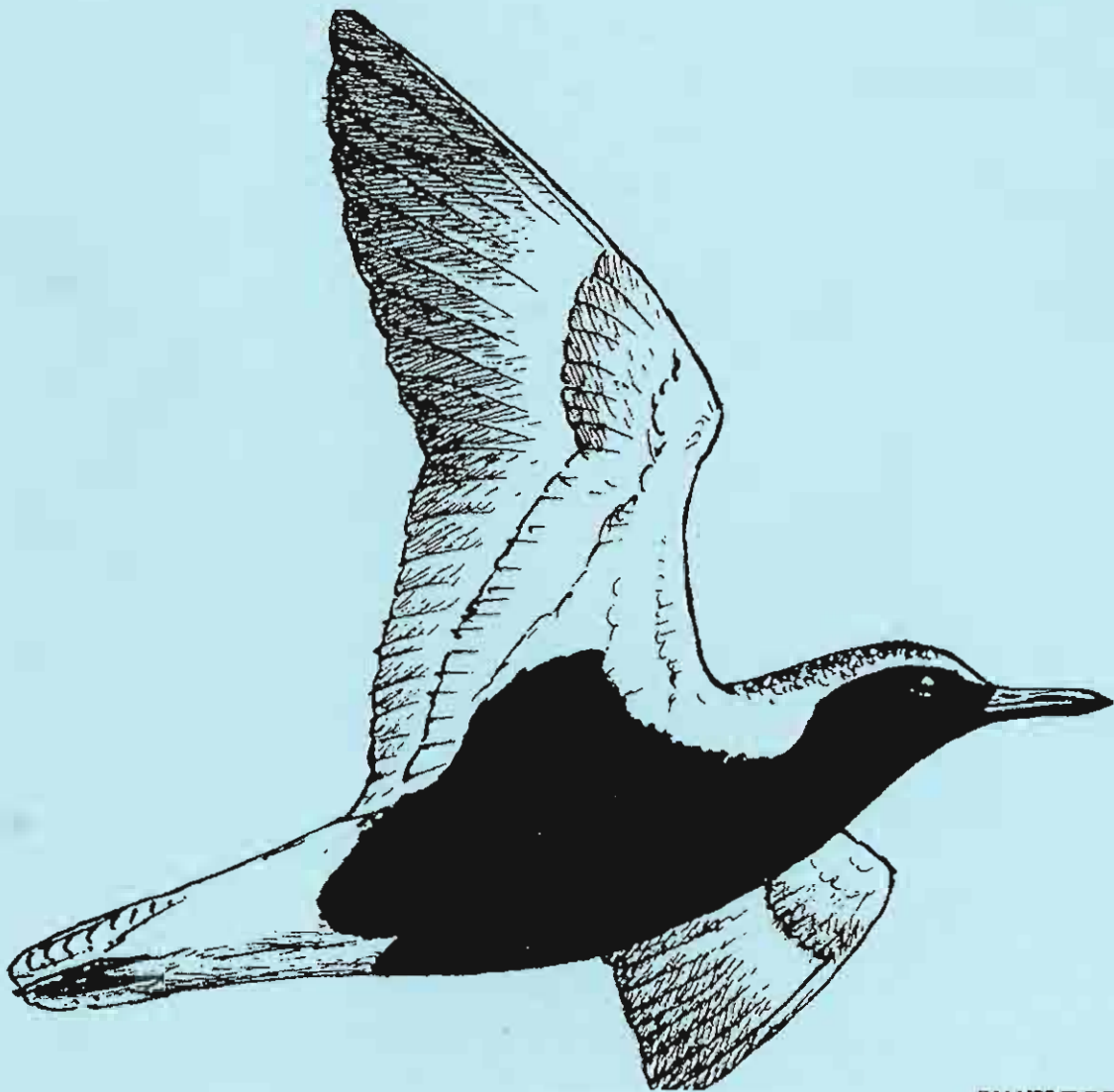


Brian & Nicki

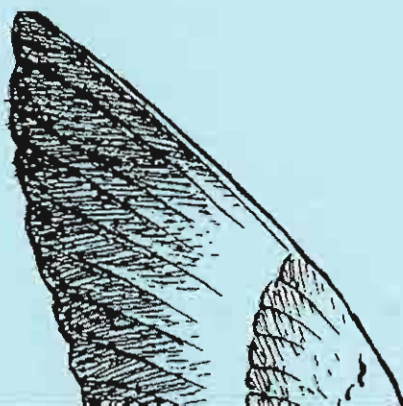
VWSG BULLETIN

JOURNAL OF THE VICTORIAN WADER STUDY GROUP

Number 25
August 2002



Number 25
August 2002



VICTORIAN WADER STUDY GROUP INC. OFFICE BEARERS

Chairman
Dr. Clive Minton
165 Dalgetty Road
Beaumaris, Vic. 3193
Tel. 03 9589 4901
Fax. 03 9589 4901
Email mintons@ozemail.com.au

Treasurer/Secretary
Rosemary Davidson
14 Young Street
Ashburton, Vic. 3147
Tel. (h) 03 9885 8231
Yanakie 03 5687 1322
Email rosied@ozemail.com.au

Equipment Officer
Paul Buchhorn,
PO Box 32
Balnarring, Vic. 3926.
Tel. (h) 03 5983 5537
Email
buchhorn@peninsula.hotkey.net.au

Editor
Dr. Rosalind Jessop
PO Box 97
Cowes, Phillip Island,
Vic. 3922.
Tel. (w) 03 5951 2800
Fax 03 5956 8394
Email rjessop@penguins.org.au

Assistant Editors
Dr. Doris Graham
14 Falconer Street
North Fitzroy. Vic. 3068.
Tel/fax. 03 9482 2112
Email:
dorris_graham@hotmail.com

Conservation Officer
Jeff Campbell
Country Roads Motor Inn
Henty Highway
Warracknabeal,
Vic. 3933
Tel. 03 5398 1811
Fax 03 5398 1605

Pete Collins,
PO Box 4009, Cowes. 3922.
Tel/fax 03 5952 1857
Email
moonbird@waterfront.net.au

Committee for 2000/2001 and 2001/2002

The above officers and

Mark Barter, Malcolm Brown, Allan Clarke, Ken Gosbell, Brenda Murlis, Graeme Rowe, Susan Taylor.

Public Officer: Dr. Clive Minton

Subscriptions (payable in advance on 30th June)

Full Member \$15.00

Student, interstate or overseas \$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 with articles, field notes and other material.

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

Views and opinions expressed in "VWSG Bulletin" are those of the author(s) and not necessarily those of the VWSG.

©VWSG This book is copyright. Apart from any fair dealings for the purpose of private study, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission. Inquires should be directed to the editor.

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

on adjacent dunes etc. Such translocation of nests has proved extremely successful with Ringed Plovers in the UK and the use of exclosures has been beneficial on Hooded Plovers at Phillip Island and on Piping Plovers and Least Terns in North America.

Data Entry

Ken Gosbell, assisted by a team of helpers from within VWSG, has been most successful in keeping reasonably up to date with the computerisation of our banding and processing data. This necessary, time-consuming, but boring task is vital if we are able to utilise all of our data in scientific analyses and publications now in train or planned for the future. The efforts of these members are very greatly appreciated.

Publications

Work is continuing on analysing data and preparing it for publication on a number of species/subjects using VWSG data. Several of these studies have resulted in publications in the last year. A list of publications using VWSG data was given in the last VWSG Bulletin and an update of this will be published in the future.

Equipment

Paul Buchorn is greatly thanked for maintaining Group equipment in such excellent condition. Many other people also contribute in a variety of ways – especially in net mending! Peter Anton is especially thanked for assistance in a number of ways and Graham Rowe for dealing with any electrical problems.

Alan Williams, not a VWSG member but an excellent innovator and a very generous giver of his time, has designed a new and more robust form of firing box which has withstood all attempts to wreck it over a 12 month period! It has now become the “standard” design.

Financial Situation

A detailed financial statement appears elsewhere in this Bulletin.

The Group has a healthy financial situation in spite of in recent times, spending more on equipment maintenance and upgrading and on the annual Bulletin than its income derived from member subscriptions.

There is sufficient accumulated surplus to enable this to happen but the accumulated balance in hand, as shown in the financial statement, is a little misleading because it contains some \$10,000 that the Group is committed to expend on its Coast Action/Coast Care programs.

Acknowledgments

Some of those who contributed especially significantly to the VWSG's activities and success in the past year or so have been acknowledged in various appropriate sections in this Bulletin. In addition the following are thanked for their considerable efforts and input.

- (a) All those persons who made flag sightings and/or reported them – from both overseas and within Australia.

- (b) Malcolm Brown, Doris Graham and a range of other VWSG members who have organised and undertaken the manufacture of leg flags during the year to meet our highly variable and unpredictable needs.
- (c) Environment Australia who provided a contract (to AWSG) to enable all past and current flag sightings to be put on a computerised database for ease of access and usage in the future and also to enable such information to be transferred to, and stored by, the Australian Bird Banding Office in Canberra on a long-term basis.

VWSG members Heather Gibbs developed the database and Julie Deleyev and, more recently, Lauren Beasley undertook all the data input and data extraction work. The Banding Office kindly paid for consumables such as ink, paper and postage used during the process of handling all flag sighting reports on their behalf.

- (d) Rosemary Davidson, our Secretary/Treasurer, very kindly allowed us to use her house at Yanakie as our base during extended fieldwork sessions in Corner Inlet. This generous gesture was one of the reasons why fieldwork in that area was so well supported!
- (e) Parks Victoria at Foster, Wonthaggi and Queenscliff, very kindly provided boat transport for our wader and tern banding and counting activities in Corner Inlet and at Mud Islands, Port Philip Bay. Without the capacity and security of such boat support our fieldwork activities would not be possible. The skill of boat handling by PV boat drivers when severe wind conditions sprung up in Corner Inlet in June 2001 will long be remembered by those who were present. Contrary to expectations after such an experience, members volunteered for similar fieldwork the next day and returned in even greater numbers for the "Corner Inlet week" in June 2002!
- (f) Tim Gunn, who each year organises the powder coating of 1000 metal bands for use on Crested Tern chicks at the Mud Islands breeding colony. This project is now in its eighth season and "shocking pink" will be the colour used this year!
- (g) Iain Stewart and Maureen Christie for facilitating our annual visits to South Australia and for starting the process of building up a local cannon-netting team. Ren De Garis, who was responsible for initiating these South Australian excursions in 1993, kindly provided excellent wine to go with the special crayfish supper provided by Iain and Sandy Stewart (to which Maureen Christie also contributed in 2002).
- (h) Last, but most rather than least, the many land owners who regularly over the years have granted access to their properties for us to catch, band and count waders and terns. This very long list includes Melbourne Water (Werribee Sewerage Farm), The Ministry of Defence (Swan Island), Parks Victoria (many locations), John and Jean McDonald (northwest Swan Bay), Esso/BHP (Barry Beach and Long Island, Hastings), Flinders Yacht Club (West Head), Richard Prins and Damien Costello (Yallock Creek), Bruce Ridgeway and the Foreshore Committee (Stockyard Point), Mr. and Mrs. Price (Anderson's Inlet, Inverloch), Neville and Nancy Rousacc (Rousacc's Point, near Foster) and Michael Lyon (Lyon Downs, Yanakie).

Without the kind permission of all the above, our studies would be much less comprehensive and successful.

Finally to all those VWSG members, and occasional volunteer participants, who have taken part in the extensive fieldwork activities over the past year or more. Whilst there is great enjoyment in seeing birds in the hand, in collecting scientific data (especially where it is of conservation value) and being out along the beautiful coastline and wetlands of Victoria the fieldwork also makes heavy physical demands on participants in terms of equipment handling, hours in the field, unreasonably early starts/finishes, and often the need for intrepid perseverance in unattractive (sometimes damn right awful) weather conditions. What is achieved is very very much a team effort. Thanks to everyone.

Clive Minton

Clive's contribution to ornithology was recognised when he became a Member of the Order of Australia (AM) for "service to ornithology, particularly in the study of migratory wading birds in Australia" in the Australia Day honours list 2001. Congratulations from all member of VWSG.

Numbers of waders processed by the VWSG each month to December 2001. Processing includes measuring wing length, bill length and/or total head length (as appropriate) and weight; also recording full details of primary feather moult (if any). Additional wing moult has been gathered on some birds which were not fully processed. The table below is used to plan fieldwork, with the object of obtaining useable data (preferably on at least 50 birds of each age group) for each month of the year for all the main wader species.

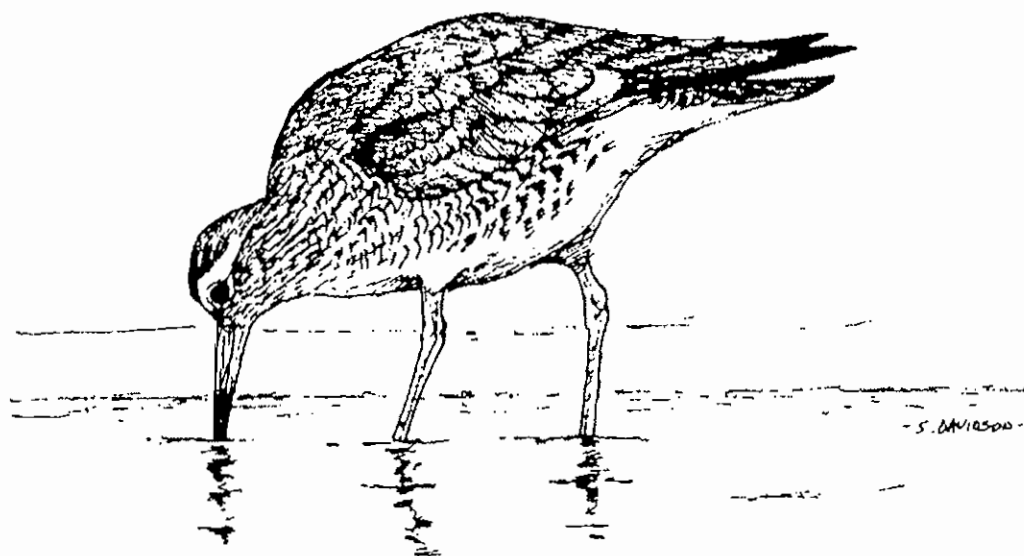
	J	F	M	A	M	A	M	J	J	J	A	S	O	N	D	TOTAL
Latham's Snipe	51	44	0	0	0	0	0	0	0	0	106	99	35	61	396	
Short-billed Dowitcher	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
Black-tailed Godwit	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
Bar-tailed Godwit	274	127	685	14	0	438	69	0	77	185	203	271	2343	23	23	
Whimbrel	0	0	16	0	0	1	0	0	0	4	2	0	806	100	806	
Eastern Curlew	16	92	19	0	22	18	13	75	147	124	180	100	492	60	492	
Common Greenshank	1	135	120	0	0	0	0	0	0	0	176	0	34	12	34	
Terek Sandpiper	13	2	1	1	2	0	0	1	0	1	1	0	40	1	40	
Grey-tailed Tattler	31	0	1	3	0	3	0	0	0	0	1	1	2603	437	2603	
Ruddy Turnstone	347	376	408	475	1	7	31	1	12	39	469	437	531	129	531	
Great Knot	164	21	26	0	0	29	3	0	16	103	40	129	3026	260	3026	
Red Knot	479	148	302	34	2	318	378	81	85	674	265	260	2312	397	2312	
Sanderling	247	479	432	211	0	0	0	0	0	202	344	397	5	3	5	
Little Stint	1	0	0	0	0	0	0	0	0	0	1	0	22529	3088	22529	
Red-necked Stint	2397	1218	5959	2006	507	725	608	523	647	1535	3316	0	1	0	1	
Long-toed Stint	0	0	0	0	0	0	0	0	0	1	0	0	2	0	2	
Pectoral Sandpiper	0	2	0	0	0	0	0	0	0	0	0	0	5100	1527	5100	
Sharp-tailed Sandpiper	1387	785	176	2	0	0	0	15	519	345	344	1527	7971	1149	7971	
Curlew Sandpiper	822	1210	1392	229	222	127	216	471	246	999	888	1149	5	2	5	
Broad-billed Sandpiper	1	2	0	0	0	0	0	0	0	0	0	0	2610	31	2610	
Pied Oystercatcher	87	181	274	327	449	508	415	185	102	37	14	31	682	0	682	
Sooty Oystercatcher	3	43	81	45	194	176	120	19	0	1	0	0	21	6	21	
Black-winged Stilt	0	9	0	0	0	0	0	0	0	4	2	0	151	151	151	
Banded Stilt	0	0	0	0	0	0	0	0	0	0	0	0	310	83	310	
Red-necked Avocet	39	0	0	0	0	0	0	67	29	46	46	64	254	64	254	
Pacific Golden Plover	40	27	32	1	0	0	0	0	0	28	62	17	120	0	120	
Grey Plover	2	14	4	3	0	2	0	0	2	86	17	24	734	11	734	
Red-capped Plover	39	79	58	114	203	104	65	18	8	11	0	0	4032	0	4032	
Double-banded Plover	0	2	180	257	755	941	965	930	1	0	0	0	114	12	114	
Lesser Sand Plover	54	5	13	7	3	2	2	0	0	1	15	0	33	0	33	
Greater Sand Plover	21	3	6	0	0	1	1	0	0	0	1	0	63	8	63	
Black-fronted Dotterel	0	7	0	0	11	16	6	9	2	0	4	0	16	0	16	
Hooded Plover	0	0	1	0	0	15	0	0	0	0	0	0	144	1	144	
Red-kneed Dotterel	0	10	0	20	0	44	11	16	12	8	22	1	146	11	146	
Masked Lapwing	4	6	80	2	3	13	0	0	1	5	21	11	1	0	1	
Cox's Sandpiper	0	0	0	0	0	0	0	0	0	0	1	0	57653	0	57653	
TOTAL																

Wader Banding Totals – VWSG 2001

Species	New	Retrap	Total
Bar-tailed Godwit	196	29	225
Eastern Curlew	18	0	18
Ruddy Turnstone	107	57	164
Great Knot	38	6	44
Red Knot	378	36	414
Sanderling	38	27	65
Little Stint	1	0	1
Red-necked Stint	3388	962	4350
Sharp-tailed Sandpiper	18	0	18
Curlew Sandpiper	422	101	523
Broad-billed Sandpiper	2	0	2
Pied Oystercatcher	157	86	243
Sooty Oystercatcher	43	15	58
Black-winged Stilt	3	0	3
Pacific Golden Plover	14	1	15
Red-capped Plover	3	0	3
Double-banded Plover	7	0	7
Greater Sand Plover	1	0	1
Masked Lapwing	5	0	5
19 Species	4839	1320	6159

Wader Banding Totals – VWSG January – June 2002

Species	New	Retrap	Total
Bar-tailed Godwit	273	94	367
Eastern Curlew	18	0	18
Grey-tailed Tattler	1	0	1
Ruddy Turnstone	84	30	114
Great Knot	51	10	61
Red Knot	368	116	484
Sanderling	321	162	483
Red-necked Stint	4364	781	5145
Sharp-tailed Sandpiper	542	30	572
Curlew Sandpiper	404	50	454
Pied Oystercatcher	149	151	300
Sooty Oystercatcher	59	25	84
Grey Plover	12	3	15
Red-capped Plover	2	0	2
Double-banded Plover	61	4	65
Black-fronted Dotterel	3	0	3
Masked Lapwing	6	0	6
17 Species	6718	1460	8174



VWSG Wader Catches 1975 to December 2001

Species	New	Retrap	Total
Latham's Snipe	347	14	361
Black-tailed Godwit	2	0	2
Bar-tailed Godwit	2543	166	2709
Short-billed Dowitcher	1	0	1
Whimbrel	23	0	23
Eastern Curlew	740	62	802
Common Greenshank	432	60	492
Terek Sandpiper	32	1	33
Grey-tailed Tattler	37	3	40
Ruddy Turnstone	2108	612	2720
Great Knot	512	53	565
Red Knot	3193	323	3516
Sanderling	1963	690	2653
Little Stint	5	0	5
Red-necked Stint	81185	22873	104058
Long-toed Stint	1	0	1
Pectoral Sandpiper	2	0	2
Sharp-tailed Sandpiper	5695	197	5892
Curlew Sandpiper	22767	4411	27178
Cox's Sandpiper	1	0	1
Broad-billed Sandpiper	5	0	5
Pied Oystercatcher	1772	854	2626
Sooty Oystercatcher	570	113	683
Black-winged Stilt	21	0	21
Banded Stilt	151	0	151
Red-necked Avocet	306	5	311
Pacific Golden Plover	235	24	259
Grey Plover	119	12	131
Red-capped Plover	603	180	783
Double-banded Plover	3352	975	4327
Lesser Sand Plover	115	11	126
Greater Sand Plover	31	3	34
Black-fronted Plover	53	4	57
Hooded Plover	25	1	26
Red-kneed Dotterel	134	11	145
Masked Lapwing	148	3	151
36 Species	129229	31661	160890

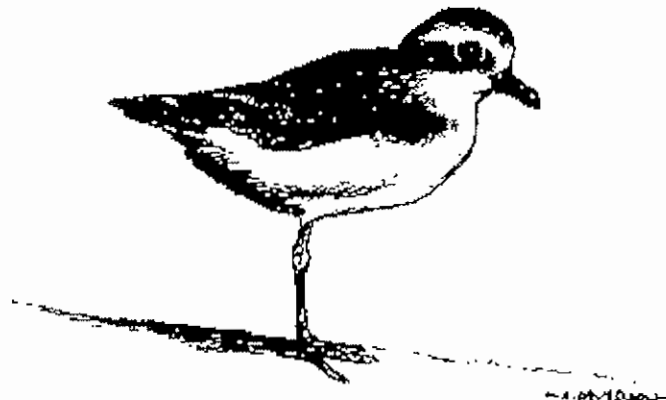
Annual Wader Banding Totals by VWSG

Calendar Year	New	Retrap	Total
1975	9	0	9
1976	616	4	620
1977	482	12	494
1978	1296	42	1338
1979	7436	486	7922
1980	6121	1206	7327
1981	4561	869	5430
1982	3774	796	4570
1983	2875	628	3503
1984	4272	1045	5317
1985	4073	1051	5124
1986	7144	2057	9201
1987	5350	1559	6909
1988	8019	2697	10716
1989	5437	1584	7021
1990	4094	1950	6044
1991	3224	850	4074
1992	4652	861	5513
1993	8831	2588	11419
1994	4839	1753	6592
1995	2708	625	3333
1996	5263	1035	6298
1997	4366	1050	5416
1998	8083	1408	9491
1999	6515	1591	8106
2000	10350	2594	12944
2001	4839	1320	6159
Totals to end 2001	129229	31661	160890

Average annual total for '79-01 = 6889

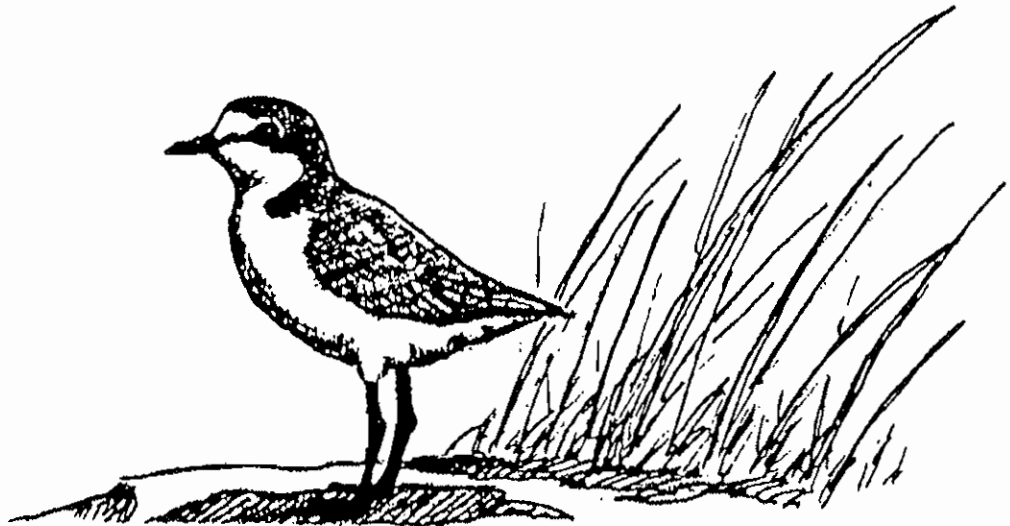
VWSG Catch Record - Waders

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



Location of Waders Caught in Victoria and South Australia

	to Dec. 2000	2001	Total
<i>Victoria</i>			
Werribee	48296	755	49051
Western Port	39159	2886	42045
Queenscliff/Swan Bay	25492	776	26268
Anderson Inlet (Inverloch)	17323	617	17940
Corner Inlet	16003	937	16940
Sandy Point/Shallow Inlet	1281	67	1348
Altona	955	0	955
Mud Islands	753	0	753
Killarney Beach	426	0	426
Geelong (Point Henry / Belmont Common)	257	0	257
Bendigo SF	143	0	143
Seaford Swamp	98	0	98
Braeside/Croyden	79	0	79
Gippsland Lakes	40	0	40
Toowong	10	0	10
<i>South Australia</i>			
Canunda/ Carpenter Rocks/ Brown Bay/ Beachport	4506	121	4627
Total	154731	6159	160890



