Amazingly the bird seen on two occasions at Red Lake, Cunyu Station, right in the centre of WA was actually spotted by VWSG member Roger Standen who was holidaying there on the property of a long-time friend. It is amazing that his presence should have coincided with tens of thousands of Banded Stilt arriving. Included in these was a bird carrying a satellite transmitter put on an adult by Reece Pedler at the Lake Eyre South breeding colony only six weeks earlier. Roger however did not see this bird, even though he was made aware of its presence.

The other Banded Stilt which went to Western Australia was seen at Lake Preston in Yalgorup National Park. These records add to earlier flag-sightings and further new satellite transmitter data which show that there is a significant interchange between the WA and SA Banded Stilt populations.

Other of birds from the Lake Torrens breeding events have been observed at Lake George, near Beachport, and Streaky Bay, on the Eyre Peninsula. Also, a bird from Lake Torrens was seen at the breeding colony in Lake Eyre South in April 2012, together with another which had been flagged as a chick in The Coorong in January 2006.

A more local resighting of a Banded Stilt was a bird marked originally at Werribee Sewage Farm on 28/12/2000 which was seen at the Avalon Saltworks in January 2012. This individual would have then been a minimum age of 14 years.

Banded Stilt at the Coorong (Photo Maureen Christie)

Sightings of Waders Leg-flagged in Victoria, South Australia and King Island, Tasmania

Clive Minton, Roz Jessop, Maureen Christie, Heather Gibbs, Mavis Burgess, Iain Stewart

When we first started putting leg flags on waders in Victoria, now 22 years ago, each new report of the sighting of one of our birds was greeted with excitement. This turned to amazement as it quickly became apparent that putting coloured plastic flags on birds was exceeding all expectations in terms of increasing the amount of data on wader movements which our banding activities generated (now a factor of 30x the level of "old fashioned" recoveries).

The volume of flag sightings, now several thousand each year, means that we can only disseminate to VWSG members details of the most unusual or scientifically outstanding sightings via the VWSG annual bulletin. It also means that the task of curating these records is enormous. Each record has to be vetted and the key information input to the flag sighting database (if necessary, after clarification through correspondence with the flag sighter). The finder also has to be formally thanked and notified of the origin of the flagged bird.

Some ten years ago this task outgrew the capacity of volunteers to manage and the Federal Government, in effect on behalf of the Australian Bird and Bat Banding Scheme, decided to financially support the activity through an annual grant to the AWSG. Unfortunately this financial support ceased two years ago, and since funds ran out "processing" of incoming flag sightings – undertaken by Heather Gibbs on behalf of AWSG/VWSG for the last 7 years – has been carried out at a reduced level with more limited funding, mostly provided by the AWSG. There is now a large backlog of incoming sightings (over 3500) waiting to be dealt with. Also we have not been proactive in seeking transmission of batches of sightings collected by various other countries in the flyway. Thus the flag sighting data included in this report is no longer totally comprehensive and up to date.

It is hoped that improved interim measures can be developed to enable this backlog to be dealt with and to get the flag sighting processing up to date again during the next year. Longer term (from July 2013) it is hoped that a major new project can be developed and funded which will support this vital leg flag database processing operation and the associated database development.

The tables below summarize the flag sightings processed into the AWSG Leg-Flag Database during the past year. Some individual highlights are given in the text below the main tables.

Victoria

All sightings of Victorian-flagged waders processed into the AWSG leg-flag database during the year to 17/08/2012 -- by species and country of sighting**.**

Species	Australia	China (mainland)	Hong Kong (China)	Indonesia	Japan	New Zealand	Russia	South Korea	Taiwan (China)	USA	Total Overseas
Bar-tailed Godwit	73	377			33	209		152		1	**772**
Red Knot	65	479			1	204	2				**686**
Red-necked Stint	20	13	13	2	7		3	1			**39**
Curlew Sandpiper	33	27	8		2				2		**39**
Sanderling		6			12						**18**
Eastern Curlew		8			1			1			**10**
Ruddy Turnstone	1	3			1	2		1	1		**8** *
Sharp-tailed Sandpiper	1	8									**8**
Great Knot	13	6									**6**
Whimbrel					2						**2**
Terek Sandpiper		2									**2**
Grey Plover		2									**2**
Total	**206**	**931**	**21**	**2**	**59**	**415**	**5**	**155**	**3**	**1**	**1592**

NB Includes all engraved flags
* Most records from Taiwan not yet included

The main feature of the above table is the large increase in sightings of Vic-flagged Red Knot and Bar-tailed Godwit on the Yellow Sea coasts of China and South Korea. This is the result of the intensive flag-sighting efforts carried out in those areas, particularly by Chris Hassell / Adrian Boyle in the Bohai Bay region, and by Andreas Kim in the estuaries on the west coast of South Korea. Also noteworthy are 10 sightings of Eastern Curlew, mainly deriving from a catch of 30 birds at Inverloch in February 2011. Note also the small number of records of Ruddy Turnstones and the paucity of sightings from Taiwan because reports from there in the past year have not yet been imported into the database. *

Notable individual sightings of Victorian-flagged birds reported during the past year include:

a) a Bar-tailed Godwit in June 2011 breeding on the north coast of Alaska at 70deg N 154deg WEST. This is close to the border with Canada and over 13,000 km from Vic. It is one of the furthest movements ever of a wader from Victoria.

b) A Whimbrel seen on northward migration in Japan in late April and again in early May. Very few Whimbrels have been caught and flagged in Victoria.

c) Eastern Curlew sightings in Japan, South Korea and China. It is interesting that all 3 geolocators retrieved from Eastern Curlew showed that the birds had made their major stopover on both northward and southward migration in the Chinese part of the Yellow Sea

d) A Terek Sandpiper was seen (twice) in mid-Aug. on southward migration near Shanghai in China. Very few Terek Sandpipers have been banded / flagged in Victoria, especially in recent years.

e) A Red-necked Stint was seen, twice on successive days, on northward migration through Sakhalin Island, East Siberia, in late May. Much more unusual was one on the shores of Lake Baikal in central Siberia much further to the west (52deg N 106deg E) in late July. This is nearly 11,000 km from Victoria.

f) Few Grey Plover are flagged by VWSG but each year we seem to receive a small number of sightings. One was seen at the north end of the Yellow Sea in early May and the other in Japan in mid-May 2011.

South Australia

All sightings of South Australian-flagged waders processed into the AWSG leg-flag database during the year to 17/08/2012 -- by species and country of sighting.

Species	Australia	China (mainland)	Hong Kong (China)	Japan	New Zealand	South Korea	Total Overseas
Sanderling	5	37	1	46		1	85
Red-necked Stint	20	13	13	2	7		35
Bar-tailed Godwit		7			12		19
Red-necked Stint	8	6	2	2			10
Ruddy Turnstone	18	4		2		1	7
Curlew Sandpiper	8	3	3				6
Red Knot					3		3
Pacific Golden Plover				1			1
Double-banded Plover	1				1		1
Total	60	70	19	53	23	2	167

N

*

B Includes all engraved flags

* Records from Taiwan not yet included

The highlight of the above table is the large number of Sanderling sighted on migration through Japan and China. On a much smaller scale, the 19 Bar-tailed Godwit sightings are our ongoing annual dividend from just a handful of juvenile birds flagged in South Australia almost 10 years ago. The total number of sightings that have now accumulated from just 11 birds is almost 200. The largest number is in NZ, to which the birds moved soon after they had been flagged. But in recent years there have been regular reports of these birds on migration through Asia.

Another notable record in the past year was a Golden Plover seen in southern Japan on southward migration in late August. This is only the third overseas report of a Golden Plover marked by the VWSG, and the first from South Australia.

The above table does not include any sightings this year from Russia. In most recent years quite a few Sanderling and Red-necked Stint have been reported on both northward and southward migration through Sakhalin.

Tasmania

All sightings of Tasmanian-flagged waders processed into the AWSG leg-flag database during the year to 17/08/2012 -- by species and country of sighting.

Species	Australia	China (mainland)	Japan	Taiwan (China)	Total Overseas
Ruddy Turnstone	9	6	5 *	1	**12**
Red-necked Stint	4				
Total	**13**	**6**	**5**	**1**	**12**

*

NB Includes all engraved flags

* Most records from Taiwan not yet included

Almost all the birds banded in Tasmania each year by the VWSG are Ruddy Turnstones, with just a handful of Red-necked Stints banded in some years. Overseas sightings of Ruddy Turnstones occur mainly in Taiwan and mainland China, but there were five in Japan in the past year. Most of the Taiwan records have not yet been processed.

Sightings of Waders Leg flagged elsewhere and then seen in Victoria, South Australia or King Island, Tasmania

Clive Minton, Roz Jessop, Maureen Christie and Heather Gibbs

As usual, a number of sightings of birds flagged elsewhere were reported in the VWSG's study areas in Victoria / South Australia / Tasmania during the year. Nine of these birds had been flagged overseas – six in China, one in Russia, one in Japan and one in New Zealand. There were also 43 sightings of waders flagged elsewhere in Australia.

A little more detail is provided in the tables and text below.

Victoria

Species	Australia	China (mainland)	Russia	Total Overseas
Red Knot	1			
Red-necked Stint	11	1	1	**2**
Curlew Sandpiper	6	2		**2**
Banded Stilt	1			
Double-banded Plover	1			
Total	**20**	**3**	**1**	**4**

The most interesting sighting was the Red-necked Stint banded on Sakhalin Island, Eastern Siberia, Russia which was seen by Don Redman at Lake Victoria / Freshwater Lake complex on 25/03/2012. Sakhalin appears to be an important stopover area for Red-necked Stine on both north and south migration.

South Australia

Species	Australia	China (mainland)	Japan	Total Overseas
Red-necked Stint	11	1	1	**2**
Curlew Sandpiper	6	2		**2**
Red Knot	1			**0**
Total	**17**	**3**	**1**	**4**

It is interesting that Red-necked Stint and Curlew Sandpiper form the majority of the birds in the above table even though Ruddy Turnstone and Sanderling are the two species which VWSG specifically travels to SA to study. The paucity of sightings of these two species flagged elsewhere is a reflection of the fact that the species are often hard to catch and very few are banded each year at other locations in the flyway.

Tasmania

Species	Australia	New Zealand	Total Overseas
Ruddy Turnstone	3	1	**1**
Sanderling	1		**0**
Red-necked Stint	1		**0**
Total	**5**	**1**	**1**

A New Zealand-flagged Ruddy Turnstone has been seen on several occasions on King Island over the last 2-3 years. It is possible these sightings all refer to the same individual which has changed its non-breeding area away from NZ.

Catching adult Crested Terns at the Nobbies – (Photo PINP)

Tern Breeding and Banding Report 2011/12

Clive Minton, Roz Jessop, Susan Taylor, Dave Cropley and Robyn Atkinson

Caspian Tern

Location	Breeding pairs	Chicks banded
Mud Islands	30	22
Corner Inlet	95	51
Totals	**125**	**73**

The 2011/12 breeding season was a record for breeding pairs of Caspian Terns on the Victorian coast. This was mainly because of a major increase to an unprecedented level of 95 breeding pairs (usually 40 – 70) on the west end of Clonmel Island, Corner Inlet. There was also an increase of five pairs above the usual 25 pairs nesting at Mud Islands.

Breeding success was also unusually good at both colonies this year, as reflected in the number of chicks banded (almost all at both colonies). Success was aided by the absence of the usual storm tides in November and December. These often flood eggs, and/or cover them with wind-blown sand, in Corner Inlet.

Engraved leg flags, which enable birds to be individually identified, were also used on Caspian Tern chicks at the two colonies for the first time this year. They have already resulted in a number of autumn/winter sightings on the NSW coast. The quality of the information we derive by using engraved flags will certainly increase in the future.

Crested Tern

Location	Breeding pairs	Chicks banded	Banded adults caught
Mud Islands	1100	350	160
The Nobbies	5000	1145	1233
Corner Inlet	750	612	29
Totals	**6850**	**2107**	**1422**

The number of breeding pairs of Crested Terns on the Victorian south coast continued at a high level with a record 750 pairs in Corner Inlet (usually 200 – 500 pairs). However breeding success was very mixed this year, again as illustrated by the number of chicks banded (very few were, as usual, not banded before fledging).

The Nobbies experienced a disastrous breeding outcome. The Crested Terns started nesting in big numbers, rather earlier than usual, from the very beginning of November and were more synchronized. This was apparently because of excellent food supplies (pilchards etc.) just offshore, with the same favourable phenomenon also benefitting egg laying by the Fairy Penguins on Phillip Island. However in late November this food bonanza evaporated, probably because the fish moved elsewhere. Many newly-hatched Crested Tern chicks died and it is probable that even some of the 1145 banded there on 21 December did not survive.

Mud Islands had moderate breeding success. But the large colony at Corner Inlet also achieved record breeding success, with 612 chicks being banded (with most probably subsequent fledging) from 750 eggs laid. Presumably food supplies in that area remained satisfactory throughout the season, which was also quite extended. The first chicks in Corner Inlet were banded on 18 December and the last ones not until 9 February.

For the first time for several years significant numbers of banded adult Crested Terns at The Nobbies and Corner Inlet colonies were recaptured - as well as, as usual, at Mud Islands. There was at least one bird aged 24 at all three colonies! The retrap data is currently being analysed and is expected to show that The Nobbies colony is now largely self-sufficient for recruiting new breeding adults (as the other two colonies are) whereas in its early days it was dependent on excess birds from the Mud Islands colony.

Fairy Terns

It was a very poor year for breeding Fairy Terns in the section of the Victorian coast (Corner Inlet to Port Phillip Bay) monitored annually by the VWSG.

The colony which has bred for the last two years at Andersons Inlet, Inverloch, was not present because winter wave action had removed the sandbank on which the birds had bred previously. No nesting Fairy Terns were found in Port Phillip Bay or in Western Port (although a few may have tried at Rams Island or on Tortoise Head on French Island). In Corner Inlet no nests were seen although a large flock (100) of Fairy Terns was present near the east end of Dream Island in late December. One wonders why Fairy Terns had such a poor year when Caspian and Crested Terns had such high breeding populations, with good breeding outcomes at all locations except The Nobbies.

Nobbies Tern Colony 2011 – Photo PINP

Tern Recovery Report 2011/12

Clive Minton and Roz Jessop

Caspian Tern

Band No.	Age	Date banded	Location banded	Date recovered	Location recovered	Method of recovery	Km. moved
091-25169	Chick	26/1/93	Corner Inlet	10/4/12	North Lakes, QLD	Alive	1398km NNE

This Caspian Tern was still travelling to its south-east Queensland non-breeding area in its 20th year.

Crested Tern

Banded at The Nobbies, Phillip Island

Band No.	Date banded	Date recovered	Location recovered	Method of recovery	Km. moved
074-05433	21/12/10	14/7/11	Wonboyn Lake, NSW	Found dead	443 km ENE
074-05753	"	16/11/11	Bakers Beach, Tas	"	316km SSE
074-03633	"	12/1/12	Stockton, NSW	Alive	868km NE
074-15980	21/12/11	11/4/12	Sydney Airport, NSW	Died	744km NE
074-15588	"	1/7/12	Rules Beach, QLD	Alive	1690km NNE

Only interstate movements are included in the table above. All refer to birds in their first or second year and all but two have made the usual movement to the northern New South Wales coast. It is exceptional for a Crested Tern from Victorian colonies to travel as far north as Queensland. The movement of 1690km is close to the record for this species. Movements into Tasmania are also not common.

Banded at Clonmel Island, Corner Inlet

074-26402	9/2/12	7/5/12	Inverloch	Found dead	97km W

A westerly movement from the Victorian breeding colonies is unusual.

Banded at Mud Islands, Port Phillip Bay

072-27149	19/12/92	23/3/12	Nelson	Found dead	329km W

This is an unusual westerly movement and particularly surprising because it relates to a 19½ year-old bird.

Common Tern

Band No.	Age	Date banded	Location banded	Date recovered	Location recovered	Km. moved
052-23820	Adult	17/3/03	Gippsland Lakes	23/9/11	Susumanskiy, RUSSIA (62°N 148°E)	11172km N

This is I think our third report of a Common Tern on its breeding grounds in Siberia. It is the furthest north (62 deg.) and a total of 11,172 km from the Gippsland Lakes.

Little Tern

Band No.	Age	Date banded	Location banded	Date recovered	Location recovered	Km. moved
052-00588	Adult	13/3/99	Gippsland Lakes	10/6/11	Wataoi, Miyagi, JAPAN	8471km N
042-29706	Chick	7/1/07	Port MacDonnell	5/3/07 28/12/10 14/10/11	Port MacDonnell Port MacDonnell South Stradbroke Island, QLD.	-- -- 1641km NE
042-00434	Adult	13/3/99	Gippsland Lakes	14/10/11	South Stradbroke Island, QLD	1251km NNE
041-98924	Chick	10/12/98	Lakes Entrance	25/1/99	Gippsland Lakes	
				13/3/99	"	
				3/12/99	Ballina, NSW	1128km NNE
				3/11/01	"	"
				1/11/09	Bundjalung NP	1086km NNE
				25/9/10	South Stradbroke Island, QLD.	1238km NNE
				14/10/11	"	"

A wonderful collection of recoveries, emanating from the coloured leg flag combinations which identify each bird individually. The bird found breeding in Japan was a minimum of 14½ years old. The other three birds were all seen at South Stradbroke Island, Queensland, in late September/early October. But all three had somewhat different origins. One was very probably another Northern Hemisphere-breeding bird on its way southward again to the Gippsland Lakes. A second was a bird bred at Lakes Entrance in 1998 and was still on its way back southwards from its wintering grounds somewhere on the northern half of the east coast of Australia. It has an interesting sightings history mostly relating to other journeys down the east coast of Australia in previous years. It is now 13 years old. The remaining bird was a chick banded by Maureen Christie and her team near Port MacDonnell in January 2007. It was one of only a handful of Little Terns which breed in South Australia each year. It too had also gone to Queensland for its winter holidays.

Fairy Tern

Band No.	Age	Date banded	Location banded	Date recovered	Location recovered	Km. moved
042-00440	Juv	19/3/99	Gippsland Lakes	19/1/02	Lake Conjola, NSW	383km NE
				9/1/04	Shoalhaven Heads	--
				20/12/08	Lake Conjola	--
				29/12/10	Lake Conjola	--
043-01924	Adult	19/2/10	West Cattle Is., Coorong, SA	4/7/11	Werribee SF	510km ESE
042-29738	Chick	24/2/09	Beachport, SA	13/10/11	Southend, SA	18km SSE

A nice collection of Fairy Tern flag recoveries, with some unusually long movements and one particularly old bird. The latter is now a regular breeder at colonies on the coast of southern New South Wales, sometimes being partnered by a Little Tern. It is now 12 years old. The Werribee sighting of a bird from The Coorong is almost a mirror image of the Inverloch bird which went **to** The Coorong. The South Australian bird is the first recovery from the chicks banded by Maureen Christie and her team near Beachport. Unlike the other reports this bird was dead (road casualty).

Sightings of Victorian-flagged Terns 2011/12

Clive Minton, Roz Jessop, Heather Gibbs and Susan Taylor

Caspian Tern

Banded at Clonmel Island, Corner Inlet

Date seen	No.of birds	Location seen	Observer	Km. Moved
2/4/11	1	Mathieson Homestead, near Hervey Bay, QLD	John Knight	1587 NE
5/6/11	1	Fisherman's Island, Moreton Bay, QLD	Andy Jensen	1391 NE
18/7/11	1	Thooloora Island, QLD	Jill Dening	1428 NE
1/11/11	1	Brisbane, QLD	Chris Martinez	1373 NE
24/3/12 27/3/12	1	Woy Woy, Blackwall Bay, NSW	Wendy Gillespie	706 NE
6/4/12	1	Toorbul, near Bribie Island, QLD	Dez Wells	1420 NE
8/4/12	2	Woy Woy, Blackwall Bay, NSW	Wendy Gillespie	706 NE
22/4/12	1	Shoalhaven Heads, NSW	Martin &Penny Potter	549 NE
30/4/12	1	Toorbul, near Bribie Island, QLD	Sarah Beavis	1420 NE
5/5/12	1	Manly Harbour, QLD	Sandra Harding	1381 NE

Autumn/winter destinations in northern New South Wales and south-east Queensland are as usual the main feature of sightings of flagged Caspian Terns from the two Victorian breeding colonies.

Banded at Mud Islands

3/4/12	1	Stockton Sandspit, Hunter Estuary, near Newcastle, NSW	Neville McNaughton HBOC	874 NE

Common Tern

Banded in the Gippsland Lakes

12/3/12	1	Wooyung Beach, NSW	Tim Holmes	1191 NE
12/4/12	1	Flat Rock, near Ballina, NSW	Steven McBride	1154 NE

Even though we have banded and flagged few Common Terns in the Gippsland Lakes since the 1990s we continue to receive reports each year of flagged birds from the east coast of Australia. These are all migrants from the Northern Hemisphere.

Little Tern

Banded in the Gippsland Lakes

7/11/10	1	Blacks Beach spit, Mackay, QLD	Glen Pacey and Peter Rothisberg	1887 N
25/11/12	2	Mogareeka, near Tathra, NSW	Steve Burrows	245 NE

These birds were most likely to have been Northern Hemisphere visitors returning to their non-breeding areas in eastern Victoria.