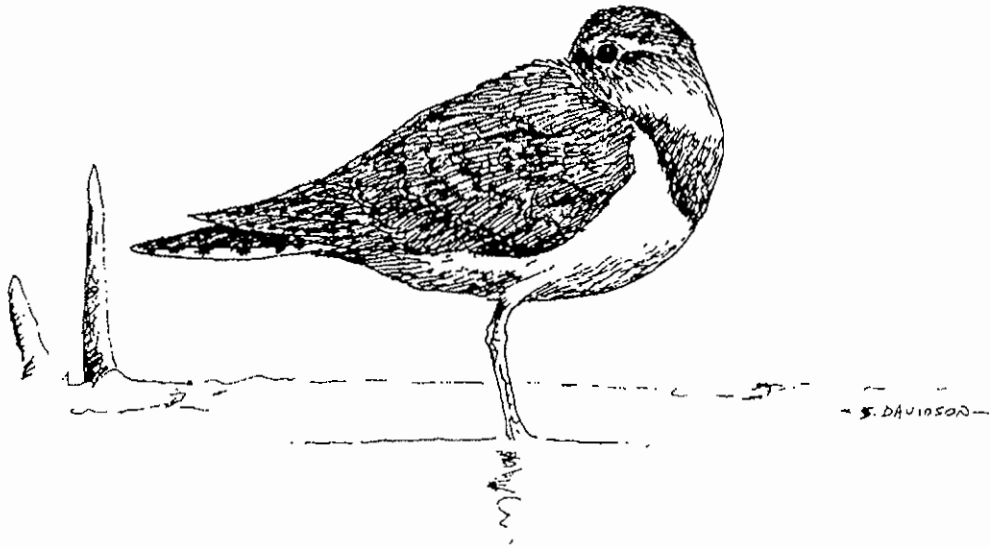
Waders leg-flagged by the VWSG in Victoria (orange)

Species	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Latham's Snipe	0	0	0	0	40	0	110	56	70	0	2	0	0	278
Black-tailed Godwit	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Bar-tailed Godwit	0	1	157	6	64	0	43	173	16	84	388	324	9	1452
Whimbrel	0	0	0	0	16	0	0	0	0	2	0	2	0	20
Eastern Curlew	0	0	8	0	73	88	87	4	37	35	91	27	18	468
Common Greenshank	0	0	21	21	51	0	1	109	131	19	0	0	0	353
Terek Sandpiper	0	0	2	2	2	2	0	0	0	0	0	1	0	9
Grey-tailed Tattler	0	0	0	0	0	0	0	3	1	0	0	0	0	4
*Ruddy Turnstone	0	99	188	37	35	1	194	129	194	372	75	54	34	1412
Great Knot	0	0	2	0	4	0	3	36	31	21	21	53	38	209
Red Knot	0	0	302	26	88	1	52	59	295	289	175	334	377	1998
*Sanderling	0	0	163	0	191	1	47	328	148	342	51	118	36	1425
Little Stint	0	0	0	1	0	0	0	0	0	0	1	0	0	3
Red-necked Stint	0	799	1259	2516	2282	1661	1384	3065	1434	3224	4215	6038	2570	30447
Pectoral Sandpiper	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Sharp-tailed Sandpiper	0	4	250	111	71	21	69	145	155	474	212	105	18	1635
Curlew Sandpiper	146	462	367	1255	808	839	469	753	270	633	770	1162	417	8351
Cox's Sandpiper	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Broad-billed Sandpiper	0	0	0	0	0	1	0	0	0	0	0	0	2	3
Black-winged Stilt	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Banded Stilt	0	0	0	0	0	0	0	0	0	0	0	151	0	151
Red-necked Avocet	0	0	0	0	5	0	0	0	27	0	0	46	0	78
Pacific Golden Plover	0	10	10	1	0	0	0	6	0	10	13	0	14	64
Grey Plover	0	0	0	1	0	0	6	0	22	0	0	21	0	50
Red-capped Plover	0	0	0	0	0	19	0	0	29	3	10	2	2	65
Double-banded Plover	0	0	0	0	0	8	0	0	0	40	24	98	3	173
Lesser Sand Plover	0	0	0	14	6	8	9	13	0	4	1	0	0	55
Greater Sand Plover	0	0	0	0	3	6	0	0	0	2	4	0	1	16
Black-fronted Dotterel	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Red-kneed Dotterel	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Masked Lapwing	0	0	0	0	0	0	1	0	4	0	0	2	5	12
31 Species	146	1375	2729	3992	3739	2656	2475	4881	2867	5554	6053	8538	3735	48740

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

Waders leg-flagged by VWSG in South Australia (orange/yellow)

Species	1999	2000	2001	Total
Latham's Snipe	0	0	4	4
Grey-tailed Tattler	0	1	0	1
Ruddy Turnstone	234	226	73	533
Sanderling	63	420	2	485
Red-necked Stint	126	383	22	531
Sharp-tailed Sandpiper	0	2	0	2
Curlew Sandpiper	24	11	0	35
Pacific Golden Plover	0	2	0	2
Red-capped Plover	0	0	1	1
Double-banded Plover	0	0	4	4
Total	447	1045	106	1598



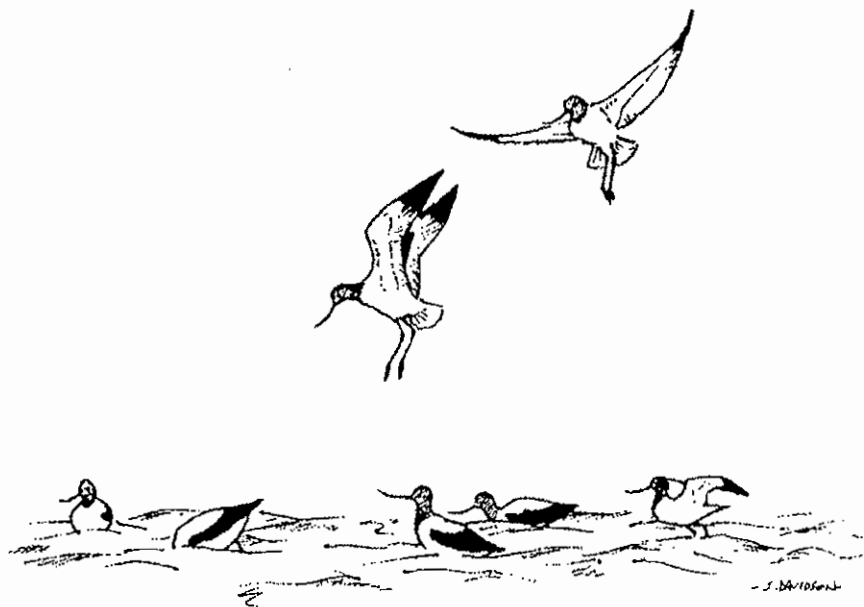
VWSG FIELDWORK PROGRAM 2001

DATE	PLACE AND OBJECTIVES	HIGH TIDE	
Sat 13 Jan	Flinders Turnstone	1625	2.58
Sun 28 Jan	Sandy Point Sanderling	1531	1.90
Sun 4 Feb	Barralliar Island, Western Port Curlew Sandpipers & Red-necked Stints	0823	2.47
Sat 10 Feb to Sun 11 Feb	Queenscliff Small waders and Pied Oystercatchers	1412* 0310 1510	1.32 1.51 1.40
Fri 16 Feb to Sun 18 Feb	Gippsland Lakes Little Terns and Common Terns		
Wed 28 Feb	Flinders Turnstone and Sooty Oystercatchers	1737	2.61
Sat 3 Mar to Wed 7 Mar	Corner Inlet Large Waders	0609 to 0844	2.37 to 2.44
Fri 9 Mar to Mon 12 Mar	Ward Spit, Port Pirie, South Australia - Red Knot	0901 0927	2.84 2.80
Fri 16 Mar	Werribee S.F. - Pied Oystercatchers	0818	0.87
Sun 25 Mar	Sandy Point Sanderling	1250	1.86
Sun 8 April	Stockyard Point Pied Oystercatchers	1254	2.54
Mon 9 April	Long Island, Hastings Pied Oystercatchers	1404	2.75
Thu 12 Apr	Barry Beach Pied and Sooty Oystercatchers	1609	2.52
Sun 6 May	Rhyll Pied Oystercatchers	1130	2.48
Sat 26 May	Roussac Point Pied and Sooty Oystercatchers	1501	2.52
Sun 27 May	Lyons Downs (Yanakie) Pied and Sooty Oystercatchers	1550	2.60
Sat 9 Jun	Stockyard Point Pied Oystercatchers	1544	3.01
Fri 22 Jun to Mon 25 Jun	Corner Inlet Pied and Sooty Oystercatchers and overwintering large waders	1232 to 1525	2.36 to 2.59
Sun 22 Jul	Barry Beach Pied and Sooty Oystercatchers	1300	2.38
Sat 28 Jul	AGM At Clive Mintons house, 10 am net mending, 4 pm AGM, 5.30 pm BBQ 7 pm Slide shows and talks		
Sun 5 Aug	Rhyll -- Pied Oystercatchers	1403	2.71
Sun 19 Aug	Yallock Creek - Small waders	1242	2.68
Sat 20 Oct	Sandy Point - Sanderling	1514	2.34
Sun 18 Nov	Flinders - Ruddy Turnstone	1439	1.36
Fri 30 Nov	Mud Islands - Crested Terns	(1150)	(1.14)
*Sat 8 Dec to Sun 9 Dec	Inverloch Small waders and Eastern Curlew	0626 1813 0705	2.57 2.32 2.57
Fri 14 Dec	Mud Islands - Crested Terns	(1135)	(1.23)
Thur 20 Dec	Corner Inlet - Crested & Caspian Terns	(1640)	(2.08)
*Sat 22 Dec	Stockyard Point - Small Waders	0648	2.72
*Sun 23 Dec	Yallock Creek - Small waders	0719	2.64
*Thur 27 Dec to Sat 29 Dec	Werribee - Small waders	1149 1237 1331	0.78 0.76 0.75

VWSG FIELDWORK PROGRAM 2002

DATE	PLACE AND OBJECTIVES	HIGH TIDE	
Thur 3 Jan	Corner Inlet Caspian and Crested Tern chicks		n/a
*Sat 5-Sun 6 Jan	Queenscliff / Swan Bay Small waders	**0513 1710 0554	1.53 1.32 1.49
Sun 20 Jan	Barrallier Island, Western Port Small waders	0620	2.70
*Sat 26-Sun 27 Jan	Gippsland Lakes Little and Common Tern		n/a
Sat 2 Feb	Flinders Turnstone	1727	2.70
*Fri 22-Tue 26 Feb	Corner Inlet Large waders and Oystercatchers	0706 to 0952	2.37 to 2.28
*Sat 2-Sun 3 Mar	Queenscliff Large waders and Oystercatchers	**1515 0346 1612	1.45 1.50 1.52
Sun 10 Mar	Werribee SF Pied Oystercatcher	1133	0.76
*Sat 16-Thur 21 Mar	South Australia Sanderling and Turnstone	1445 to 1702	1.0 to 1.0
Tues 2 Apr	Barry Beach Bar-tailed Godwit	1627	2.60
Sat 13 Apr	Long Island, Hastings Pied Oystercatcher	1351	2.43
Sun 14 Apr	Stockyard Point Pied Oystercatcher	1436	2.61
Tues 2 Apr	Barry Beach Bar-tailed Godwit	1627	2.60
Sat 6 April	Werribee North Spit Pied Oystercatcher	0833	0.83
Sat 13 Apr	Long Island, Hastings Pied Oystercatcher	1351	2.43
Sun 14 Apr	Stockyard Point Pied Oystercatcher	1436	2.61
Sat 27 April	Rhyll Pied Oystercatcher	1256	2.69
Sun 28 April	Flinders Sooty Oystercatcher	1300	1.57
Sun 12 May	Fairhaven Pied Oystercatcher	1317	2.54
Sun 26 May	Queenscliff Pied Oystercatcher and overwintering waders	**1145	1.51
Tues 11 June To Sat 15 June	Corner Inlet Pied and Sooty Oystercatcher, and overwintering Red Knot and Bar-tailed Godwit Stay at Rosemary Davidsons house at Yanakie	1235 to 1549	2.22 to 2.50
Sun 16 June	Roussac Point Pied and Sooty Oystercatcher	1629	2.55
Sat 13 July	Barry Beach Pied and Sooty Oystercatcher	1431	2.39
Sun 14 July	Lyons Downs, Yanakie Pied and Sooty Oystercatcher	1519	2.46
Sat 27 July	Stockyard Point Pied Oystercatcher	1526	2.86
Sat 3 Aug	Annual General Meeting at Clive and Pat Minton's House 10 am net mending, 4 pm AGM, 6 pm BBQ, 7 pm slides and talks		
Sun 11 Aug	Yallock Creek Eastern Curlew	1502	2.89
Sun 8 Sept	Yallock Creek Recently arrived Red-necked Stint and Curlew Sandpiper	1341	2.69
Sun 22 Sep	Stockyard Point Pied Oystercatcher and small waders	1343	2.47
*Sat 12 Oct to Sun 13 Oct	Queenscliff Red Knot and Bar-tailed Godwit	**Sat 0508 and 1547 Sun 0555	1.63 1.42 1.55
*Thur 17 Oct to Wed 23 Oct	South Australia Sanderling and Ruddy Turnstone	1133 to 1327	0.93 to 0.80
*Sat 9 Nov to Sun 10 Nov	Queenscliff Red Knot, Bar-tailed Godwit and Grey Plover	**Sat 0403 and 1441 Sun 0449	1.69 1.40 1.64

*Thur 28 Nov Fri 29 Nov	Inverloch Red-necked Stint	Thur 0619 Fri 0702	1.39 1.34
Sat 21 Dec	Corner Inlet Caspian and Crested Tern chicks	1314	1.98
*Fri 27 Dec to Sun 29 Dec	Werribee SF Red-necked Stint, Curlew Sandpiper and Sharp-tailed Sandpiper	Fri 0912 and 2109 Sat 0946 Sun 1023	0.85 and 0.76 0.84 0.84



Recoveries of Waders Banded in Victoria 2000/2001

Clive Minton, Rosalind Jessop, Peter Collins and Julie Deleyev

This list follows the same format as in previous VWSG Bulletins. It include all birds found dead and also all birds which have shown significant movements away from the banding location or have shown exceptional longevity.

Some reports have emanated from sightings of individually colour marked birds (eg. Pied and Sooty Oystercatchers, Hooded Plover) or birds recaptured by other banders.

The age codes at banding are

1 = first year or juvenile

2 = second year

2+= second year or older

3+= third year or older

Bar-tailed Godwit

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
072-80929	2+	230202	Off Manns Beach, Corner Inlet	270402	Yalu Jiang, northern Yellow Sea, China	8700 N

Amazingly this is only the second overseas recovery of a VWSG banded Bar-tailed Godwit (the previous one was in New Zealand). It was caught by one of our members, Pete Collins, during a visit to China to assist Chinese researchers mist netting waders. There has of course, been many overseas sightings of Bar-tailed Godwits leg flagged in Victoria.

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
071-51045	2+	280980	Queenscliff	050102	Queenscliff	Local
071-51182	2+	101283	Queenscliff	050102	Queenscliff	Local

These two retraps are the oldest Australian records for Bar-tailed Godwits. The first was a minimum of 22 ½ years old; the second was at least 19 ½ years old.

Eastern Curlew

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
091-25230	2+	201193	Inverloch	000502	Litovka River, Primorski Krai, Russia	9149 N

This bird was found dead at the southern end of the breeding grounds in SE Siberia. It is the VWSG's fourth overseas recovery (10th for Australia) and its second on the Russian breeding grounds (one also in the NE Chinese breeding area).

Great Knot

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
061-89219	2+	100201	Queenscliff	100401	Tae Tan, Hwanghae Namdo, North Korea	8719 N

This is the first Australian wader recovery reported from North Korea. The bird had become entangled in fishing gear and died.

Red Knot

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
052-02888	2+	270100	Queenscliff	250201	Karaka, Manukau Harbour, New Zealand	2650 E
052-02911	1	270100	Queenscliff	150301	Kaiaua, Firth of Thames, New Zealand	2674 E
052-22719	2+	221201	Stockyard Point	200102	Barrallier Island, Western Port	23 WNW
051-42681	1	120191	Yallock Creek	290398	Broome, WA	3050 NW
051-9400?	?	140798	Barry Beach	300302	Auckland Airport	2500 ENE

The first bird was mist netted by the NZ Wader Study Group. Unusually it is an adult bird which spent the 1999/2000 summer in Australia but was clearly spending the 2000/2001 summer in New Zealand. Usually it is first year birds from Australia which make the transfer to New Zealand, such as the second bird in the list.

The third bird was found freshly dead in the sea. It was in full breeding plumage when first banded and when found dead, whereas it should have been in non-breeding plumage in Dec/Jan.

The final bird would have been about to depart on northward migration when it had an accident at Auckland Airport.

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
051-18256	2	191085	Queenscliff	050102	Queenscliff	Local

This bird was 17 ½ years old when retrapped. It is one of the oldest records of Red Knot in Australia.

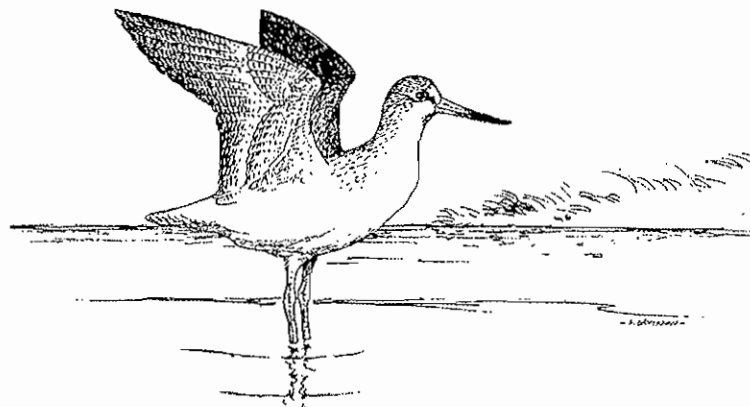
Sanderling

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
042-30590	2+	250301	Sandy Point, Shallow Inlet	290902	Takamatsu, Kahoku-Gun, Japan	8462 N
3C77053 Japan	2+	250901	Takamatsu, Kahoku-Gun, Japan	160202	Sandy Point, Shallow Inlet	8462 S

A wonderful exchange of controls (recapture of a bird banded elsewhere) - with Tomio Nagakawa, a Japanese wader bander. He also saw many leg-flagged Sanderling from Australia. Japan appears to be a major stopover area for Sanderling, especially on southward migration.

The above records are the first Australian and Japanese banding recoveries of Sanderling. (Editors note these recoveries are kept together, even though the first bird was not banded in Victoria, as their value is increased with proximity within the bulletin).

Not listed are seven Sanderling banded at Sandy Point in 1997/2000 and recaptured at Brown Bay, Port MacDonnell, South Australia 16th –20th March 2002.



Red-necked Stint

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
035-70620	2+	141199	Queenscliff	200101	Mud Islands	9 E
03581766	1	081201	Inverloch	180302	Carpenter Rocks SA	471 W
035-36967	1	291198	Inverloch	190302	Port MacDonnell SA	434 W
035-82002	1	081201	Inverloch	200302	Port MacDonnell SA	433 W

It is noteworthy that there was not a single overseas recovery reported in the past year in spite of the many thousands of Red-necked Stints banded.

The first of the above birds was found dead. Very few banded birds are ever found dead in Australia – rapid decomposition and predation probably result in dead and dying birds disappearing very quickly.

Note that the first of the three birds from Inverloch recaptured in South Australia had moved within the same season (3 months). It is possible that high population levels have increased the level of movement within the non-breeding range.

Curlew Sandpiper

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
042-15610	2+	291299	Werribee SF	280302	Mai Po, Hong Kong	7435 NNW
041-12982	2+	260185	Queenscliff	000000	Chongming Island, Shanghai, China	8106 NNW

Wader banding has resumed in Hong Kong after a lull of several years and it was nice that it was rewarded with the recapture of a Victorian banded bird. Note that this was in March - further evidence (to that from leg flag sightings) that some Victorian Curlew Sandpipers penetrate well into northern latitudes before the end of March.

The date of recovery of a 1985 Queenscliff bird in China was completely unknown - it could have been way back in the 1980's.

Pied Oystercatcher

Band	Age	Date banded	Location banded	Date(s) seen/ recovered	Location found	Km moved
10085095	2+	080288	Stockyard Point	261100 201200	Bermagui NSW	455 NE
101-03639	3+	080595	Off Manns Beach, Corner Inlet	261100	Merrimbula NSW	336 NE
101-04817	3+	060796	Barry Beach	100201	Bermagui NSW	412 Ne
101-04602	2	130895	Barry Beach	280401	Narooma NSW	430 NE
101-15566	1	160799	Off Manns Beach, Corner Inlet	200901 to 011001	South Ballina NSW	1251 NNE
100-96841	2	060889	Barry Beach	121001	Botany Bay NSW	675 NE
101-15910	2	190600	Off Manns Beach, Corner Inlet	051101	Ben Boyd NP NSW	317 ENE
101-15410	1	240698	Roussac Point, Corner Inlet	141101	Mimosa Ponds NP, NSW	416 NE
101-04844	4	040896	Barry Beach	131200	Bruny Island Tas	515 S
101-07358	3+	070401	Hastings	161101	Perkins Island, Tas	276 S
101-04665	3+	210596	Roussac Point	160102	Little Musselroe Bay Tas	266 S
100-99328	2+	270491	Off Manns Beach, Corner Inlet	120202	Little Musselroe Bay Tas	260 S
101-15139	3+	150198	Danger Point SA	011100 300101 080601 200801	Bucks Bay SA " Pelican Point SA " previously retrapped at Rhyll	562 W 560 W
100-96888	3+	100690	Barry Beach	011100 101100 300101 080701 200801 151101	Bucks Bay SA Carpenter Rocks SA Bucks Bay SA Pelican Point SA " Carpenter Rocks SA	529 W 529 W 527 W
100-96760	2+	160489	Werribee SF	101100 121100 150201 140701 151101	Carpenter Rocks SA Queenscliff Vic? Livingstones SA Canunda NP SA Carpenters Rocks SA	364 W 373 W
101-04641	3+	180591	Stockyard Point	111100 141101	Nora Criena SA "	510 W
100-96800	2+	200589	Stockyard Point	111100 141100 160202	Nora Criena SA Nora Criena SA Stockyard Pt Vic	496 W
101-60003	1	260200	Stockyard Point	111100 280201 280401 140501 261201	Livingstones SA Pelican Point SA Stony Drain SA " Blackfellows Cave SA	447 W 515 W 443 W
101-15418	1	120798	Stockyard Point	131100 020201 040202	The Coorong SA " "	c.638 W

101-04654	2	180596	Stockyard Point	131100 020201 040202	70k S of Murray Mouth SA The Coorong SA "	c.638 W
100-96814	3+	050889	Stockyard Point	131100 020201 021001 040202	65k S of Murray Mouth SA The Coorong SA Point Lonsdale Vic The Coorong SA	c.638 W
101-15130	3+	020897	Stockyard Point	131100	24k S of the Murray Mouth SA	
101-03679	2	171093	The Gurdies	020201 110201	The Coorong SA 67k S of the Murray Mouth SA	615 WSW
101-03686	2+	090794	Altona	020201 040202	The Coorong SA "	564 W
101-15551	1	160799	Off Manns Beach, Corner Inlet	020201 040202	The Coorong SA "	752 W
101-15562	1	160799	Off Manns Beach, Corner Inlet	020201	The Coorong SA	752 W
100-96873	1	060590	Werribee SF	240201 280301 190501	Nene Valley SA " Douglas Pt CP SA	354 W 348 W
100-96789	1	010789	Werribee SF	240201 190501	Nene Valley SA Douglas Point CP SA	354 W 348 W
101-15596	1	260200	Stockyard Point	071101	37k S of the Murray Mouth SA	
101-03670	2	171093	The Gurdies	141101	Nora Criena SA	515 W
101-04718	3+	030696	Long Island	141101	Nora Criena SA	484 W
101-15534	1	280699	Stockyard Point	151101	Carpenter Rocks SA	449 W
101-15540	1	280699	Stockyard Point	261201	Blackfellows Cave SA	443 W
101-03538	1	060692	Barry Beach	301201	Carpenter Rocks SA	520 W
101-07343	3+	080401	Stockyard Point	301201	Carpenter Rocks SA	449 W
101-15535	1	280699	Stockyard Point	301201	Pethers Rock SA	475 W
101-04616	3+	300995	The Gurdies	040202	The Coorong SA	644 W
101-07500	3	040801	Rhyll	040202	The Coorong SA	632 W
101-03575	3+	270293	The Gurdies	091100 to 020801	Warnambool Vic	369 W
101-03684	3+	090794	Altona	101100	Killarney Beach Vic	227 W
101-04031	3	110994	Stockyard Point	151200 080801 230801	Killarney Beach Vic " "	215 WSW
100-99577	1	030594	Werribee SF	151200 to 280801	Killarney Beach Vic	199 W
100-96787	2+	200589	Stockyard Point	291200 150302	Mallacoota Vic	365 ENE
101-03956	3	130894	Barry Beach	301200 270201	Wingan Inlet Vic	293 ENE
100-82086	3+	080380	Werribee SF	070401	Werribee SF Vic	Local (21 years)
100-96846	2+	060590	Werribee SF	291001 (dead)	Queenscliff Vic	24 SSE
101-07370	2	090401	Hastings	031201 (dead-hit by car)	Portland Vic	313 W
100-82025	2+	130681	Queenscliff	060101	Queenscliff Vic	Local (23+)

100-82049	2+	280382	Off Manns Beach, Corner Inlet	060101	Queenscliff Vic	190 W (21+)
100-99404	3+	230691	Stockyard Point	060401	Killarney Beach Vic	280 WSW
100-99420	3+	290691	French Island	060401	Killarney Beach Vic	259 WSW
101-04632	3+	180596	Stockyard Point	020601 130801 221101 220202 210302	Port Fairy Vic " Warrnambool Vic Port Fairy Vic Killarney Beach Vic	284 WSW 264 WSW 284 WSW 280 WSW
101-03680	2	171093	The Gurdies	310701	Discovery Bay Vic	260 WSW
100-99572	1	030592	Werribee SF	130801	Port Fairy Vic	204 WSW
101-04813	3+	060797	Barry Beach	170801 030302	Bridgewater Bay Vic Discovery Bay Vic	430 W 441 W
101-15124	3+	200897	Stockyard Point	170801	Bridgewater Bay Vic	355 W
101-04652	3+	180596	The Gurdies	280801	Warrnambool Vic	369 W
100-82075	2+	080380	Werribee SF	131201	Mud Islands Vic	Local (22+)
100-82142	2+	081083	Werribee SF	160202	Stockyard Point Vic	(21+)
100-99402	2	230691	Stockyard Point	220202	Port Fairy Vic	284 WSW
101-04849	1	070697	French Island	220202	Port Fairy Vic	264 WSW
101-04633	3+	180596	Stockyard Point	220202	Port Fairy Vic	284 WSW
101-04034	2+	300795	The Gurdies	220202	Port Fairy Vic	288 W
100-99308	2+	140491	Werribee SF	220202	Port Fairy Vic	204 WSW
101-04025	3	110994	Stockyard Point	220202	Port Fairy Vic	284 WSW
100-811??	2+	301279	Off Manns Beach, Corner Inlet	230202	Off Manns Beach Vic	Local (22 years)
101-15592	3+	240200	Rhyll	240202	Port Fairy Vic	268 W
100-82031	2+	130681	Queenscliff	020302	Queenscliff Vic	Local (20 years)
101-15468	1	110399	Werribee SF	030302	Discovery Bay Vic	283 W
101-03621	3+	070593	Off Manns Beach, Corner Inlet	030302	Discovery Bay Vic	476 WSW
100-82003	2+	020581	Werribee SF	030302	Discovery Bay Vic	283 WSW (21+)
101-04684	3+	210596	Roussac Point	030302	Discovery Bay Vic	433 W
101-04689	3	210596	Roussac Point	030302	Discovery Bay Vic	199 W
100-99304	2+	140491	Werribee SF	210302 060402	Killarney Beach Vic Werribee Vic	225 W
101-15972	2	170700	Fairhaven	090402	Marlo Vic	290 W

101-15566 is the longest movement ever of an Australian banded Pied Oystercatcher (1,251 km). 100-811?? Is the oldest Australian Pied Oystercatcher – minimum age of 23 ¼ years.

100-82031 is the second oldest bird – minimum age 22 ¼ years. This bird had previously been recorded in 1988 in Queenscliff tangled in fishing gear. Whoever freed it did a successful job! 100-82086 is a minimum age of 23 ¼ years old and is equal oldest Australian Pied Oystercatcher.

All the above records derived from colour band sightings except where indicated. All known interstate movements are included.

Sooty Oystercatcher

Band	Age	Date banded	Location banded	Date(s) seen/recovered	Location found	Km moved
101-03691	2+	090794	Altona	170401 and 241002	Port Fairy Vic Killarney Beach Vic	232 W 227 W
101-15108	3+	240797	Roussac Point	250101	Rabbit Island Vic	24 S
101-16013	3+	250300	Barry Beach	250101	Rabbit Island Vic	25 S
100-82131	2+	260683	Queenscliff	050701 020202 100702	Phillip Island Vic	49 WSW 21+



Red-necked Avocet

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
082-90324	2+	210893	Stockyard Point	281200	Werribee SF Vic	91 WNW

This is only the second recovery of a VWSG banded Red-necked Avocet. Flagged birds have previously been recorded moving between Western Port and Werribee over quite short time periods but this was over 7 years after banding.

Double-banded Plover

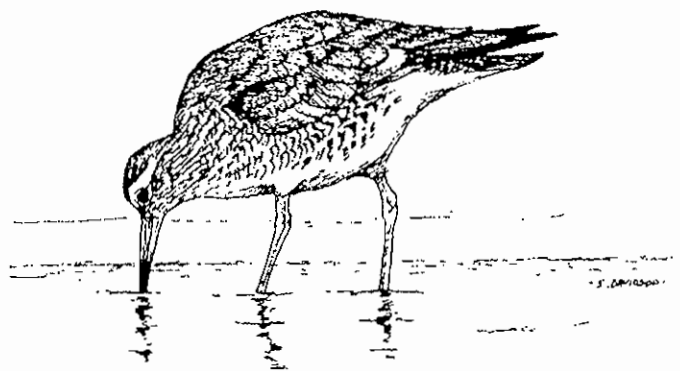
Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
042-29222	1	160700	Stockyard Point	240502	Upper Tasman River, South Canterbury, New Zealand	2137 ESE

The remains of this bird, with metal band and orange leg flag, were found in a stoat burrow. Stoats prey on many nesting waders in New Zealand.

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
041-31457	2+	190987	Queenscliff	260502	Queenscliff Vic	local
041-44206	2+	310788	Queenscliff	260502	Queenscliff Vic	local
041-47766	1	030689	Queenscliff	260502	Queenscliff Vic	local
041-47781 C61328 (NZ)	1	030689	Queenscliff	260502	Queenscliff Vic	local

The above four birds were 16 ½ +, 15 ½ +, 13 ½ and 13 ½ respectively when retrapped on 26th May 2002 on Sand Island, Swan Island, Queenscliff. All surpass the previous record age for a Double-banded Plover.

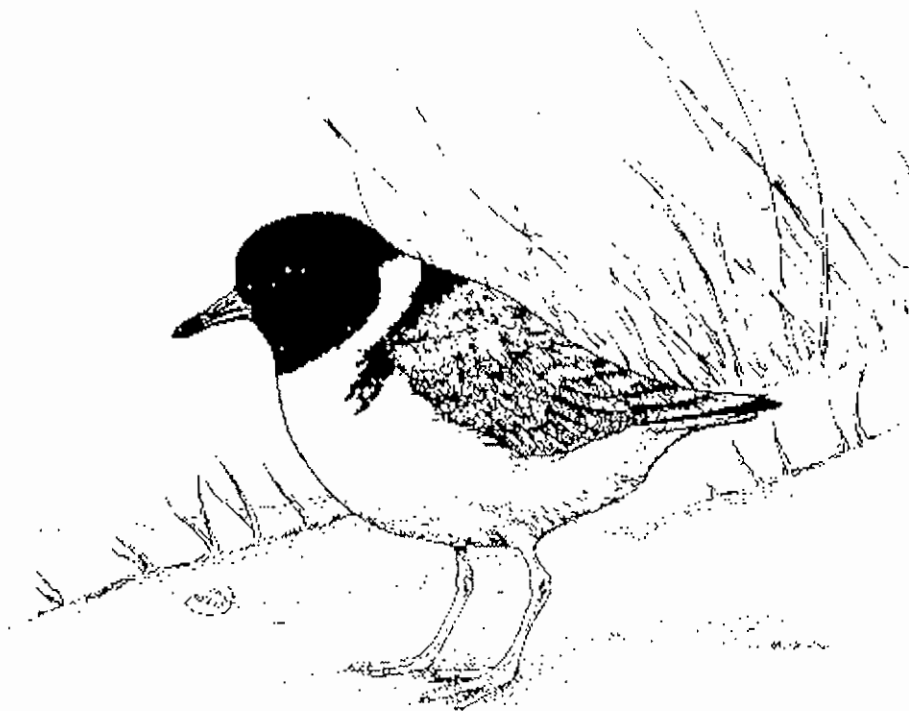
Note that the last bird had previously been recaptured, on the breeding grounds, in New Zealand (Ohau River, 3rd December 1998 – VWSG Bulletin 24).



Hooded Plover

Band	Age	Date banded	Location banded	Date seen	Location found	Km moved
051-18440	2+	220686	Inverloch	250201	Venus Bay Vic	local

This is the oldest record ever of an Australian banded Hooded Plover. In spite of regular searching over the past year by Jim and Anthea Whitelaw it has not been seen again. It therefore lived for a minimum of 16 ¼ years.



Recoveries of Waders Banded in South Australia 2000/2001

Clive Minton, Rosalind Jessop, Peter Collins and Iain Stewart

Sanderling

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
042-00724	2+	040499	Canunda NP	250301	Sandy Point	539 ESE

Curlew Sandpiper

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
042-31825	1	160302	Port MacDonnell, SA	180302	Carpenters Rocks, SA	40 WNW

This bird was recaptured 40 km from where it was banded two days earlier!

Recoveries of Waders Banded Elsewhere 2000/2001

Clive Minton, Rosalind Jessop, Peter Collins and Julie Deleyev

Red Knot

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
051-84521	3+	040498	Bynoe Creek, Gulf of Carpentaria, Queensland	230202	Off Manns Beach, Corner Inlet	2425 S
052-01593	1	100601	Broome, WA	120602	Barry Beach	3150 SE

The first bird would appear likely to be an individual which usually spends the non-breeding season in Victoria but was on northward migration through the Gulf of Carpentaria when originally banded. It is considered that many Victorian birds use the Gulf as a migratory stopover location and this is a rare tangible example of this.

The second bird in the list is an unusual record. Firstly there are few Red Knot movements between NW Australia and Victoria. Secondly this was a 2 year old bird which had not gone north – in fact it had gone south! Either it was an immature bird, which had only reached Broome on its first year southward migration, or it was a first year bird from Victoria which had gone as far north as Broome for its “winter holidays”. In both cases it is further evidence that some Red Knot do not go north to breed until at least their third year. The sixth individual, a nice return compliment, was recaptured as a newly arrived (low weight, non-moulting) adult in Broome. It was presumably on its way back to Victoria. Not many Red Knot from the eastern Australia non-breeding areas use NW Australia as a migratory stopover.

Ruddy Turnstone

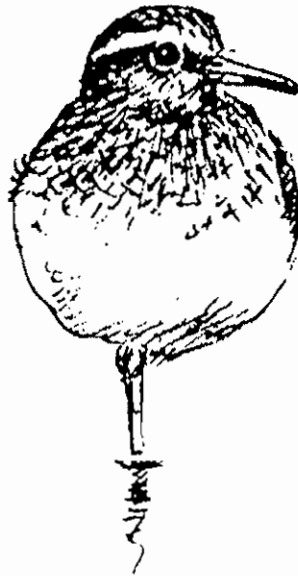
Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
051-96687	3+	190998	Port Hedland Saltworks	010401	Nr. Port MacDonnell SA	2800 SE

This is the first NW Australian banded Ruddy Turnstone to be caught in SE Australia. A movement in the opposite direction has however been recorded previously.

Double-banded Plover

Band	Age	Date banded	Location banded	Date recovered	Location found	Km moved
C64474	2+	210900	Twizel, New Zealand	240201	Barralier Island Western Port Vic	2169 W

The first bird was recognised by an individual colour band combination from New Zealand. It was an early arrival in Western Port – most of the birds which come here for the winter arrive in March/April (and depart in August).



Sightings of Waders Leg-flagged in Victoria

Report Number 9

Clive Minton, Rosalind Jessop, Peter Collins, Julie Deleyev and Lauren Beasley

Most waders, resident and migratory, caught in Victoria since December 1990 have had an orange plastic leg-flag placed on the right tibia (upper leg). 48,740 individual birds (see separate table) have been colour marked in this way up to the end of 2001 (and a further c. 7500 since then up to the end of June 2002).

Whilst the exact date and place of banding of a flagged bird cannot be determined exactly from observation of the bird in the field, the broad origin (coastal Victoria) of any orange-flagged bird seen away from the flagging locations can be determined. As a result of the introduction of flagging, the rate of generation of information on wader movements, both within Australia and overseas, has increased ten-fold (or more).

The list below covers all sightings of orange-flagged birds which have been reported since those listed in the previous VWSG Bulletin (No. 24, April 2001, List No. 8). Whilst most of these records refer to 2001 and the first half of 2002, some unpublished records from earlier years, which have only just become available, have been included. Sightings are listed in an approximate north to south geographic order, and within each country/state in date of sighting order. The person who made the actual sighting is generally recorded, though in many cases the actual sightings were reported to us through another party (e.g. a national bird banding scheme, or a flag-sightings coordinator). Everyone who contributed to these records is greatly thanked for their efforts.

The leg flag sightings listed below are primarily for the interest of members and to acknowledge those who sighted and reported flagged birds. They will be analysed and formally published in scientific papers, often in conjunction with other VWSG data, as part of the ongoing program of writing up the results of VWSG fieldwork. Several papers in which flag sighting data is a significant component have already been published, or are at an advanced stage of preparation. The flag sighting information contained in the list below (and in previous similar lists) should therefore not be used or quoted in other scientific publications without first consulting the VWSG (contact Clive Minton). A further reason for this caveat is that the records need to be fully rechecked for accuracy and completeness before being used for such a purpose.

Black-tailed Godwit

Overseas Sightings

CHINA

Date Seen	No	Location seen	Finder
23/04/01	1	Happy Island, Hebei Province	Dave Allen, RSPB

Sightings within Australia

Western Australia

Date Seen	No	Location seen	Finder
20/09/01	1	Roebuck Bay, Broome	Brian Thompson

This species continues to amaze. There have now been four flag sightings, two overseas (Korea and China) and two in Australia (both at Broome), from only two Black-tailed Godwits ever caught and flagged in Victoria! As mentioned in the previous VWSG Bulletin (No. 24, April 2001, p. 32) it is possible that all records relate to the same individual.

Bar-tailed Godwit

Overseas Sightings

USA

Date Seen	No	Site	Observer
13/05/01	1	St. Paul, Pribilof Islands, Alaska	Pavel Tomkovich
16/05/01	1	St. Paul, Pribilof Islands, Alaska	Pavel Tomkovich
19/06/01	1	Central Seward Peninsula, Alaska	David Tracy
17/06/01	1	Cape Espenberg, 70km S of Kotzebue	John Pearce
24/06/01	1	Cape Espenberg, 70km S of Kotzebue	John Pearce
1/07/01	1	Cape Espenberg, 70km S of Kotzebue	John Pearce
5/09/01	2	Tern Mountain, Village of Chefnak, Yukon Delta	Daniel Ruthrauff
6/09/01	6	Tern Mountain, Village of Chefnak, Yukon Delta	D. Ruthrauff, Fred Broerman
7/09/01	4	Tern Mountain, Village of Chefnak, Yukon Delta	Daniel Ruthrauff

JAPAN

Date Seen	No	Site	Observer
22/04/00	1	Sone Shinden, Kokura-Minami-Ku	Japan Banding Office
29/04/00	1	Tori-No-Umi, Watari-Machi, Miyagi	Jun Hosoya
14/04/01	1	Gan-No-Su, Higashi-Ku, Fukuoka-Shi	Kazuhisa Oue
14/04/01	1	Gan-No-Su, Higashi-Ku, Fukuoka-Shi	Yukinori Kurihara
14/04/01	1	Gan-No-Su, Higashi-Ku, Fukuoka-Shi	Masataka Hanada
12/05/01	1	Oose Beach, Ooshima, Kagoshima	Nobutaka Iwamoto

KOREA

Date Seen	No	Site	Observer
7/05/01	1	Yongjong Island	Ken Gosbell et al
8/05/01	3	Namyang Bay (Unpyong-ri)	Ken Gosbell et al
14/04/02	1	Sosan Tidal Flats	Han Jong-hyun
27- 28/04/02	2	Aphaedo, Mokpo	Lee Jeong-sik
4/05/02	2	Aphaedo, Mokpo	Lee Jeong-sik

18/05/02	1	Aphaedo, Mokpo	Lee Jeong-sik
----------	---	----------------	---------------

CHINA

Date Seen	No	Site	Observer
17/04/01	1	Happy Island, Hebei Province	Dave Allen, RSPB
22/04/01	1	Happy Island, Hebei Province	Dave Allen, RSPB
07/05/01	1	Happy Island, Hebei Province	Dave Allen, RSPB
25/04/02	2	Yalu Jiang National Nature Reserve	David Melville, Pete Collins
26/04/02	4	Yalu Jiang National Nature Reserve	David Melville, Pete Collins
27/04/02	2	Yalu Jiang National Nature Reserve	David Melville, Pete Collins
28/04/02	4	Yalu Jiang National Nature Reserve	David Melville, Pete Collins

NEW ZEALAND

Date Seen	No	Site	Observer
14/01/01	2	Tapora Wildlife Refuge, Kaipara	G Grant/M Twyman
15/01/01	1	Ohiwa Harbour, Bay of Plenty	Will Perry
09/02/01	1	Waimea Inlet, Mapua Estuary, Nelson	Willy Cook
24/02/01	2	Karaka, Manukau Harbour, South Auckland	Tony Habraken
25/02/01	1	Walker Island, Kaipara Harbour	Gwen Pulham et al
13/03/01	1	Tauranga Harbour, North Island	John Heaphy
25/03/01	1	Walker Island, Kaipara Harbour	Gwen Pulham et al
6/05/01	1	Waimea Inlet, Mapua Estuary, Nelson	Willy Cook
20/05/01	1	Miranda, Firth of Thames, South Auckland	Betty Seddon
6/06/01	1	Ohiwa Harbour, Bay of Plenty	Rosemary Tully
23/06/01	1	Gobi, Farewell Spit	Rob Schuckard
23/06/01	1	Tapora area, Kaipara Harbour, Auckland	Gwen Pulham
24/06/01	2	Mudflat near Mullet, Farewell Spit	W. Cook
24/06/01	1	Banana Pan, Farewell Spit	W. Cook
04/08/01	1	Karaka, Manukau Harbour, South Auckland	Tony Habraken
05/08/01	1	Miranda Firth of Thames	Tony Habraken
19/08/01	1	Tapora area, Kaipara Harbour, Auckland	Gillian Vaughan
9/09/01	2	Karaka, Manukau Harbour, South Auckland	Tony Habraken
20/09/01	1	Parengarenga Harbour, Far North Cape, North Is.	Tony Habraken et al
21/09/01	1	Parengarenga Harbour, Far North Cape, North Is.	Tony Habraken et al
6/10/01	1	Karaka, Manukau Harbour, South Auckland	Tony Habraken
14/10/01	3	Karaka, Manukau Harbour, South Auckland	Tony Habraken
4/11/01	2	Thames, Firth of Thames	Tony Habraken
11/11/01	1	Takahiwai, Whangarei Harbour	Gavin Grant et al
17/11/01	2	Papakanui Spit, Kaipara Harbour, Auckland	Tony Habraken
18/11/01	1	Mangere Sewerage Ponds, Manukau Harbour	Gwen Pulham
22/11/01	3	Kiwi Esplanade, Manukau Harbour	Gillian Vaughan
10/12/01	1	Manawatu Estuary, Manawatu, North Island	Simon Fordham
30/12/01	1	Kiwi Esplanade, Manukau Harbour	Adrian Riegen
1/01/02	1	Karaka, Manukau Harbour, South Auckland	Tony Habraken et al
12/01/02	1	Manawatu Estuary, Manawatu, North Island	Sav Saville
13/01/02	4	Walker Island, Kaipara Harbour	Gwen Pulham et al
4/02/02	1	Waimea Inlet, Best Island, near Nelson	Willy Cook
14/02/02	1	Manawatu Estuary, Manawatu, North Island	Arthur and Sheryl Keates
16/02/02	2	Farewell Spit, Gobi, near Nelson, South Island	Rob Schuckard
17/02/02	1	Farewell Spit, Bay Flat, near Nelson	R. Stocker

25/02/02	1	Farewell Spit, Bay Flat, near Nelson	Rob Schuckard
26/02/02	5	Farewell Spit, Bay Flat, near Nelson	R. Schuckard, D. Melville
27/02/02	3	Farewell Spit, Bay Flat, near Nelson	Phil Battley
28/02/02	1	Farewell Spit, Bay Flat, near Nelson	David Melville
3/03/02	1	Tapora South, Kaipara Harbour, Auckland	G. Gorbey et al
16/03/02	1	Papakanui Spit, Kaipara Harbour, Auckland	Gwen Pulham et al
13/04/02	3	Walker Island, Kaipara Harbour	Tony Habraken et al
3/06/02	4	Miranda, Firth of Thames, South Auckland	Tony Habraken

Sightings within Australia

Queensland

Date Seen	No	Site	Observer
7/10/01	1	Wynnum	Arthur and Sheryl Keates

Western Australia

Date Seen	No	Site	Observer
5/05/01	1	Broome Bird Observatory 18km E of Broome	Adrian Boyle
22/05/01	1	Broome Bird Observatory 18km E of Broome	Adrian Boyle
13/06/01	1	Broome Bird Observatory 18km E of Broome	Adrian Boyle
4/07/01	1	Beaches Crab Ck Rd Roebuck Bay Broome	Jonny Schoenjahn
5/07/01	1	Beaches Crab Ck Rd Roebuck Bay Broome	Jonny Schoenjahn
7/08/01	1	Roebuck Bay, Broome	Matthew Angus
8/09/01	1	Roebuck Bay, Broome	BBO Staff

New South Wales

Date Seen	No	Site	Observer
23/09/01	1	Shell Point, Botany Bay	Phil Straw
26/09/01	1	Woolooware Wader Lagoon, Botany Bay	Ken Gilmore
14/10/01	1	South Beach in Ballina	Bo Totterman

Another mammoth list of flag-sightings. We have made more progress on delineating the migration routes of this species than any other in the last few years, purely because of the volume of leg-flag sightings.

Further sightings in Alaska, including some on the breeding grounds as well as birds at migratory staging areas in south-west Alaska on both northward and southward migrations further confirm that this is the breeding area of virtually all the Bar-tailed Godwits which occur in Victoria.

The other very clear pattern, to which the listed sightings in Japan/Korea/China provide further evidence, is that Victorian Bar-tailed Godwits use these areas of the Asian coastline on northward migration, but totally avoid such areas on the return journey. This all supports the growing evidence that Bar-tailed Godwits departing south-west Alaska in the first half of September fly approximately 10,000km non-stop across the ocean to make their first landfall on the northern coast of Australia (and New Zealand). This is the longest known single flight migration of any bird species. It is thought that this huge non-stop journey is facilitated by regularly occurring, extremely strong, northerly winds in that part of the Northern Hemisphere at that time of year.

Another feature of the flag sightings above is the continuing accumulating evidence of the strong link between the Bar-tailed Godwits of Victoria and those in New Zealand. Whilst previous listings have mainly been of birds seen in North Island New Zealand,

there is now an increasing number in the Farewell Spit/Nelson area of the South Island as a result of the growing team of wader experts residing in that area.

Some of the sightings within Australia refer to birds on migration back to Victoria. However the ones at Broome in Northwest Australia seem to refer to a bird which moved over there for an extended period.