Fairy Tern

Banded at Inverloch

5/1/12	1	Teal Island, The Coorong, SA	Lyn Pedler, Fiona Paton and David Paton	621 NW

This movement of a chick banded and flagged in early 2011 at the colony at Inverloch is unusually long for this species. However see also other long movements recorded in the past year in the "Tern Recoveries" section.

Whiskered Tern

3/3/12	1	Great Northern Highway, south of Roebuck Plains, WA	Simon Buckell	3111 NW

This is a record movement for an Australian-banded or flagged Whiskered Tern. The observer saw the orange flag quite clearly as he scanned a flock of Whiskered Terns temporarily roosting on the road near Broome. Since large numbers of Whiskered Terns from Asia visit Australia in the non-breeding season it is possible that this bird had changed its non-breeding area from Victoria to north-west Australia.

Barry Beach terns and Double-banded Plovers

Friends of Shorebirds SE

South Australian Team Report

August 2011 – July 2012

Maureen Christie

Once again we have had an extremely busy year, yet again having taken on several special projects as well as our normal workload of catching, counting and protecting breeding waders and terns.

Engraved Leg Flags and Geo-Locators; Banding and Flagging

I was recently asked how many Ruddy Turnstone had been banded and flagged in SA. To establish this figure, I needed to look at all of the data sheets that I had (unfortunately not a compete set and so further study may mean some of these figures are amended).

Banding 4.2.1995 to 31.7.2012	
Total new bands	2584
Retraps	950
Total caught	**3534**
Total flagged	
SA -/O (4.2.1995 to 19.1.1998)	606
O/Y 2.4.1999 to 2.11.2004)	869
ELF New	1088
Subtotal	2563
banded only	21
Total new bands	**2584**
Retraps	950
Total caught	**3534**

ELF 22.11.2004 to 31.7.2012	
New	1088
Placed on retrap with no flag	12
Placed on retrap with -/O	35
Placed on retrap with O/Y	155
Total new ELF	**1290**
new ELF	1290
replaced ELF	193
Total ELF used	**1483**

To date 1088 flags have been placed on 'new' birds, and 202 on retraps, giving a total number of engraved flags in the field of 1290. Until I had undertaken this review, I had believed that all retraps since 2008 with 2 code flags had had their flags replaced, but no, code CN was put on 22/11/2004 and NOT replaced on 5/3/2010. It underlines the problems of drawing conclusions from resighting data of engraved leg flags. Unfortunately we have not quantified how bad a flag has had to be before it was replaced. And we have not noted other factors that have been involved – sometimes we have not had sufficient engraved flags available to replace all of the dodgy flags, other times there has just been insufficient time to replace all flags that have been suspect. The first time a retrap was recorded as having a 'faded code' was on 7/3/2005 and this was a flag put on 11/11/2004 – just four months later! Compare this to CN, which was put on 22/11/2004 and not replaced on 5/3/2010! Some of the removed flags have been kept, so hopefully an evaluation of the wear rate on the different styles of flag will be able to be made.

We only managed one successful turnstone catch this year. However, 82 turnstone, including 17 retraps, caught at Nene Valley in August was a worthwhile contribution to the data base. The

retraps were all originally banded as juveniles in the preceding summer. The majority of these had been caught at Danger Point confirming that juveniles move sites during winter.

No more geo-locators were put on turnstone this year. One was retrieved – at Danger Point on 9/11/2011. Interestingly it was first seen there on 27/9/2011. 44 were put on Sanderling at Pethers Rocks, Canunda National Park. One was retrieved.

We continue to manage to pay our way in this tri-state project – this year we received $4,840 from the South East Cooperative Coastal Conservation Initiative (funded through Caring for Our Country) for 20 geo-locators bringing our total contribution from various sources to $11,240.

In November Mike Weston and Steve Johnson conducted a 2 day workshop to teach us how to use loop mats to catch Hooded Plover. There was a half day presentation to DENR staff and our members and the balance of the time was spent in the field. We managed to colour band 5 individuals. Mike and Steve managed to make the procedure seem simple. To date, despite several attempts, we have not been successful in catching.

Counting

Our President, Jeff Campbell is count organiser. Efforts to try and gauge the effect of predation control measures being undertaken as part of a Caring for Country Grant have seen us undertake

more counting than usual. Hooded Plover counts were completed in November and May. The usual Population Monitoring counts, 'extra' sections of the coast along with counts of coastal lakes were done. We also participated in the annual AWSG Coorong count.

The special project on Lake George, commenced in July 2009, continues. Despite not managing to get out every month, data continues to accumulate.

In August we completed the last of a series of 3 waterbird surveys at The Bool Ramsar Site for the Wetland Management Section of the South East Region of DENR. Although not planned that way, conditions for each survey have been markedly different. On 6/7/8th August 2010 the Bool was dry; on 29/30/31st October there was a small amount of water. Conditions were absolutely superb for the final survey 12/13/14th August, 2011, with The Bool full to overflowing! Although there were virtually no waders present, the water birds made up for their absence. A highlight, for those lucky enough to see them was the Australasian Bittern.

Golo Maurer from Shorebirds 2020 conducted an extremely successful Shorebird Identification Workshop at Robe on 17/9/2011. Adelaide Optical once again gave an interesting talk on how the optics of binoculars and telescopes are structured and sensible tips on how to maintain the equipment. Clare Manning, the Senior Ranger Ecologist with Coorong and Lower Lakes DENR spoke on small terns and the state wide surveys planned for the summer.

Our group was responsible for coordinating the small tern surveys from Kingston through to the mouth of the Glenelg. Surveys were successfully conducted Nov 2011, Feb 2012 and April 2012. Clare has produced a report for her funding provider – Nature Foundation SA. I am happy to provide an email version of the report on request.

The Wonders of Wader Migration was the title of a talk presented by Clive at Port MacDonnell in November. This was very well received, with people attending from Port MacDonnell, Millicent, Mount Gambier and The Coorong. Locals appreciated that, despite a busy day in the field, members of the visiting team also came along.

Predator Control – Threat Abatement Project

Funding for this project has now been secured for a further 5 years. Our main commitment continues to be to monitor how successful the project has been in improving conditions for beach nesting birds. Monitoring methods for the future are under review. In addition to the normal summer and winter counts, we have been doing a count during May to assess the number of fledged juveniles in the population. We have continued with our program of artificial nest monitoring, with 10 nests of 3 quail eggs once again set up in two sites - Rivoli Bay and Canunda. The work load is shared, with DEH responsible for the nests in Canunda and our group responsible for those in the unbaited Rivoli Bay. Nests were monitored during January, 2012, with 2 night vision cameras used in Rivoli Bay. Once again the bulk of the workload, and the data organisation, was handled by Wendy and David Trudgen. They prepared a report on the three years of monitoring for presentation to the Hooded Plover Workshop on Phillip Island in May, 2012. Unfortunately Wendy was ill and unable to attend, so I made the presentation on their behalf. Although fox predation was found to be greater on Rivoli Bay (the unbaited beach), Ravens were also identified as a serious predator.

Two car loads travelled from Mount Gambier to Phillip Island for the workshop organised by Birdlife and Phillip Island Nature Park. It was great to exchange ideas and experiences with teams from NSW, Vic, Fleurieu Peninsula, Yorke Peninsula & Eyre Peninsula. The special presentation on Phillip Island Nature Parks' predator eradication program was especially appreciated. The success of the program was visible to all - with ground nesting birds in large numbers. Thank you to Grainne and Birdlife and Roz and Phillip Island Nature Parks. Thanks also go to Ross

Anderson, Barry Schriever and the Department of Environment, Water and Natural Resources DEWNR.

Dog's Breakfasts

This has proved a very popular project with Council by-law officers, vets and everyone involved considering it worthwhile. We have reduced our program to four locations - Kingston, Robe, Beachport, and Port MacDonnell. This year we had dog leads made with our logo and *I'm a wet sand walker and I don't chase chicks.* They proved very popular! A grant received for protective clothing has been used to purchase jackets with our logo specifically for use at Dogs Breakfasts and other public relations activities.

Breeding Waders and Terns

Patience was rewarded at last, and this year Glen Jackway, Senior Ranger with DEWNR, managed to safely land us on Penguin Island. A total of 92 chicks were banded. One of these was recovered on a beach at Anglesea on 16/5/2012.

As usual, a great deal of effort was put into monitoring and protecting Hooded Plover and Oystercatcher nests, with Jeff Campbell co-ordinating the protection of all beach nesting waders/terns. As usual, our first Hooded Plover nest of the season was found in Canunda in early September.

This year we seem to have had more disappointments than usual – we lost 2 Hooded Plover nests to hoon drivers on Long Beach, Robe. One of a pair of Little Tern nesting at Port MacDonnell was predated. And then, on Saturday 7th January there was a huge tide all around our coast. We lost Fairy & Little Tern and Red-capped Plover nests at Danger Point. Hooded Plover nests were lost at Kingston and Nene Valley. A half grown Pied Oystercatcher chick at Cape Banks disappeared, presumed drowned. Fairy Terns nesting at the Obelisk at Robe were subjected to considerable human disturbance but it is hoped that 1 chick may have fledged. Despite all of this gloom there have been several fledged Pied and Sooty Oystercatchers and Hooded Plovers.

Children's Books

At the last VWSG AGM Heather Gibbs had *Terry – the Adventures of a Terek Sandpiper* available. I approached FoSSE members for $2,000 bridging finance so that we could also make *E3 Call Home* available. What started as a modest project has now grown, and there are four titles available.

Rusty Loses His Loop by J& M Wright-Simon Illustrated by Robin Green
The Best Beak in Boonaroo Bay Narelle Oliver.

E3 Call Home Janet Hunt
Terry – The Adventures of a Terek Sandpiper. Anne Hamilton & Sandra Temple;
Note that Terry is now available through kindle as an ebook.

Banded Stilt

As a group, we continue to be deeply involved with recording Banded Stilt activity in the Coorong, and tracking them as they move around the continent. Once again we have had the thrill of being involved with a breeding event – see extract from Newsletter 88 elsewhere in the Bulletin.

Bird Hide and Information Shelters

This has proved to be a challenging project and still very much a work in progress. I will leave reporting on it until next year, when, hopefully, it will be complete!

General

All SA and King Island data is entered by David and Wendy Trudgen. David is also responsible for maintaining the VWSG Oystercatcher Database. Flag making is organised by Jeff and Sarah Campbell, in collaboration with Malcolm Brown. Newsletters continue to be issued from time to time.

The group continues to provide input into various forums, with both Jeff Campbell and myself representatives on various committees. Press reports and radio interviews are conducted as the opportunity arises. We continue to be involved in more and more public relations activities. Jeff Campbell acts as our unofficial 'Conservation Officer' and makes comments on Draft Plans and the like. Once again we were involved with Threatened Species Day and manned a stall in collaboration with Birds Australia at the Naracoorte Caves. Display material has also been made available for various presentations at the Mount Gambier library. And so the list goes on…..

A very successful AGM and working bee was held at the Campbell family home in Mt Gambier on 22nd January.

Thank you to the members of the group who have worked hard to produce these results. Thank you too, to the members of both the Regional and District Offices of the Department of Environment, Water and Natural Resources who have provided encouragement and practical help.

Sanderling banding at Canunda NP – (Photo Maureen Christie)

SOUTH AUSTRALIAN TEAM CATCHES 01/08/2011 to 31.07.2012.

DATE	PLACE	Sanderling	Ruddy Turnstone	Red-necked Stint	Curlew Sandpiper	Sharp-tailed sandpiper	Banded Stilt	Other		TOTALS
02.08.2011	Nene Valley									*
09.08.2011	Nene Valley		82	22				8	Double Banded Plover	112
06.11.2011	Piccaninnie Ponds							1	Pied Oystercatcher**	1
10.11.2011	Canunda							1	Pied Oystercatcher**	1
21.11.2011	B. Caves area							2	Hooded Plover	2
22.11.2011	Nora Creina							1	Hooded Plover	1
22.11.2011	Beachport area							2	Hooded Plover	2
29.11.2011	Piccaninnie Ponds							2	Pied Oystercatcher**	2
06.01.2012	Gerloff Bay							1	Pied Oystercatcher**	1
15.01.2012	Beachport - Rivolli Bay							1	Pied Oystercatcher**	1
24.01.2012	Beachport - Penguin Is							92	Crested Tern	92
17.03.2012 +	Lake Eyre South						2			2
24/25.3.2012 +	Lake Eyre South						10			10
08.04.2012	Riddoch Bay									*
	SA this year		82	22	0	0	12	111		227
B/F SA team	1.12.00 – 31.7.2011	26	461	402	18	107	720	312		2046
	SA TEAM TO DATE	**26**	**543**	**424**	**18**	**107**	**732**	**423**		**2273**
Eyre Peninsula										
14.11.2011	Yanerbie		3	41						44
15.11.2011	Yanerbie	2	30	35						67
16.11.2011	Yanerbie	103		4				1	Red-capped Plover	108
	Totals Eyre Peninsula	105	33	80	0	0	0	1		219
special geo trips										0
08.11.2011	Stony Point		14	84	13	75		6	Whiskered Tern	192
09.11.2011	Danger Point		19	6		1		1	Pied Oystercatcher	27
10.11.2011	Pethers, Canunda	227		8						235
11.11.2011	Pethers, Canunda	81		30				1	Caspian Tern	112
	geo trips this year	308	33	128	13	76	0	8		566
B/F geo trips	23.4.2009 - 31.7.2011		159	24						183
	Geo trips to date	308	192	152	13	76	0	8		749
GRAND TOTALS TO DATE		439	768	656	31	183	732	432		3241

* net set, no catch made. ** chicks/'runners. + Reece Pedler's PhD project

SOUTH AUSTRALIAN TEAM CATCHES - Month Waders Caught in 01/08/2011 TO 31.07.2012

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTALS
Ruddy Turnstone	5		1	201	38	16	46	61	77	1	97		543
Red Knot				1		12							13
Sanderling		17	2	2				5					26
Red-necked Stint		34	34	95	4	20	49	89	32	43	1	23	424
Sharp-tailed Sandpiper									6	101			107
Curlew Sandpiper						2	7	6		3			18
Pied Oystercatcher	8			1	1						6	10	26
Sooty Oystercatcher			2	3	2						1		8
Banded Stilt	185	149	12	332		54							732
Red-capped Plover	3	4	1	4				5		1		1	19
Double-banded Plover			4	6		4		10					24
Black-fronted Dotterel			3										3
Hooded Plover		2		1							5	3	11
Little Tern	16												16
Fairy Tern		104											104
Crested Tern	199												199
TOTALS	416	310	59	646	45	108	102	176	115	149	110	37	2273

Excludes special geo expeditions by visiting Vic teams and Eyre Peninsula catches

REPRINT OF: Shorebirds SE - NEWSLETTER No 88,

July 2012 – Banded Stilt

Maureen Christie

Stop Press – Banded Stilt A7 is at Cantara – a saline ephemeral marsh in the southern end of the Coorong National Park. Tomorrow the Dollies will join members from Kingston and the Coorong in a concentrated search. Hopes are high that we will find and photograph A7, but, at the very least, we should be able to make detailed observations on the flock that is there, and take samples of the food.

And who, may you ask, is Banded Stilt A7?

This latest episode of the Banded Stilt story starts in March .....we received news of widespread, extensive rainfall whilst we were at Anna Plains Station on the annual AWSG NWWA wader expedition. An email was immediately sent to Iain – any water anywhere that might spark a breeding event????? Well, there was water flowing into Lake Eyre South and Lake Torrens, so hopes were high as Reece Pedler, who has just commenced a PhD on Banded Stilt, headed home to Roxby Downs a week before the expedition finished. By the time I reached Roxby on 15th March, Reece, together with Ben Parkhurst had already found a breeding colony on a small island in Lake Eyre South, and another at Lake Torrens. The Lake Eyre South colony was on a tiny island/mound spring. Reece had warned me that the trek to the island was arduous, he had not exaggerated. When only a third of the way to the island, I realised that I did not have enough oomph to make it there, and back. I wanted to pull out, but no push, pull, shove, they managed to get me there. And I was so grateful ..... a beautiful calm day, Banded Stilt on nests, clear blue water, with stilts feeding in the shallows. The only concern - Silver Gulls hassling nesting stilt and predating eggs. After dark Reece and Parky managed to capture two adult Banded Stilt which were banded, flagged, and fitted with transmitters. All that was left to do, was to celebrate with port sipped out of specimen jars!

The next morning, just as we were about to leave – a small flock of Banded Lapwing on the beach!

And so, it was back to Roxby to prepare for our trip to the colony at Lake Torrens were it was hoped that we would fit 8 more transmitters. Unfortunately it was a case of 'the best laid plans.....' The colony was deserted! There was no obvious reason why. There was no sign of significant egg predation. Most nests had only 1 egg. We decided to collect all of the eggs that we could, and return to Roxby. Eggs were carried ashore in hats, muesli bar boxes, and carry bags! We managed to get ashore with very few breakages, but, how to transport all of the eggs safely back to Roxby over a very rough track? Solution – pack them in sand! They arrived back at Roxby with not one crack! So Reece has been able to organise all sorts of tests, with the balance of eggs going to Philippa at the SA Museum.

On their way home from the expedition Jutta and Ande were able to join Reece in Lake Eyre South and help with the last 8 transmitters – including A7. Since then Banded Stilt have moved in all directions – some going ~1700 km W to Canning Stock Route WA and 1400 km SE to Lake Corangamite near Colac Vic!

Hopes were high that the breeding on Lake Eyre South would be successful, despite Clive's gloomy prediction that the presence of even a small number of Silver Gulls spelt doom for any chicks. Roz organised banding permits. Jeff made lots of blue flags so that we could cohort band any chicks. Unfortunately it was no time before Reece was reporting *it is clear that the predation rate is disastrously high* and finally, by the end of April, *despite the huge numbers of*

adults, I only observed 3 stilt chicks.... Amazingly all 3 of these chicks were taken by gulls as I watched.....

Still we didn't give up hope. Banded Stilts at the failed colony were observed mating late in May, and water from Queensland has started to arrive at the northern end of Lake Eyre. However, come early July, the likelihood of any breeding in the immediate future is slim.

So, does all of this work with transmitters make our flags redundant? I don't think so. Sightings of flagged birds come with lots of info – how the bird looks, what size the flock is, etc., etc. Of course, getting our acts together so that we can chase up transmitter birds mean that we have the opportunity of gaining this sort of information for transmitter birds as well.

And, whilst Reece has been getting exciting maps of Banded Stilt moving in all directions, we have been lucky with sightings of flagged Banded Stilt. Roger Standen emailed in with news from Red Lake, Cunyu Station, WA. Visiting a uni mate, he had chanced upon a flock of – hold your breath – approx. 100,000 Banded Stilt. Aware of the importance of such a sighting, he spent a considerable time scanning the flock, searching for flags and making an estimate of the different stages of breeding plumage. He was rewarded. The vast majority of the thousands of stilt that he scanned had full adult plumage. However, one which was nearly all white on front with just a shadow of the band starting to appear, had orange/yellow (triangular) and hence flagged as a chick on Lake Torrens in 2011. He was able to make lots of observations, take food samples, and even get a photo of the flagged bird! Iain Stewart googled us to the site – a string of ephemeral salt lakes near the Canning Stock Route. No wonder we have periods when we are struggling to find all of 'our' stilt!!! From a flock of 100,000, to a flock of 39. On 3rd June Iain Stewart rang from Lake George to say that he had just seen a flock of 39 Banded Stilt. Their plumage ranged from fully coloured bands, partial colour, to no colour. And one of the uncoloured stilt had orange/yellow (triangular) flags on the left leg!

We are still getting sightings of relatively small numbers of Banded Stilt from all over the place. 2000 were seen at the Logan Lagoon Ramsar, Flinders Island, Tasmania. The VWSG flagged 3 juveniles (presumably from Lake Torrens 2011) at Yallock Creek in January, and 1 of these was seen at nearby Stockyard Point on 14th May. On 3rd April we counted approximately 2,600 on Lake George. There have been relatively small numbers at Cantara since May. Jane is seeing small numbers at various sites on Eyre Peninsula. On 3rd July we had 15,000 on Lake Nadzab (near Kingston SE). A beautiful sunny, still day I managed to scan at least 1000 pairs of legs, all to no avail – not one flag to be seen! We will call in there tomorrow to collect food samples, and check them out again!

Banded Stilt – Coorong (Photo M. Christie)

Conservation Report - August 2012

Doris Graham

The Western Port Catchment Committee is growing as a leader of groups concerned with the health and sustainability of Western Port. In its nine years it has grown to be well known for its networking, stimulating interactive activities which focus on topical issues related to Western Port with over 50 contacts , around bi-monthly meetings.

Some of these topics discussed in the last year are:

- Poison weeds;
- Coastal acid soils;
- Port of Hastings Development Authority;
- Draft Management Plans of Port Phillip Bay and Western Port Regional Catchment Strategy;
- Soil- carbon-overview; RMIT
- Dolphin Research Centre introduction of new course “Marine and Coastal Education”
- Melbourne Water- the Healthy Water Ways strategy and Stormwater strategy available.