Eastern Curlew

Overseas Sightings

JAPAN

Date Seen	No	Location seen	Finder
26/03/01	1	Sone Estuary and Tidal Flat, Kitakyushu, Fukuoke	Kazuo Samoto

Sightings within Australia

Queensland

Date Seen	No	Location seen	Finder
19/01/02	1	Swan Bay, Southern Moreton Bay Marine Park	Brenda Healey

New South Wales

Date Seen	No	Location seen	Finder
21/07/01	1	Dykes in Kooragang Island, Newcastle	Ann Lindsey
20/08/01	1	Swan Bay, near Port Stephens	Sue Hamonet
1/09/01	1	Kurnell Shorebird Lagoon, Kurnell	Phil Straw

Not as good a crop of flag-sightings as in other recent years. This probably reflects the lower number of Eastern Curlew caught and flagged in recent years, as a result of the VWSG's fieldwork effort being concentrated on other species.

Terek Sandpiper

Overseas Sightings

KOREA

Date Seen	No	Location seen	Finder
10/05/01	1	Mankyung Estuary, Kunsan City	Ken Gosbell et al

This is only the second overseas sighting of a Terek Sandpiper flagged in Victoria. The previous one was in Hong Kong. Only 9 Terek Sandpipers have ever been flagged in Victoria.

Ruddy Turnstone

Overseas Sightings

TAIWAN

Date Seen	No	Location seen	Finder
26/04/01	1	Tatu River Estuary, Changwha County	Chung-Yu Chiang
13/05/01	1	Ta-chia river mouth, Taichung County	Mr. Tsai, Chung-Huang
17/08/01	1	Tatu River Estuary, Changwha County	Chung-Yu Chiang

10/05/02	2	HanBou (Hanpou), ChangHwa County	Chung-Yu Chiang
----------	---	----------------------------------	-----------------

NEW ZEALAND

Date Seen	No	Location seen	Finder
9/02/01	1	Miranda, Firth of Thames, South Auckland	N. Milius and W. Hare

Sightings within Australia

Western Australia

Date Seen	No	Location seen	Finder
18/09/01	1	Kanidal Beach	Helen and Paul Evans

South Australia

Date Seen	No	Location seen	Finder
20/12/01	1	Pelican Point, near Mt Gambier	Maureen Christie
6/02/02	1	Lake St. Clair (between Beachport and Robe)	Maureen Christie

Tasmania

Date Seen	No	Location seen	Finder
3/02/02	1	Wildlife Sanctuary, George Town	Peter Duckworth

The sighting of six orange leg-flagged birds at overseas locations is a record. As indicated by recoveries also, Taiwan seems to be an especially important staging area for this species.

The New Zealand sighting is further evidence of some link between the Ruddy Turnstone population in that country and in the south east of Australia.

Some interstate transfers are apparent in the sightings within Australia.

Great Knot

Overseas Sightings

KOREA

Date Seen	No	Site	Observer
10/05/01	1	Mankyung Estuary, Kunsan City	Ken Gosbell et al
7/04/02	1	Sosan	Han Jong-hyun

CHINA

Date Seen	No	Site	Observer
26/04/02	1	Yalu Jiang National Nature Reserve	David Melville, Pete Collins

TAIWAN

Date Seen	No	Site	Observer
8/04/01	1	Auku, Chiayi County	Mr. Tsai, Chih-Yuan and Ms. Wu, Li-Lan
5/04/02	1	Pachang River mouth, Chiayi county	Ms. Wu, Li-Lan
7/04/02	1	Peikang River Mouth, Chiayi County	Ms. Wu, Li-Lan
13/04/02	1	Pachang River mouth, Chiayi county	Ms. Wu, Li-Lan

Sightings within Australia

Queensland

Date Seen	No	Site	Observer
14/01/01	1	Mathieson Homestead, near Hervey Bay	Arthur and Sheryl Keates
8/11/01	1	Maaroom, near Maryborough	Chris Barnes

South Australia

Date Seen	No	Site	Observer
7/01/01	1	Young Husband Peninsula, Coorong	Mark Ziembicki

Tasmania

Date Seen	No	Site	Observer
2/02/02	1	Robbins Island (Bird Point)	Eric Woehler et al

An unprecedented selection of sightings, reflecting the group's slightly greater success in catching Great Knot in the last few years. Overseas sighting locations are generally the same as those for Great Knot flagged in Northwest Australia and Queensland.

Three of the sightings within Australia appear to be birds which have changed their non-breeding area. We have little data on the site faithfulness of this species.

Red Knot

Overseas Sightings

TAIWAN

Date Seen	No	Site	Observer
21/04/01	1	Ta-chuang, Hsin-chu City	Mr. Mao, Shih-Min

NEW ZEALAND

Date Seen	No	Site	Observer
6/11/91	1	Miranda, Firth of Thames, South Auckland	G. Ella
20/07/92	1	Manawatu Estuary, Manawatu, North Island	R. Slack
16/10/93	1	Waipu Estuary, Northland	Pam Agnew
22/11/93	1	Waipu Estuary, Northland	Stephen Davies
1/01/98	2	Waipu Estuary, Northland	K. Hansen
5/10/98	1	Pautanui Inlet, Wairarapa	R. Morrison
28/10/99	1	Miranda, Firth of Thames, South Auckland	T. Crocker
29/12/99	1	Miranda, Firth of Thames, South Auckland	Betty Seddon
30/10/00	5	Miranda, Firth of Thames, South Auckland	P & J Morrin
12/11/00	3	Taramaire, Firth of Thames, South Auckland	Will Perry
28/12/00	1	Taramaire, Firth of Thames, South Auckland	Will Perry
30/12/00	2	Miranda, Firth of Thames, South Auckland	Will Perry
31/12/00	2	Taramaire, Firth of Thames, South Auckland	Bev Woolley
5/01/01	1	Taramaire, Firth of Thames, South Auckland	T. Wilson
10/01/01	5	Miranda, Firth of Thames, South Auckland	Dick Veitch
14/01/01	4	Tapora area, Kaipara Harbour, Auckland	G. Grant, M. Twyman
3/02/01	2	Miranda, Firth of Thames, South Auckland	Bev Woolley
4/02/01	2	Miranda, Firth of Thames, South Auckland	Bev Woolley
9/02/01	1	Farewell Spit, between Gobi and Puponga	Rob Schuckard

10/02/01	2	Mudflat near Mullet, Farewell Spit	Rob Schuckard
11/02/01	2	Kaiaua, Firth of Thames	Tony Habraken
17/02/01	1	Parengarenga Harbour, Far North Cape, North Island	Gavin Grant et al
18/02/01	5	Taramaire, Firth of Thames, South Auckland	Tony Habraken
24/02/01	5	Karaka, Manukau Harbour, South Auckland	Tony Habraken
25/02/01	2	Walker Island, Kaipara Harbour	Gwen Pulham et al
3/03/01	1	Miranda, Firth of Thames, South Auckland	Betty Seddon
12/03/01	2	Miranda, Firth of Thames, South Auckland	J. Groom
23/03/01	6	Karaka, Manukau Harbour, South Auckland	Tony Habraken
24/03/01	1	Miranda, Firth of Thames, South Auckland	N. Milius, W. Hare
25/03/01	1	Walker Island, Kaipara Harbour	Gwen Pulham et al
26/03/01	1	Motueka Sandspit, near Nelson	Rob Schuckard
19/08/01	1	Tapora area, Kaipara Harbour, Auckland	Gillian Vaughan
9/09/01	2	Karaka, Manukau Harbour, South Auckland	Tony Habraken
13/09/01	1	Miranda, Firth of Thames, South Auckland	Keith Woodley
20/09/01	2	Parengarenga Harbour, Far North Cape, North Island	Tony Habraken et al
21/09/01	1	Farewell Spit, Gobi, near Nelson, South Island	Steve Wood
21/09/01	4	Parengarenga Harbour, Far North Cape, North Island	Tony Habraken et al
7/10/01	2	Miranda, Firth of Thames, South Auckland	Tony Habraken
14/10/01	3	Miranda, Firth of Thames, South Auckland	Tony Habraken
4/11/01	5	Miranda, Firth of Thames, South Auckland	David Lawrie
4/11/01	16	Thames, Firth of Thames	Tony Habraken
11/11/01	4	Takahiwai, Whangarei Harbour	G. Grant, M. Twyman
17/11/01	5	Tapora South, Kaipara Harbour, Auckland	Gavin Grant et al
17/11/01	3	Mudflat near Mullet, Farewell Spit	Rob Schuckard
18/11/01	3	Mangere Sewerage Ponds, Manukau Harbour	Gwen Pulham et al
22/11/01	4	Kiwi Esplanade, Manukau Harbour	Gillian Vaughan
24/11/01	12	Miranda, Firth of Thames, South Auckland	Tony Habraken
30/11/01	1	Walker Island, Kaipara Harbour	Gwen Pulham et al
20/12/01	1	Kiwi Esplanade, Manukau Harbour	Tony Habraken et al
30/12/01	1	Lake Ellesmere, South Island	Colin Hill, Steve Wratten
13/01/02	1	Walker Island, Kaipara Harbour	Gwen Pulham et al
4/02/02	2	Waimea Inlet, Best Island, near Nelson	Willy Cook
11/02/02	2	Miranda, Firth of Thames, South Auckland	Arthur and Sheryl Keates
17/02/02	1	Farewell Spit, Bay Flat, near Nelson	R. Stocker
17/02/02	1	Lagoon, Farewell Spit	Willy Cook
17/02/02	7	Jordan's Farm, SE Kaipara Harbour, Auckland	Gwen Pulham et al
25/02/02	2	Farewell Spit, Bay Flat, near Nelson	David Melville
26/02/02	2	Farewell Spit, Bay Flat, near Nelson	David Melville
27/02/02	8	Farewell Spit, Bay Flat, near Nelson	Phil Battley
28/02/02	2	Farewell Spit, Bay Flat, near Nelson	David Melville
28/02/02	1	Farewell Spit, Bay Flat, near Nelson	Rob Schuckard
3/03/02	1	Tapora South, Kaipara Harbour, Auckland	G. Gorbey et al
8/03/02	1	Waimea Inlet, Best Island, near Nelson	Willy Cook
24/03/02	3	Miranda, Firth of Thames, South Auckland	Tony Habraken
13/04/02	1	Walker Island, Kaipara Harbour	Tony Habraken et al
14/04/02	1	Miranda, Firth of Thames, South Auckland	Will Perry
14/04/02	4	Karaka, Manukau Harbour, South Auckland	David Lawrie, Tony Habraken
20/04/02	4	Karaka, Manukau Harbour, South Auckland	David Lawrie, Tony Habraken

26/05/02	1	Mangere Sewerage Ponds, Manukau Harbour	Ted Wnorowski et al
----------	---	---	---------------------

Sightings within Australia

Western Australia

Date Seen	No	Site	Observer
18/05/02	1	Stilt Viewing, Roebuck Bay, Broome	Adrian Boyle

Queensland

Date Seen	No	Site	Observer
20/11/99	1	The Oaks, S of the Norman River mouth	Peter Driscoll
16/08/01	1	Caloundra Sandbanks	Bo Totterman
27/08/01	1	Toorbul, near Bribie Island	Dennis Stanbridge
28/08/01	1	Toorbul, near Bribie Island	Dennis Stanbridge
30/08/01	2	Nudgee Beach, Moreton Bay	Ivell and Jim Whyte
1/09/01	1	Manly Boat Harbour, Moreton Bay	Arthur and Sheryl Keates
1/09/01	1	Toorbul, near Bribie Island	Phil Cross, QWSG
8/09/01	2	Toorbul, near Bribie Island	Arthur and Sheryl Keates
9/09/01	1	Manly Boat Harbour, Moreton Bay	Arthur and Sheryl Keates
22/09/01	2	Toorbul, near Bribie Island	Dennis Stanbridge
23/09/01	1	Toorbul, near Bribie Island	Dennis Stanbridge
26/09/01	2	Toorbul, near Bribie Island	Dennis Stanbridge
4/11/01	1	Boonooroo near Maryborough	Arthur Keates and David Connolly
8/11/01	1	Boonooroo near Maryborough	Chris Barnes
17/11/01	1	Boonooroo near Maryborough	Chris Barnes
23/02/02	1	Toorbul, near Bribie Island	Gavin Goodyear
2/03/02	1	Toorbul Point	Bob James, Karyll Butler
4/03/02	1	Toorbul Point	Dennis Stanbridge
5/03/02	1	Toorbul Point	Dennis Stanbridge
6/03/02	1	Toorbul Point	Dennis Stanbridge
17/03/02	1	Toorbul Point	QWSG Members
18/03/02	1	Toorbul Point	Dennis Stanbridge
23/03/02	1	Toorbul Point	Gavin Goodyear
13/04/02	1	Toorbul Point	Jean Corney
1/05/02	1	Toorbul Point	Linda Cross

New South Wales

Date Seen	No	Site	Observer
10/09/01	1	Stockton Sandspit, Hunter Estuary, near Newcastle	Ann Lindsey
22/09/01	4	Ash Island, Hunter Estuary, near Newcastle	Ann Lindsey
28/09/01	1	Penrhyn Inlet in Botany Bay	Ken Gilmore

South Australia

Date Seen	No	Site	Observer
16/04/02	1	Penrice Saltfields St Kilda Adelaide	Bill Allcock, SAOA

Red Knots continue to be a great disappointment as far as overseas sightings of leg-flagged birds (except in New Zealand) are concerned. There is only one flag sighting in

Asia in the above list, contrasting markedly with the situation for Bar-tailed Godwit, and for the much lesser number of Great Knot flagged in Victoria. There is still not one single flag sighting or recovery of a Victorian Red Knot in Russia to indicate where the breeding grounds of our birds lie.

In contrast, the assiduousness of the New Zealand wader watchers is apparent in a record list of sightings of orange-flagged Red Knot there. On one day alone (24th November 2001) twelve different orange-flagged Red Knot were found at Miranda, Firth of Thames, by Tony Habraken.

The pattern of sightings again probably mainly derives from birds which spent their first, immature, year in Australia and then subsequently transferred as a second year or adult bird to New Zealand citizenship! Whilst such a pattern cannot be established from flag sightings it is certainly clearly apparent from recoveries and recaptures of banded Red Knot. Only occasionally do Red Knot, which have been recorded in Australia in the main non-breeding season as adult birds turn up later in New Zealand. Overall there seems to be an even greater link between Australian and New Zealand Red Knot than there is between Australian and New Zealand Bar-tailed Godwits.

Adrian Riegen, the coordinator of the New Zealand Wader Study Group, is especially thanked for his enormous efforts in collecting together the huge number of leg-flag sightings in New Zealand and routing them through to us.

Most of the sightings within Australia relate to birds on migration to/from Victoria, via Queensland. However, a few birds appear to have permanently moved interstate.

Sanderling Overseas Sightings

JAPAN

Date Seen	No	Location seen	Finder
16/08/01	4	Ichinomiya River Estuary, Chosei, Chiba	Kazuyuki Kuwabara
18/08/01	1	Sone, Futtsu, Chiba	Takemi Naito
19/08/01	1	Obitsu River, Kisarazu, Chiba, Tokyo Bay	Koki Hirano
20/08/01	1	Ooya River, Tsuna, Hyogo	Satoshi Ihoroi
29/08/01	1	Obitsu River, Kisarazu, Chiba, Tokyo Bay	Yoko Yamaoka
2/09/01	2	Kujukuri, Sanbu, Chiba	Kenzo Tomiya
2/09/01	1	Ibaraki Pref.	N. K.
15/09/01	1	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Hidenori Arayama
17/09/01	1	Kokura Beach, Hyuga, Miyazaki	Yutaka Onoo
6/10/01	1	Komaiko Seashore	Mr. Tomio Nagakawa
27/10/01	1	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Mr. Tomio Nagakawa

TAIWAN

Date Seen	No	Location seen	Finder
19/04/01	1	Taiping river mouth, Taitung County	Mr. Tsai, Wei-hsun
13/05/01	1	Ta-chia river mouth, Taichung County	Mr. Tsai, Chung-Huang

HONG KONG

Date Seen	No	Location seen	Finder
27/04/01	2	Mai Po Marshes	Karl Ng
30/04/01	1	Mai Po Marshes	Mike Kilburn

Sightings within Australia

Western Australia

Date Seen	No	Location seen	Finder
10/09/01	1	Curran Point, near Drysdale River	George Swann
18/09/01	2	Bush Point, south Roebuck Bay, near Broome	Peter Collins, NWA 2001 Expedition
18/09/01	2	Kanidal Beach	Helen and Paul Evans
30/10/01	2	Coconut Well, near Broome	Peter Collins, NWA 2001 Expedition

Queensland

Date Seen	No	Location seen	Finder
3/10/01	1	Wave Break Island South, Gold Coast	Edward Kleiber
12/04/02	1	Mirapool, Moreton Island	Ivell Whyte and John Olds

New South Wales

Date Seen	No	Location seen	Finder
23/09/01	1	South Beach in Ballina	Bo Totterman

South Australia

Date Seen	No	Location seen	Finder
23/02/01	2	Brown Bay, 15km E of Port Macdonnell	Maureen Christie
3/01/02	1	Murray Mouth, Goolwa	Roger Jaensch
17/04/02	1	Almonta Beach, Coffin Bay National Park	Bob Cook

Victoria

Date Seen	No	Location seen	Finder
2/03/01	1	Iron Prince Point, near Cape Howe	Jim Wilson
28/07/01	1	Discovery Bay	Dave Ryan

Tasmania

Date Seen	No	Location seen	Finder
25/04/02	1	Policemans Point near Ansons Bay, N of St Helens	Darryel Binns

As always, Japan dominates the overseas sightings. Japan appears to be the centre of the migration route for Sanderlings, more so than probably for any other wader species that migrates to Australia. Although all the sightings listed in this report are of birds on southward migration, there have been orange-flagged birds seen on northward migration in previous years. However, the fact that the sightings in Taiwan and Hong Kong were all of birds on northward migration may suggest that the Sanderling northward migration route through Asia is further west than the southward migration route.

Sightings within Australia show the wide variety of migration routes used by birds travelling to/from Victoria. The lower non-breeding season site faithfulness of this species, compared with most other migratory waders, is also indicated by some of the records in the above list.

Red-necked Stint

Overseas Sightings

RUSSIA

Date Seen	No	Site	Observer
30/07/01	1	Babaryna-Belkeye Island, Lena Delta	Sergei Kharitonov

JAPAN

Date Seen	No	Site	Observer
21/05/00	1	Fujimae Tidal Flat, Nagoya, Aichi	Tsuguo Ohta
3/09/00	1	Nanko Bird Sanctuary, Suminoe, Osaka	Takada et al.
11/10/00	1	Yatsu Tidal Flat, Narashino, Chiba, Tokyo Bay	Yatsu Nature Observatory
16/05/01	1	Shiokuchi, Minami-akita, Akita	Hitoshi Sasaki
4/08/01	1	Tama River Mouth, Tokyo	Hiroshi Yukawa
12/08/01	1	Rokujo Tidal Flat, Toyohashi	Yasutoshi Ooba
13/08/01	1	Rokujo Tidal Flat, Toyohashi	Yasutoshi Ooba
16/08/01	1	Sone, Futtsu, Chiba	Kikuo Ishitsubo

KOREA

Date Seen	No	Site	Observer
10/05/01	1	Mankyung Estuary, Kunsan City	Ken Gosbell et al
12/08/01	1	Siwha Lake, Kyunggi Province	Hansoo Lee

CHINA

Date Seen	No	Site	Observer
17/05/01	1	Beidaihe, Qinhuangdao City, Hebei Province	Bjorn Johansson
21/05/01	1	Cajjiapu, near Tianjin	Ms. Yang Hong Yan
24/05/02	2	Blue Sea Beach lagoons, Hebei	Stephen Andrews

TAIWAN

Date Seen	No	Site	Observer
12/05/99	1	Wu-Chiang-Hsi Estuary, Chin-Men	Mr. Yeh, Chih-Wei
17/05/01	1	Tayuan, Taoyuan County	Ms. Pan, Ming-Li
17/05/01	1	Tayuan, Taoyuan County	Ms. Pan, Ming-Li
22/05/01	1	HanBou (Hanpou), ChangHwa County	Chung-Yu Chiang
4/08/01	1	Hsin-Wen Salt Pan, Chiayi County	Ms. Wu, Li-Lan
6/08/01	1	Szu-Tsao, Tainan city	Mr. Fu, Yung-Tsang
8/08/01	1	Tseng-Wen Estuary, Tainan county	Mr. Fu, Yung-Tsang
11/08/01	1	Hsin-Wen Salt Pan, Chiayi County	Ms. Wu, Li-Lan
17/05/02	1	HanBou (Hanpou), ChangHwa County	Chung-Yu Chiang
19/05/02	1	Fubou, Chang Hwa County	Ms. Shih, Yueh-Ying
20/05/02	2	An-Nan, Tainan City	Mr. Fu, Yung-Tsang
20/05/02	3	HanBou (Hanpou), ChangHwa County	Chung-Yu Chiang
21/05/02	3	Szu-Tsao, Tainan city	Mr. Fu, Yung-Tsang

HONG KONG

Date Seen	No	Site	Observer
21/04/01	1	Mai Po Marshes	John G. Holmes
1/05/01	2	Mai Po Marshes	Yu Yat Tung

5/05/01	1	Mai Po Marshes	Geoff Carey
9/05/01	1	Mai Po Marshes	Geoff Carey

Sightings within Australia

Western Australia

Date Seen	No	Site	Observer
11/03/01	1	Lake McLarty, Shire of Murray	Colin Davis
29/07/01	1	Lake McLarty, Shire of Murray	Colin Davis et al
18/08/01	1	Broome Sewerage Works	Adrian Boyle
29/08/01	2	Kidney Bean Clay Pan, near Broome	Adrian Boyle
29/08/01	1	Eyre Bird Observatory	Paul Evans
5/09/01	1	Kidney Bean Clay Pan, near Broome	Chris Hassell
13/09/01	1	Kidney Bean Clay Pan, near Broome	Chris Hassell
18/09/01	3	Bush Point, south Roebuck Bay, near Broome	Pete Collins et al
29/09/01	1	80 Mile Beach	Pete Collins et al
4/10/01	1	80 Mile Beach	Pete Collins et al
5/10/01	1	80 Mile Beach	Pete Collins et al
20/10/01	1	80 Mile Beach	Pete Collins et al
2/11/01	1	Roebuck Bay, Broome	Adrian Boyle
10/02/02	1	Lake Serpentine, Rottnest Island	Richard and Lorraine Chyne
19/03/02	1	Rottnest Island	Klaus Uhlenhut
14/04/02	1	Barkers Inlet (small lake), near Esperance	Allan Rose
23/04/02	1	Serpentine River Reserve in Mandurah	Marcus Singor

Queensland

Date Seen	No	Site	Observer
31/03/01	1	Koorinal, Moreton Island	Ian Bunce

New South Wales

Date Seen	No	Site	Observer
15/01/01	2	Lake Wollumboola Culburra	David Hair
16/01/01	2	Lake Wollumboola Culburra	David Hair
25/01/01	1	Lake Wollumboola Culburra	David Hair
3/02/01	6	Tullakool	Chris Coleborn
24/03/01	4	Tullakool	Chris Coleborn
25/08/01	1	Kurnell mudflats in Botany Bay	Ken Gilmore
8/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Alan Morris
10/09/01	1	Batemans Bay	Mike Crowley
10/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Alan Morris
17/11/01	1	Kurnell Boat Harbour, Botany Bay	Ken Gilmore
12/01/02	1	Swan Bay, near Port Stephens	Sue Hamonet

South Australia

Date Seen	No	Site	Observer
1/03/00	1	West of Nene Valley	Maureen Christie
16/04/00	1	Bucks Bay	Maureen Christie
25/06/00	1	Stoney Drain (east of Green Point)	Maureen Christie
3/08/00	1	Nene Valley	Maureen Christie

17/08/00	1	Pelican Point, near Mt Gambier	Maureen Christie
20/10/00	1	Livingstones	Maureen Christie
17/01/01	6	Penrice Saltfields St Kilda Adelaide	David Close
5/02/01	1	Hindmarsh Island, opposite Murray Mouth, Coorong	Lys Muirhead
5/02/01	1	Swan Point, NW of Murray Mouth	Mark Ziembicki
6/02/01	1	Hindmarsh Island, opposite Murray Mouth, Coorong	Lys Muirhead
4/11/01	1	Penrice Saltfields St Kilda Adelaide	Lys Muirhead
15/12/01	2	Pelican Point, near Mt Gambier	Maureen Christie
20/12/01	1	Pelican Point, near Mt Gambier	Maureen Christie
18/01/02	1	Port Rickaby, York Peninsula	Kent Treloar
2/02/02	2	Lake George, near Beachport	Adrian Boyle
14/02/02	1	Cape Banks Lighthouse	Maureen Christie
14/03/02	5	Lake George, near Beachport	Adrian Boyle
9/04/02	1	Parnka Point, The Coorong	Margaret Dadd

Victoria

Date Seen	No	Site	Observer
22/02/01	6	Lake Murdeduke, near Winchelsea	Margaret Cameron
22/02/01	9	Victoria Lagoon, Gippsland Lakes	Lynn Turner
12/03/01	2	Woodvale Saltworks, NW of Bendigo	Simon Kennedy
9/04/01	7	Lake Kelly, near Kerang	Chris Coleborn
11/04/02	1	Woodvale Saltworks, NW of Bendigo	Roger Standen
3/05/02	4	Lake Ranfurly, near Mildura	Alex Hawtin

Tasmania

Date Seen	No	Site	Observer
14/01/01	1	Pipe Clay Lagoon, Hobart	Tim Reid
30/01/01	1	Cape Portland	Ralph Cooper
3/02/01	1	Pipe Clay Lagoon, Hobart	Tim Reid
30/03/01	1	Cape Portland	Ralph Cooper
16/04/01	1	South Arm	Priscilla Park
10/11/01	1	Narawntupa National Park (NE Arm)	Peter and Hazel Britton
9/12/01	1	Cape Portland	Ralph Cooper
9/02/02	1	Barilla Bay, near Hobart Airport	Alan Wiltshire, Sheryl Hamilton
29/03/02	1	King Island (6.5km North of Currie)	Sarah Lloyd
27/04/02	1	Cape Portland	Ralph Cooper

The last year has produced a nice selection of overseas sightings of orange-flagged Red-necked Stints, especially from Taiwan and Japan. However, pride of place must go to one seen on an island off the north coast of Siberia, opposite the delta of the Lena River. This was at 74 degrees north and over 12,500km from the Victorian coast where it was originally flagged. It was fascinating that a Red-necked Stint flagged in South Australia was seen in the same place at the same time by the same observer! This must be the northernmost limit of the species' range.

Sightings within Australia show both migration routes of birds on their way to/from Victoria and also a number of birds which have clearly changed their non-breeding area away from Victoria. It is possible that this mobility/ lack of site faithfulness may have increased in Red-necked Stint in the last two or three years as a result of the exceptionally high population levels.

Sharp-tailed Sandpiper

Overseas Sightings

KOREA

Date Seen	No	Location seen	Finder
11/05/02	1	Geum River Estuary, Chungham Province	Hansoo Lee

CHINA

Date Seen	No	Location seen	Finder
24/05/02	1	Blue Sea Beach lagoons, Hebei	Stephen Andrews

Sightings within Australia

New South Wales

Date Seen	No	Location seen	Finder
3/02/01	4	Tullakool	Chris Coleborn
8/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Alan Morris
10/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Alan Morris
15/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Alan Morris

South Australia

Date Seen	No	Location seen	Finder
11/02/01	1	Penrice Saltfields St Kilda Adelaide	David Close

Only modest numbers of Sharp-tailed Sandpipers are caught and flagged by the VWSG each year. It is nice to get two more flag sightings overseas, which are slowly enabling the migration route of this species to be delineated.

Curlew Sandpiper

Overseas Sightings

JAPAN

Date Seen	No	Location seen	Finder
16/05/01	1	Shimo-tomita, Koyu, Miyazaki	Naotaka Suzuki

CHINA

Date Seen	No	Location seen	Finder
20/05/01	1	Caijiapu, near Tianjin	Ms. Yang Hong Yan
24/05/02	1	Blue Sea Beach lagoons, Hebei	Stephen Andrews

TAIWAN

Date Seen	No	Location seen	Finder
24/04/01	1	Szu-Tsao, Tainan city	Mr. Hsu, Sheng-Fa
27/04/01	1	HanBou (Hanpou), ChangHwa County	Chung-Yu Chiang
28/04/01	1	Putai, Chiayi County	Ms. Wu, Li-Lan et al
6/08/01	1	Szu-Tsao, Tainan city	Mr. Fu, Yung-Tsang
28/04/02	1	HanBou (Hanpou), ChangHwa County	Mr. Li, Tsung Jung
8/05/02	1	HanBou (Hanpou), ChangHwa County	Chung-Yu Chiang
13/05/02	1	HanBou (Hanpou), ChangHwa County	Chung-Yu Chiang

HONG KONG

Date Seen	No	Location seen	Finder
3/04/01	1	Mai Po Marshes	Geoff Carey
5/04/01	3	Mai Po Marshes	Geoff Carey
8/04/01	6	Mai Po Marshes	Geoff Carey
10/04/01	9	Mai Po Marshes	Geoff Carey
12/04/01	4	Mai Po Marshes	Geoff Carey
13/04/01	2	Mai Po Marshes	Richard Lewthwaite
14/04/01	2	Mai Po Marshes	John G. Holmes
15/04/01	1	Mai Po Marshes	Yu Yat Tung
16/04/01	1	Mai Po Marshes	Richard Lewthwaite
20/04/01	1	Mai Po Marshes	Geoff Carey
22/04/01	2	Mai Po Marshes	Richard Lewthwaite
23/04/01	2	Mai Po Marshes	John G. Holmes
23/04/01	4	Mai Po Marshes	Geoff Carey
26/04/01	1	Mai Po Marshes	Yu Yat Tung
29/04/01	3	Mai Po Marshes	Yu Yat Tung
30/04/01	3	Mai Po Marshes	Mike Kilburn
5/05/01	1	Mai Po Marshes	Geoff Carey
9/05/01	1	Mai Po Marshes	Geoff Carey
20/03/02	1	Mai Po Marshes	Bruce Ferry
2/04/02	1	Mai Po Marshes	Geoff Welch

Sightings within Australia

Western Australia

Date Seen	No	Location seen	Finder
13/10/00	1	Beaches Crab Ck Rd Roebuck Bay Broome	Adrian Boyle

19/08/01	1	Kidney Bean Clay Pan, near Broome	Adrian Boyle
29/08/01	1	Kidney Bean Clay Pan, near Broome	Adrian Boyle
19/09/01	1	Broome Sewerage Works	Ros Jessop, Pete Collins
5/10/01	1	80 Mile Beach	Falk Huettmann
14/10/01	1	Port Hedland Saltworks	Peter Collins
16/10/01	1	Roebuck Bay, Broome	Adrian Boyle
17/10/01	1	Roebuck Bay, Broome	Adrian Boyle
19/04/02	1	Wader Beach, Roebuck Bay, Broome	Adrian Boyle
10/05/02	1	Richard's Point, Roebuck Bay, Broome	Adrian Boyle
11/06/02	1	Richard's Point, Roebuck Bay, Broome	Adrian Boyle

Queensland

Date Seen	No	Location seen	Finder
25/06/01	1	Karumba Point, Gulf of Carpentaria	Ceinwen Edwards
1/09/01	1	Manly Boat Harbour, Moreton Bay	Arthur and Sheryl Keates
23/09/01	1	Lytton	Arthur and Sheryl Keates

New South Wales

Date Seen	No	Location seen	Finder
3/02/01	4	Tullakool	Chris Coleborn
24/03/01	1	Tullakool	Chris Coleborn
15/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Alan Morris
16/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Ann Lindsey
28/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Ann Lindsey
15/12/01	1	Penrhyn Inlet in Botany Bay	Mark Husk
19/12/01	1	Penrhyn Inlet in Botany Bay	Ken Gilmore
1/01/02	1	Penrhyn Inlet in Botany Bay	Mark Husk
6/01/02	1	Penrhyn Inlet in Botany Bay	Arthur and Sheryl Keates

South Australia

Date Seen	No	Location seen	Finder
3/03/00	1	Pelican Point, near Mt Gambier	Maureen Christie
25/06/00	1	Stoney Drain (east of Green Point)	Maureen Christie
14/01/01	1	Walkers Beach, SE of Venus Bay, Eyre Peninsula	Digger B. Jackson
17/01/01	1	Penrice Saltfields St Kilda Adelaide	David Close

Victoria

Date Seen	No	Location seen	Finder
24/02/01	1	Mildura Tip Swamp, Mildura	Miriam Pywell
9/04/01	4	Lake Kelly, near Kerang	Chris Coleborn

As usual, sightings are dominated by a plethora of records from the Mai Po Marshes in Hong Kong. We thank Geoff Carey enormously for his efforts in collating records from a large number of different observers, prominent amongst whom is Paul Leader. The sighting on the early date of the 20th March (2002) is yet another example of how early Curlew Sandpipers from Victoria can reach such latitudes in the Northern Hemisphere. Surprisingly, each year orange flagged Curlew Sandpipers from Victoria reach Hong Kong ahead of yellow-flagged birds from Northwest Australia.

The string of sightings on northward migration in Taiwan is the result of a considerably increased effort there in wader fieldwork in the last two years.

The sighting in Japan is unusual- Japan is on the eastern fringe of the migration route of this species.

A noticeable feature of the list is the complete absence of overseas flag sightings of birds on southward migration. Do they really take off from inland locations in China or elsewhere and fly non-stop to the northern coast of Australia?

As with most other species, leg-flag sightings within Australia mostly refer to birds still on migration but a few relate to birds which have changed their non-breeding areas to interstate locations.

Broad-billed Sandpiper

Overseas Sightings

TAIWAN

Date Seen	No	Location seen	Finder
24/04/01	1	Szu-Tsao, Tainan city	Mr. Hsu, Sheng-Fa

At the time of this sighting only two Broad-billed Sandpipers had ever been flagged in Victoria. The most recent was at Stockyard Point in 1994 and it was seen again there in 1995. It is amazing that this bird should have turned up again, especially overseas, so many years later.

Red-necked Avocet

Sightings within Australia

New South Wales

Date Seen	No	Location seen	Finder
3/02/01	1	Tullakool	Chris Coleborn
14/09/01	1	Ash Island, Hunter Estuary, near Newcastle	Alan Morris

The relatively mobile/nomadic nature of this species is indicated by the two flag sightings at widely separated locations in New South Wales.

Grey Plover

Overseas Sightings

JAPAN

Date Seen	No	Location seen	Finder
27/08/00	1	Tama River Mouth, Tokyo	Hitoshi Shirota

Previous flag sightings of Grey Plover have also been mostly in Japan.

Double-banded Plover

Overseas Sightings

NEW ZEALAND

Date Seen	No	Location seen	Finder
25/11/00	1	Ashley River Estuary, Christchurch, South Island	Eric Spurr

The VWSG has flagged very few Double-banded Plovers. This was a sighting in the usual breeding area of birds which visit Victoria in the non-breeding season.

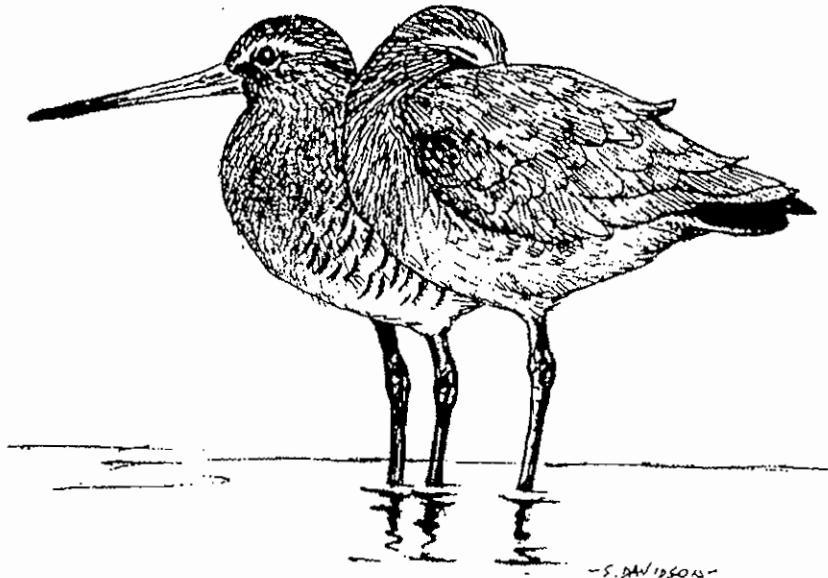
Greater Sand Plover

Overseas Sightings

TAIWAN

Date Seen	No	Location seen	Finder
20/07/01	1	Tatu River Estuary, Changwha County	Chung-Yu Chiang

In spite of only 16 Greater Sand Plovers ever being flagged in Victoria we still continue to receive sightings from both overseas and within Australia. Their migration direction is more north-westerly than other waders and Taiwan is at the eastern edge of their main migration route.



Sightings of Waders Leg Flagged in South Australia

Report No. 2

Clive Minton, Rosalind Jessop, Peter Collins, Iain Stewart and Maureen Christie

This is the second list of waders leg-flagged in South Australia – the first list was in the last VWSG Bulletin (No. 24, April 2001).

Use of a leg flag code specific to South Australia – orange on the right tibia, yellow on the right tarsus – was commenced in April 1999. Prior to that time, Sanderling and Ruddy Turnstone (only) caught in South Australia were flagged with an orange flag on the right tarsus, thereby enabling them to be distinguished from birds orange-flagged on the right tibia in Victoria. So far the new flagging combination and the old combination have only been used in the south-east of the state in the Brown Bay, Port McDonnell, Carpenter's Rocks, Canunda National Park, and Beachport areas. This list covers all flag sightings reported since the previous report, including both O/Y birds and O right tarsus birds.

Please see the introduction to the Victorian flag sightings list for other relevant information, including the caveat about the use of this flagging data.

Ruddy Turnstone

Overseas Sightings

JAPAN

Date Seen	No	Location seen	Finder
22/08/00	1	Yatsu Tidal Flat, Narashino, Chiba, Tokyo Bay	Harutaka Takubo
24/08/00	1	Yatsu Tidal Flat, Narashino, Chiba, Tokyo Bay	Yatsu Nature Observatory
26/08/00	1	Yatsu Tidal Flat, Narashino, Chiba, Tokyo Bay	Yatsu Nature Observatory

HONG KONG

Date Seen	No	Location seen	Finder
30/04/01	1	Mai Po Marshes	Karl Ng

NEW ZEALAND

Date Seen	No	Location seen	Finder
24/06/01	1	Banana Pan, Farewell Spit	W. Cook
24/11/01	1	Miranda, Firth of Thames, South Auckland	Tony Habraken
15/12/01	1	Miranda, Firth of Thames, South Auckland	Tony Habraken et al

Sightings within Australia

Western Australia

Date Seen	No	Location seen	Finder
30/09/01	1	Broome Sewerage Works	Adrian Boyle
1/10/01	1	Broome Sewerage Works	Adrian Boyle
4/10/01	1	Broome Sewerage Works	Adrian Boyle
5/10/01	1	Broome Sewerage Works	Adrian Boyle
7/10/01	1	Lacepede Islands	Maureen Christie
7/10/01	1	Broome Sewerage Works	Adrian Boyle

South Australia

Date Seen	No	Location seen	Finder
23/04/02	1	Kangaroo Island	Mel Berris

Victoria

Date Seen	No	Location seen	Finder
30/08/01	1	Forrest Caves Beach, Phillip Island	Ros Jessop, Peter Collins
12/10/01	1	Ricketts Point, Beaumaris	Alex Farias

Ruddy Turnstones produce very few overseas recoveries. The seven overseas, albeit probably involving only three of four individual birds, are therefore most welcome.

Sanderling

Overseas Sightings

JAPAN

Date Seen	No	Location seen	Finder
6/08/00	1	Hasaki, Kashima, Ibaraki	I. Tanabe
12/08/00	1	Hasaki, Kashima, Ibaraki	Naoki Katsura
18/08/00	1	Anou River Estuary, Tsu, Mie	Naoya Abe
24/08/00	1	Shimo-Arachi, Kashima, Ibaraki	Toshihiko Kawamata
26/08/00	1	Ichinomiya River Estuary, Chosei, Chiba	Kenzo Tomiya
5/08/01	1	Tama River Mouth, Tokyo	Hiroshi Yukawa
19/08/01	1	Ichinomiya River Estuary, Chosei, Chiba	Tozo Suzuki
25/08/01	3	Ichinomiya River Estuary, Chosei, Chiba	Tozo Suzuki
28/08/01	1	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Mr. Tomio Nagakawa
30/08/01	1	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Kenji Hirano
2/09/01	2	Kujukuri, Sanbu, Chiba	Kenzo Tomiya
2/09/01	1	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Mr. Tomio Nagakawa
3/09/01	1	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Mr. Tomio Nagakawa
4/09/01	1	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Mr. Tomio Nagakawa
5/09/01	2	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Mr. Tomio Nagakawa
7/09/01	2	Takamatsu, Ishikawa Prefecture, Kahoku-Gun	Mr. Tomio Nagakawa

Sightings within Australia

Queensland

Date Seen	No	Location seen	Finder
12/04/02	1	Mirapool, Moreton Island	Ivell Whyte and John Olds

Western Australia

Date Seen	No	Location seen	Finder
18/09/01	1	Kanidal Beach	Helen and Paul Evans
18/09/01	2	Bush Point, south Roebuck Bay, near Broome	Peter Collins
29/09/01	1	80 Mile Beach	Ken Gosbell
30/10/01	1	Coconut Wells near Broome	Maureen Christie

New South Wales

Date Seen	No	Location seen	Finder
8/12/01	1	South Beach in Ballina	Bo Totterman
15/12/01	1	South Beach in Ballina	Bo Totterman
10/03/02	1	Flat Rock between Lennox Head and Ballina	June Harris

South Australia

Date Seen	No	Location seen	Finder
18/11/98	1	Murray River Mouth	Iain Stewart
19/11/98	1	Murray River Mouth	Iain Stewart
9/02/00	5	Murray Mouth, Goolwa	Peter Collins et al
3/01/02	1	Hindmarsh Island, opposite Murray Mouth, Coorong	Andrew Black
17/02/02	2	Murray Mouth, Goolwa	David Lawrie

Victoria

Date Seen	No	Location seen	Finder
14/10/01	1	Sandy Point, Shallow Inlet	Ken Gosbell et al
5/02/02	4	Killarney Beach	Barbara Garrett
16/02/02	1	Sandy Point, near Wilson's Promontory	Ros Jessop, Peter Collins

As always Sanderling produce a mass of flag sightings in Japan and at other locations within Australia. It is notable, as in the sightings of Victorian-flagged Sanderling, that all the Japanese sightings in this list were of birds on southward migration.

The sightings around Australia contain both birds that were on migration back to South Australia and others which had changed their non-breeding area.

Red-necked Stint

Overseas Sightings

RUSSIA

Date Seen	No	Location seen	Finder
30/07/01	1	Babaryna-Belkeye Island, Lena Delta	Sergei Kharitonov

Sightings within Australia

Western Australia

Date Seen	No	Location seen	Finder
29/09/01	1	80 Mile Beach	Julie Deleyev et al
10/02/02	1	Lake Herschel (West), Rottnest Island	Liz Walker, Rolf Gensen

South Australia

Date Seen	No	Location seen	Finder
31/01/01	1	Woodswell, Coorong	Maureen Christie
11/02/01	1	Penrice Saltfields St Kilda Adelaide	David Close
25/02/01	1	Price Saltfield, Upper Yorke Peninsula	David Close
7/05/01	1	Coorong National Park	Philip Griffin

Victoria

Date Seen	No	Location seen	Finder
13/03/01	1	South Woorinen Lake, N of Swan Hill	Simon Kennedy
27/12/01	1	Werribee Sewerage Farm	Stephanie and Lindsay Tyler
5/02/02	1	Killarney Beach	Barbara Garrett

The sighting off the north coast of Siberia is unprecedented. It was seen in company with an orange-flagged Red-necked Stint from Victoria (see Orange flag list).

One is always a little concerned with a sighting in the Perth area of Western Australia where Yellow/Orange is the flag combination used on Red-necked Stints. Was the flag combination put on upside down or did the person making the observation write it down incorrectly – making it really only a local bird? Everything however suggests that the Rottnest Island record was a genuine movement of a South Australian-flagged bird, and there has been a similar movement into South Australia of a flagged Red-necked Stint from Perth.

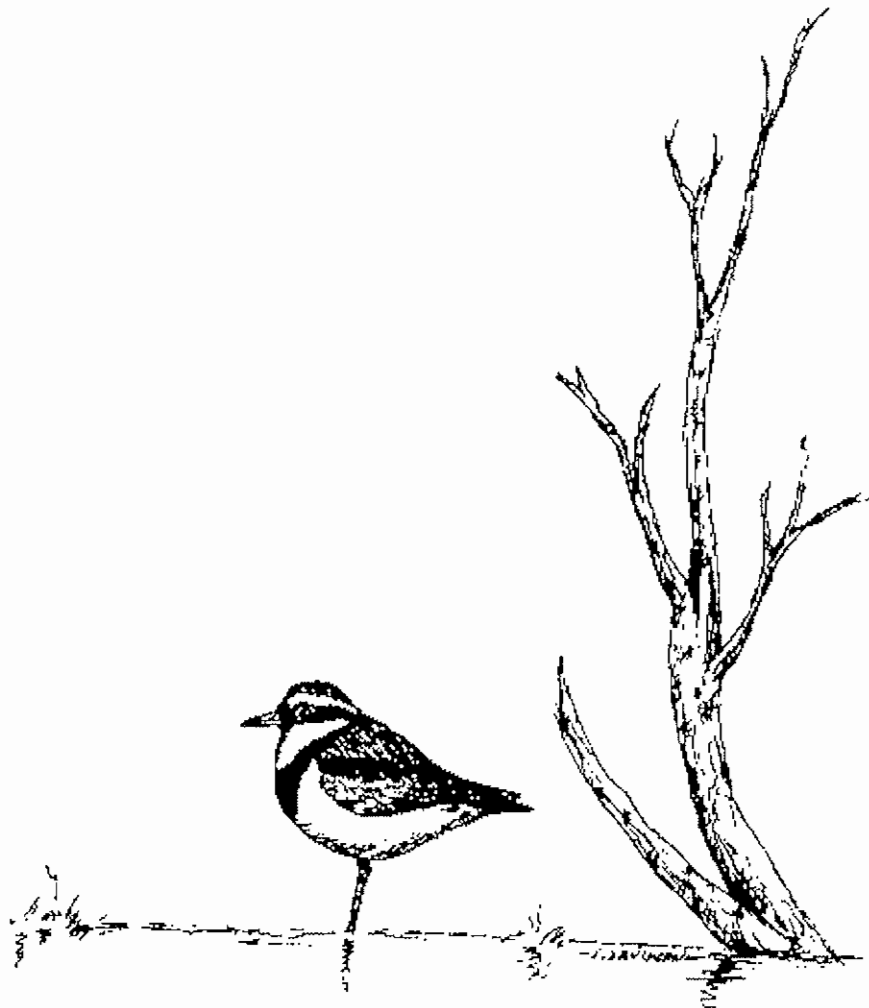
Curlew Sandpiper

Sightings within Australia

Western Australia

Date Seen	No	Location seen	Finder
19/04/02	1	Wader Beach, Roebuck Bay, Broome	Adrian Boyle
6/05/02	1	Broome Sewerage Works	Adrian Boyle
18/05/02	2	Wader Beach, Roebuck Bay, Broome	Adrian Boyle
17/06/02	1	Stilt Viewing, Roebuck Bay, Broome	Adrian Boyle

All these records refer to Curlew Sandpipers in non-breeding plumage. They are clearly first year birds which have made a partial northward movement for the winter.



Tern Breeding and Banding 2001/2002

Clive Minton, Rosalind Jessop and Peter Collins

Long term studies of local breeding and migratory terns in Victoria are a significant part of the VWSG's fieldwork program. This report on results for 2001/2002 follows a similar format to the previous report (VWSG Bulletin 24, April 2001, pages 55-58).

Caspian Tern

Location	Breeding pairs	Chicks banded
Mud Islands	12	3
Corner Inlet	c. 50	16
Totals	62	19

The Caspian Tern breeding population was also down on the last two years, as also was the number of chicks banded. At Corner Inlet, this was probably largely the result of the regular disruption of breeding activities by storm tides in the October to January period.

Chicks at both colonies were again orange-flagged – on the left leg at Mud Islands and on the right leg at Clonmel Island, Corner Inlet. This flagging program commenced in 1999 and has been a great success in increasing flag sightings in the southeast Queensland wintering areas.

Crested Tern

Location	Breeding pairs	Chicks banded	Banded adults retrapped at nest
Mud Islands	1300	1043	215
The Nobbies	1800	1614	147
Corner Inlet	300	156	3
Totals	3400	2813	365

The number of breeding pairs of Crested Terns in the 2001/2002 summer (3,400 pairs) was slightly down on the record population levels of the previous two summers (4,320/4000 pairs).

Numbers do fluctuate quite markedly from year to year at each colony, presumably partly as a result in annual variations in the local supply of fish. The overall number of pairs is still at a very satisfactory level, still being more than three times the level it was when our studies and conservation activities commenced 20 years ago.

The number of chicks banded (2,813) was also slightly down on the two preceding years (3,193/3,286). As there were still quite a number of birds incubating eggs at the time of the last chick-banding visit to each colony, it is probable that over three thousand chicks were actually hatched/fledged – a return to the extremely high breeding success rate of some earlier years.