Boat trip on Western Port 2011

In order to learn more about the water and its immediate environs a 5 hour trip on the “Tidemaster” trip around the north east of Western Port was supported by Melbourne Water. It was a good weather trip and the educators were kept alert answering questions after a 10 minute talk by several “experts”. Jon Fallaw, from the Phillip Island Nature Parks, and I spoke of the waders/shorebirds of the area and John gave a concise account of other animals from Little Penguins to fish fingerlings that use Western Port as home. Was very interesting to see how few of this group of about 40 persons had not been out on the waters around which they live and work.

Proposed Redevelopment of the Lonsdale Golf Course at Point Lonsdale-- Environmental Effects Statement (EES

- This project was first submitted 8 or 9 years ago but was not approved until an EES had been approved by the Planning Permit. Unfortunately I did not hear that the project was again being considered and only had a few days to prepare and submit some aspects that would be detrimental to the waders.
-
- The project proposed a major redevelopment of the golf course to the north and south of the current course extending around the edges of Lake Victoria, also at a later date subdivision of 100 residential lots on land that I understand is owned by the Golf Club. The works include construction of new golf fairways, course maintenance facilities, water storage basins and new course irrigation.
- These changes will disturb waders at all seasons.
- A recognized bird watcher who visits the Lake daily say there are waders there every day maximizing up to 10,000 waders late in the season, prior to the annual migration in late April. The site is well sheltered and can be used 24 hours per day. Two holes of the proposed course extension will directly impact on the area of the old-grit extraction ponds are used for feeding and roosting.
- Further a new Tee-off and a green would be within 15 metres of the shoreline of the Lake. The use of this new area will be a frequent disturbance to the birds.

However I contacted the Geelong Field Naturalists Club Inc. who know the area year-round over many years and had submitted an excellent document.

They concluded that the proposal should not go ahead, ,on the grounds that there will be disturbances to vital roosting and feeding grounds of migratory waders , Hooded Plovers, and orange bellied-parrots., and removal of some Moonah Woodland.

I asked if I could support their document with a brief submission to the Council on behalf the VWSG. This was accepted, and I was also allowed to attend the hearings in Geelong. I found these very interesting and rekindled my enthusiasm for the fun of train travel.

The main points indicating the damage that will be detrimental to the life style.:

- Lake Victoria is non-tidal and part of the Swan Bay Ramsar complex.
- Waders are protected by the EPBC Act and several International Agreements.
- Waders are site faithful and it has been proven that a whole population will disappear when their "site" is destroyed.
- This is an essential wader-feeding site at all times but more so when the high tides in Swan Bay cover feeding areas.
- Their life style is based on breeding in the Arctic, returning to their summer sites in the southern hemisphere, where they rest, recover and refresh and moult and before they begin their flight back to the northern hemisphere.
- This cycle is finely tuned, and if food is scarce or missing their lives are in danger as they will not attain the weight to attain the thousands of kilometres between each.

I attended the Public hearings in front of the Panel when no comments were permitted from the public—very interesting.

I have only just heard (August 2012) that the project has passed with several alterations and conditions. It will be a sad day for the waders if the dangers outlined by opponents of this project damage the site for waders. Thanks to the Geelong Field Naturalists Inc. for allowing me to use your information.

Conservation activities by other VWSG members:-

April Reside from Magnetic Island: As the Scientific advisor in Black-throated Finch Recovery Team, I organize the water-hole counts and comment on documents and am also mentor of PhD student studying their habitats, diets and movements in local Townsville region. Am also member of the "Magnetic Island Nature Care" group mainly removing weeds and restoring bushlands on the island. Also trying to eradicate a small population of Indian Mynas that keep trying to establish on the island. Participate of the N. Queensland Conservation Council and have been involved with the Shorebirds 2020.

For my *Postdoc* I am modelling the impact of climate change on Australian terrestrial vertebrates—including 450 bird species to identify refugia from future climate change for conservation prioritization. All this with the Central Biodiversity and Climate Change and James Cook University. I am also working with Stephen Garnett forecasting the impacts of future climate change on Australian bird fauna. We also get orange-footed scrub fowl (aka dinosaur chickens) , noisy pittas, russet- tailed thrush, barking owl and more fantastic birds in our backyard -- all this in case VWSG members need an incentive to visit!.

Jeff Campbell:

- Marine Parks; shorebirds and tern monitoring, nest protection.
- Friends of Shorebirds, South Australia.
- Frequency as and when required.
- Shorebirds and terns.

Graeme Rowe:
Approximately 10 times per year I staff the Bunurong Environment Centre, Inverloch, which is part of the South Gippsland Conservation Society.

Graham Beal:
Monthly bird banding in Wright Forest, Dandenong Ranges to investigate response of birds to fire control measures, by catching birds in mist nets to determine species and age. Determining dispersal into different parts of the forest after burning or which species use different parts of the forest at different times of the year or different species are attracted to these areas.
As member of Friends of Wright Forest weed control, surveys etc.

Runs weekly Radio show Roundabout, 5 – 7pm on Community radio 3MDR, 97.1fm streaming www.3mdr.com. Talks weekly for many people, individuals and/or representatives of groups on diverse environmental topics.

Stephen Johnson:
I am Bass Coast Regional Hooded Plover Co-ordinator for Inverloch to San Remo-42 kms. Have A class banding licence for Hooded Plover. BirdLife Australia-- member of Beach Nesting Birds Project (Dr Grainne Maguire). Ongoing year round – 6 years to date. Hooded Plover-breeding monitoring, Public Education, Adult and chick banding. Comment: Bad year last season for breeding success, with only seven fledglings along the Bass Coast. High tide surges, foxes, ravens, humans disturbance were main cause of failures. Always looking for more volunteers.

Heather Gibbs:
Volunteering at primary school doing nature walks and bird surveys.

Aiming to get children's books into schools with Maureen Christie, S.A., and Joan Dawes (AWSG). To date there are at least 4 from Aust/NZ plus other give-aways via BirdLife Australia.

Lachlan Manley
Every Oct -April volunteers baby sit breeding Hooded Plovers in their local coastal towns around Victoria. I am with the Bellarine Hoodies Group and when we find nests we carry out the best management plan possible to help them survive. I spent nearly every day speaking to walkers and beach users about the birds needs sometimes 4 hrs a day on busy times. We had 4 main and 4 or so first time helpers during the season. Hoping more people in their local towns would be willing to spend some hours helping the co-ordinators out when needed. Really helps. We had only 2 chicks survive between Pt Lonsdale and Anglesea last year. Not much better on Mornington Peninsula. None would have survived otherwise.

If you want to help in your local area please contact Grainne Macquire (Grainne.Maguire@birdlife.org.au) for local contacts.

Also 2012 in the year of the bi-annual Hooded Plover count contact Renee Mead hoodedplover@birdlife.org.au

This year's count will be November 10th-11th. We encourage the count to occur on these dates so that we can 'simultaneously' cover as much beach as possible and avoid double counting, however, we will accept surveys done within the period of 3rd-18th November. The last count in November 2010 developed a few new initiatives to make the count more efficient and more systematic, namely the development of fixed routes with start and end points. We wish for these to remain the same for this count and for following counts. Maps were developed for each route for participants so that these routes were clear and easy to follow.

BirdLife Tasmania
BirdLife Tasmania is directing most of its effort on Shorebirds and small Terns through working with Councils on their dog plans and State Government on the Coastal Management Policy. Undertaking extensive surveys of beach nesting birds around the State. Also extensive community engagement and education about shorebirds and their needs.

Thank you all for these contributions. Doris

Waterbirds in East Asian Flyway face extinction – message from BirdLife Australia
A report commissioned by the IUCN warns of the imminent extinctions of migratory shorebirds and collapse of ecological systems in East and South East Asian tidal flats, especially around the Yellow Sea.

The report shows that ecological systems are collapsing, with populations of migratory waterbirds declining rapidly, linked to the disappearance and degradation of migratory staging posts. The report identified six key areas in the Yellow Sea where the crucial threat is coastal land reclamation: between 2000 and 2010, more than 41% of the area of tidal mudflats was reclaimed.

Waterbirds that depend on the Asian intertidal habitats of the East Asian-Australasian Flyway are the world's most threatened migratory birds — their rates of population decline are among the world's highest. At least 24 are approaching extinction: the Spoon-billed Sandpiper, with declines of 26% per year, could be extinct within a decade.

International cooperation and effective environmental safeguards are vital.

We need your help to encourage the Australian Government to support the motion 'Conservation of the East Asian-Australasian Flyway intertidal zone, with particular reference to the Yellow Sea and its threatened birds' at the IUCN World Conservation Congress in Korea in September. Please email the Environment Minister Tony.Burke.MP@environment.gov.au and urge him to ensure the Australian delegation supports BirdLife Australia's motion.

Catching Red-necked Avocet at Yallock Creek – January 2012

Clive Awarded the Eisenmann Medal

Clive Minton has been awarded the 2012 Eisenmann Medal by the Linnean Society of New York in March 2012.

The Eisenmann Medal is given to people who have achieved in Ornithology as evidenced by publications, but who, in addition, have helped and worked with amateurs or students to interest them in Ornithology. This work must be a personal effort and not part of a job. For example, a teacher/professor deals with many students and probably publishes, but would not necessarily qualify for the medal unless they had made an extra personal effort to work on projects with students.

Gene Eisenmann was by profession a lawyer, but retired early to work on birds – he really had two careers, one in the law and one in ornithology, both very successful. You are the first Eisenmann medalist whose career parallels Gene Eisenmann's closely!

Clive accepted an invitation to speak at their annual dinner on 13 March 2012 in New York.

Clive would like to pass on the following thoughts regarding his nomination:

I'm particularly pleased that this award relates to the activities of volunteers/amateurs and especially in organising and involving them in ornithological fieldwork. This is the way I have operated throughout my life and it's only through the enormous effort and dedicated support of huge numbers of people that I've been able to achieve so much over the years.

The VWSG and the AWSG (especially the north-west Australia expeditions) are two long-

standing tangible examples. I think they have consistently been the largest wader banding operations in the world over many years. This award is therefore very much to all who have been involved with me in fieldwork during the last 33 years in Australia, before that for 25 years in the UK, and during the whole period at various other locations around the world.

"The Eisenmann Medal

The award was established in 1983, in memory of Eugene Eisenmann, himself an "amateur" ornithologist. Ornithology is one of the few biological sciences where "amateurs", those not formally trained in biology or without an advanced degree in science, have made significant contributions to the advancement of the field. Gene Eisenmann retired early from his law practice and devoted the rest of his life to the study of birds, particularly Neotropical birds. He became a Research Associate in the Ornithology Department at the American Museum of Natural History, where he served as resident expert and consultant on the birds of Middle America. He published in scientific journals and served as editor of *The Auk*. He had a worldwide reputation in ornithology. Highly esteemed as a scientist, Gene was also known for his willingness to spend countless hours advising students, amateur birders, and really all people who came to him with bird questions.

The Eisenmann medal is given to an individual who has achieved in ornithology (published books and papers) and who has helped amateurs by taking time to help young naturalists/students who express an interest in birds and/or to help broaden an interest an amateur already has in birds. Gene was always willing to help birders in the Linnaean Society when they came to the Museum. As editor of *The Auk* he once received a piece written by a high school student in Canada. The paper needed work. Gene did not reject the piece, but worked with the student through correspondence, and later published the paper in *The Auk*. The student went into ornithology and is a well-known ornithologist in Canada today.

Members of the Awards Committee often are puzzled by the contribution to the amateur part of the stated definition of the Eisenmann Medal. It is important to remember in thinking about contribution to the amateur that this is an individual's contribution. Often professional ornithologists, teachers, writers, artists, in carrying out their work help many individuals, however, these people do not necessarily qualify for the Eisenmann Medal unless as individuals they have helped amateurs, working with them as individuals, advising them and encouraging their interest in birds.

The first Eisenmann Medal was awarded to Ernst Mayr in 1983 at the annual meeting of the Linnaean Society. Between 1983 through 2009 the medal will have been awarded to twenty recipients, and is not necessarily given every year.

Victorian Coastal Awards

Outstanding Individual Achievement Award to Bernie McCarrick

The Outstanding Individual Achievement Award is awarded to an individual who has made a significant personal contribution to improving the coastal and marine environment. The award recognises the efforts of those leaders in our communities, and those professionals working in all manner of organisations that have consistently protected and promoted the interests of our coast.

Outstanding Lifetime Achievement Award WINNER

Bernie McCarrick *(bmccarrick@parks.vic.gov.au) (right) being presented with a memorial glass plaque by the Minister for Environment and Climate Change the Honourable Ryan Smith (left).*

Over three decades Bernie McCarrick has worked tirelessly to protect and improve the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site. His passion and commitment to increasing awareness and understanding of the international significance of these coastal wetlands for migratory shorebirds has been unwavering.

For many years, Bernie worked for Cheetham Salt. It was during this time he became familiar with the wide range of wetland birds, including many that migrate from the northern hemisphere that used the shallow ponds for feeding. His interest led to close associations with organisations such as the Victorian Wader Study Group, various bird observer clubs and researchers, increasing his understanding and knowledge. When the salt works ceased operations, Bernie ensured that the values of the site were maintained, in spite of significant pressure for development, until the area was reserved as a Crown Land Reserve for conservation purposes.

In 1982 whilst Bernie continued working at the site for Melbourne Parks and Waterways, the Cheetham Wetlands were successfully nominated for a listing as a wetland of international importance under the Ramsar Convention. His long association and intimate knowledge of the area was a significant factor in his appointment in 1996 as Park Ranger with the newly formed Parks Victoria in the Point Cook Coastal Park. He is widely recognized as someone who is dedicated to the coast, wildlife and people.

Amazing Results from Geolocators

Clive Minton, Ken Gosbell, Roz Jessop and Maureen Christie

Introduction

Most VWSG members will be well aware that we have been deploying geolocators on waders over the last four years and that some exciting results have ensued. Details have regularly been circulated by email but time constraints have prevented the preparation of a summary for previous VWSG Bulletins. Furthermore, scientific papers emanating from these geolocator studies have all been published in overseas journals, because of the international interest in this cutting edge technology, and therefore most VWSG members will not have seen these.

This article is intended to rectify the situation with a summary of all VWSG's geolocator activities, and the key results derived from them, over the last four years.

Geolocators

A geolocator is an electronic device comprised primarily of a light sensor, a data recording system and a clock – all powered by a small battery. Major changes in light intensity such as at dawn and dusk each day are detected. The timing of these, which is unique for each location on the earth's surface, can be computed to provide the geographical location each day of the bird carrying the geolocator. In effect the geolocator is indirectly acting as a GPS unit.

Geolocators have long (20 years+) been used for tracking birds and other animals. Until recently they weighed upwards of 10g and could therefore only be deployed on large species. The movements of seabirds, such as albatrosses, have been especially studied and this is why the British Antarctic Survey became a world leader in the development of geolocators.

The VWSG has been enthused about using electronic devices to further its studies of migratory waders since it was involved in assisting the Queensland Wader Study Group in the deployment of satellite transmitters on Eastern Curlew in 1998. But it was only when we became aware, in February 2009, that geolocator tracking devices weighing as little as 1g, had been successfully used on two species of 'bush' birds in North America weighing as little as 50g (Sanderling/Curlew Sandpiper size) that we realized that there were now opportunities for making a major advance in our wader migration studies.

The big practical problem of geolocators versus satellite transmitters is that the geolocators have to be retrieved from a bird to download the stored data. In contrast satellite transmitters relay the data back as it is generated and the bird does not need to be recaptured. The much larger batteries needed to do this still make satellite transmitters unsuitable for use on anything smaller than the largest waders. For BAS studies of nesting seabirds it was usually fairly easy to retrieve geolocators as the birds returned to the nest after each off-duty period and were relatively easy to catch there. In contrast recapturing waders carrying geolocators in their non-breeding areas, such as Australia, are a much more difficult proposition. On the other hand with a geolocator costing only about $200, compared with around $7000 for a satellite transmitter unit and its satellite transmission services, one can afford to have a relatively modest rate of geolocator retrieval compared with the almost 100% certainty of generating information from a satellite transmitter.

Attachment methods

The traditional methods of attaching a geolocator to a bird were either by using an elasticated backpack harness system or by attaching it to a metal or plastic band on a bird's leg. In March 2009 we tested dummy geolocators on Ruddy Turnstone attached both by harness and by a leg flag on the bird's tibia. Birds were watched over a period of an hour or more after release into a keeping cage compartment. It was apparent that the harness created some constraint to birds. Furthermore on birds which were carrying large amounts of fat prior to migration the harness

could slip off over the tail of the bird. It is hard to secure a harness to a tennis ball – and this is what pre-migratory Ruddy Turnstone (and many other species of medium/small waders in Australia) is like just prior to their departure on northward migration!

In contrast dummy geolocators attached to a leg flag seemed to be carried by most birds quite satisfactorily after some initial signs of inconvenience whilst getting used to the device. So the leg flag attachment method was adopted and has been used for all geolocators applied so far to waders in Australia (and in many other parts of the world). (See Ruddy Turnstone 9Y with a geolocator, photographed in Taiwan at end of article).

Deployments/retrievals

The attached table shows that 252 geolocators have so far been deployed by the VWSG. These have been used in each year on Turnstone (161 total), for the last two years on Sanderling (48), and on 23 Eastern Curlew in 2011. The geolocators have been put onto Turnstones at four different locations, with the largest number (92) on King Island (Tasmania).

Geolocators deployed/retrieved each year by VWSG/AWSG.

	Ruddy Turnstone		Greater Sand Plover		Sanderling		Eastern Curlew		Red Knot		Great Knot		TOTAL	
YEAR														
	On	**Off**	**On**	**Off**	**On**	**Off**	**On**	**Off**	**On**	**Off**	**On**	**Off**	**On**	**Off**
2009	8	4											8	4
2010	75	33	30	8									105	41
2011	46	12+3*	29	7	24	1	23	3					122	23+3*
2012	32				44				42		7		125	
Total 2009-11	**129**	**52**	**59**	**15**	**24**	**1**	**23**	**3**					**235**	**71**
Retrieved %		*40*		*25*		*4*		*13*						*30*
Total to 2012	*161*	*52*	*59*	*15*	*68*	*1*	*23*	*1*	*42*	*0*	*7*	*0*	*360*	*71*

**Deployed in 2010*

Retrieval rates have varied between species and locations. In the first year we were particularly pleased to retrieve four of the six geolocators which had been put on Ruddy Turnstone at Flinders. Retrievals have been good in each year and at all locations with the highest rate being at Flinders (65%) and the lowest rate being in South Australia (26%). The overall retrieval rate on Turnstones has been 40% if the units put on in King Island in 2012 are omitted from the calculations because these birds have not yet been available for recapture (they are only now returning from their 2012 visit to the Northern Hemisphere).

The retrieval rate on Eastern Curlew (three out of 23) is a little disappointing but not unexpected. This species is difficult to catch because of its wariness and also because it often roosts on flat saltmarshes where cannon-netting is not possible. We hope to retrieve more of these geolocators in future years since Eastern Curlew is a long-lived species. Although the geolocator usually only generates data for one year the information collected remains stored in the logger even when the operating battery goes flat.

The retrieval of only one geolocator from 24 Sanderling is disappointing. Three birds with geolocators were present in a flock of 400 at Canunda National Park when retrieval was attempted. But only one geolocator-carrying bird was recaptured in a total catch of 308. Sanderlings are much less faithful than most other migratory waders to their non-breeding areas. It is probable therefore that quite a number of the other geolocator birds have returned to different locations. With a further 44 individuals added to the pool of geolocator-carrying Sanderling in March 2012 it is hoped that several more can be recaptured in the 2012-13 non-breeding season. It is ironic that so far more (5) have been seen in Asia on migration (Japan, Korea, China and Taiwan) than have been found back at the original marking site in South Australia!