The colonies at Mud Islands and the Nobbies use virtually the same nesting areas each year (which at Mud Islands are artificially created and maintained) and are generally safe from inundation even by the most severe storm tides. Unfortunately at Corner Inlet the Crested Terns change their nesting site regularly (in 2001/2002 it was on the west end of Box Bank) and seem to prefer newly emerging very low sand hills (you could barely call them dunes). As the area is extremely prone to gale force winds and storm tides in Spring/early Summer their nests, and sometimes their chicks, are quite frequently washed out or covered in wind blown sand. If only one could persuade them to nest on the many rather higher sandy dunes!

The aspects of the study aimed at determining the age of first breeding for Crested Terns continued very satisfactorily in 2001/2002. A record 365 banded adult birds were recaptured, by hand/hand net, at the nest. Extensive scans of the breeding population for known age birds, identified by their colour-banded metal band where each colour represents a particular year of hatching, was also carried out again. The annual cohort of 1000 chicks at Mud Islands was this year banded with a black-painted metal band. Within the next year or two, sufficient data should have accumulated for a detailed analysis to be undertaken to show the proportions of young Crested Terns which first commence nesting at different ages. It appears that age of first breeding varies between individuals and may in fact be spread over a three or more year period (? 2 to 5 or 6 years old).

The colours used on 1000 chicks at Mud Islands each year are listed below.

Colour	Date of Banding
Orange	17 December 1995
Blue	21 December 1996
Yellow	21 December 1997
Dark Green	3 December and 20 December 1998
White	17 November and 6 December 1999
Red	6 December and 16 December 2000
Black	30 November and 13 December 2001
Pink	November/December 2002

Little Tern

Little Terns were not known to have bred in 2001/2002 at either Sand Island, Queenscliff, or at Mud Islands, or Corner Inlet. The occasional single pair has bred at each of these locations at times in recent years.

Fairy Tern

Paired Fairy Terns were present in Corner Inlet during the 2001/2002 summer but no breeding colony was actually located. It is probable that eggs were laid on either the east or west end of Clonmel Island and possibly also at the east end of Dream Island. But the regular storm tides would certainly have washed these out and breeding success therefore was yet again nil.

About 10 pairs of Fairy Terns were located nesting at Rams Island, Western Port, in November (per Murray Portbury). However, it is thought these failed after being flooded by high tides.

Cannon netting at the Gippsland Lakes

For the second successive summer it was not possible to cannon net Common Terns and Little Terns because of algal blooms. These affected the fish supply and most terns left the vicinity of the usual catching areas at Albifrons Island (Ocean Grange), Point Wilson (Spermwhale Head) and Lochsport.

The banding and flagging of adult Common and Little Tern visitors from the Northern Hemisphere has thus come to an abrupt halt. Hopefully it will be possible to resume this most productive study in the 2002/2003 summer.

Crested Tern

Thalasseus bergii



Tern Recovery Report

Clive Minton, Rosalind Jessop and Peter Collins

Caspian Tern

Australian Recoveries

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
091-41441	1	20/12/00	Off Mann's Beach, Corner Inlet, Vic	4/10/01	Bribie Island, Pumicestone Passage, Qld	1418 NNE
091-41420	Chick	22/11/00	Mud Islands, Port Phillip Bay, Vic	23/11/01	Fraser Island, Vic	282 NE

These two recoveries are of immature birds (i.e. less than one year old) which have remained up in their typical "winter" area is southeast Queensland.

One was found dead and the other was injured and temporarily taken into captivity.

Crested Tern

Australian Recoveries

Recoveries of chicks banded at Mud Islands, Port Phillip Bay

Band	Date Banded	Method of Recovery	Date Recovered	Location Recovered	Km Moved
072-92149	17/11/99	Dead	23/12/00	2km from tip, Southern Arm, St Helens Bay, Tas	454 SE
072-36570	18/12/93	Dead	4/01/01	Ocean Beach, Strahan, Tas	434 S
072-23118	14/12/91	Dead	14/01/01	Lake Tyers Beach, Vic	295 E
072-15614	15/12/90	Dead	17/04/01	Elwood, Vic	48 NE
072-65451	17/12/95	Dead	28/06/01	Brighton Beach, Vic	44 NE
073-05214	16/12/00	Dead	24/08/01	Dromana Beach, Vic	21NNE
072-66057	17/12/95	Dead	26/08/01	Apollo Bay Beach, Vic	106 SW
072-72673	21/12/96	Dead	30/08/01	Port Elliot SA	619 W
073-05858	16/12/00	Trapped by hand net	22/09/01	At Sea East of Wollongong, NSW	731 NE
072-36574	18/12/93	Dead	30/09/01	Cape Jervis 1km North, SA	662 NW
073-05081	6/12/00	Caught in fishing gear- alive	26/12/01	Hampton, Vic	43 NE
073-05474	16/12/00	Dead	7/01/02	Apollo Bay Beach, Vic	109 SW
073-08910	13/12/01	Dead	4/04/02	Cleeland B, Woolami Safety Beach, Phillip Island, Vic	59 SE
072-37259	18/12/94	Dead	10/04/02	Near Nobbies, Phillip Island	42 SE

Recoveries of Terns banded as chicks at The Nobbies, Phillip Island

Band	Date Banded	Method of Recovery	Date Recovered	Location Recovered	km Moved
072-91346	3/12/99	Sick or injured, but alive	1/02/01	Wanji, Near Toronto, NSW	810 NE
073-06632	19/12/00	Dead	28/02/01	San Remo, Vic	22 E
072-98402	10/01/00	Dead	22/04/01	Hat Head, NSW	1099 NE
073-06590	19/12/00	Dead	10/07/01	Lakes Entrance, Vic	259 E
072-91906	3/12/99	Dead	21/10/01	Cape Woolami, Vic	21 E
072-98484	28/11/00	Sick or injured, but alive	8/11/01	Peterborough Beach, Vic	196 W
073-16489	17/12/01	Mercy killed	15/03/02	On beach at Loch Sport, Vic	222 E
073-07791	27/11/01	Dead	26/03/02	Whitemark Beach, Flinders Island, Tas	306 SE
072-98489	28/11/00	Dead	4/04/02	Cleeland B, Woolami Safety Beach, Phillip Island, Vic	19 E
073-16983	17/12/01	Dead	10/04/02	Near Nobbies, Phillip Island, Vic	Local
073-16974	17/12/01	Dead	10/04/02	Near Nobbies, Phillip Island, Vic	Local
073-16463	17/12/01	Dead	10/04/02	Near Nobbies, Phillip Island, Vic	Local
073-16462	17/12/01	Dead	10/04/02	Near Nobbies, Phillip Island, Vic	Local
073-16122	17/12/01	Dead	10/04/02	Near Nobbies, Phillip Island, Vic	Local
073-17306	24/12/01	Seen	11/04/02	At sea, 5 miles south of Jervis Bay Entrance, NSW	629 NE
073-17452	24/12/01	Mercy killed	19/04/02	Warrnambool, Vic	230 W

Recoveries of Terns banded as chicks at Manns Beach, Corner Inlet

Band	Date Banded	Method of Recovery	Date Recovered	Location Recovered	km Moved
091-38787	13/01/00	Dead	6/01/01	Gladstone, Qld	1701 N
072-27579	12/12/93	Seen	15/02/01	Hollands Landing, Victoria Lagoon, Gippsland Lakes, Vic	89 NE

The above recoveries contain all birds reported via the Banding Office since the last VWSG Bulletin. Most birds were found dead, some not far from their natal areas in Victoria, but others in their wintering grounds in northern NSW and even up into Queensland. The bird from Corner Inlet found at Gladstone in Qld is the furthest north location, and greatest distance moved, of a Crested Tern from Victoria.

The mortality rate of Crested Terns in the first year after fledging is very high, and most recoveries therefore, are of birds less than a year old. It is therefore particularly pleasing that a number of recoveries of birds from Mud Islands are of individuals which are up to ten years old.

Little Tern

Overseas Recoveries

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
041-59321	2+	13/01/90	Spermwhale Head/Ocean Grange Area, Vic	20/05/01	Sihwa Lake, Central West Coast, Korea	8639 NNW

Australian Recoveries

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
042-00570	2+	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	29/03/01	Barry Beach, Corner Inlet, Vic	148 WSW
042-00660	2+	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	29/03/01	Barry Beach, Corner Inlet, Vic	148 WSW
042-14153	Chick	2/12/98	Manning River Estuary, Harrington, NSW	24/12/01	Lake Tyers Beach, Vic	788 SW
041-78380	Chick	15/12/94	Towra Point, Botany Bay, NSW	24/12/01	Lake Tyers Beach, Vic	509 SW
041-47417	1	5/03/89	Spermwhale Head, Ocean Grange Area, Vic	24/12/01	Lake Tyers Beach, Vic	33 ENE
042-00413	1	24/01/99	The Cut, Mitchell River, Lakes NP, Vic	24/12/01	Lake Tyers Beach, Vic	32 E
042-00422	2+	25/01/99	15km East of Colac, Vic	24/12/01	Lake Tyers Beach, Vic	431 E
042-00396	2+	24/01/99	The Cut, Mitchell River, Lakes NP, Vic	24/12/01	Lake Tyers Beach, Vic	32 E
042-00610	2+	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	24/12/01	Lake Tyers Beach, Vic	28 ENE
042-15409	2+	1/12/99	Rigby Island, Lakes Entrance, Vic	24/12/01	Lake Tyers Beach, Vic	12 E
042-15418	2+	1/12/99	Rigby Island, Lakes Entrance, Vic	24/12/01	Lake Tyers Beach, Vic	12 E
041-60424	2+	9/03/91	Spermwhale Head, Ocean Grange Area, Vic	8/01/02	Wallaga Lake, NSW	273 NE
041-96355	2+	24/01/97	Albifrons Island, Ocean Grange, Lakes NP, Vic	8/01/02	Wallaga Lake, NSW	268 NE
042-00432	2+	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	8/01/02	Wallaga Lake, NSW	268 NE
042-00967	1	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	10/01/02	Mogareka, Mouth of Bega River, Tathra, NSW	238 NE

041-97708	2+	26/01/98	Trouser Point, Lochsport, Vic	22/01/02	Mogareka, Mouth of Bega River, Tathra, NSW	249 NE
042-00967	1	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	24/01/02	Mogareka, Mouth of Bega River, Tathra, NSW	238 NE
042-00967	1	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	26/01/02	Tathra, NSW	237 ENE
041-99056	Chick	29/12/97	Towra Point, Botany Bay, NSW	21/02/02	Caloundra Sandbanks, Qld	815 N
042-00419	2+	25/01/99	The Cut, Mitchell River, Lakes NP, Vic	15/03/02	Mouth of Tweed River, NSW	1201 NNE
041-92203	2+	27/01/96	Albifrons Island, Ocean Grange, Lakes NP, Vic	4/04/02	Caloundra Sandbanks, Qld	1325 NNE

The exciting observation of a uniquely flagged Little Tern at a breeding colony in Korea is a further indication that Little Terns from the Northern Hemisphere which visit Australia come from a range of breeding locations (so far, Japan and Korea).

The 9 recoveries at Lake Tyers on the 24 December 2001 refer to Little Terns which were injured or killed by a severe hail storm. It is interesting that two of these breeding birds at Lake Tyers were of NSW origin.

Other evidence of interstate movements of Little Terns is the series of sightings of birds at various breeding colonies in southern NSW in January 2002.

It is not clear whether the last two recoveries in the list refer to the northward autumn/winter movement of Little Terns that breed in Victoria or to Northern Hemisphere migrants.

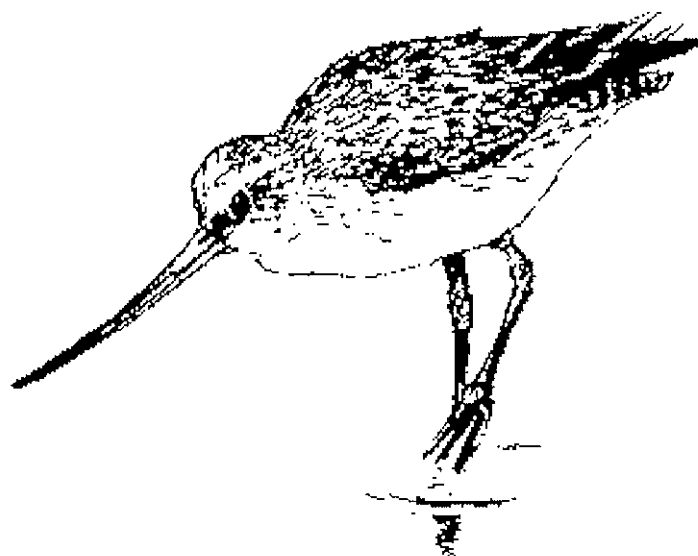
An analysis of the movements of Little Terns, to be carried out in collaboration with the NSW Parks and Wildlife Service, is about to commence.

Fairy Tern

Australian Recoveries

Band	Age	Date Banded	Location Banded	Date Recovered	Location Recovered	Km Moved
042-00440	1	13/03/99	Albifrons Island, Ocean Grange, Lakes NP, Vic	19/01/02	Lake Conjola, NSW	383 NE

This is the first interstate movement of a Fairy Tern banded in Victoria. Its original origin is not clear as it was banded as a juvenile in the post-breeding season when certainly a significant number of Little Terns from New South Wales had dispersed southwards into the Gippsland Lakes. When found (recognised by unique colour band combination) in January 2002 it was breeding at a colony in southern NSW. Given the Fairy Tern's propensity to site faithfulness it is quite probable that it was originally a bird hatched in NSW in early 1999.



Year 2001 Arctic breeding success, as measured by the percentage of first year birds in wader populations in Australia in the 2001/02 austral summer

Clive Minton, Rosalind Jessop, Peter Collins and Chris Hassell

Introduction

The Victorian Wader Study Group and the Australasian Wader Studies Group (through the Broome Bird Observatory and NW Australia Wader Study Group) continued their long term programmes of monitoring migrant wader populations during the 2001/02 non-breeding season in SE Australia and NW Australia. These two locations, on opposite sides of the continent and nearly 3000 km apart, enable a wide range of the wader species/populations which migrate from the Northern Hemisphere breeding grounds to Australia to be studied.

A core element of the fieldwork activities over the last 20 years has been a banding programme which attempts to catch a representative sample of as many species as possible, in each of the two regions, during the period when the majority of adult and juvenile/first year birds are present. The proportion of immature birds in such catches is then used as a measure of the breeding success in the previous Arctic summer. Results for the 1999 and 2000 breeding seasons have already been published (Minton et al 2000 and 2001). This paper looks at the 2001 breeding season outcomes and also reviews the data for the last four breeding seasons.

Methods

For this year's data (and for revisions of previous years' data included in Tables 3 and 4) some adjustment has been made to the dates for which data are included in the light of a refinement of the knowledge of the migration period of each species in each region.

In SE Australia the earliest date normally used is 1st December (occasionally very late November) as some juvenile birds continue to arrive throughout November. The end date is normally 28 February, because adult Sharp-tailed Sandpipers and Curlew Sandpipers commence their northward movements in early March. However samples of Red-necked Stints, Ruddy Turnstones and Sanderling are included up to 20 March (in 1999 to the first few days of April) because these species do not leave until well into April.

In NW Australia an earlier 'start' date is possible because birds arrive there (latitude 18° S) significantly earlier than in SE Australia (latitude 38° S). Furthermore in the 2001/02 season no catching was undertaken in the December/January/February period because of the absence of key personnel. All catches included in Table 2 were made between 20 October and 16 November, when intensive fieldwork was undertaken by the AWSG NWA 2001 Wader and Tern Expedition. Examination of the data showed negligible variation in the proportion of juveniles in this period suggesting most juveniles had arrived in NW Australia by the end of the third week of October. Catches up to 20 March were used (though in most seasons the majority were in the November/February period) since visible migration studies at Broome have shown that only Eastern Curlew depart from NW Australia in significant numbers before that date.

Breeding success in a population is considered to have been poor in the preceding breeding season when the proportion of juveniles in Australia in the subsequent austral summer is 0-10%, moderate – 10-20%, good – 20-30%, and exceptional – over 30% (Minton et al 2000).

Results

Tables 1 and 2 give the results of wader catches in 2001/02. The number of catches made for each species is given as an indication of the spread of samples obtained. In most of the main

species in SE Australia 4 to 8 catches were made (but 23 for Red-necked Stint) whilst in NW Australia the range was 6 to 13 catches.

Table 1. Proportion of first year birds in wader catches in SE Australia in 2001/2002

Species	Number of catches		Total birds caught	Number of first year birds	% first year
	Large >50	Small <50			
Red-necked Stint	15	8	6351	2188	34
Sharp-tailed Sandpiper	2	4	535	42	7.8
Sanderling	4	2	483	49	10
Curlew Sandpiper	3	5	419	115	27
Red Knot	3	1	363	249	69
Bar-tailed Godwit	2	-	282	4	1.4
Ruddy Turnstone	1	3	114	10	8.8
Great Knot	1	2	61	5	8.2
Pacific Golden Plover	-	1	15	1	(6.7)
Grey Plover	-	1	12	0	(0)
Non-arctic northern migrants:					
Eastern Curlew	-	1	18	1	(5.6)

All catches were in period 1 December 2001 to 28 February 2002 except for Red-necked Stint, Sanderling and Ruddy Turnstone where catches up to 20 March 2002 are included.

Table 2. Proportion of first year birds in wader catches in NW Australia 2001/2002

Species	Number of catches		Total birds caught	Number of first year birds	% first year
	Large >50	Small <50			
Red-necked Stint	4	8	840	140	17
Great Knot	6	7	634	33	5.2
Grey-tailed Tattler	5	8	506	85	17
Bar-tailed Godwit	2	10	332	50	15
Little Curlew	2	4	315	112	36
Curlew Sandpiper	1	10	230	44	19
Red Knot	2	8	221	12	5.4
Sanderling	1	6	115	5	4.3
Whimbrel	-	2	44	5	11
Broad-billed Sandpiper	-	5	19	7	(37)
Ruddy Turnstone	-	7	16	0	(0)
Non-arctic northern migrants:					
Greater Sand Plover	9	4	943	123	13
Terek Sandpiper	3	8	380	45	12
Black-tailed Godwit	-	1	32	0	0
Eastern Curlew	-	2	33	0	0

Also Lesser Sand Plover 6 (-), Sharp-tailed Sandpiper 2 (-), Asiatic Dowitcher 1 (1), Common Sandpiper 1 (-) and Oriental Pratincole 1 (-).

All catches were in period 20 October to 16 November 2001 except for two Little Curlew catches on 26 November and 01 December 2001 (9 and 20 birds respectively).

South-east Australia

The "winners" in SE Australia in 2001/02 were Red Knot (69% first year birds), Red-necked Stint (34%) and Curlew Sandpiper (27%) – the first two falling in the "exceptional" breeding success category. For Red Knot and Red-necked Stint these were the highest percentages ever recorded in SE Australia. The Curlew Sandpiper figure was the highest since the record, uniquely good, 45% recorded after the 1991 breeding season (a year of widespread bountiful breeding success).

In contrast, populations of other species such as Sanderling, Ruddy Turnstone, Sharp-tailed Sandpiper and Great Knot contained only modest levels of first year birds and their 2001 breeding season would be classified as moderate to poor.

For the Bar-tailed Godwit population which visits SE Australia the 2001 breeding season was obviously disastrous. These birds are all from the *baueri* subspecies, which breeds in Alaska (Wilson and Minton, in press). Bob Gill, of the US Fish and Wildlife Service in Alaska, had forewarned us of this likely outcome as extremely poor weather conditions occurred in Alaska during the 2001 breeding season. They had subsequently seen very few juvenile birds at migratory departure points.

North-west Australia

In 2001 the breeding success of wader populations which spend the non-breeding season in NW Australia appears to have been more uniform across species than in SE Australia. Also most species could be classed as having moderate breeding success, with Curlew Sandpiper (19%), Red-necked Stint (17%) and Grey-tailed Tattler (17%) tending towards 'good'. However Great Knot appear to have fared poorly.

The most interesting contrasts with SE Australia occurred in Bar-tailed Godwit and Red Knot. In both species NW Australia results were the opposite of SE Australia figures. Thus Bar-tailed Godwits in NW Australia, which breed in the Yakutia Region of Northern Siberia (Wilson and Minton, in press), had quite a reasonable breeding year in 2001 (15% first year birds). However, Red Knot (5.4%) had a poor year. Red Knot in NW Australia are of the newly named *piersmai* subspecies breeding in the New Siberian Islands (Tomkovich 2001). Those visiting SE Australia probably all breed in the Chukotsky Peninsula (*rogersi*).

Data on Little Curlew is included for the first time, ageing methods having now been satisfactorily developed. The figure of 30% first year birds suggests high breeding success in 2001 (but see later).

Comparisons between years

Tables 3 and 4 give the percentage first year figures for 1998/99 (newly presented data), 1999/00 and 2000/01 (Minton et al 2000 and 2001 – slightly revised) and 2001/02 (summary of data from Tables 1 and 2).

Table 3. Comparison of percentage of first year birds in wader catches in SE Australia between 1998/99 and 2001/02

Species	98/99	99/00	00/01	01/02
Red-necked Stint	32	23	14	34
Curlew Sandpiper	4.1	20	6.8	27
Sanderling	7.8	13	2.9	10
Ruddy Turnstone	3.3	21	10	8.8
Sharp-tailed Sandpiper	12	10	17	7.8
Bar-tailed Godwit	41	19	3.6	1.4
Red Knot	2.8	38	52	69
Great Knot	-	7.5	(3.7)	8.2

All birds caught by cannon netting in the period late November to mid March (Sharp-tailed Sandpiper and Curlew Sandpiper to end February only).

Table 4. Comparison of percentage of first year birds in wader catches in NW Australia between 1998/99 and 2001/02.

Species	98/99	99/00	00/01	01/02
Great Knot	2.4	4.8	18	5.2
Bar-tailed Godwit	2.0	10	4.8	15
Grey-tailed Tattler	26	(44)	17	17
Red-necked Stint	26	46	15	17
Curlew Sandpiper	9.3	22	11	19
Red Knot	3.3	14	9.6	5.4
Little Curlew	59	33	-	36
Non-arctic northern migrants:				
Greater Sand Plover	25	33	22	13
Oriental Plover	12.5	-	6.4	(0)
Terek Sandpiper	12	(0)	8.5	12

All birds caught by cannon netting in the period 20th October to mid March (Curlew Sandpiper to end of February only). Figures in brackets are where sample size is less than 20 birds. A dash indicates no sample.

A number of conclusions can be drawn.

In SE Australia

- (a) The 1999 breeding season was by far the best for most species during the last four years.
- (b) Red-necked Stints have had three very good breeding seasons in the last four years [see also separate article in this issue of Stilt].
- (c) Most species show quite a marked variation of apparent breeding success from year to year.
- (d) There appears to be little correlation between species, except in the good 1999 year. Bar-tailed Godwit and Red Knot seem to have the greatest tendency to depart from the norm. Red-necked Stint and Curlew Sandpiper figures, which quite often showed a good correlation in the 1980's, have not correlated well in recent years.
- (e) When Red Knot have a successful breeding season this is reflected in exceptionally high "percentage first year" figures. There are two reasons for this. Firstly, in such years, flocks of largely juvenile birds tend to occur in habitats where they are more easily cannon-netted. Secondly, banding and flagging has shown that most juvenile birds of the Flyway population tend to remain in Australia. Only in their second year do a high proportion of these birds move on to their future regular non-breeding areas in New Zealand (Minton 1996).
- (f) More years of data will need to be generated and examined to see what cyclical patterns of breeding performance, possibly associated with lemming/predator cycles, may be apparent in the wader species/population which visit SE Australia.

In NW Australia

- (a) The 1999 breeding season also appears to have been the best of the last four years for most species.
- (b) Patterns of yearly breeding success for Red-necked Stint and Curlew Sandpiper follow the same pattern as in SE Australia, though the figures differ in absolute terms.
- (c) Red Knot do not show the exceptionally high percentage first year figures apparent in some years in SE Australia. This suggests the NW Australia Red Knot population is not affected by a comparable "New Zealand" factor like the Red Knot in SE Australia.
- (d) There is no correlation between the annual percentage first year figures for Bar-tailed Godwits in NW Australia and SE Australia. This is not surprising given their widely separated breeding areas.
- (e) Greater Sand Plovers seem to show a more consistent, and on average higher, breeding success than other species. They, of course, do not breed in the Arctic region and thus may be less susceptible to variations in weather conditions and/or predator cycles.
- (f) Little Curlew populations have contained a very high (33-59%) proportion of first year birds in all three years which were sampled. It is not clear whether this is a genuine reflection of the situation for the population as a whole or whether some local timing/habitat factor is influencing the figures. This will be investigated further in the future.
- (g) As in SE Australia there seems to be only a modest correlation between species / years with quite wide variation occurring. Great Knot seem to be most out of phase with any general trend (perhaps because they nest in markedly different habitat).