Ruddy Turnstone

Not surprisingly, with the large number given geolocators and a high retrieval rate, considerable information has been generated on Ruddy Turnstone. The most important findings in relation to the migration strategy of Ruddy Turnstone are

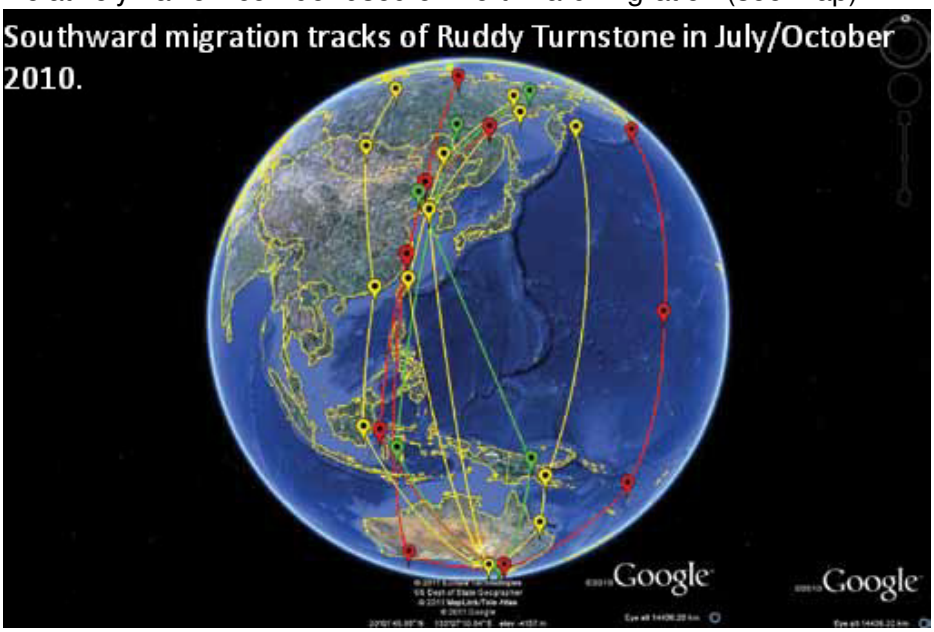
a) Most birds usually fly for around 7500km non-stop over six or seven days when they leave their non-breeding area on northward migration, mostly in the second half of April. Taiwan is the most favoured initial stopover location. (See Map.)

b) After an initial stopover, usually of 1-2 weeks, the behavior of individuals becomes much more varied. Most make at least two more stops before they 'disappear' into the arctic in late May/early June. Almost all individuals visit the Yellow Sea, particularly the west and north sides, for one of these stopovers.

c) When birds enter the period of continuous daylight in the Arctic their location can no longer be detected via the geolocator. The average duration of the northward migration is 38 days, i.e. just under six weeks.

d) Although the exact breeding location of birds in the arctic cannot be detected, the northward tracks in May and the southward tracks which resume again in late July suggest that the Arctic Ocean coastal strip in the Yakutia region is the main destination. Birds appear to spend an average of 57 days on the breeding grounds.

e) Southward migration is spread out over a much wider geographic region than the relatively narrow corridor used on northward migration (see Map). While some



individuals follow a similar route to the northward migration, one bird was as far west as Mongolia and several individuals made long trans-Pacific flights back to Australia. On average birds took 73 days (10½ weeks) for the return migration, nearly twice as long as the northward migration. Presumably there is less urgency to get back to the non-breeding areas compared with the need to get to the breeding grounds at the optimum time on northward migration.

f) The most extreme example of the more circuitous return migration route used by some individuals was shown by a Ruddy Turnstone from Flinders carrying engraved leg flag 9Y (see Map at end of article). After breeding in Siberia this bird moved to islands off the south-west coast of Alaska in late July. On its return journey to Flinders in 2010 it stopped off at the Gilbert and Ellis Islands (Kiribati) in the Central Pacific. It did not get back to Flinders until 3 December, whereas most other Turnstones had returned to their non-breeding area during the first half of October.

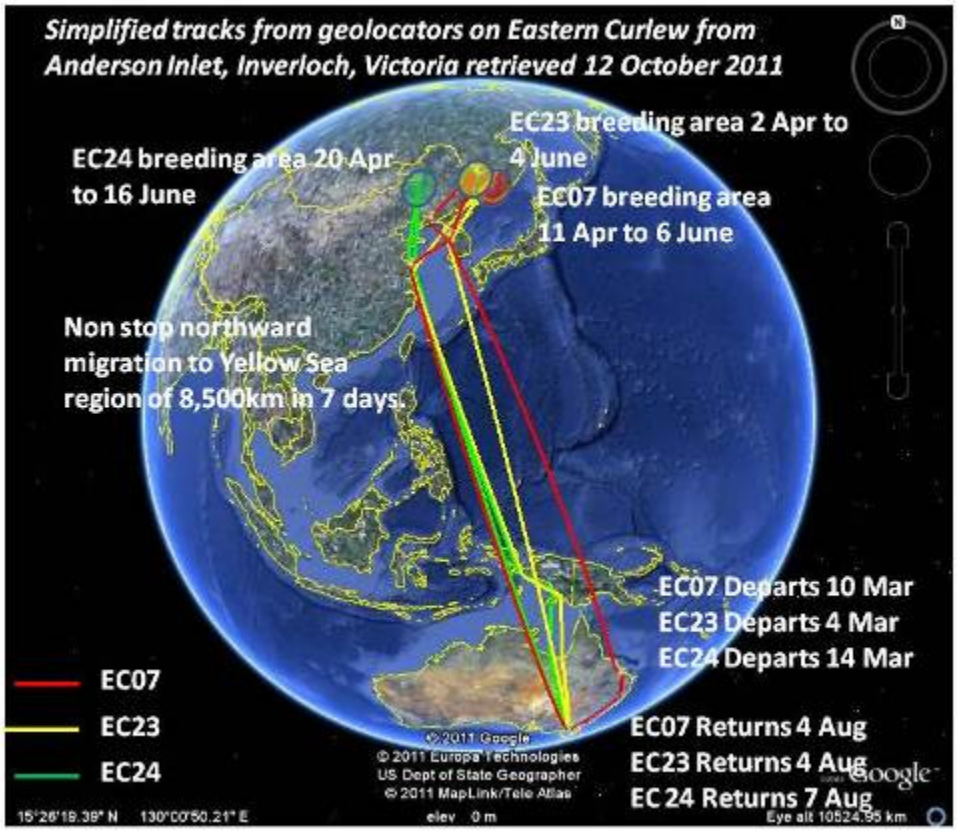
By good fortune this same Turnstone was given another geolocator in 2011. It again made its southward return migration via Alaska and the Central Pacific. This time it used the Marshall Islands and then Vanuatu for migration stops. The distance covered each year by this bird on migration was 27,000km (see Map at end of article). It is not clear why such a wide variation occurs in the southward migration tracks of Ruddy Turnstone. It is difficult to see that there isn't in fact some potential disadvantage of long round-trip flights over the Pacific. Not only may such birds not find a suitable location for a migratory stopover but they seem to be potentially disadvantaged in not arriving back at their non-breeding area (where they have to undergo a time-consuming wing moult) until nearly two months after their compatriots.

g) Over ground migration speeds of Ruddy Turnstone during flights averaged 63km/hr. on northward migration and 40km/hr. on the southward journey.

Eastern Curlew

The three geolocators retrieved from Eastern Curlew all gave excellent migration tracks between Inverloch and their breeding grounds in the Amur River valley in north-east China, and back again. (See Map). The routes were similar to those previously determined from flag-sightings

and recoveries except that southern Japan was not visited and none of the birds nested in the Siberian part of the Amur River wetlands.



The main features of the migration were:

a) All three birds left Inverloch in the first half of March and made a non-stop 7-8 day journey of 8500km to the western shores of the Yellow Sea in China.

b) After remaining there for an average of 32 days they then made the relatively short (1 day) flight to their breeding grounds in the first half of April.

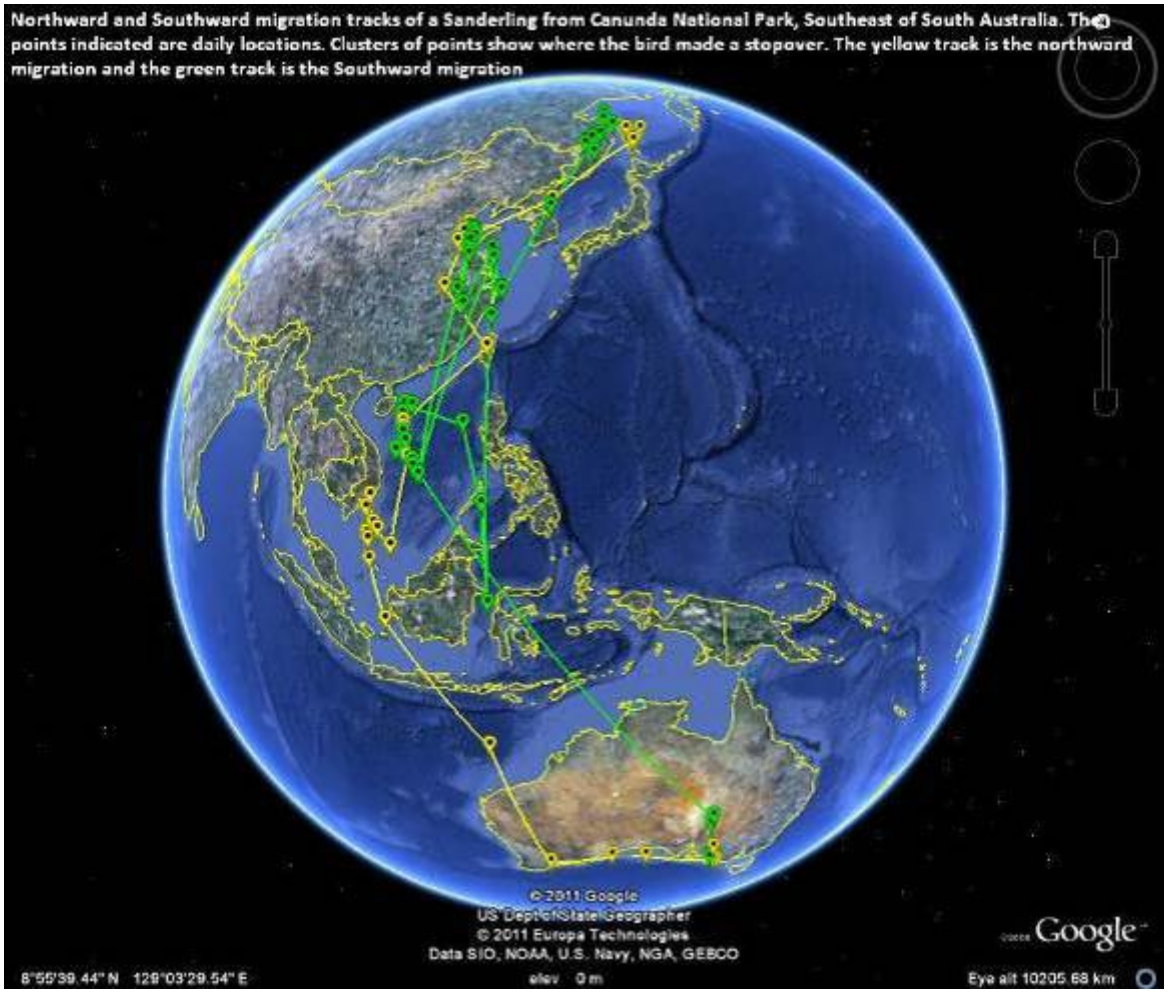
c) All three birds left the breeding grounds in the first half of June and returned to the Yellow Sea where they stopped for an even longer period (average 47 days). Another long non-stop flight to Papua New Guinea/the northern shores of Australia was made in the second half of July. Birds achieved an average over-ground flight speed of 47km/hr., the same speed as achieved on the even longer northward leg to the Yellow Sea.

d) After a one or two day stop two birds then flew directly back to Inverloch, achieving over-ground speeds of 75-80km/hr. Examination of the weather maps suggested that both received assistance from northerly winds. The third bird, after a landfall at Gladstone, made its journey down the east coast of Australia, with several short stops.

e) All arrived back at Inverloch in the first week of August. The total period for the two migrations plus time spent on the breeding grounds was thus almost five months.

Sanderling

Fortunately the one geolocator retrieved from a Sanderling provided a full round-trip migration track. (See Map.) This showed that the bird had made a rather more circuitous migration than the other two species and had made more stopovers (at least five on both the northward and southward journey). Vietnam was used for its initial stopover on northward migration and the area of Sakhalin Island on the east coast of Siberia was used on both northward and southward migrations. The west side of the Yellow Sea (China) was also used on both migrations.

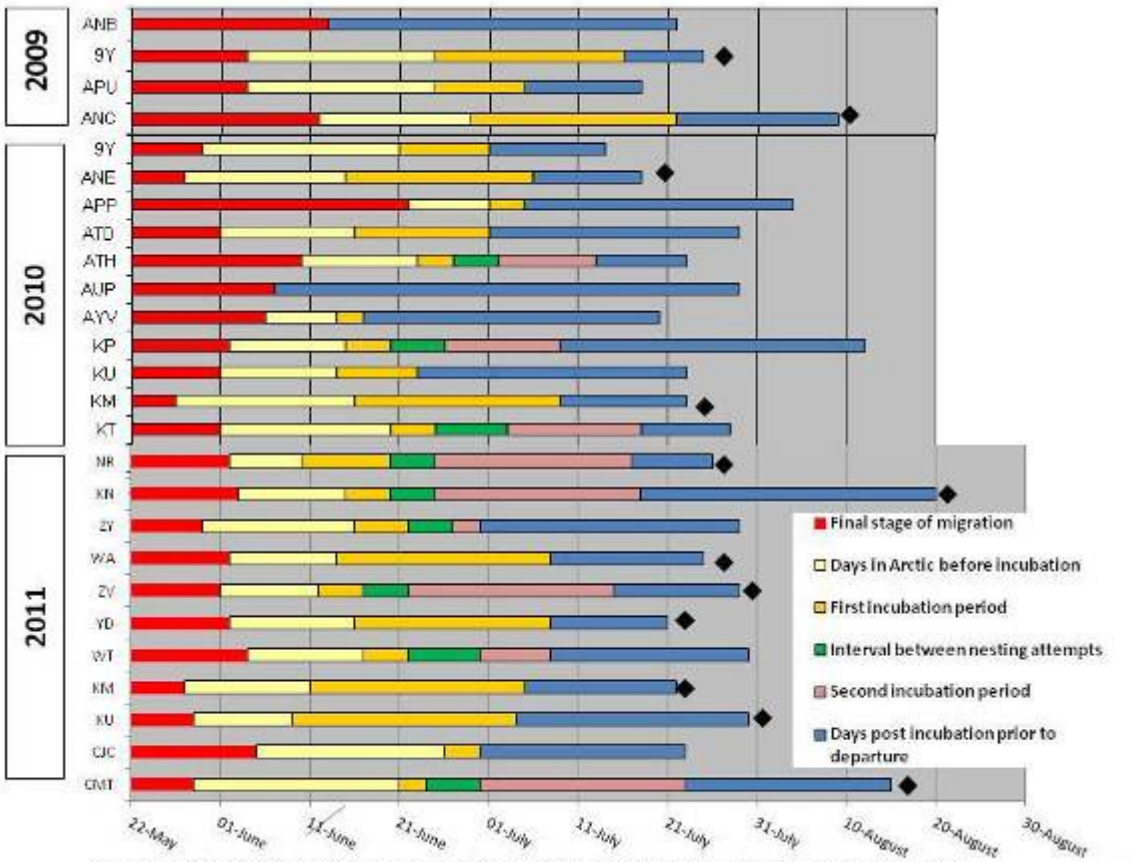


Having first been recorded moving south on 1 August the Sanderling reached its original marking area in Canunda National Park, South Australia, on 2 October. Amazingly it was actually seen there by Maureen Christie and Iain Stewart on 3 October.

Breeding

Geolocators were deployed on waders for the primary purpose of obtaining more detailed information on their migration. However examination of the light level records from the geolocators showed that there were periods when the bird was in the continuous daylight area of the arctic when there were regular light/dark patterns. It became obvious that this 'noise' was caused by the bird sitting down and obscuring the light from the light sensor during egg laying/incubation/chick brooding. Much to our surprise we have now been able to piece together detailed information on the breeding activities of each bird in the arctic from its geolocator records.

We have data from 26 individual Ruddy Turnstones which reached the arctic during the 2009, 2010 or 2011 breeding seasons. (See diagram below.) The average date of arrival on the breeding grounds was 2 June. Twenty-four birds actually nested. The median date for the start of incubation was 16 June.



Activities of 26 individual Ruddy Turnstone on their breeding grounds in the 2010 and 2011 Arctic summer.

Eight birds successfully hatched eggs after an average incubation period of 23 days. Nine of the pairs which initially failed subsequently re-nested. Out of these four were successful in hatching eggs thus giving an overall hatching success of 50%. Amazingly the interval between failure of the first clutch and the start of the second clutch was only five to eight days.
Incubation was shared almost equally between the sexes with shifts of 4 - 8 hours in the first week, increasing to 8 - 13 hours by the third week. Of the birds that hatched eggs all but one had arrived in the arctic by 2 June. Females departed from the breeding grounds earlier than males and failed breeders left before successful birds.

All three Eastern Curlew carrying geolocators nested, but none appeared to have incubated for long enough for eggs to have been successfully hatched. One Eastern Curlew also laid a second clutch, but this failed after only a few days of incubation.

The Sanderling appeared to nest rather later than the other species but appears to have been successful in hatching eggs, with incubation lasting from 3 to 22 July.

It is quite amazing that we've been able to obtain this detailed insight into the breeding activities of waders from geolocators which were primarily deployed for migration studies. A key conservation outcome is the indication from the Turnstone data that birds arriving earliest in the arctic have the greatest chance of nesting successfully. This outcome supports the critical nature of the migratory staging areas used by waders, in particular the importance of them providing sufficient food for the birds to migrate on to their arctic breeding grounds at the earliest possible date. Re-nesting, after the failure of a clutch, had also not been previously shown for Ruddy Turnstone in Siberia. Significantly these repeat layings seemed to have made an important contribution to the overall breeding success.

Publications
Two papers covering VWSG's results from geolocator studies have already been published, a further one has now been accepted for publication, and a fourth one is in the final stages of preparation. Additionally VWSG knowledge has been incorporated into a more general paper on geolocators/waders. Details are given below

- Initial results from light-level geolocator trials on Ruddy Turnstone reveal unexpected migration route. Wader Study Group Bulletin 117 (1) (2010).
- Geolocator studies on Ruddy Turnstones and Greater Sand Plovers in the East Asian/Australasian Flyway reveal widely different migration strategies. Wader Study Group Bulletin 118 (2) (2011).
- Geolocators reveal incubation and re-nesting characteristics of Ruddy Turnstones and Eastern Curlews. Accepted for publication in Wader Study Group Bulletin 119 (2) (2012).
- New insights from geolocators deployed on waders in Australia. In preparation for submission to the Wader Study Group Bulletin for publication in late 2012.
- The use of light level geolocators to study wader movements. Wader Study Group Bulletin 117 (3) (2010). This was a combined UK/Australia/USA/Canada paper.
-

A further paper with a much more detailed analysis of Ruddy Turnstone movements and other data obtainable from geolocators is currently in the early stages of preparation by Marcel Klaassen and his team at Deakin University.

Funding

The cost of geolocators deployed by VWSG in 2009 to 2012 is $23,488. This excludes the cost of the 70 geolocators provided as part of Marcel Klaassen's research programme at Deakin University. Some of the geolocators deployed were test units provided free of charge by manufacturers.

Funding of geolocators purchased by VWSG has been through a range of grants and donations, as detailed below

	$
Wettenhall Foundation	10,000
Kimberley Clark (SA)	2,200
Nature Foundation (SA)	2,000
DENR (SA)	2,200
SA Cooperative Coastal Conservation Initiative (SA)	4,840
Gavin Jackson (memorial)	2,450
Various VWSG members	1,130
	$24,820

Maureen Christie arranged the four contributions from South Australia. All donors are gratefully thanked for their generous support.

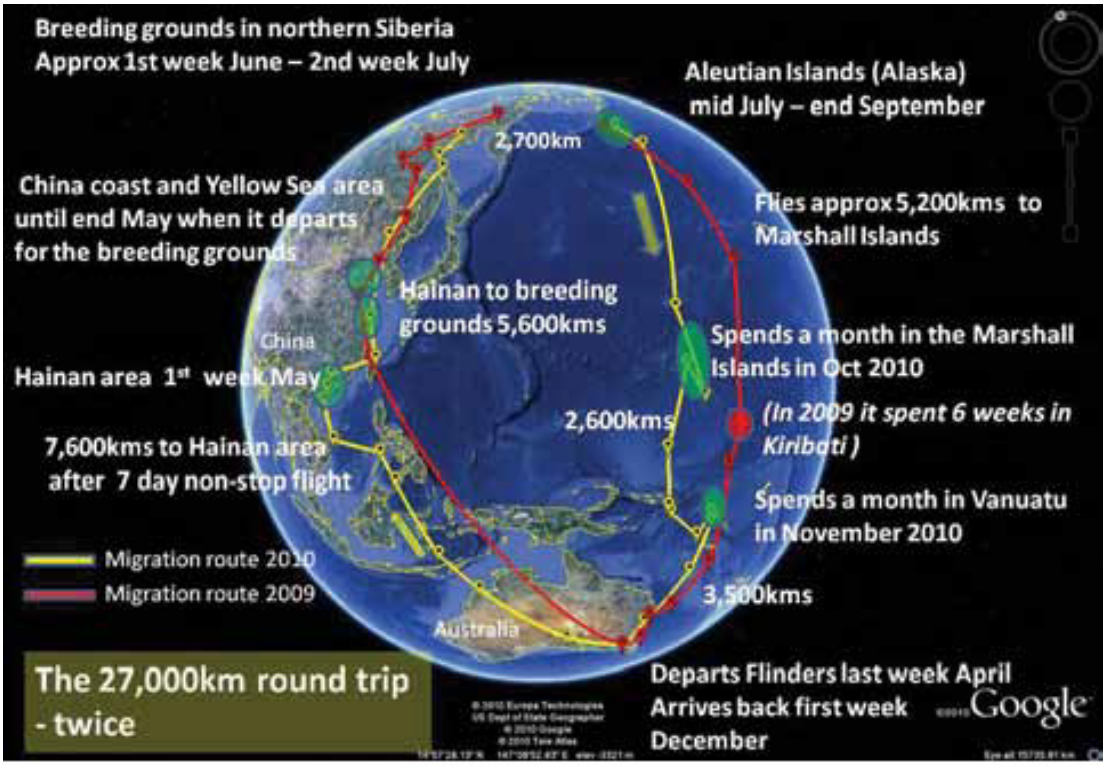
Future Plans
The VWSG will continue to deploy further new geolocators each year as appropriate scientifically and as funding allows.

At this stage it seems desirable to continue the most successful program on Ruddy Turnstone to further the in-depth studies of the migration strategy of this species and to amplify the breeding data which can also be obtained. Further deployments on Eastern Curlew and Sanderling will be determined by the results obtained from geolocator retrievals over the 2012/13 season. Additional species will be considered in due course.

Consideration is also being given to deploying a small number of satellite transmitters on the larger wader species, perhaps starting with Eastern Curlew.

Longer term there is the possibility of a major advance in electronic technology becoming available with the ICARUS project potentially commencing in 2015. This would facilitate the deployment of satellite transmitters weighing as little as 1g (the same as current geolocators). They could be deployed on species where recapture rates are too low to justify the use of current geolocators and they could be used on species as small as Red-necked Stint.

The VWSG intends to continue to be at the forefront of exploiting the use of electronic devices for studying wader migration.



Migratory tracks in two successive years for Ruddy Turnstone 9Y. Each year the bird departed from Flinders in late April/early May and did not get back there until early December after a round trip migration of 27,000 kms.

Thanks to Lou Ekanayake, S & N Printing, Hallam, 03 ***9703 1311*** *for donating this colour page*

Banded Stilt in central WA

May/June 2012

Rog Standen

While on a stay with friends who own the pastoral lease of Cunyu Station, immediately below the Little Sandy Desert of WA, I stumbled across huge numbers of Banded Stilt on a number of lakes that filled early in 2011 and/or 2012.

I knew from discussions with Maureen Christie that there had been chicks banded and flagged over the last couple of years at Lake Torrens SA, so I set about trying to find out if any had made their way to WA.

Camping beside Red Lake (one of the more accessible lakes) for a few days gave me the opportunity to spend many hours scouring the thousands of legs I could see through the scope. The birds continually fed across the vast lake and also formed a roosting raft that varied in size depending on how many were out feeding. Interestingly, the raft was always in the same part of the lake every time I went there over a three week period (frustratingly the raft was at the other end of the lake to where the track was closest to it).

What excitement I had when I finally found one of the flagged chicks! Still in immature plumage with just a hint of a breast band, the bird wore orange over yellow flags that were clipped to triangular flags meaning it was banded in early 2011. This bird was very recognisable as it also had a slightly upturned beak. That physical feature proved to be very useful a few days later when I took Dawn, the owner, to see this wonderful spectacle of thousands of birds in a huge raft. To my surprise I managed to find the flagged bird again in the same place on the lake as before. Dawn had seen the flock of birds, rising like a cloud, from her vehicle at the other end of the lake about 5km across, but did not know what they were. She was very excited about seeing these birds through a scope and especially seeing the flagged bird.

News of the sighting was relayed to Maureen who circulated it among the core Banded Stilt people and on a return email (this one from PhD candidate Reece Pedler) I found that another bird, with a satellite transmitter fitted at Lake Eyre in early 2012, had also flown to this property and was on Lake Nabberu at that time. The trouble was that Lake Nabberu is actually a series of connected lakes about 100 km long! Fortunately he could send me a satellite image showing which part of the Nabberu Lake complex it was last seen on. It happened to be on the other side of the Frere Range to where Red Lake is so still on Cunyu. Subsequent email traffic showed that it moved to Red Lake! Despite my attempts I could not find that one among the possible hundred thousand birds on the lake. But at least I could add some valuable information about what other birds were with the satellite bird and information about habitat and possible food.

In relation to the food, there was virtually nothing to see with the naked eye in the lake that the birds were eating. I hopefully have some samples that I sieved through some gauze that I will try and identify under a microscope. The water was not as salty about 11,000 EC, as I thought it might have been.

Contrary to the invisible food, one noticeable thing happening was that the wind was pushing the water hundreds of metres from one side and it then flowed back overnight when it calmed down creating a 'tidal' movement in the lake. This made it attractive to over 1,000 Red-capped Plovers and over 500 Red-necked Stint.

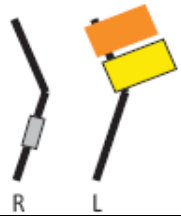
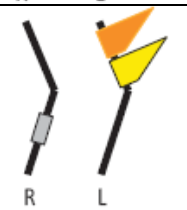
Other lakes had varying numbers from five to 1,800 to several thousand and at another lake further west, which is part of the extensive Lake Nabberu, close to one hundred thousand birds. However, when I got to this one, prompted by Reece's satellite bird having moved there, I suspect many of the Red Lake birds had gone there too as the numbers had dropped off at Red Lake by then. Other species on the Red Lake included Black-winged Stilt (over a thousand), Red-necked Avocets (10s), Curlew Sandpipers (5), Sharpies (3) and a single Greenshank with tens of thousands of Grey Teal, Pink-eared Duck by the thousand and a few of several other duck species.

Several of the lakes dried up during my stay there, but the most westerly Lake Nabberu where the stilt went was much deeper than the rest and would have kept water in it for some months.

The size of the lakes, difficult access and numbers of birds moving around made it impossible to get good estimates of numbers but the order of magnitude was in no doubt. Where will they go when these lakes do dry out – as they always do? This will be fascinating to find out.

The Banded Stilt were the highlight of a month spent building a bird list for the million-acre property and capturing the station in pictures. My thanks go to Ken and Dawn for their hospitality and access to the property through the use of a station vehicle that enabled me to get to places I wouldn't have gone with my own vehicle.

BANDED STILT FLAGS

	**A single yellow flag on the right upper leg** was flagged as a chick in 1995 at Lake Ballard in WA. Several of these were seen at Lake Eyre in 2000 and one at Lake George in April 2001.
	**A single orange flag on the right upper** was flagged in Victoria, the majority at Werribee in 2000. Several of these have been seen in the Coorong (Feb 2005, August 2007). And one in the pastoral lands in May, 2011.
	**Orange above yellow flags on the right upper (rectangular flags)** was flagged as a chick in the Coorong in 2006. There have been several sightings of these in Victoria. In Feb 2008 one was seen at Yalgorup National Park, WA (about ½ way between Mandurah and Bunbury, on the coast). This is the first recorded movement of Banded Stilt from eastern Australia to Western Australia. One was seen accompanying a group of chicks to the water at Lake Torrens in June, 2010. A Coorong flagged adult was seen in the 2011 Lake Torrens breeding colony
	**Orange above yellow flags on the left upper (rectangular flags)** was flagged as a chick at Lake Torrens in June 2010. One seen in the pastoral lands in May, 2011.
	**Orange above yellow flags on the left upper (triangular flags)** was flagged as a chick at Lake Torrens in April 2011.

Oriental Pratincole *Glareola maldivarum*

Graham Beal

From the beginning of July, this year, a surprise overwintering wader, an Oriental Pratincole has been present at the Austin Road lagoons near Werribee Sewerage Farm and as I write this on the 19th August this interesting bird is still present.

The **Oriental Pratincole** (*Glareola maldivarum*), also known as the Grasshopper-Bird or Swallow-Plover is a wader in the Pratincole family, Glareolidae.

Their most unusual feature of the pratincoles is that although classed as waders they typically hunt their insect prey on the wing like swallows, although they can also feed on the ground.

These are birds of open country, and are often seen near water in the evening, hawking for insects. These pratincoles are found in warmer parts of south and east Asia, breeding from Northern Pakistan and the Kashmir region across into China and south west. Their 2-3 eggs are laid on the ground. They are migratory, wintering in both India and Pakistan, Indonesia and Australasia. They are rare north or west of the breeding range, but, amazingly, this species has occurred as far away as Great Britain more than once. The first record for the Western Palearctic was in Suffolk, England in June 1981.[2]

These birds have short legs, long pointed wings and long forked tails. They have short bills, which is an adaptation to aerial feeding. The back and head are brown, and the wings are brown with black flight feathers. The belly is white. The underwings are chestnut.

Very good views are needed to distinguish this species from other pratincoles, such as the very similar Collared Pratincole, which also has a chestnut underwing, and Black-winged Pratincole which shares the black upper wing flight feathers and lack of a white trailing edge to the wing. These features are not always readily seen in the field, especially as the chestnut underwing appears black unless excellent views are obtained.

On the 7th of February 2004, 2.5 million Oriental Pratincoles were recorded on Eighty Mile Beach in Australia's north-west by the Australasian Wader Studies Group. There had previously been no record of this magnitude and it is supposed that weather conditions caused much of the world's population of this species to congregate in one area.

I think that I am correct in saying that this is the 19th record for Victoria.

The largest group ever recorded in the state was of six birds at the Werribee sewerage farm from 12 to 29 December 1962; this was the first Victorian record (Aust. Bird Watcher 2: 4-5).

There was a record from the western side of Port Phillip Bay and one from Yallock Creek, Western Port (19 Jan 1974).

The only Additional locality for the species is the Kerang Lakes in northern Victoria. Single birds were also seen at Werribee in 2003 and 2004.

References

Sitters, H., Minton, C., Collins, P., Etheridge, B., Hassell, C. & O'Connor, F. 2004. Extraordinary numbers of Oriental Pratincoles in NW Australia. Wader Study Group Bull. 103:26-31.

Wikipedia, the free encyclopaedia, Martin.O'Brien@nre.vic.gov.au, birding-aus@vicnet.net.au, Oriental Pratincoles in Victoria - 2003

My Bird Catch!!!

Hannah Lee, age 8.
30th January 2012

On the 25th of January I went to Barwon Heads to catch some birds with my grandma Penny. When we got there we were a bit late so the group were already setting up the nets. Then we started to help. Not long after we were in the hide waiting for the birds.

We waited for quite a long time and some of us were tired so we went to get some food and drinks. Then we went back to the hide and waited another 15 minutes and then Clive the boss of the group, Pell (Penny) and I started to move slowly down towards the nets, because the birds were there. We were catching Bar-tailed Godwits, Red Knots and Crested Terns.

Then when Clive thought the time was right, he said through the radio, “three, two, one, FIRE!” Then we all rushed down to see what we had caught. I had let go five seagulls because we didn’t want them. I carried fifteen birds up to the keeping cages. My job was to get the birds out of the keeping cages for our team. There were five people in each team.

When we had done all the birds – banded, flagged, measured and weighed them – we packed up everything and loaded it into Clive’s trailer. And then we had a team talk and then everybody went home. Pell and I caught the ferry home. I had a wonderful day.

Visit to King Island between 27 November and 2 December 2011

Clive Minton and Roz Jessop

Objectives

The principal purpose of the visit was to retrieve geolocators deployed on Ruddy Turnstone in early April 2011. A subsidiary objective was to census the Turnstone population and distribution on the whole of King Island at this time of year (previous data all being collected in the late March-early April period). The opportunity was also taken to search for leg flags on all wader species and to record details of the engraved leg flags on as many Turnstones as possible.

Participants

From Victoria – Clive Minton, Penny Johns, Robyn Atkinson, Prue Wright, David Wilbraham, Jutta Leyrer and Heather Gibbs (and her two children Dom and Amy).
From King Island – Mavis Burgess, Margaret and Henry Bennett, Kate Ravich and Shelley Davidson.

Catching

The original plan was to carry out an extensive recce after arrival early on the morning of 26th November and then to follow this with five days of catching activities. Bad weather (Currie Airport closed because of heavy rain and poor visibility) prevented our departure from Moorabbin Airport on 26th and in the end we did not reach King Island until 1pm on the 27th. It was still possible to carry out some reccies on the 27th and to determine a site for the first catch on the 28th. But the need to recce the whole island for Turnstone, and the lack of perceived opportunities to recapture more birds carrying geolocators, meant that catching activities were only carried out on three days.

Three really successful catches were made, with each containing one or more birds carrying a geolocator. At Central Manuka on 28 November there were three geolocator-carrying birds in 54 Turnstones caught. Two of the geolocators had been put on in early April 2011 and one at the end of March 2010 – all at Manuka. A further Turnstone carrying a 2011 geolocator was also seen in the Manuka area but it was never settled enough in its location for a further catching attempt to be made.

The extensive recceing on 29 November revealed a good flock of Turnstones (including birds carrying geolocators) at Unlucky Bay, about six km north of Manuka. This is a site which we had not previously caught at because Turnstone numbers are usually smaller than at adjacent sites such as Manuka and the Whistler area.

The first attempt at Unlucky Bay on 30 November provided a quick dividend with a geolocator-carrying bird present in a small group of 10 Turnstone which started to feed in the rotting seaweed in the catching area quite quickly after the net had been set. It was again a bird with a geolocator which had been put on in early April this year at Manuka. Once it was established that this bird was catchable the net was immediately fired.

Another catching attempt was made on 1 December at Unlucky Bay, with the net set in the same position as few birds had witnessed the previous net firing. This time however considerable patience and perseverance was required as the flock of 30 to 40 (estimated) Turnstones continued to roost from midday until 5pm on some small rocks in the bay. They did not attempt to feed at all over the high tide period even though this left many feeding areas uncovered, including the maggot-filled patches of weed on the upper beach. Soon after some of the team had returned to Currie at 5pm a few Turnstones started to go walkabout and with a little gentle twinkling by Margaret and Henry's car they were persuaded to walk along the beach to the weed area in front of the net. It must have been apparent to

all the birds on the off-shore rocks that these birds had found a food bonanza (we had removed the dried kelp from the surface to enable them to easily dig into the pile to find the masses of maggots) because they flooded into the shore and walked up to the netting area within minutes. Although only glimpses of the geolocator-carrying Turnstone had been seen it was felt that it must have been in the catching area because almost all the population had come ashore, and so the net was fired. Joy of Joys – there it was in the net (another 2011 bird) but lo and behold there was also another geolocator (from March 2010) and the total catch was an amazing 51 birds.

So overall we retrieved six geolocators in three catches, with a total of 115 Turnstone caught. A very satisfactory outcome.

Ancillary Catching Data
Sixty-six (57%) of the 115 Turnstone caught were retraps. Although two of the catches were made at a new site, Unlucky Bay, these birds are clearly part of the Manuka "population".

There were also two controls in the last catch, both birds originally banded in South Australia. One was originally caught there as a first-year bird at the end of April this year. The other had been banded as an adult in April 1999 and is now a minimum of 14½ years old. There is clearly a significant relationship between the South Australian and King Island Turnstone populations but data is insufficient at present to indicate whether these are just random movements between populations or part of a more regular pattern.

Eleven of the Ruddy Turnstones were juveniles, corresponding to 9.6% of the birds caught. This is lower than the 14% juveniles recorded in catches in November 2010 and early April 2011. It suggests that, at best, the 2011 breeding season for Turnstones in the Siberian Arctic had only moderate success.

Geolocator Results
Ken Gosbell has successfully downloaded and carried out an initial interpretation of the data on three of the geolocators put on in early April this year. The fourth of these, and the two from 2010, could not be downloaded (which is normal if they have ceased collecting new data) and have been sent back to the U.K. for downloading by James Fox (previously with British Antarctic Survey).

The three birds, carrying Mk 10 BAS geolocators, followed the pattern which is now becoming well established for the bulk of the Turnstone population. They migrated up through Asia in April/early June and then back again in late July/October by a fairly similar route.

The three birds left King Island on 16th, 23rd and 26th April. Two made long non-stop flights to Taiwan and the north Philippines, each in five days. The other followed a similar path but appeared to stop in north-west Australia near Broome for just over a week before eventually moving on to Taiwan by 13th May. This bird then spent the 21st May to 1st June in the north-east of the Yellow Sea and eventually flew into continuous daylight over the Sea of Okhotsk, on 4th June. A second bird also staged in the Yellow Sea between 6th and 24th May before flying into continuous daylight over the Sea of Okhotsk on 28th May. The third bird spent five weeks at its stopover in the northern Philippines and then on 26th May flew non-stop to eastern Siberia where the signal was eventually lost, again over the Sea of Okhotsk, on 2nd June.

Pleasingly, all three birds showed marked signs of incubation on their geolocator light- level recorders. One incubated continuously from 15th June to 9th July - a period which suggests that it successfully hatched chicks. The other two started incubation on 10th and 17th June respectively but one appeared to cease incubation after a week and the other after just over 2 weeks. Both then seemed to re-commence incubation after a gap of five and nine days respectively. However both again appeared to have failed with incubation apparently only

proceeding for 10 days. It is generally considered that that few Arctic-breeding waders will lay a second batch of eggs if they experience a nesting failure. The short arctic summer is thought to inhibit repeat clutches. However geolocators may well reveal that re-nesting occurs more frequently than previously thought with these two units, and one retrieved from a geolocator-carrying Eastern Curlew a few weeks ago, strongly suggesting two separate periods of incubation.

Southward migration was first recorded in all three birds in the latter part of July. The earliest record, 19th July, was well inland at 57ºN, 117ºE. A second one was much further north (67ºN, 136ºE) when it was first relocated on the 29th July. The third was in the Sea of Okhotsk when its signal was first picked up on 30th July.

All three birds flew to the north shores of the Yellow Sea for their main stopover on southward migration. One was there from 7th August to 1st September, another from 7th August to 23rd August, and the other for only seven days in late July (21st to 28th July). This last bird then spent a short time on the south China coast but then spent a long period fattening (21st July to 26th August) at the same site at which it had made a stopover in the north Philippines during northward migration.

The movements of all birds during September are clouded by the difficulty in obtaining exact position fixes for up to two weeks on either side of the equinox (September 21st). The "Philippines" bird appears to have made a stopover around Broome from around the end of August. It arrived back in King Island on 13th October. A second bird appeared to spend 25th August to 1st October in Indonesia and eventually arrived back on King Island on 14th October after passing over north-west Australia. The third bird took a more easterly route and appeared to fly via West Papua New Guinea and then the Gulf of Carpentaria. It was the first of the three to arrive back on King Island – on 2nd October.

We hope to retrieve more geolocators on our 7th to 14th April scheduled visit to King Island next year. We also hope to retrieve more information from the three geolocators just sent to England for downloading.

Stop Press. Ken Gosbell has just phoned to say that one of these three birds had also carried a geolocator the previous year. He will send out a separate note comparing the two years' migrations.

Flag Sightings

We had a particularly productive visit in terms of seeing flagged birds from elsewhere and in reading the codes on engraved flags on Turnstones.

We managed to read the engraved flags, or record the colour-band combinations, on 11 Pied and one Sooty Oystercatcher. All but one of these birds (a locally banded one) had been marked by the VWSG in Victoria, mostly in the Corner Inlet complex. This data further supports the view that a significant proportion of the King Island Oystercatcher population, particularly Pied, comes to the Victorian coasts and estuaries for the late summer/autumn/winter non-breeding period.

Turnstones flagged in New Zealand and in China were also seen, plus an additional (not caught) bird from South Australia. We now have at least one record linking New Zealand and King Island Turnstones in each of the last five years.

A total of 77 engraved flags on Turnstone were read in the field. Twenty-nine of these were at Dripping Wells, recorded during a productive recce on our last morning (2nd December). It is clear from the data collected on recent visits that Dripping Wells is a core location which should be incorporated into the portfolio of main core locations at which we catch on each Mar/Apr visit. It could even be a good site for the future deployment of geolocators.

Ruddy Turnstone census

When it became apparent early in our visit that there were many fewer Turnstones at some of our regular sites than we find during our March/early April visits we decided that we should carry out a census of the complete Turnstone population on the whole island.

Catching priorities during Mar/Apr visits have meant that we have only had time to count west coast sites, where most of the Turnstones are known to be because of the much greater deposits of kelp washed up there by the onshore winds (compared with the more sheltered east coast).

It was felt that coverage of the east coast was particularly important at this time to see whether birds apparently missing from the west coast sites had just moved to other locations on the island. However only 52 birds were seen on the east coast (see table) and fascinatingly none of them was carrying flags put on in western King Island. It seems that the east coast birds really are separate, in line with our previous thinking.

The table also includes Turnstone population count data from all the other locations visited. Comparison figures are also given for the March/April 2009, 2010, 2011 visits together with some historical data from 1985. Note that the totals at the bottom of each column of the table are affected by some locations not being counted on each occasion and the totals are not therefore directly comparable.

Comparison of the detailed figures shows that at several locations, numbers were less than in the March/April period – especially in the Manuka complex, Currie area, and the south-west region of Surprise Bay and Stokes Point. The 200 found at Black Point at the east end of Seal Bay on 29th November were initially thought to probably be the result of the slight relocation of the birds from the Surprise Bay/Stokes Point area, particularly because a high proportion were seen to be carrying flags. However when we returned the next day, to read the flags, they could not be found and there were still only 79 birds in the Surprise Bay/Stokes Point section. The Black Point birds are undoubtedly part of the south-west King Island sub-population however and it is important that this area be counted regularly in the future. Because weather conditions had changed markedly between the two days, with a strong westerly blowing on the second day, it is probable that the Black Point birds had moved to the rocky bays on the headland between Black Point and Seal Rocks (time did not allow a search for them there on the second day).

Although the absence of counts in some places in the past makes a direct comparison with the most recent census difficult, it does seem that the Turnstone population on King Island during the November/December visit was less than during the late March/early April visits. Lower numbers were also experienced during the early November 2010 visit, but because of the earlier timing of the visit, late arrivals of birds from the north could not be ruled out then as a possible cause.