Discussion and conclusion

Caution is needed in interpreting the "percentage of first year" figures due to potential biases in the data (Minton et al 2000, Tomkovich *et al.* 2000). However it is clear that the collecting of such information from wader populations in their non-breeding areas - especially if a number of independent samples are obtained each year - is giving a fair and logical indication of the variation in breeding success between species/years. At present it is the only quantitative information available on the reproductive output of wader populations in the East Asian - Australasian Flyway. Such information is fundamental to trying to determine causes of short term variations and long term trends in population monitoring counts of waders.

Data sets of this type increase markedly in value if collected in a consistent manner over a prolonged period. The VWSG and AWSG fieldwork programmes will continue to have the collection of "percentage of first year" data as key priorities for the foreseeable future.

Further information from previous years will be progressively amassed to extend the data set backwards in time. In the long term such data series may well be useful also in delineating the effects of climate change on the general reproductive success of Arctic - breeding waders.

Increasing banding recoveries and flag sightings are gradually enabling the specific breeding areas of wader populations visiting SE Australia and NW Australia to be pinpointed. It should thus be increasingly possible to tie in more closely the apparent breeding success of populations with conditions in specific regions of the Siberian Arctic each year, as reported in Arctic Birds newsletters (Soloviev and Tomkovich 1999, 2000, 2001). Such an examination is needed to explain in particular the variation between the breeding success of different species in any year.

What will the 2002 breeding season bring? If a three yearly breeding cycle is operating then, on the basis that 1999 was really good, it should be another good breeding year. But surely we cannot expect another good Red-necked Stint (or Curlew Sandpiper or Red Knot) year? Only time will tell. As usual we shall be eagerly waiting in Australia for the return of the wader migrants, with the adults arriving in August/September and the juveniles in September/October. The "% juvenile" monitoring catching programmes in Victoria and NW Australia will commence in November.

Acknowledgments

The very large number of people who have participated in the VWSG and NW Australia banding programmes over the years are greatly thanked for their efforts. Cannon netting requires a large team effort and without such dedicated support catches of sufficient size and quantity to produce meaningful results would not have been possible.

The Australian Bird Banding Office of Environment Australia is thanked for administrative support and for the provision of banding permits. The Departments of Natural Resources and Environment (Victoria), Conservation and Land Management (WA) and Environment and Heritage (SA) are thanked also for permits to band in their respective states.

The Broome Bird Observatory of Birds Australia is thanked for its widespread logistical support of banding activities in NW Australia.

Coast Action/Coast Care kindly provided funds for the purchase of some equipment in Victoria. The Potter Foundation generously made a grant to facilitate the purchase of portable radios for fieldwork in NW Australia.

References

Minton, C.D.T., 1996. Wader Migration to/from Australia. Presented at The Southern Hemisphere Ornithological Congress, Albany, Western Australia.

Minton, C.D.T., R. Jessop, and C.Hassell 2000. 1999 Arctic breeding success from an Australian perspective. Arctic Birds 2: 19 – 20.

Minton, C.D.T., R. Jessop, P. Collins and C.Hassell 2001. Indications of year 2000 arctic breeding success based on percentage of first year birds in Australia in the 2000/01 austral summer. Arctic Birds 3: 31 – 32.

Soloviev, M.Y. and P.S.Tomkovich eds Arctic Birds 1 –3, 1999, 2000, 2001.

Tomkovich, P.S. and M.Y. Soloviev, 2000. Comments on relating breeding success of arctic waders in 1999 to numbers of young birds in Australia. Arctic Birds 2: 21.

Tomkovich, P.S. 2001. A new subspecies of Red Knot *Calidris canutus* from the New Siberian Islands. Bull B.O.C. 121 (4): 257 – 263.

Wilson, J.R. and C.D.T. Minton in press. Breeding origins and migration routes of Bar-tailed Godwits which spend the non-breeding season in Australia. Emu.

Variations in apparent annual breeding success of Red-necked Stints and Curlew Sandpipers between 1991 and 2001

Clive Minton, Rosalind Jessop and Peter Collins

Introduction

The reproductive rate is one of the two fundamental parameters (mortality is the other) which govern the population level of a species. In Arctic-breeding waders it is difficult to directly measure reproductive success on the breeding grounds and certainly impractical to do this on a wide range of species simultaneously and for a prolonged period.

A long established alternative on goose and swan populations has been to scan flocks on the non-breeding grounds to determine the proportion of juvenile (first year) birds, still recognisable by plumage differences throughout most of the year. This is not so feasible on waders because many immature birds soon become almost identical in appearance (in the field) to adult birds, often even before all birds have reached their non-breeding destinations.

For waders the best quantitative estimates of breeding success have been obtained by catching samples from flocks on the non-breeding grounds and determining the proportion of juvenile/first year birds (which still can be aged in the hand). Whilst there may be potential biases in such data (as in most field data) such information at the very least produces an annual breeding success index for each species. Short and long term changes in this index may be helpful in understanding changes in wader population levels determined by systematic annual counts.

This note examines the apparent breeding success, since 1991, of Red-necked Stints and Curlew Sandpipers which spend the non-breeding season in SE Australia. It also relates the index of breeding success to changes in population levels during this period.

Methods

The Victorian Wader Study Group has been catching and banding waders in SE Australia since late 1975, initially by mist-netting but since early 1979 mostly by cannon netting. Up to April 2002 approximately 168,000 have been caught (135,000 newly banded and 33,000 retraps). By far the greatest volume of data has been collected on Red-necked Stints (108,000) and Curlew Sandpipers (28,000).

This analysis is based on data collected in the last 11 years. All the birds included were cannon-netted, at a variety of sites along the coast of Victoria and in the southeast corner of South Australia. Only catches made in the period between the end of November and the end of February were included (except for a few Red-necked Stint catches up to 20th March in some years). This is the period when populations in SE Australia are at their most stable with the majority of adult and juvenile birds being present in their non-breeding area destinations (see separate paper elsewhere in this edition of the Stilt and also Minton et al 2000 and 2001).

Results

Table 1 shows the number of Red-necked Stints (47,007) and Curlew Sandpipers (9,491) caught in SE Australia each austral summer between 1991/92 and 2001/02. It also shows the number of first year birds in each yearly sample.

The table also indicates that the level of sampling of each species has been relatively consistent throughout this 11 year period, with between 11 and 19 (23 – 25 in the last three years) Red-necked Stint catches each year and 7 – 18 Curlew Sandpiper catches annually in the defined period.

For the whole period combined the percentage of first year birds in the Red-necked Stints captured was 19.3% and in Curlew Sandpipers it was 12.3%.

Figure 1 shows the percentage of first year birds in each of the 11 annual samples of each species.

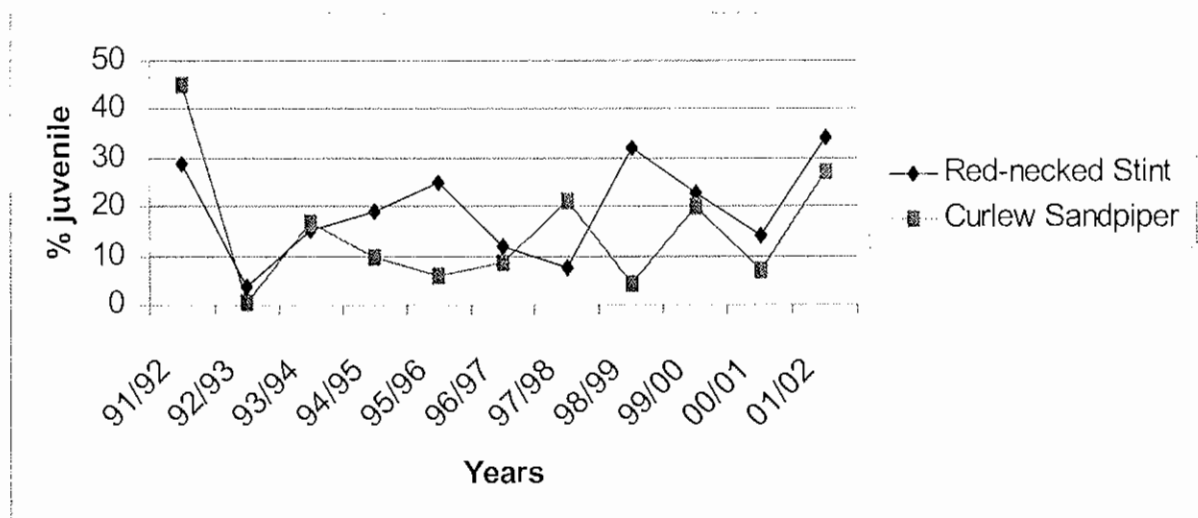
Table 1. Catches of Red-necked Stints and Curlew Sandpipers in SE Australia between 1991/92 and 2001/02

Year	Red-necked Stint					Curlew Sandpiper					% Curlew Sandpipers in catches
	No. of catches		Total caught	No. of first years	% of first years	No. of catches		Total caught	No. of first years	% of first years	
	Large >50	Small <50				Large >50	Small <50				
91/92	8	4	1994	580	29	4	3	437	198	45	21
92/93	15	-	4340	163	3.8	6	6	2232	6	0.3	34
93/94	10	3	6015	892	15	6	4	1239	215	17	17
94/95	7	8	3191	594	19	3	9	954	92	9.6	23
95/96	8	3	1804	452	25	4	5	506	30	5.9	22
96/97	10	7	3526	421	12	5	13	636	56	8.8	15
97/98	11	8	4232	331	7.8	5	10	934	196	21	18
98/99	9	6	4854	1572	32	5	5	737	30	4.1	13
99/00	19	6	4885	1108	23	6	4	1016	206	20	17
00/01	11	14	5815	770	14	2	11	381	26	6.8	6.1
01/02	15	8	6351	2188	34	3	5	419	115	27	6.2
Total			47007	9091				9491	1170		Average = 16.8%
Average % first year					19.3%					12.3%	

All catches made by cannon netting.

All catches in the period late November to end February except for a few Red-necked Stint catches up to 20th March in some years.

Figure 1. Percentage of first year Red-necked Stints and Curlew Sandpipers in wader catches in SE Australia from 1991/92 to 2001/02.



A number of interesting facts are apparent.

- The Red-necked Stint and Curlew Sandpiper "percentage figures" do not correlate closely. In six of the ten year-to-year changes the direction of change was opposite for the two species. The extreme example was 1997/98 to 1998/99 when Red-necked Stint increased from 7.8% to 32% but Curlew Sandpiper dropped from 21% to 4.1%.
- There is no evidence for a strong regular three year cycle of breeding success associated with, for example lemming/predator fluctuation periodicity. The nearest approximation is

that 1991, 1995, 1998 and 2001 were apparently the best breeding years for Red-necked Stints compared with adjacent years. However of these only 1991 and 2001 were really good for Curlew Sandpipers.

(c) In Red-necked Stint;

- i) only 2 years were below 10%
- ii) 5 years were above 20%
- iii) 5 of the 6 years in the 92/93 to 97/98 period were below average
- iv) 3 of the last 4 years have been above average (2 at record levels)

(d) In Curlew Sandpiper

- i) 6 years were below 10%
- ii) 4 years were above 20%
- iii) 6 of the 9 years in the 92/93 to 00/01 period were below average.

Overall there is a clear picture that Curlew Sandpipers appear to have fared much less well than Red-necked Stints as far as breeding success is concerned during the last decade. Relative population levels have changed (see later also) and this is apparent too from the decreasing proportion of Curlew Sandpipers in "small wader" catches made by the VWSG over the period (see Table 1). In the earlier years of the period the proportion of Curlew Sandpipers in such catches was usually above 20% but in the last two years it has dropped to only 6%.

Discussion

Patterns of breeding success for both Red-necked Stint and Curlew Sandpiper in the 1990's seem to have departed from the more regular situation of the 1980's, when a three - yearly cycle was more apparent with "good" years in 1982, 1985 and 1988 (followed also by 1991) (VWSG unpublished data).

Starting with the universally disastrous 1992 breeding season, when world weather effects following the Mount Pinitubo volcanic eruption accentuated normal negative breeding factors (Ganter & Boyd 2000), both species had a long run (Red-necked Stint six years, Curlew Sandpiper nine years) with generally below average breeding success. In the case of Red-necked Stint this was followed by four years of good breeding success, with two of these years being at record levels.

The effects of these patterns of breeding performance have, not unexpectedly, been apparent in population levels. Curlew Sandpiper numbers in Australia have declined by 70% over the last 20 years. This conclusion was based on an analysis (by Jim Wilson) of the annual austral summer (February) population monitoring counts organised by the Australasian Wader Studies Group (Wilson 2001a and Wilson 2001b) . Many of these sites are in Victoria (SE Australia) and all except one of the count sites showed this marked downward trend. In the eastern half of Corner Inlet (Victoria) Curlew Sandpiper numbers averaged 2,440 (range 1,400-2,700) in the February counts in the period 1981-1985 but only 665 (range 500-920) in the period 1998-2002 (Minton and Dann in prep.). Most of that decline has occurred since 1994.

Red-necked Stint numbers in SE Australia also declined during the period of below average breeding success in the 1990's. However they have now rebounded, to record levels. For example in the eastern half of Corner Inlet – which has the largest Red-necked Stint population of any of the 20-30 sites in Australia which are counted annually – the population averaged 21,465 in the February 2000-2002 counts (range 19,300-23,675). For the previous 19 years (1981-1999) the February count averaged 9,895 (range 6,300-14,300) (Minton and Dann in prep.).

Red-necked Stints have also spread extensively into new habitats as a result of the high population levels over the last four years. Flocks of hundreds, sometimes thousands, are now present on ocean beaches where previously only tens occurred normally. Numbers in all the traditional areas – muddier bays and estuaries – have also increased but not as dramatically as in the previously more marginal Red-necked Stint habitats.

It is interesting that the species appears to have been able to adapt to such a major increase in numbers. No detrimental consequences have yet been noticed – normal weight levels and patterns seem to be being retained – but it is possible that there may be effects on survival rates. It will be interesting to see how rapidly habitat utilisation returns to previous patterns if/when breeding success of Red-necked Stints drops to more traditional levels.

Another consequence of the ubiquitous presence of Red-necked Stints recently is that it is almost impossible to make a cannon-net catch of any species of wader (except oystercatchers and Eastern Curlew, with which they rarely associate) without obtaining a significant by-catch of Red-necked Stints!

Collection of data for these “breeding success” series will be continued in the future. It will be especially interesting to monitor Red-necked Stints and Curlew Sandpipers given past similarities and recent divergences in their apparent breeding performance and consequent population levels.

Acknowledgments

VWSG members and helpers are thanked for their enormous input of time and physical effort to the fieldwork programmes which resulted in such consistent samples of Red-necked Stints and Curlew Sandpipers being caught and aged annually over many years.

The Australian Bird and Bat Banding Office of Environment Australia is also thanked for permits to band and for administrative support. The Departments of Natural Resources and Environment (Victoria), and Environment and Heritage (South Australia) are also thanked for permission to band. Parks Victoria kindly granted permission to for banding in National Parks.

Coast Action/ Coast Care (twice) and the Department of Natural Resources and Environment also assisted with grants for the purchase of equipment.

Melbourne Water, The Department of Defence, Esso/BHP and numerous other landowners were most generous in allowing access to their land.

References

- Ganter, B. & H. Boyd, 2000. A tropical volcano, high predation pressure, and the breeding biology of Arctic Waterbirds: a circumpolar review of breeding failure in the summer of 1992. *Arctic Waterbirds*. 53(3): 289-305.
- Minton, C.D.T., R. Jessop, and C. Hassell 2000. 1999 Arctic breeding success from an Australian perspective. *Arctic Birds* 2: 19 – 20.
- Minton, C.D.T., R. Jessop, P. Collins and C. Hassell 2001. Indications of year 2000 arctic breeding success based on the percentage of first year birds in Australia in the 2000/01 austral summer. *Arctic Birds* 3 : 31 – 32.
- Wilson, J.R. 2001a. Victoria wader surveys January and February 2001. AWSG Report. 62pp.
- Wilson, J.R. 2001b. The January and February 2001 Victoria wader count. *The Stilt*, 40: 55-64.

Anderson Inlet Wader Surveys, January 2000 to May 2002

Jim and Anthea Whitelaw

Background

The South Gippsland Conservation Society (S.G.C.S.) initiated a series of summer, and winter wader counts in February and July respectively, from 1981 to 1985 in Anderson Inlet. There were two major outcomes from this work.

Firstly, the counts established that Anderson Inlet was ranked equal fourth in Victoria for shorebirds, which lead to a heightened recognition of the Inlet as a significant site for migratory waders from the northern hemisphere. More significantly, the Inlet was classified as an internationally important site for Double-banded Plover *Charadrius bicinctus*, a winter migrant from New Zealand, Eastern Curlew, *Numenius madagascariensis*, Red-necked Stint *Calidris ruficollis* and Sharp-tailed Sandpiper *Calidris acuminata*. In addition, the count data established that the Inlet was a nationally important site for Common Greenshank *Tringa nebularia* and Pacific Golden Plover *Pluvialis fulva*.

Secondly the data provided the basis for the publication of "Anderson Inlet Waders and Waterbirds" (S.G.C.S., 1987).

Subsequently, Jeff Campbell revived the counts by the Australasian Wader Studies Group (A.W.S.G) in 1991 with the primary objective "of determining the effect, if any, of *Spartina anglica* on the numbers and species composition of waders and waterbirds using the Inlet" (Campbell, 1992). A series of reports covering the period 1991 to 1997 was generated. Campbell identified a general decline in wader numbers over the survey period. In particular Sharp-tailed Sandpipers, "were virtually absent from the inlet" and that the decline in numbers of Common Greenshank, meant that they "now appear to be an irregular visitor to the inlet rather than the regular summer inhabitants that they once were".

Regular visits to several mainland sites in the Inlet, especially around Mahers Landing, beginning in September 1995 led the authors of this article to endorse Campbell's findings.

However, a boat based reconnaissance of the Inlet in December 1999 in advance of a Victorian Wader Studies Group banding expedition led to the discovery of an unusual new set of roosting sites and highlighted the need to modify some of Campbell's conclusions. The new roost sites comprised of low, 2 metre high mangrove stands east of the Venus Bay boat ramp and at the entrance to Pound Creek. The composition of the flocks here were not different to those reported for the other sites in the Inlet. Common Greenshank and Sharp-tailed Sandpiper were still present in the Inlet although their numbers had declined. The unique finding from the new sites was that the above two species as well as Red-necked Stint, Pacific Golden Plover, and Curlew Sandpiper, *Calidris ferruginea*, were using the mangroves as roosting sites at high tide. It is common knowledge that Grey-tailed Tattler, *Heteroscelus brevipes*, and Eastern Curlew, will tree-roost but it was not previously known that these other species will also resort to this strategy (Minton 2000).

Current Counts

Counts in Anderson Inlet were recommenced in January 2000 and are continuing on a bi-monthly regimen. The counts are boat based on an early morning high tide (plus 2.3 meters) and are made possible by the support of Parks Victoria which supplies the boat and driver, Brian Martin. Counts are made at Point Smythe, Doyles Road, islands to the east of the Venus Bay boat ramp, a small island off Nolan Bluff, Pound Creek, the foreshore of Price's farm and Mahers Landing west to Townsend Bluff. Although wave motion can make observation difficult the boat allows us to get closer to many species than one could on foot. Indeed it would be impossible to observe the mangrove roost sites by any other means. In addition, flocks of Eastern Curlew can be approached much nearer in the boat than on foot. At Mahers Landing it

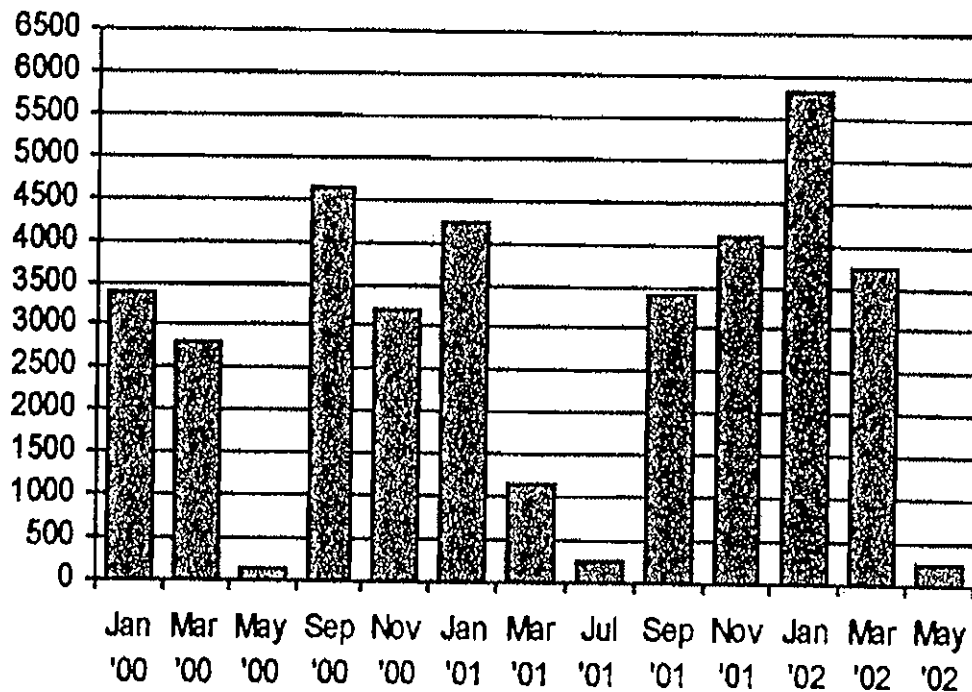
is possible to ground the boat within a few metres of roosting Red-necked Stint, Curlew Sandpiper and Double-banded Plover without disturbing the birds.

Results

The highest number of waders recorded was about 5,500 in January 2002, and the lowest was less than 200 in May 2000 (Figure 1). The counts in January increased each year, from 3 400 in 2000, 4 300 in 2001 to 5 700 in 2002. This increase reflected the increase in the number of Red-necked Stints, which were the most common species in the Inlet (Figure 2a).

Figure 1.

Anderson Inlet Total Waders



Some observations of individual species

Red-necked Stint. There are large numbers of this species present in the Inlet during the summer months (Figure 2a), however there were none seen during the two counts in May and one in July. The highest count to date, in January 2002, was about 5,000. Quite large flocks can usually be found roosting in the vicinity of Mahers Landing and they are by far the most numerous species present on the mangrove tops near the Venus Bay boat ramp.

Curlew Sandpiper. There were dramatic differences in the numbers of this species recorded each year (Figure 2b). The highest number recorded was 635 in March 2000. Since then numbers had decreased almost alarmingly, by the summer of 2000 - 2001. The latest summer numbers were somewhat higher. Usually 20 to 30 of this species were found at Mahers Landing but most appear to have retreated to the mangrove roosting areas, especially those off the Venus Bay boat ramp.

Figure 2a.