If, as appears likely, there genuinely are significantly fewer Turnstones on King Island in November/early December, then there are at least two possible explanations:

a) A larger than expected proportion of migrants have still not arrived. A King Island-flagged Turnstone was seen on Ashmore Reef, off the north-west coast of Australia, in November this year and a similarly-flagged bird remained in the Darwin area the previous year until early December. It is also possible that a few birds using the Pacific southward migration route could be still completing their journey. But it is not thought that the combination of all these possibilities is likely to be sufficient to account for the apparent population shortfall. Geolocators so far have shown that all except the few birds traversing the Pacific are usually back in their non-breeding areas before the end of October.

b) Some Turnstones may spend the first part of the non-breeding season elsewhere (e.g. on the north Tasmanian coast and other parts of Tasmania) then move to King Island in

February/early March to carry out their pre-northward migration fattening. This partial northward movement to congregate at high class feeding areas before the main migration is known to occur in a number of wader and waterfowl species. For example, Red Knots spending the non-breeding season on the southern tips of Chile and Argentina, regularly move northwards to areas on the central Argentinean coast during February and early March even though they do not set off on their main northward migration until early April.

If this is a significant and previously undetected aspect of Turnstone migration, then geolocators retrieved from birds in March/early April may possibly show that some birds have previously visited other locations during the non-breeding season. With only one geolocator-carrying Turnstone known to have been left on King Island during this visit it will be fantastic if we can find and retrieve more geolocators during our next visit in early April 2012.

Acknowledgements
The visit would not have been possible without the dedication of the team who travelled to King Island from Victoria and of the various people on King Island who assisted us in so many different ways. Mavis Burgess, whose information provided the foundation for our original visit in 2007, kindly provided a huge amount of victualling support (including all the main meals on day 1, after our delayed arrival) and transport for fieldwork on several days. She also procured the black powder necessary for our cannons. Margaret and Henry Bennett were with us on all fieldwork undertaken throughout our visit and they provided transport on each day for a significant proportion of our team. Kate Ravich, a BA Council member from Sydney who also has a holiday home on King Island, also provided strong fieldwork support and transport on two days. Jenny Marshall kindly moved out of her own home for the week, so that we could be based there. Margaret and Graeme Batey again allowed two of our team to sleep at their house (even though they themselves were away). Shelley Davidson, the Tasmanian Parks Warden, also again loaned the Parks trailer. King Island Airlines are thanked for generously transporting our bulkiest cannon-netting equipment to/from King Island free of charge. The Wettenhall Foundation is greatly thanked for providing funding for the geolocators deployed in early 2011. And finally a special thanks to Michael Driessen of DPIPWE Tasmania, who amazingly managed to renew our Banding Permit in two hours on the Friday afternoon before our visit when it was found to be out of date.

King Island, Ruddy Turnstones – can you find the flagged one?
(Photo Roz Jessop)

Counts of Ruddy Turnstone on King Island 27 Nov to 2 Dec 2011

Listed from south to north, then east coast

West Coast	**Nov/Dec**		**April**		**Mar/ April**		**Mar**		
	2011		**2011**		**2010**		**2009**		**1985 ***
Seal Rocks/Black Point	200		n.c.		60		n.c.		
Seal River Mouth	0		n.c.		0		n.c.		
Stokes Point	0		30		20		90		
Stokes Point to Surprise Bay	67		70		110		40		
Surprise Bay (including Denby Beach)	12		75		105		80		
Seal Rocks	0				0		0		
Dripping Wells	90		62		65		40}		
Ettrick Beach	0		0		0		0}		60
Miller Bay	0		0		0		0		
Currie Golf Course (Burgess Bay)	35		85		90		96}		330
Currie Harbour	0		15		25		14}		
Dirty Bay	0		13		30		22		
Manuka – South	0}		45}		10}		67}		
– Central	60}	65	50}	155	150}	175	68}	200	67
– North (Whalebone)	5}		60}		15}		65}		
South Porky	0		9		0		40		28
Unlucky Bay	60		48		10				20
North of Bungaree Creek	0				0		0		35
Duck Bay – Island Point}	35		70		115		15}		260
South Whistler }	95						80}		
Whistler Point	0		4		40		55		106
The Springs (Cape Wickham)	61		50		45		n.c.		
Lighthouse area	0		0		n.c.		0		
	720		**686**		**890**		**827**		

±Also British Admiral 63, Fitzmaurice Bay 26, Sea Elephant 309 – counts by D.B. Whitchurch

East Coast					
Sea Elephant	34	n.c.	n.c.	n.c.	
Blowhole	18	n.c.	n.c.	n.c.	
Narracoopa	**0**	n.c.	n.c.	n.c.	
	52				
*Comparison with locations counted in 1985	445	400	510	540	851

n.c.= not counted

Cape Wickham Lighthouse King Island (Photo Roz Jessop)

Report of a Visit to King Island

6 to 14 April 2012

Clive Minton and Roz Jessop

Introduction
This was the sixth successive March/April visit to King Island to continue the VWSG long-term study of Ruddy Turnstone. There have also been additional visits, for retrieving geolocators, in November in each of the last three years, as well as two "scanning" visits in earlier years.

Objectives
The main purposes of the visit were:

a) To continue the annual monitoring of breeding success of Ruddy Turnstone by measuring the percentage of juvenile birds in catches
b) To band and put engraved leg flags on additional Ruddy Turnstone to ensure that the proportion of marked birds in the population remains at least at current levels
c) To retrap previously marked birds to facilitate survival rate calculations
d) To retrieve further geolocators put on Ruddy Turnstone on King Island in April 2011 (or previously)
e) To apply further new geolocators to Ruddy Turnstone

Participants
Clive Minton, Roz Jessop, Robyn Atkinson, Roger and Annabel Richards, Mike Preeston, Peter Jenkins, Rob Patrick and Daniel Minton – all from Victoria. Graeme and Margaret Batey, from King Island, also participated in fieldwork on most days.

2012 Visit
Clive and Daniel Minton arrived on 6th April and carried out a recce of all the main Ruddy Turnstone locations on the west shores of King Island from Dripping Wells northward. Catching was carried out on the remaining seven days. The team was again based at Jenny Marshall's house in Currie, but two people slept at the nearby house of Graeme and Margaret Batey.

Population Count
Table 1 gives the figures for the Ruddy Turnstone population at all of the sites which were visited. A few minor sites were not covered, nor was the Seal Rocks/Black Point area which was discovered in November 2011. However all the main sites were covered and therefore a comparison with previous visits/years is possible.

The 445 Turnstone counted was the lowest total so far. This continues the downward trend which has been apparent ever since our first visit in March 2007 and which figures from 1985 (see Table 1) suggest has been on-going for much longer.

It is considered that part of the reason for the low figure during this visit is that a portion of the adult population had already migrated. The visit was at a later date than any previous visit. Although the earliest departure date from King Island recorded so far by a geolocator was April 14th it could well be that some birds leave earlier. It has generally been an early northward migration throughout the Flyway this year according to various email communications received from Asia, as well as from elsewhere in Australia, over recent weeks.

A further indication that some birds had already departed is that, for the first time ever, the proportion of males in the population (43%) was significantly lower than the normal 50:50 male : female ratio.

Male Ruddy Turnstone tend to leave on northward migration a few days ahead of females (mainly based on Delaware Bay data). Also the proportion of juveniles in catches (15.2%), was higher than the level recorded in the November 2011 visit (9.6%) and higher than found this season in other Turnstone populations in South Australia and Victoria. This again suggests that some adults may have already departed.

It will be interesting to see what population levels are present when the next scheduled visits, in November 2012 and March 2013, take place. It is already clear that the King Island population has almost halved since 1985. It is possible that the decline is accelerating. The population count will therefore become a key component of our King Island studies in the future.

Catching
A cannon-net catch was successfully made on each day (seven catches – Tables 2 & 3). The catch total (118) however was smaller than usual, mainly because of the reduced population present at most of the catching sites. There were so few birds at Currie Golf Course/Burgess Bay (30 rather than the usual 50-100) that we didn't even attempt to catch there on this visit. Whistler Point, which has been a most productive catching site in the past, also didn't have any Turnstone present during this visit even though there was still a significant weed bank on the shore.

A record 45% of the birds captured were retraps (Table 2). Most were at the same site at which they had originally been banded but there was one bird from South Australia. One juvenile banded at Surprise Bay was recaptured at Stokes Point (10km) the following day!

As already mentioned, the proportion of juveniles in catches was 15.2%. This figure will not however be used in determining the overall 2011/12 percentage juveniles in south-east Australia because this sample was taken so late in the season that the figure may have been artificially increased by the departure on northward migration of some of the adult birds.

Weights
As would be expected so late in the season most birds were extremely heavy due to fat deposition prior to setting off on northward migration (Table 2). Mean weights were uniformly high, with the sample at Stokes Point on 10 April being the equal highest ever recorded (173g). Two individuals in this catch weighed 194g – double the average fat-free weight of a Turnstone (95g). It is interesting that the average weight of the juvenile Turnstone (101.8g) was identical to the figure recorded for juveniles during the April 2011 visit.

Geolocators
A further five geolocators were retrieved from Ruddy Turnstone. Amazingly four of these were in a catch of only five birds at South Manuka on 11 April. Of the 17 birds which were given geolocators at South Manuka in April 2011 six have now been recaptured (and the geolocators removed).

One of these birds had also carried a geolocator the previous year. Since the geolocator removed in April this year was replaced with a new one this bird is now carrying its third geolocator.

Downloading of the geolocators is only partially complete as two have to be returned to the UK for data extraction. But preliminary information indicates that the other three birds departed on different dates (20, 23 and 24 April) in 2011. All made a major flight over six days non-stop to Taiwan or Vietnam. They then proceeded northward via another significant stopover in the north-west of the Yellow Sea. They entered the area of continuous daylight

around the beginning of June and full signals were not resumed until late July. All showed strong signs of incubation during the period they were in the Arctic. The return journeys were via a similar route but equinox problems in September meant that less detail was available for that part of the journey. As previously, most birds seemed to originally reach the south coast of Australia further west than King Island, before turning eastwards to their final destination. Arrival dates back at King Island were on 3, 16 and 18 October respectively.

A fuller report on the results of the geolocator work will be prepared when all information is available – *see article in this Bulletin.*

Thirty-two new geolocators were put on Ruddy Turnstone in the Manuka area in the period 11 to 13 April. All but one of these geolocators was from the new supplier (Biotrack) of the BAS developed units, similar to those we have used in previous years.

The Future

It is intended to continue the Ruddy Turnstone studies in King Island over the next year (or more) along the lines of studies during the last six years. The next visit will be between **14 and 22 November 2012**, followed by a further visit in the last week of March in 2013. It is not too early to put your name on the lists now – logistic constraints limit the team to about nine people.

Acknowledgements

We again thank the various people on and associated with King Island who have helped us during the past year. In particular we thank Angus Roberts, the captain of the Searoad ship, who again very kindly transported our vehicle (Roz Jessop's Land Cruiser this time because Clive's vehicle had broken down!) and equipment to/from King Island. We are also grateful to King Island Airlines for bringing over the packet of new geolocators once Australia Post got round to delivering it.

We again thank Jenny Marshall for moving out of her house in Currie so that we could live there, and Graeme and Margaret Batey for having two team members to sleep at their nearby house. We also thank Shelley Davidson of the Tasmanian Parks Service for the loan of a trailer. Finally we thank Margaret and Henry Bennett for storing equipment between visits.

We were particularly sorry that ill health this year prevented a number of King Island participants from being part of the team in the field. We hope they will be able to join us again during our future visits.

King Island coastline (photo Roz Jessop)

Table 1. Counts of Ruddy Turnstone on King Island 6-13 April 2012

Listed from south to north, then east coast

West Coast	April 2012		Nov/Dec 2011		April 2011		Mar/ April 2010		Mar 2009		1985*
Seal Rocks/Black Point	n.c.		200		n.c.		60		n.c.		
Seal River Mouth	n.c.		0		n.c.		0		n.c.		
Stokes Point	50		0		30		20		90		
Stokes Point to Surprise Bay	25		67		70		110		40		
Surprise Bay (including Denby Beach)	70		12		75		105		80		
Seal Rocks	n.c.		0				0		0		
Dripping Wells	40		90		62		65		40}		
Ettrick Beach	0		0		0		0		0}		60
Miller Bay	n.c.		0		0		0		0		
Currie Golf Course (Burgess Bay)	30		35		85		90		96}		330
Currie Harbour	0		0		15		25		14}		
Dirty Bay	n.c.		0		13		30		22		
Manuka – South	35}		0}		45}		10}		67}		
– Central	50}	120	60}	65	50}	155	150}	175	68}	200	67
– North (Whalebone)	35}		5}		60}		15}		65}		
South Porky	40		0		9		0		40		28
Unlucky Bay	15		60		48		10				20
North of Bungaree Creek	n.c.		0				0		0		35
Duck Bay – Island Point}	35		35		70		115		15}		260
South Whistler }	0		95						80}		
Whistler Point	0		0		4		40		55		106
The Springs (Cape Wickham)	20		61		50		45		n.c.		
Lighthouse area	n.c.		0		0		n.c.		0		
	445		**720**		**686**		**890**		**827**		

[±]Also British Admiral 63, Fitzmaurice Bay 26, Sea Elephant 309 – counts by D.B. Whitchurch

East Coast						
Sea Elephant		34	n.c.	n.c.	n.c.	
Blowhole		18	n.c.	n.c.	n.c.	
Narracoopa		**0**	n.c.	n.c.	n.c.	
		52				
*Comparison with locations counted in 1985 n.c.= not counted	265	445	400	510	540	851

Cleaning the net – King Island (Photo Roz Jessop)

HAVE YOU SEEN?

By Roz Jessop

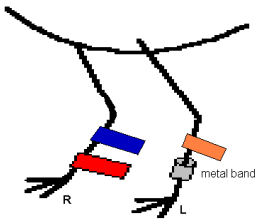
Always read flag combinations from top to toe

RED-CAPPED PLOVERS WITH ENGRAVED LEG-FLAGS?
In 2008 Deakin University commenced a banding study of Red-capped Plover at Cheetham Wetlands and Truganina Swamp, west of Melbourne – near Altona and Altona Meadows. Dr Mike Weston and students have flagged over 100 Red-capped Plover on the upper leg with an orange leg-flag engraved with two letters. They would greatly appreciate any sightings you may make. Masked Lapwings have also been marked with engraved flags at Phillip Island.

Please send details (including date and place) to
Dr Mike Weston, Deakin University,
221 Burwood Hwy, Burwood, 3125.
Email: mike.weston@deakin.edu.au
Phone: (+61 3) 9251-7433

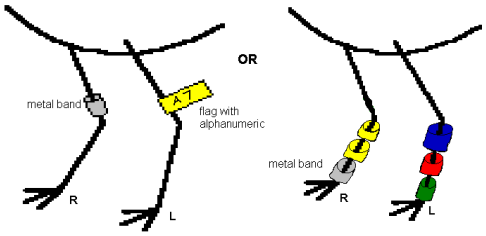
Mike and his post graduate students would also like to acknowledge the generous support of the VWSG in helping with the manufacture of the flags – especially Doris Graham.

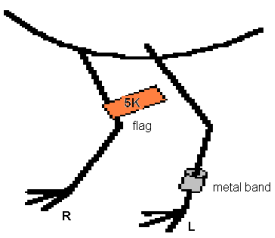
HOODED PLOVERS, OYSTERCATCHERS OR GREY WADERS WITH FLAGS?



Hooded Plover with colour bands or flags?
Phillip Island Nature Park has an ongoing study colour flagging Hooded Plover chicks on Phillip Island. Any sightings of colour marked Hooded Plover should be sent to Roz Jessop rjessop@penguins.org.au

Pied and Sooty Oystercatchers with colour bands or flags?
Any sightings of Pied and Sooty oystercatchers with colour bands or flags should be sent to David Trudgen trudgen@iinet.net.au





"Grey" waders and terns with engraved or plain flags or colour bands? Any sightings of grey waders or terns with engraved flags or plain colour flags should be reported to Clive Minton mintons@ozemail.com.au

Wader Breeding Success in the 2011 Arctic Summer, based on Juvenile Ratios of Birds that spend the Non-breeding Season in Australia

Clive Minton, Roz Jessop and Chris Hassell

Introduction

Each year the Victorian Wader Study Group (in south-east Australia, SEA) and the Australasian Wader Studies Group (in north-west Australia, NWA) put a great deal of fieldwork effort into trying to catch satisfactory samples of the main migratory wader species in each area to enable estimates to be made of breeding success in the preceding Arctic summer. Fieldwork is carried out in the period November/March when wader populations are reasonably stable i.e. when most adults and juveniles have arrived in their non-breeding areas and before adults commence their northward migration the following year. The breeding success (really an *index* of breeding success) is measured by the proportion of juveniles in catches made with cannon-nets at a range of locations/dates in each region.

Breeding productivity is one of the key parameters (the other is survival rate) controlling population levels. It is therefore important, especially at the present time when population levels are changing markedly, to try and obtain quantitate information on breeding success to measure year-to-year variations and, potentially more importantly, changes over time. It is practically difficult to find large numbers of nests of waders in their Northern Hemisphere (mainly Arctic) breeding grounds and to follow them through to obtain hatching/fledging success rates. It is even more difficult, and prohibitively expensive, to do this over an extended period of many years and for a wide range of species.

The current alternative of "percentage juvenile sampling" has its limitations, but it has been shown to be practical over prolonged periods (33 years now for some species in SEA). There are undoubtedly many variables which can affect the number of juvenile birds in a sample of birds caught for banding. It has long been known that mist-netting produces an inordinately high proportion of juveniles, perhaps because of their relative naivety compared with adults. Only cannon-net catches are therefore incorporated into the data used to calculate the juvenile ratios each year. Some locations seem to consistently have a higher proportion of young birds than others, so a range of different catching sites are sampled if possible. Also the composition of individual catches at any site can vary significantly, sometimes for unknown reasons, so the larger the number of samples obtained the more likely the figure is to be representative of the population of a species in a region. The distribution of juveniles in a large roosting flock can also be non-homogenous with young birds sometimes clumping and at other times segregating to the outer fringes of a flock. Being less wary, juveniles may also enter/roost in the cannon-net catching area more readily than adults. Finally it should be pointed out that the measurement obtained is the proportion of young birds in the population some six months on average after the juvenile birds have first fledged. The figure is therefore not an estimate of how many birds fledged but how many also successfully carried out their first southward migration and then survived for some months afterwards.

The above limitations on the data used to calculate juvenile ratios therefore need to be recognised when assessing the conclusions drawn. Year to year comparisons are probably more

accurate than absolute figures. At the very least the breeding success categorization each year (good, average, poor etc.) is probably correct.

This paper presents the results of percentage juvenile sampling of waders in SEA and NWA during the November 2011 to March 2012 non-breeding season, thereby giving an estimate of wader breeding success in the 2011 Northern Hemisphere summer for a range of species.

Methods

Data were collected in the usual way. In SEA this was via a large number of catches at a wide range of locations throughout the period, between mid-November and late March. In NWA most of the data were collected during a concentrated three-week period of fieldwork at Roebuck Bay (Broome) and 80 Mile Beach between 18 February and 11 March 2012.

Information collected is compared with previous data - long-term median figures for SEA where datasets are long (18 to 33 years) and long-term average for NWA where datasets are shorter (13 years). A general assessment of breeding success is then made for each species in each region.

Results

The figures for 2011/12 are given in Table 1 (SEA) and Table 2 (NWA). This year it was possible to sample all of the main species in SEA because Curlew Sandpiper* and Sharp-tailed Sandpiper mostly returned to their traditional non-breeding areas along the coasts rather than stopping off at ephemeral wetlands present extensively in central Australia in the previous year. Similarly in NWA all of the principal species sampled annually were caught in reasonable numbers and, additionally, good samples of Ruddy Turnstone and Broad-billed Sandpiper (for the second consecutive year) were obtained. However Sanderling and Sharp-tailed Sandpiper – species which are only occasionally sampled adequately – again only produced small catch totals.

Tables 3 and 4 show the annual percentage juveniles in catches for each of the main species in each year since 1998/99 (when annual sampling commenced in NWA). The average figure thus gives an estimate of typical percentage juveniles in catches in recent years against which the most recent results can be compared.

Discussion

2011 was clearly a far less satisfactory breeding season than 2010 for almost all species of waders which come to Australia in the non-breeding season from breeding grounds in the Northern Hemisphere.

Only one (Red Knot) of seven species monitored in SEA had a breeding success rating higher than average. Two species (Curlew Sandpiper and Sanderling) were rated “very poor” and Sharp-tailed Sandpiper as “poor”.

In NWA none of the main species had breeding success higher than average and three (Curlew Sandpiper, Terek Sandpiper and Red Knot) were classed as “very poor”. Great Knot also appeared to have poor breeding success and Bar-tailed Godwit and Greater Sand Plover had percentage juvenile ratios below average. Only Broad-billed Sandpiper, of which adequate samples are only obtained occasionally, seem to have had a good breeding season in 2011.

* – scientific names are given in tables

Factors affecting breeding success
Analyses of breeding success data on a range of species worldwide has shown that a number of factors can affect breeding success, particularly in Arctic breeding birds. These include the date of snowmelt, average temperatures in June and/or July, the occurrence of late snowfalls (particularly at the time of chick hatching in early July) and predator levels (Arctic Foxes, Stoats, Minks, skuas etc.). The strongest correlations have been shown with predator levels, which in turn are related to lemming numbers and which in the past often occurred in a regular three-year annual cycle in northern Central Siberia.

Analysis of the Australian data has not so far shown any clear pattern of correlation with any single parameter. This is probably partly because the wader species coming to Australia in the non-breeding season come from a wide range of longitudes and latitudes in Siberia and Alaska where conditions may be far from uniform for any of the above parameters each year. With these local variations and with several of these influencing factors probably varying simultaneously but independently it is not surprising that this confounds the data and masks any correlation with a single factor.

Professor Marcel Klaassen of Deakin University and one of his students, Yaara Rotman, are currently re-examining all of the Australian juvenile ratio data and testing for correlations with climatic/predation factors. A synthesis is expected to be completed later in 2012.

Conclusion
Overall 2011 was a poor breeding season for most wader species which come to Australia. This was not unexpected given that the two previous breeding seasons both appear to have been above average (with 2010 being particularly good).

Sampling will continue in SEA and NWA in the 2012/2013 season. Let us hope for an improved outcome.

Acknowledgements
Teams of 10 – 30 people from the VWSG and from AWSG NWA Expeditions have spent considerable effort in obtaining the data presented in this report. They are thanked for their huge physical and time consuming effort in achieving this, often in somewhat difficult climatic conditions – cold wet and windy in SEA and hot and sometimes very wet in NWA.

All those landowners who allowed access via their properties to beach catching sites are also greatly thanked, as are Broome Bird Observatory, Anna Plains Station, Rosemary Davidson (Yanakie, Victoria) and many other people in SEA for providing local accommodation for fieldwork teams. The Australian Bird Banding Scheme kindly granted appropriate banding licenses and the various state environment/conservation bodies kindly provided state licenses and, where necessary, ethics and other animal capture approvals.

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Table 1. Percentage of juvenile/first year waders in cannon-net catches in south-east Australia in2011/2012

Species	No. of catches		Total caught	Juv./ 1st year		Long term median* % juvenile (years)	Assessment of 2011 breeding success
	Large (>50)	Small (<50)		No.	%		
Red-necked Stint *Calidris ruficollis*	8	5	3869	611	**15.8**	14.3(33)	Average
Curlew Sandpiper *C. ferruginea*	2	4	304	11	**3.6**	10.0(32)	Very poor
Bar-tailed Godwit *Limosa lapponica*	2	1	184	34	**18.5**	18.5(22)	Average
Red Knot *C. canutus*	0	4	34	23	**67.6**	58.0(18)	Good
Ruddy Turnstone *Arenaria intepres*	2	6	177	17	**9.6**	9.6 (21)	Average
Sanderling *C. alba*	2	2	348	7	**2.0**	12.2(20)	Very poor
Sharp-tailed Sandpiper *C. acuminata*	1	4	115	6	**5.2**	10.7(30)	Poor

All birds cannon-netted in period 15 November to 28 February except for Red-necked Stint, Ruddy Turnstone, and Sanderling, for which catches up to 29 March are included.
* Does not include the 2011/2012 figures

Table 2. Percentage of juvenile/first year waders in cannon-net catches in north-west Australia in 2011/2012

Species	No. of catches		Total caught	Juv/1st year		Assessment of 2011 breeding success
	Large (>50)	Small (<50)		No.	%	
Great Knot *Calidris tenuirostris*	9	5	1369	89	6.5	Poor
Bar-tailed Godwit *Limosa lapponica*	2	8	491	38	7.7	Below average
Red-necked Stint *C. ruficollis*	0	8	90	22	24.4	Average
Red Knot *C. canutus*	0	4	77	6	7.8	Very poor
Curlew Sandpiper *C. ferruginea*	0	6	79	1	1.3	Very poor
Ruddy Turnstone *Arenaria intepres*	1	2	58	8	13.8	Average?
Sanderling C. *alba*	0	3	3	-	(-)	-
Sharp-tailed Sandpiper *C. acuminata*	0	0	0	0	(-)	-
Non-arctic northern migrants						
Greater Sand Plover *Charadrius leschenaultii*	6	6	544	102	18.8	Below average
Terek Sandpiper *Xenus cinereus*	1	8	225	12	5.3	Very poor
Grey-tailed Tattler *Heteroscelus brevipes*	2	9	285	57	20.0	Average
Broad-billed Sandpiper *limicola falcinellus*	0	2	46	13	28.3	Good?
All birds cannon-netted in period 1 November to mid-March						

Table 3. Percentage of first year birds in wader catches in south-east Australia 1998/1999 to 2011/2012

Species	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	*Average (13yrs)*
Ruddy Turnstone *Arenaria intepres*	6.2	29	10	9.3	17	6.7	12	28	1.3	19	0.7	19	26	10	*14.2*
Red-necked Stint *Calidris ruficollis*	32	23	13	35	13	23	10	7.4	14	10	15	12	20	16	*17.2*
Curlew Sandpiper *C. ferruginea*	4.1	20	6.8	27	15	15	22	27	4.9	33	10	27	(-)	4	*17.6*
Sharp-tailed Sandpiper *C. acuminata*	11	10	16	7.9	20	39	42	27	12	20	3.6	32	(-)	5	*20.0*
Sanderling *C. alba*	10	13	2.9	10	43	2.7	16	62	0.5	14	2.9	19	21	2	*16.7*
Red Knot *C. canutus*	(2.8)	38	52	69	(92)	(86)	29	73	58	(75)	(-)	(-)	78	68	*56.7*
Bar-tailed Godwit *Limosa lapponica*	41	19	3.6	1.4	16	2.3	38	40	26	56	29	31	10	18	*23.9*

All birds cannon-netted between mid November and 25 March (except Sharp-tailed Sandpiper and Curlew Sandpiper to end February only). Averages (for previous 13years) exclude figures in brackets (small samples) and exclude 2011/2012 figures

Table 4. Percentage of first year birds in wader catches in north-west Australia 1998/1999 to 2011/2012

Species	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	Average (13yrs)
Red-necked Stint *Calidris ruficollis*	26	46	15	17	41	10	13	20	21	20	10	17	18	24	*21.0*
Curlew Sandpiper *C. ferruginea*	9.3	22	11	19	15	7.4	21	37	11	29	10	35	24	1	*19.4*
Great Knot *C. tenuirostris*	2.4	4.8	18	5.2	17	16	3.2	12	9.2	12	6	41	24	6	*13.1*
Red Knot *C. canutus*	3.3	14	9.6	5.4	32	3.2	(12)	57	11	23	12	52	16	8	*19.8*
Bar-tailed Godwit Limosa *lapponica*	2.0	10	4.8	15	13	9.0	6.7	11	8.5	8	4	28	21	8	*10.8*
Non-arctic northern migrants															
Greater Sand Plover *Charadrius leschenaultii*	25	33	22	13	32	24	21	9.5	21	27	27	35	17	19	*23.6*
Terek Sandpiper *Xenus cinereus*	12	(0)	8.5	12	11	19	14	13	11	13	15	19	25	5	*14.4*
Grey-tailed Tattler *Heteroscelus brevipes*	26	(44)	17	17	9.0	14	11	15	28	25	38	24	31	20	*21.3*
All birds cannon-netted in the period 1 November to mid March. Averages (for previous 13 years) exclude figures in brackets (small samples) and exclude 2011/2012 figures															

Corner Inlet 19 to 22 June 2012

Ila Marks and Eric Miller

Bird banding with the VWSG is always full of surprises and Corner Inlet, the third week in June 2012, was no exception. In addition to the normal trials - wind, rain, boat trips, early mornings and wet catches - this time we also had an earthquake and floods to contend with. On the up-side, and with banding there is always an up-side, that is what makes it all worthwhile, we had pleasing catches, magnificent meals, amazing locations, great company, and sunny days. That is apart from one day when we sheltered from cold rain and winds under a blue plastic tarp in the bird hide!

Most of the small team; Clive, Rosemary, Robyn, Mike, Roger, Dave, Heather, Paul, Eric, Heidi and Ila, arrived at Rosemary's house at Yanakie on Monday 18th June, by early evening. The tradition of sharing a three course evening meal at Yanakie is something everyone looks forward to and thanks to Rosemary for all of her coordination, which includes the food for breakfast and lunch as well.

Tuesday, our first day banding, was a nice sunny day, but windy. We were met by the Parks boats at Port Albert with Swampy and Brian ready to run us, plus equipment, out to Sunday Island. At Port Albert we were also joined by Susan and Margaret. Many thanks are due to Swampy, Brian and Susan, for their invaluable assistance. Without their involvement it would be very difficult for the VWSG to achieve the results we do in this remote part of Victoria. Thanks also to Dave Cropley who uses his hovercraft for the benefit of the group, by ferrying equipment and twinkling birds from near and far. The catch at Sunday Island was welcome but smaller than expected - 12 Pied Oystercatchers. One of the nets had caught on seaweed and did not go out properly.

On Wednesday we were taken out to East Clonmel Island. The morning was fine, but high winds and choppy seas were forecast for later in the day. Clive organised an early catch of 29 Pied Oystercatchers and 8 Sooty Oystercatchers. Then we packed up and went to an island closer in-shore to process the birds and to avoid the wind.

Thursday was very wet and the day was spent in the hide under the blue plastic tarp, where cups of tea and coffee were shared, as well as treats people were able to pull out of their daypacks. We had been taken to East Dream Island by Swampy and Brian. Fortunately the birds did not mind the rain and we caught 18 Pied Oystercatchers. For processing we decided against the blue plastic and took the birds ashore to a picnic shelter at McLoughlins Beach where we were able to process the birds in comfort.

Friday was very windy and we were unable to go out in the boats. Instead we went to Roussac Point, quite close to Yanakie, where we had the best catch of the week, 21 Pied and 13 Sooty. People who needed to return home on Friday had a roundabout trip as they were detoured around flooded areas, including sections of the South Gippsland Highway. It was a similar story for those who went home on Saturday.

Finally a mention of the marvellous Pied and Sooty Oyc decoys renovated or created by Marj Reni and Alan Clarke. Three of the four catches were only made because of these. The record "June Week" catch of 105 – 80 Pied and 25 Sooty – was a reward for the time and effort and skills of Marj and Alan in preparing these superb decoys.

Victorian Wader Study Group at Werribee Sewage Farm
27-30 December 2011

Barbara Campbell

From all over the greater Melbourne area a disparate fleet of heavily-packed vehicles was making its way to Werribee Sewage Farm just as the second day of the first test, Australia v India, was coming to a close. The crowds streaming out of the MCG were causing all kinds of traffic snares in the CBD. Prue Wright, who was giving me a lift in her 4WD, was muttering "I've done the wrong thing" and following behind us in a smaller vehicle, Nik Ward (UK visitor and former warden of the Broome Bird Observatory) was no doubt bemused by the labyrinthine route we were forced to take.

I was in the "passenger seat" in more ways than one on this expedition: I was from Sydney; I'd never participated in a bird-banding exercise and I didn't even have a history of bird-watching. I'm an artist, specifically a performance artist (not to be confused with the actor species), and I'm about to begin a PhD, asking the question: in what way do the migratory birds on the East Asian-Australasian Flyway direct human performance? And so my intention on this trip was quite tentative: to ease my way into this culture of birds and people.

Shortly after 7pm we have all found our way to the prosaically named "West Lagoon Pond 4" to set the nets in readiness for the next morning. At this point Clive Minton is very much in the director's chair while all around, his willing troupe perform "Acts of Readiness" which begins with carrying: huge bags of nets and camouflage material, collapsible holding cages, shade-cloth material, heavy cannon projectiles, wooden pegs, spades, boxes of tools, specialty equipment, coils of wire and what looked like miniature bunting, but which I later learn is for "jiggling", that is, encouraging the birds forward of the net line and into the catching area. The team is fairly evenly divided between experienced members and novices. The former guide the latter in the setting out of the nets, laying of firing line and jiggling line, the construction of the hides and the highly specialised task of burying and setting the cannons. On this occasion Roz Jessop performs the role of cannon setter; stepping, bending to knee, sighting, directing, and wielding the special instrument for checking the firing angle. Finally, bundles of shade-cloth and folding cages are strategically piled nearby.

In the fading light, the convoy snakes back up the highway to base camp—the administrative offices and Discovery Centre of Melbourne Water's Western Treatment Plant. Meals are hastily prepared and consumed and soon we are all horizontal: carpet tiles for earth, Exit signs for stars, and air-conditioning unit for cicadas. Some of us aren't used to camping and don't get a lot of sleep.

Wednesday 28 December

7am and not a single wader can be found in front of either of the nets we'd set the night before, nor anywhere near Pond 4. So much for the famed ubiquity of the Rednecked Stint! Not to be deterred, Clive and three other Old Hands take up position in the hides, others are sent to find where the birds are feeding and the rest of us wait in the cars parked by the pond road. From time to time Clive's voice comes to us clearly across the water and also in compressed form over the shortwave radio.

We wait...and wait...and wait still more. Meanwhile around the lagoon, other birds (the wrong birds) feed, fly, wade and swim in species clusters: pelicans, white egrets, black cormorants and black swans. I try my hand at sketching and am horrified to discover how out of form I've become.

Pond 4 is open to the sea and therefore subject to the tides. It's clearly a no show for this morning. After three and a half hours Clive calls it quits but comes up with a new plan: he suggests some of the group go off to T Section Pond 5 to set a smaller net, thus broadening our options for the afternoon, and the rest of us head off for some old-fashioned bird watching. There's been a sighting of Banded Lapwing in a nearby cow paddock. They are about to become heavily looked at.

Mid-afternoon and we're all back at Pond 4 and still not a lot of birds around. Back to the hides, back to the surrounding ponds for scouting and "twinkling" (which I learn is a sort of gentle encouragement of birds from one area towards the catching area), and back to the cars to wait and listen. The twinkling seems to be working. This time...at regular intervals...small flocks of stints zoom in, circling low, while all of us follow their movements and will them to land in just the right place. Over the next hour or so the numbers build at the pond shore in front of one, but not both nets. It's mesmerising watching this bird/human choreography.

Clive breaks the spell, sensing the time is right. He prepares us: "Three, two, one, FIRE!"

There's no time to absorb what's just happened. Before the net has even landed, we are all running to the catching area, smoke from the cannon fire still hanging in the air. Clive is shouting and I am discovering how impossible it is to run with either speed or grace in borrowed gum boots, over grass and through slimy water. Other people—the young team members—are whizzing past. "Thank goodness they are here", I think, not for the last time. How different is the energy now from the rhythms of watching and waiting that have so far ruled the day. What is happening now is pure intensity, for humans and birds. All our focus and action is on the safety of the birds. And for a significant proportion of the Red-necked Stints now fighting against the weight of the net, it's not the first time they've been in this situation. The first priority is to calm the birds' struggle. With as much speed and care as possible, we haul the shade-cloth over the netted birds. It seems to act like a blanket to a babe, causing the noise and flailing to settle down (including from Clive). We quickly move on to the next phase: getting the birds out from under the net and into the holding cages that have been magically assembled just behind the net.

Again, experience comes to the fore for the delicate operation of extracting birds from the net. Many of the less-experienced are keen to learn. I'm not confident enough and prefer to act as a runner, taking the birds from those doing the extracting and delivering them to Clive to place in the holding cages. I'm quickly shown how to hold a bird firmly and safely, with head poking out between my index and middle fingers, while the body, wings and legs nestle inside the hand. There's little time to think but I am aware of each tiny body's feathers, smoothly foreign against my skin.

The work continues. At some point I blurt, "Here's a monster!" as Clive bustles a bigger than average bird into the holding cage. We discover during the next phase—of banding, flagging and recording—one solitary Curlew Sandpiper among the 242 Stints (including 45 retraps and 31 juveniles). Other highlights punctuate the retrap statistic. A black flag over a white flag (signifying China) and a yellow flag (from NW Australia) garner cheers of wonder and a real sense that other humans in far off lands have done just what we are doing now.

Joining us for the processing are two teams of scientists, one from Deakin University researching changing dietary patterns of birds on the EAAF and the other from the Department of Primary Industries looking for possible avian flu evidence. After completing our tasks, we leave the "the bleeders" and "the poopers", as they are affectionately known, to their more exacting ones. Clive directs us over to Pond 5 where the smaller net is lying at the ready. We also leave our second net in place at Pond 4 in the hope it can be deployed the next day.

Thankfully, a good quantity of birds is already in position at Pond 5 and not too much time passes before this smaller net is fired. More running in gum boots ensues, only this time our path is further hampered by rocks buried in the grass and much stickier mud at the pond. For the birds too, there is an additional risk. The net has landed partly in the water which makes our job of securing their safety even more urgent. The net must first be "tented" to allow the birds to run out of the water to the relative safety of the mud. We also discover a tear in the net and some birds escape.

By now the sun has set, the light is fading, our time for processing limited. To speed things up, Clive decides that we will not flag the Red-necked Stints. I'm charged with recording. Instead of birds I have clipboard and pen in hand. Numbers come thick and fast. In record time we've processed 410 Red-

necked Stint (including 90 retraps and 33 juveniles), 28 Sharp-tailed Sandpiper (1 retrap, no juveniles) and 24 Curlew Sandpiper (2 retraps, 2 juveniles). Much appreciated by we novices, there is opportunity to compare and admire the two Sandpiper species at close range.

In the last light of the day, we head back to base camp, car radios picking up ABC news rather than Clive's voice. The cricket scores at the end of the third day: Australia in a good position at 8/179, having bowled India out at lunch for 282. Dinners are again assembled. Someone wonders at the safety of eating leftover turkey this long after Christmas. I for one am overcome with tiredness: from the intense activity, the exposure to the elements, the long day and sleepless night, and from the newness of it all. Sleep comes quickly.

Thursday 29 December
Shortly after 7am we're back at West Lagoon Pond 4 hoping for better luck with the morning tide but again the birds elude us. Clive and Eric Miller go into the hide, others are sent out to scout and the waiting game of yesterday morning is repeated. The birds don't seem to like it here in the morning. There's speculation that they prefer the beach which is apparently too narrow for our catching methods. A couple of hours later, Clive abandons Plan A and instead of catching, we spend the next couple of hours repositioning the nets, first at Pond 4 and then over at the smaller, muddier Pond 5.

Part of the preparations at Pond 5 include repairing the tear in the small net. Marta Slawuta, a Masters student at Victoria University, is up for the task. As she settles into position on a tiny camp stool, mud, grass and rocks around her, blue sky above, net draped over her lap like a spreading skirt, net-mending needle in hand, she seems to be stitching and reshaping time itself, evoking a task that could have been performed in any previous century anywhere on earth. She becomes for me, Marta of the Nets.

Nets in place, we fill up the middle part of the day with more bird watching, driving around the various ponds that constitute the vast treatment plant, binoculars at the ready every time the expert eye of Dave Cropley in our car spots something of interest. The Crakes (Baillon's and Spotted) are unusually bold on this day and are much photographed. The Red-necked Avocet are also plentiful around the conservation lagoons—their beaks, pure arabesque, almost invisible against the sunlight.

By 3pm we've reconvened at Pond 4, hoping the nets are better placed than before. Clive and three others take up position in the hides, others are sent out to flush the birds from the surrounding area or twinkle from the Pond 4 perimeter, while the rest of us again wait, watch and listen as Clive directs proceedings via shortwave radio. Stretches of silence counterpoint the radio commentary. We who remain near the cars have excellent vision of the slowly unfolding drama.

Clive's voice cuts through another bracket of silence: "Has anyone got the cricket score?" We all laugh. But the parallels between this scene and the one at the MCG are striking: the bursts of activity rising up out of periods of languid watching; the small white creatures moving around a prescribed arena of action; and the accumulation of statistics over days.

The numbers build as small flocks fly across, circle and come to rest tantalisingly, teasingly, frustratingly close to the two net areas. Patience, ultimately, rewards. Clive barks the countdown. Both nets are fired and the dash in on. Young legs speed ahead. Again, the small net lands partly in the water and that becomes our priority. It's our biggest catch yet: 520 Red-necked Stints (122 retraps, 29 juveniles); 1 (new, adult) Curlew Sandpiper and 1 (new, adult) Sharp-tailed Sandpiper. While we are absorbed in our work within our clusters of banders and flaggers, Australia wins the test by 122 runs. We finish processing too late to consider another catch and return to camp for our last night of office camping.

Friday 30 December
The only net in place is at T Section, Pond 5 and this is where we muster at around 7am. Ila Marks in one vehicle remains at some distance to exert pressure on the birds in an adjacent pond while the rest

of the vehicles are positioned around the Pond 5 perimeter road. An hour or so passes before Fiona is sent into the “water” to “twinkle” leaving Bruce Lavender and me in the front of his van on the road edge directly across from the cannons. At one point Bruce says, only half-jokingly, “I hope the projectiles are attached”*. *Now* I’m awake. Although the numbers aren’t huge, there appear to be a few different species in the catching area. Clive determines it’s a viable catch and readies us for the last time. I try to humour myself, “Oh well, if I’m going to die, it will be for the birds and that’s not so bad”, but my heart is in my mouth when the cannons fire.*

I’m pleased to find that we’re still alive and that Bruce is driving us around to the other side of the pond. By the time we get there the others have made it to the net and are already extracting birds. Marta’s repair job has worked nicely.

With the relatively small catch, Clive decides we have the time to fully process the birds which means, in addition to banding and flagging, recording the biometrics: length of beak, wing, weight and age. We split into two working groups. Ila trains Tamara Davies, Fiona, Marta and me in the new tasks that require yet more tools. I’m reminded of skills learnt at the jewellery bench as the small rings of number-punched metal, pliers, calipers, gauges and scales are passed around. With this additional processing, we learn more about each individual bird through the data but also by virtue of the time it takes to carry out the measuring.

It’s a small catch but with good variety: 85 Red-necked Stint (21 retraps, 4 juveniles), 10 Sharp-tailed Sandpiper (1 retrap, no juveniles), 9 Curlew Sandpiper (no retraps, 1 juvenile), 2 Black-winged Stilt (no retraps, adult) and 3 Whiskered Tern (no retraps, adult). As I type this batch of statistics from our last catch, I’m conscious of how much the numbers conceal of all that we’ve performed in the service of the birds during our time at Werribee Sewage Farm. I’m on my way, back to Melbourne, to Sydney, to study.

Sydney, January 2012.
My thanks to Clive Minton and fellow team members particularly Prue Wright for the gum boots and numerous lifts and to Bruce Lavender for the lift back. Cricket scores from The Roar, a blog by Suneer Chowdhary. [http://www.theroar.com.au]

* Unbeknownst to Bruce and me, Clive and the others had in fact judged we weren’t directly in front of any of the three cannons.

Mark Barter
A Champion of Shorebirds and other Migratory Waterbirds

On behalf of the VWSG I want to acknowledge the sad passing of Mark Barter who was one of our true champions for shorebirds in general.

Mark died in November 2011 after a long battle with cancer. However Mark's memory will live on with those who knew, respected and admired him for the tremendous contribution he made to research and conservation of migratory waterbirds both in Australia and in the East Asian – Australasian Flyway. Mark was a member of the VWSG from the early 1980's and participated in field work, data collection and analysis for over 20 years. For many years Mark and his wife Terry input all the catch sheet data from Victoria and NWA into our data base. One of Mark's key attributes was his passion for analysing and publishing results in *The Stilt* or other journals. In the 1980's and 90's he published much of the data both on biometrics and population monitoring that we still refer to today.

He was also a champion for conservation within the flyway and he was among the first from Australasia to undertake surveys and conduct awareness and education sessions in many Asian countries. It was through his untiring counts around the Yellow Sea that today we have the data to advocate for the better protection of this critical region.

Some of Mark's contributions over 30 years can be summarised in the following:

- the development of the Australasian Wader Studies Group and its conservation activities (as Chair 1987–1997),
- the development and oversight of the East Asian – Australasian Action Plan (1997-2001) and his role as Chair of the Shorebird Working Group during this time,
- conducting a program to train Nature Reserve staff in bird recognition and survey methods at various wetland sites and, with them, undertake surveys of tidal flats from Fujian in southern China to the border with North Korea,
- promoting global recognition of the critical importance of the Yellow Sea for migratory shorebirds in the East Asian – Australasian Flyway,
- advancing our understanding of the importance of the Middle and Lower Yangtze wetlands for Anatidae,
- establishing a waterbird monitoring program for the Yangtze wetlands,
- encouraging and supporting the waterbirds and wetland group University of Science and Technology of China in Hefei to focus on conservation orientated Anatidae research, and
- facilitating the development of international collaborative waterbird research programs that linked scientists in Asia, Europe and North America.

Mark was a leader, a scientist and a trainer and mentor. His work in the Flyway established a greatly expanded body of researchers, site managers and community members with a passion for waterbirds and their conservation who will motivate others and collectively ensure a lasting legacy built on Mark's foundational work. Mark made many friends throughout his time working both in Victoria, NWA and in the Flyway and he will be remembered very fondly for his dedication and passion.

To all who knew and valued Mark during his time with the VWSG we will miss him greatly and we extend to Mark's wife, Terry, our greatest sympathy and gratitude for her years of understanding and support for Mark and all his work.

Mark Barter in northern Bohai Wan (China) – waterbird surveys and training (14 May 2005)
Photo: Ken Gosbell

Prepared by Ken Gosbell

Gavin Jackson

Gavin Jackson was a relative latecomer to birding, although being exposed to its wonders by Parents and Grandparents who were birdwatchers, it never took hold until a health scare in the late 1990s helped him and his wife Deb make the decision to take life a bit more leisurely and enjoy themselves a bit more.

Gavin watching Swift Parrots in the You Yangs (Photo Bob Green)

It was May 2004 when I first met Gavin at our first residential school at Charles Sturt University; we hit it off immediately, and so began our friendship. Throughout uni days Gavin continually amazed us with an almost uncanny ability to grasp some of the really complex topics we were covering, and so it was duly deserved when in his Graduation Year he was presented with the "Bill Lane Award" as the Outstanding Ornithological Student of the Year.

Gavin often commented that he wanted to put his new found "bird nerd" knowledge to good use and so it was that he ended up volunteering with the Helmeted Honeyeater Recovery Program and the VWSG where he found the whole experience of catching, measuring, banding and the overall teamwork a really fun experience. I recently re-read some old emails that Gavin had sent me and one contained the following about a VWSG outing to Swan Island: "***I now ache in places I didn't know existed, am sunburnt and dehydrated, but it was worth it".*** Gavin & Deb took part in a NWA expedition with the AWSG, and attended a banding course at Gluepot Reserve, and was very proud when he attained his "A" class banding licence.

Gavin & Deb managed to go birding in many places around the world including the UK, Turkey, Portugal, Japan, Hong Kong, NZ and one trip I remember him ribbing me about was to Seattle and Hawaii, where they saw some truly splendid birds, it was in an email after this trip that he told me "***You know you are either getting too caught up in birdwatching or too old when you can say you saw Red-footed Boobies and not snigger".***

Gavin & Deb loved going to the WTP, we used to rib Gavin saying we thought he might enjoy it just a bit too much, but I had the privilege of having Gavin show me around there for

two days in May 2010, and saw first hand not only how good it was but how Gavin was so proud of showing off “his spot”. I also have a great memory of that day as we saw two OBPs there and then about 40 Swift Parrots at the You Yangs only hours later.

Sadly Gavin passed away on 2 February 2012 after a 6 month battle with cancer.

At the 2013 Australasian Ornithological Conference and at future AOC’s an award will be presented in Gavin’s name, this will be a biennial award with the prizes donated by BirdLife Australia, Bob Green and Les Moore, a very fitting tribute to a great bloke.

Gavin and I always joked about our “race” to 500 Australian birds, when I do see my 500th I will share a quiet little toast to Gavin to celebrate.

Prepared by Bob Green

Gavin and Deb at Anna Plains Station on the AWSG Expedition (Photo Roz Jessop)

Gavin with the VWSG crew at the traditional post-Christmas catches at Werribee (Photo Roz Jessop)

Publications and Presentations using VWSG data

Compiled by Roz Jessop

NEWSLETTERS

Members made contributions to the following:

- **"The Tattler",** Newsletter for the East Asian-Australasian Flyway. Copies can be down loaded from the AWSG web page http://www.awsg.org.au/. You can also download previous copies of the AWSG journal Stilt from this site. Article prepared by Clive Minton
- **"VicBabbler",** quarterly newsletter of the BirdLife Victoria Article prepared by Clive Minton
- **"Birdlife South East SA Newsletter"** page of 'wader notes' prepared by Maureen Christie
- **"Friends of the Shorebirds South East"** email newsletters prepared by Maureen Christie

Papers of interest:

Ekanayake, K. & Weston M. 2011. Aggressive behaviour of Red-capped Plovers *Charadrius ruficapillus* towards the Eastern Blue-tongue Lizard *Tiliqua scincoides scincoides. Wader Study Group Bulletin* 118: 191.

Minton, C., Dann, P., Ewing, A., Taylor, S., Jessop, R., Anton, P. and Clemens. 2012. Trends of Shorebirds in Corner Inlet, Victoria, 1982-2011. *Stilt* 61: 3-18.

Minton, C., Gosbell, K., Johns, P., Christie, M., Klaassen, M., Hassell, Boyle, Jessop, R. and Fox, J. 2011. Geolocator studies on Ruddy Turnstones *Arenaria interpres* and Greater Sand Plovers *Charadrius leschenaultii* in the East Asian-Australasian Flyway reveal widely different migration strategies. *Wader Study Group Bulletin* 118: 87-96

Minton, C., Jessop, R., Hassell, C. and Christie, M. 2011. North-west Australia Wader and Tern Expedition report 18th February to 11th March 2012. *Stilt* 61: 59-64.

Minton, C., Jessop, R. and Hassell, C. 2011. Wader breeding in the 2010 Arctic summer, based on juvenile ratios of birds which spend the non-breeding season in Australia. *Stilt* 60: 58-60.

Minton, C., Jessop, R. and Hassell, C. 2012. Wader breeding in the 2011 Arctic summer, based on juvenile ratios of birds which spend the non-breeding season in Australia. *Arctic Birds.*

Talks

Roz Jessop – 08/06/2011 "Ruddy Turnstones Migrations – early results of Geolocator Studies. Peninsula Field Naturalists.

Ken Gosbell, 25/10/2011 – The future of Shorebirds in a Changing World. Balwyn BirdLife Group.

Clive Minton – ABC Radio Mt Gambier – 08/11/2011 – Wonders of Wader Migration

Clive Minton – Port MacDonnell – 09/11/2011 - Wonders of Wader Migration

Golo Maurer – Threatened Shorebird - Little Wonders 14/06/2012 Birdlife Vic Group

Clive Minton – 04/07/2012 – My Birding Life – 65 years of it as a bander. Victorian Ornithological Research Group, ARI.

Dr Clive Minton, Victorian Wader Study Group – 8/08/2012 - "A Lifetime of Bird Banding" Bendigo Field Naturalists Club

Dr Clive Minton, Victorian Wader Study Group – 09/08/2012 - "Gelocators and waders" BirdLife Victoria

Doris Graham - spoke on "Waders" to about 45 people of a Probus Club in August 2012 and found them most interested and fascinated.

Facebook or videos on the web

Clive at Linnean Society
http://www.youtube.com/watch?v=c7SWPDdn2s8

Clive talking about bird banding at Corner Inlet
http://www.abc.net.au/local/videos/2011/02/02/3128083.htm

The VWSG Web site is regularly updated by Roger Standen – previous copies of the VWSG Bulletin can be downloaded from the site.

www.vicnet.net.au/~vwsg

VWSG Financial Report

Rosemary Davidson and Clive Minton

The VWSG's income and expenditure details for the 2011-12 financial year are detailed in the table. In spite of an overall loss of $3,254.83 the Group's financial position remains strong. High expenditure on geolocators continued this year, as well as significant on-going costs on engraved leg flags, electric fuses and blackpowder. However, generous donations from members, plus a further grant raised by Maureen Christie, have facilitated a satisfactory overall financial situation.

The accounts are presented in the usual way, with income and expenditure items grouped into categories to aid understanding and for comparison with previous years. The only significant new item in the Income section is $7000 which was transferred from the AWSG account at BirdLife Australia to cover the costs of typing help for Clive Minton (mostly provided via Maureen Fitzgerald). It was decided that this was more appropriately administered by VWSG than BLA, especially as half these funds were provided by VWSG (see under Expenditure).

Expenditure on items other than geolocators was approximately $7k, slightly exceeding (as usual) our "general" income of $6.6k. Donations towards the costs of geolocators (including the generous donations in memory of late member Gavin Jackson) slightly exceeded the $*c.*9k cost of geolocators in the past year.
Because of its strong financial position, built up over more than 30 years, the VWSG is now able to operate efficiently with good field equipment and the ability to maximize results by the use of expensive items such as geolocators and engraved flags.

Victorian Wader Study Group Inc.

ABN 12 724 794 488

Income & Expenditure Statement for the year ended 30 June 2012

INCOME		**EXPENDITURE**	
Subscriptions	$2,717.00	Printing Bulletins	$1,727.00
Bank Interest	$1,863.49	Postage, photocopying	$237.80
Donations	$935.00	Bank charges	$10.00
B&G Abbott, M Anderson,		Incorporation Fee	$42.80
X Dennett, P Hermans,		Excess for Manns Beach rent	$20.00
H Phillipson, J Reside,		Eisennman Medal celebration	
D Thomas		lunch expenses	$830.00
Proceeds from AGM Door Prizes	$580.00	***Sub-total***	***$2,867.60***
Excess from AGM Food	$100.00		
Sale of T Shirts	$195.00	*Equipment*	
Resale of glue	$25.00	Colour bands &	$1,661.00
Surplus from SA Fieldwork	$45.00	engraved flags	
Surplus from KI Fieldwork	$150.00	Flag making expenses	$77.00
		Trailer registration & repairs	$86.97
Sub-total	***$6,610.49***	Stool Repairs	$175.00
		Hovercraft fuel	$470.00
Donations in memory of		Angle gauges, cable winder	
Gavin Jackson	$2,450.00	repairs,hoops,stakes etc	$220.00
Donations for geolocators		Camouflage material	$65.00
from CM's celebratory lunch	$874.25	Batteries & choc blocks	$150.00
Donation to cover admin/		Fuses & black powder	$1,215.00
typing help for CM	$7,000.00		
		Sub-total	***$4,119.97***
Sub-total	***$10,324.25***		
		Purchase of geolocators	***$9,324.00***
Grant from Shorebirds SE			
for geolocators	***$1,134.00***	Payments to M Fitzgerald for sec help for CM	***$1,512.00***
		Payment to BA for VWSG's share for sec help for CM	**$3,500.00**
TOTAL INCOME	**$18,068.74**	**TOTAL EXPENDITURE**	**$21,323.57**
Cash Balance 1/07/2011		Cash Balance 30/06/2012	
Petty Cash	$98.45	Petty Cash	$40.65
Westpac Com. Solns.Acccount	$749.13	Westpac Com.Solns. Account	$319.20
Westpac Bus. Cash.Res	$32,860.99	Westpac Bus. Cash. Res.	
Bonus Account		Bonus Account	$27,027.05
Westpac Term Deposit	$20,698.50	Westpac Term Deposit	$26,310.78
Macquarie Account	$3,415.40	Macquarie Account	$1,089.96
		Unpresented cheque	-$220.00
Net Total	**$57,822.47**	**Net Total**	**$54,567.64**

MIGRATION DEVASTATION

Development of mudflats on the country's eastern coast threatens migratory birds, including rare species. **Liu Xiangrui** reports in Beijing.

Flight of the ornithologist

Economic boom in coastal areas harms vulnerable wetlands

MUDFLATS

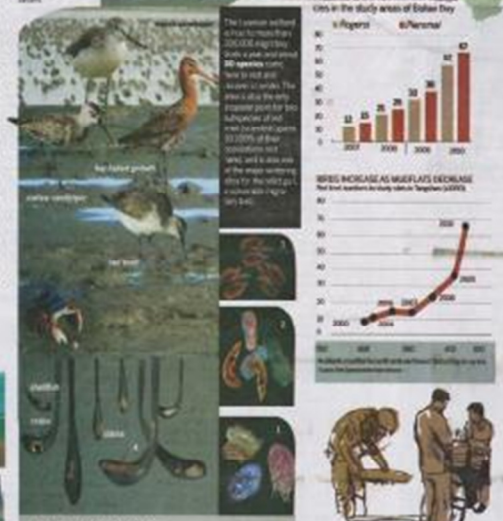
DREDGING

60 sq km is the size of the Liaohekou wetland. The nature coastal wetland is of international importance.

34% of the mudflats along the north and north-west of Bohai Bay have been reclaimed.

649 sq km is the area of Yancheng and Tiangzhen, characterized by industrialization from 1954 2000.

70% of the Yellow and Bohai seas' wetlands have been lost, it is the most-affected region.



300 people in Sejiu village harvest shellfish from the wetland. Edible shellfish generate 40% of their income.

In 2015, the gross per capita income from selling shellfish was 20,000 yuan ($3,140). Another 7,000 yuan came from making clams as animal feed.

VWSG Inc. Membership List August 2012

Bev & Geoff Abbott
Richard & Margaret Alcorn
Charles & Jocelyn Allen
Malcolm Allen
Terri Allen
Mark Anderson
Peter Anton
Allen Archbold
Robyn & Steve Atkinson
Graham & Jenny Beal
Andy Bennett & Kate Buchanan
Margaret & Henry Bennett
Rob & Gail Berry
David Billinghurst
Malcolm & Judy Brown
Paul & Anna Buchhorn
Mavis Burgess
Bill Bygott
Aiden Campbell
Jeff & Sarah Campbell
Mervyn & Ann Chappel
Rob Clemens
Maureen Christie
Allan Clarke & Marj Reni
Bretan Clifford
Pete Collins
Christine Connelly
Mike Connor
Dave Cropley
Monika Czastka
Rosemary Davidson
Michael Dawkins
John Dawson
Xenia Dennett
Barbara Dickson
Elizabeth Dunn
Dianne Emslie
Alice Ewing
Jon Fallaw & Becky Hayward
Erin Farmer
Maureen & Robin Fitzgerald
Tim & Liza Gale
Dave Gerard
Colin & Angela Gibbs
Heather Gibbs
Don & Joyce Gillespie
Ken & Carlene Gosbell
Andrew & Kath Gosden
Doris Graham
Nicole Grenfell
Patrick-Jean Guay
Angie Gutowski
Graham Hancock
Birgita Hansen
Neville Hatten & Robin Borland
Peter Haward
Peter Hermans
David & Margaret Hollands
Vivien Holyoake
Patsy Hohnen
Damian Howard
Tania Ireton
Peter Jenkins
Roz Jessop
Penny & Murray Johns
Steve Johnson
Peter Johnstone
Debbie King
Marcel Klaassen
Irma Kluger
Ken & Femmie Kraaijeveld
Joy Knight
Tessa & Angus Lamin
Brett Lane
Bruce Lavender
Jutta Leyrer
Janet Limb
Moira Longden
Sue & Andy Longmore
Richard & Debbie Loyn
John & Susie Lyons
Meg Macmillan
Bernie McCarrick
Clare McCutcheon
Geoff & Joan McDonald
Rod McFarlane & Helen Vaughan
Pat MacWhirter
Kathryn Manago
Ila Marks & Eric Miller & Heidi
Brian Martin
Golo Maurer
David Melville
Clive & Pat Minton
Stewart Monckton
Lorraine Moore
Maureen, Paul & Jordan O'Neill
Kim O'Riley
Priscilla Park
Rob Patrick
Reece Pedler
Hugo Phillipps
Heather & David Phillipson
Mike Preeston
Thomas Putt
Susan Quirk
David Rantall
John Renowden
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Charles Silveira
Howard Simco
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John Stoney
Bob Swindley
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Andrew Taylor
Susan Taylor
Deryn Thomas
David & Wendy Trudgen
Lyn Turner
Stephanie & Lindsay Tyler
Paul Van Loon
Inka Veltheim
John & Caroline Walmsley
Hazel Watson
Marion Weaving
Mike Weston
Jim & Anthea Whitelaw
David & Jean Wilbraham
Ross Williamson
Kailash Willis
Prue Wright
Dallas & Judi Wyatt
Elizabeth Znidersic

Bulletins are also sent within Australia to:

Dept. of Primary Industry
Australian Bird & Bat Banding Scheme
Australasian Wader Studies Group
BirdLife Australia
Broome Bird Observatory
CSIRO Library, ACT
Dept. of Defence, Swan Is.
Queenscliff
Eyre Bird Observatory
French Is. Head Ranger FINP
Melbourne Water (Western Treatment Plant)
National Library- ACT
DSE Geelong
NSW Wader Study Group
NWA WSG- Chris Hassell
Phillip Island Nature Parks
Parks Victoria, Foster
Parks Victoria, Queenscliff
Queensland Wader Study Group
Victoria Museum
Victorian Ornithological Research Group
Victorian State Library
And landowners on whose property the group operates in Victoria

Overseas recipients of the Bulletin:

Alaska: R Gill- Alaska Science Centre
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Kiyo Ozaki & Y Shiite-Bird Meg. Res. Cent.
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— access via the lane way off Grattan Street

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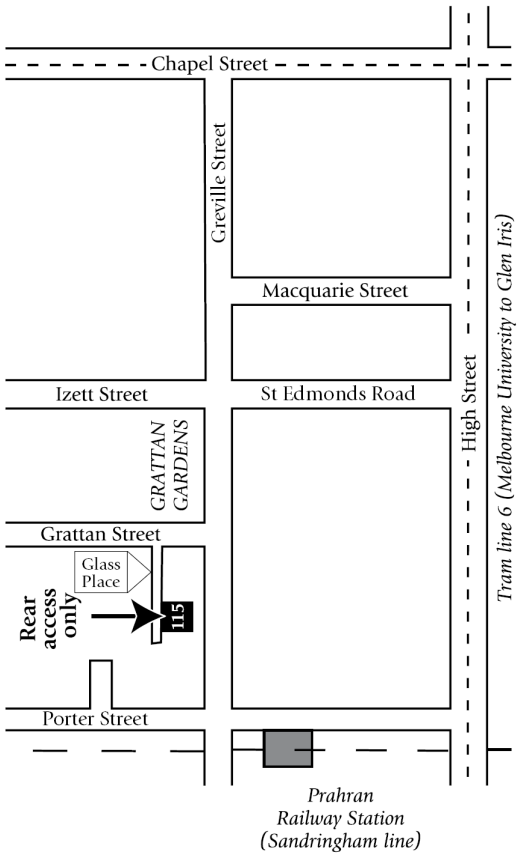
Stop 46 (79 - Nth Richmond to Prahran)

Other local trams:
8 - Toorak Road (Moreland to Toorak)
72 - Commercial Road (Melbourne University to Camberwell)



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