Anderson Inlet: Red-necked Stint Totals

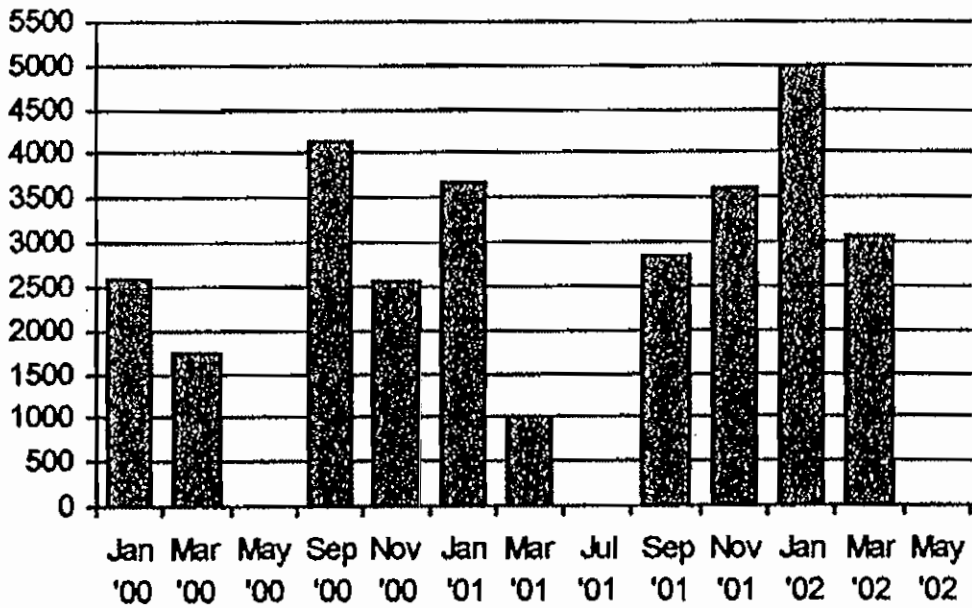
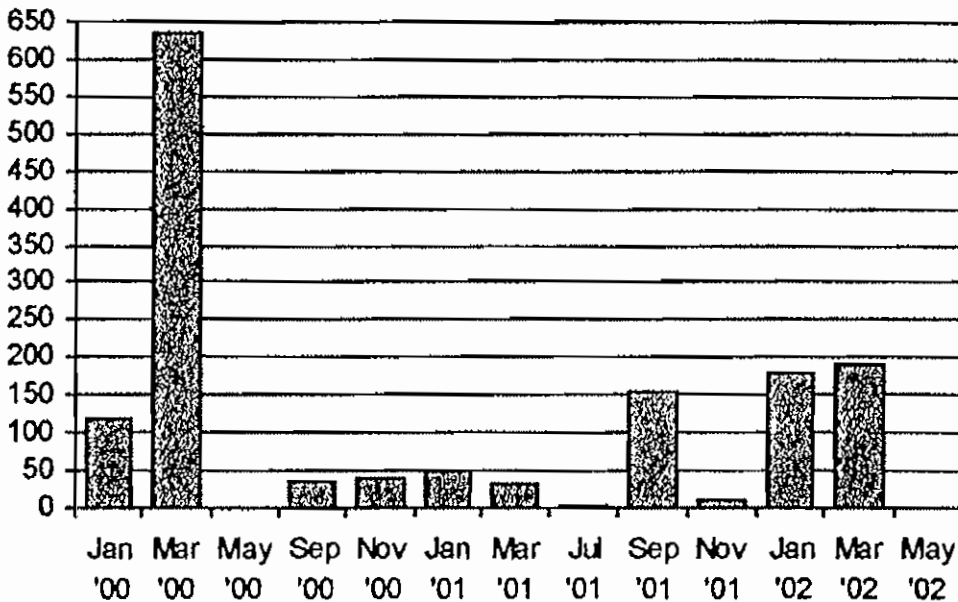


Figure 2b

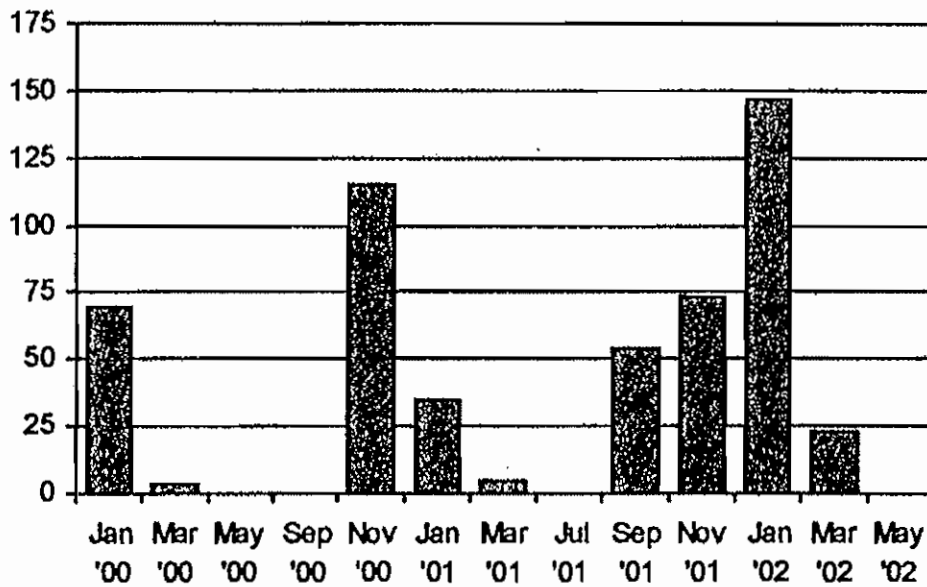
Anderson Inlet Curlew Sandpiper Totals



Sharp-tailed Sandpiper. Campbell was correct in recording diminished numbers of this species but the reduction is not as drastic as was reported. We have counted nearly 50 roosting on the *Spartina* covered island off Nolan Bluff, and on the mangroves (Figure 2c). They are difficult to sight in the *Spartina* and there may be more than we have recorded. In general they appear to have abandoned roosting at Mahers Landing except for a very few individuals, up to 12, on occasions, but certainly not regularly.

Figure 2c.

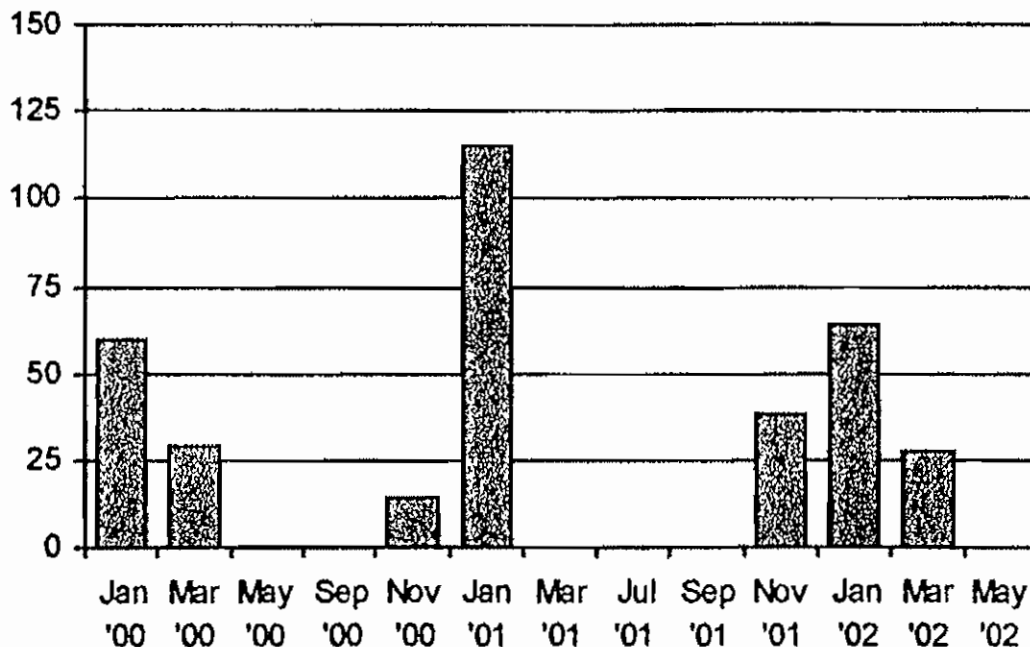
Anderson Inlet Sharp-tailed Sandpiper Totals



Pacific Golden Plover. The highest count to date is 115 in January 2001 (Figure 2d); but, none has been recorded in the winter months. These birds currently seem to use the mangroves off the boat ramp as their preferred roost site although smaller numbers can often be seen perching on the mangrove tops at Pound Creek. Occasionally they have been observed feeding in ploughed fields on nearby farms at high tide.

Figure 2d

Anderson Inlet Pacific Golden Plover Totals

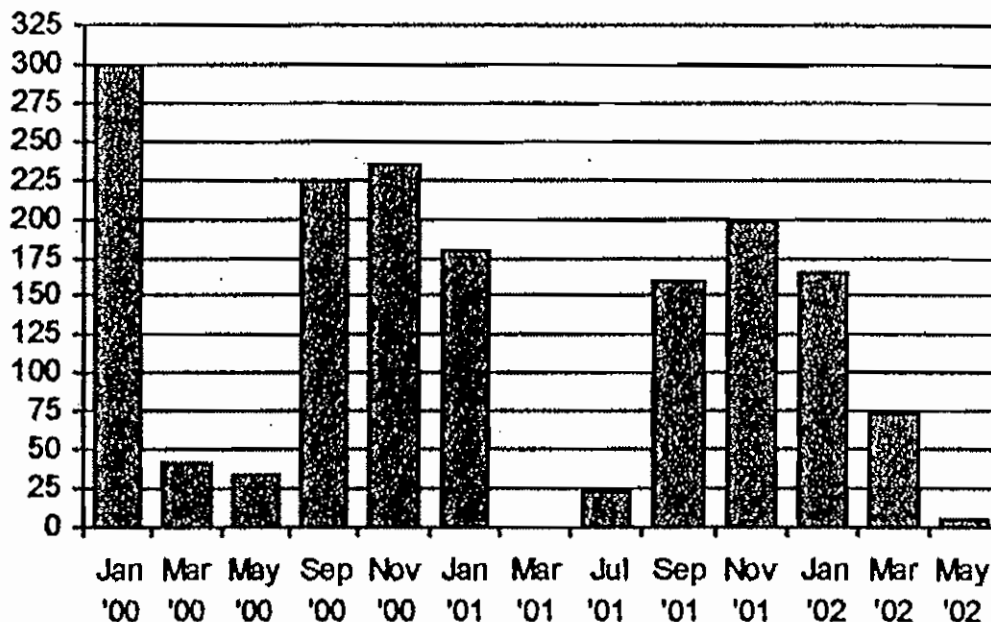


Eastern Curlew. The summer flock seems to be fairly stable at around 180 but we observed 300 in January 2000 (Figure 2e). Their preferred roost site is currently west of Pound Creek. In the past they have been observed at Point Smythe although currently this site is not

available at high tide due to significant erosion over the past two years. In addition, they had been observed also using the salt marsh east of Townsend Bluff but increased house construction adjacent to this site over the past few years could well have diminished its value as a roost site.

Figure 2e

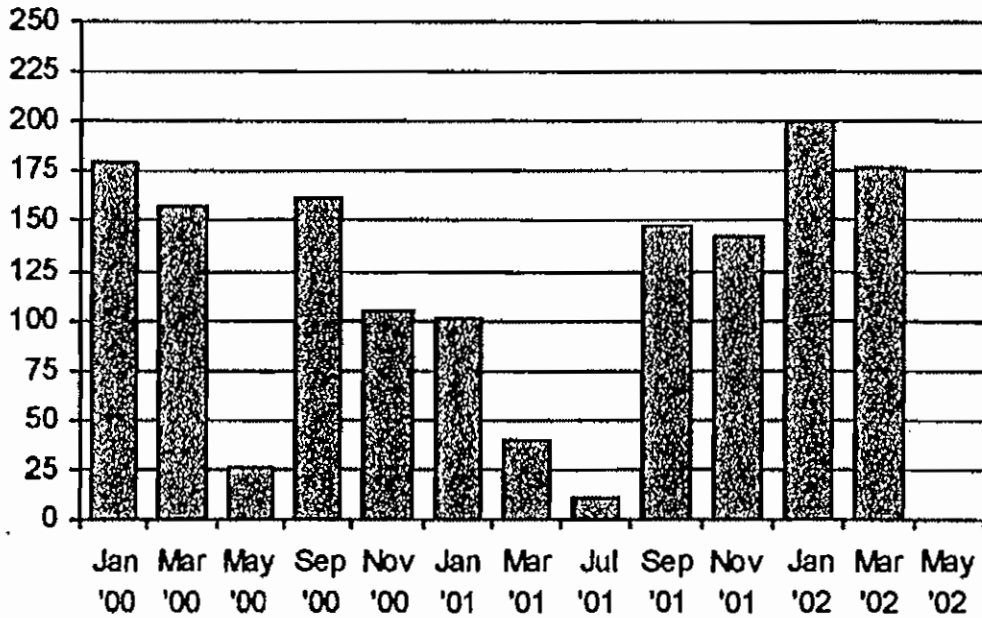
Anderson Inlet Eastern Curlew Totals



Common Greenshank. The maximum summer counts were from 100 - 200 (Figure 2f). This is a much more optimistic situation than that proposed by Campbell. This species appears to have retreated from roost sites where it had previously been observed and is now almost exclusively concentrated on the small *Spartina* infested island off Nolan Bluff and on the mangroves.. Of all the species observed roosting on mangroves this species appears to be the most reluctant to perch. Obviously, as the tide rises their longer legs allow them to remain in areas that smaller species are forced to abandon.

Figure 2f

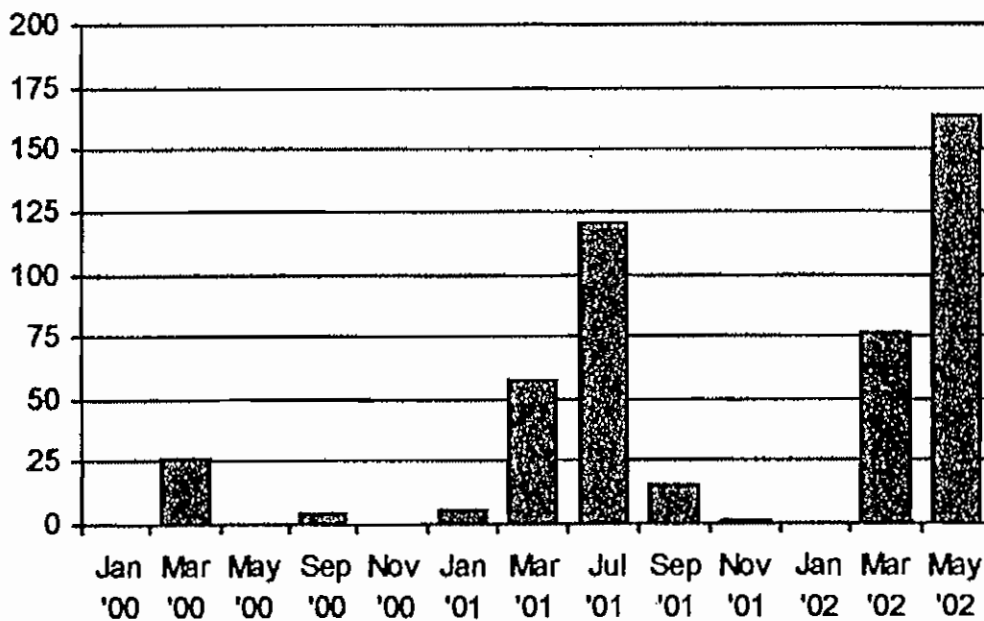
Anderson Inlet Greenshank Totals



Double-banded Plover. The counts of this species have increased each year (Figure 2g). Maximum numbers being recorded in the winter months.

Figure 2g

Anderson Inlet Double-banded Plover Totals



Discussion

As with all wader counts it is important to note that results at a particular location should be tempered by the fact that actual changes in numbers from year to year do not necessarily imply significant environmental changes at that place. Rather, fluctuations in numbers and species composition may well be a reflection of breeding success or failure during the northern summer in the Arctic.

Other factors, such as increased housing east of Townsend Bluff, the erosion at Point Smythe and the increased spread of *Spartina* appear to have led to significant changes in the roosting distribution of waders in Anderson Inlet. To this point there has not been a diminution in species composition although there has certainly been a significant reduction in the size of the Sharp-tailed Sandpiper flock. The question is whether this reduction is confined to the Inlet or indicative of a more general trend in the species? Indeed, the AWSG survey of all Victorian sites in January/February 2001 showed that the number of this species had effectively decreased to one quarter of its previously recorded population (Wilson 2001).

Perhaps the most significant question relates to the future of the rapidly spreading *Spartina* beds. One has to ask whether the unique roosting behaviour of all major species found in the Inlet is a satisfactory form of adaptation or merely temporary; and will the birds at some stage be forced to find an alternative "wintering" site? Equally important is whether the spread of *Spartina* is having a deleterious effect on the Inlet substrate and hence on the feeding beds of the waders. Evidence from similar *Spartina* invasions in the northern hemisphere suggests that the waders tolerate the infestation for some years but at some as yet unknown critical point their numbers "crash" (Lane 1992). Presumably, if the *Spartina* ends up choking the mangrove stands which the birds are currently using then the adaptation they have demonstrated to date would no longer be a viable option.

All counts to date have been conducted at high tide. It is hoped that during the coming waders' season it will be possible to revisit the same general areas at low tide to establish where the various species feed within the Inlet and whether or not *Spartina* are present at each. This could give some indication of the extent to which favoured feeding sites are or are not threatened.

In "*Spartina* Eradication in Victorian Marine Ramsar Sites" Stevenson (2000/01) states that, "In Anderson Inlet, a site of regional significance in Victoria, it (*Spartina* *sic*) now dominates 95% of the shoreline that is suitable for its growth and has effectively excluded migratory waders from the Inlet". The boat based counts since January 2000 definitely show that significant numbers of migratory waders continue to use the Inlet. However, these findings do not diminish the importance of continuing the *Spartina* control programme.

Acknowledgments

Thanks are due to Parks Victoria for provision of the boat, and to Brian Martin for his skill in getting us to sites. Also to Eulalie Brewster and Thierry Roland who performed counts in July 2001 while we were absent

References

- Campbell, J.1992. Anderson Inlet Wader and Waterbird Survey. Report No 1. 1991/92. The Stilt, No.21, 13 - 16.
- Lane, B.A.1992. The Impact of *Spartina* on International Migratory Waders. The Stilt No 21, 17 - 19.
- Mintin C. 2000,. Waders roosting on mangroves. The Stilt No 37, 23 - 24.
- South Gippsland Conservation Society, 1987. "Anderson Inlet Waders and Waterbirds"
"*Spartina* Eradication in Victorian Marine Ramsar Sites". Coast and Clean Seas Application, 2000- 01, National Heritage Trust, Jonathon Stevenson, c/- Parks Victoria, Foster.
- Wilson, J.,2001. The January and February 2001 Victoria Wader Count. The Stilt, No 21 17 - 19.

Broad-billed Sandpiper & Long-toed Stint

Graham Beal

This summer the V.W.S.G was lucky enough to catch 2 Broad-billed Sandpipers *Limicola falcinellus*, at Inverloch, Gippsland and Stockyard Point on Western Port Bay, Victoria. Both were juveniles. Only once before has one been caught in Victoria, in 1994. This bird, surprisingly, has been reported in the Flyway with its orange flag.

This species is a scarce visitor to Victoria with small numbers turning up each year. They are very hard to spot amongst large flocks of Red-necked Stints and are probably overlooked. They are more abundant in Northern Australia, locally more common in some places than others. (Editors note large numbers have been counted in Roebuck Bay recently perhaps reflecting the change in conditions at Port Hedland saltworks recently).

They resemble a Red-necked stint *Calidris ruficollis* but have a down-curved bill shorter than Curlew Sandpiper *Calidris ferruginea*. Pizzey describes their main distinguishing feature, in non breeding plumage, as having a dark eye line in a pale face: dark centre-line on crown margined (in some) by snipe-like whitish eyebrows splitting near eye. Upperparts grey with dark shoulders; dark feather-centres with pale fringes; underparts white, streaked across breast.

Breeding plumage: cream double streaks along crown and back; black feathers of upperparts edged bright and cinnamon buff; breast washed buff brown; dark arrowheads on flanks. There are two subspecies, one breeds in Arctic Eurasia and winter Africa, and the other breeds in Siberia and winters in India, Indonesia to P.N.G and Australia. It is a vagrant to New Zealand.

Long toed Stint

Another uncommon visitor to Victoria and Australia is the Long-toed Stint, *Calidris subminuta*. This is described as a regular, uncommon summer migrant. It occurs occasionally at Werribee S.F. and one was present last summer at Edithvale, (south-east Melbourne) from about the 27th Jan. to 7th Feb. 2002. It obliged many people with good views in front of the hide where it was compared with the Sharp-tailed Sandpipers.

Only one has ever been caught and banded by the V.W.S.G.

It is accurately described as a small, long-necked Sharp-tailed Sandpiper *Calidris acuminata* with long greenish yellow legs with a long central toe that protrudes behind the tail when in flight.

This species breeds in Siberia to far N. Pacific and migrates to south and south-east Asia & P.N.G. It is most abundant in W.A. and a vagrant to Tasmania.

Visible migration from Victoria

Doris Graham

We had made a good catch of Red-necked Stints at the Werribee Treatment Farm (10/03), but there was still plenty of late autumn light and five of us decided to go with Clive to check out the far ponds of the Austin Road Lagoons before heading home.

The light was slanting across the ponds and from the wall on the western side we had great views of Stints, Curlew Sandpipers, Red-necked Avocets and Black-winged Stilts. Some birds were feeding energetically others preening and some roosting on one leg. The beautiful rust red breeding plumage of the Curlew Sandpipers was glowing in the low angled rays of light—it was a glorious sight.

Dave Cropley was studying the views towards the You Yangs when we heard him exclaim "There is a flock of birds flying towards the sun". We all turned quickly and after much searching of the darkening sky found the flock, sure enough there they were, about 40 medium sized waders flying gradually higher and higher and always in the same direction. "Could they be heading for a shallow dam or pond in the Bacchus Marsh area?" pondered Dave, "Or are they really migrating?" "Oh" said Clive "They definitely look as if they are off. Keep an eye on them Dave while I check the ponds again."

No one but Clive looked away from this amazing sight. I, but not three of the others, had seen this wonderful phenomenon many times from Roebuck Bay, Broome, and from 80-mile beach. That for the next several days these birds would be flying continuously in an overall north-west direction until they reached the coast of Asia is surely one of the wonders of this planet. We watched as they formed and held the typical V-shaped line of migrating birds, lost one or two for a few minutes as they fell a bit behind then had to hurry to catch-up and join the line again. My heart went out to these wonderful birds which intrigue us so much with every facet of their lives as they set off on the most perilous of journeys. Eventually after about 20 minutes they disappeared from sight, and we had to let them go while wishing them safe landings and returns to our shores.

Most of those who attended the catch at Barry Beach, on Easter Tuesday, 2nd April this year witnessed the same phenomenon. This time it was almost all the Bar-tailed Godwits which took off and flew away from the net instead of towards it.

Peter Anton who was twinkling without too much success, called us on the radio to say that he was sure there was a flock of godwits flying high into the sky.

The first flock of about 180 birds seemed uncertain of the appropriateness of departing at that time 1555 as they had taken a long time before finally settling into the traditional V-shaped line and then flew ENE, slowly gaining height. A few of us who were not part of the decision making team relating to when to fire the net watched till they were out of sight. This took 10 to 12 minutes. Later 3 smaller flocks of 100, 50 and 50 also rose from the beach area and left in the same direction. Out of each flock some birds returned.

This is the first time since I joined the VWSG that I have seen migrating flocks leaving Victorian beaches, and I am glad that I have. It was hearing that the birds we were looking at just off the shore at Werribee migrated to the Arctic to breed every year that first caught my imagination. This was 10 years ago this month and it changed my life. I had recently retired and was looking for a new interest/passion. I knew I had found one and have not changed my mind since.

My first bird banding experiences

Melanie Mumford

Not quite old enough to have a drivers licence, I found myself waking Mum up at 5am, something I haven't had to do since I was little and had woken up from a nightmare. Each successive trip demonstrated that early mornings were a fact of life in this activity, and most of the experienced people seemed quite use to it – even if they did complain about it.

My first trip involved cannon netting Red-necked Stints at Inverloch. After helping to set the nets we settled down to wait for the birds. I was told that after the nets were fired we had to race down onto the beach to get the birds out of the water, but I wasn't exactly sure that I understood how we would do it. Crouching in the hide, waiting for the nets to be fired I was reminded of a war-movie – maybe it was just that I was extremely nervous – but I felt as though any minute we were going to be instructed to run over this hill into enemy territory. The “boom” of the cannon nearly caused me to jump out of my skin, and then the real excitement began. Once the net was safely out of the water, the birds covered to settle them and the keeping cages set up I got my first close up look at a wader. After a very quick lesson on how to hold the birds I was handed two extraordinarily cute little Stints to carry to the keeping cages. In a few hours I learnt so many things about these birds.

A few weeks later I had an entirely different experience with Crested Tern chicks. There were no nets, but there was added pressure of making sure you did not step on very young chicks or eggs that could not get out of your way. These chicks and their parents were not so well behaved as the Stints. They bit and pecked, and had the annoying habit of poohing on us. Hopefully they will come back to the colony to be parents themselves.

Getting wet is a regular occurrence having to run into water or making our way out to boats. As it was put to me “We not only study waders we, we act like them.”

One tern banding trip involved a speedboat ride, very fast and even a bit scary, out to a sand island in Corner Inlet. In some places with every step we sank up to our ankles in sand – the novelty of this wore off after the leg muscles started cramping! We were looking for Caspian Tern chicks. I quickly learnt two thing about them, one, they are very cute and two, they don't like being captured. One chick decided it would gain an early release by swallowing its band. I prevailed and the chick had to settle for munching on a “carrying bag” while it was banded and flagged. I then watched it waddle away crying out about the injustice of being small, fluffy and uncoordinated. Flag reports will help tell us where these cute babies spend their infancy.

The sheer number of birds and the beautiful places in which they live, as well as the pleasure of being able to handle them and the immense opportunity to learn have made every trip an amazing experience. It was great know that the information collected would help with the long term conservation of these birds.

A brief trip to China

Pete Collins

In late April 2002 I had an immensely enjoyable trip to China in the company of David Melville of Nelson, New Zealand. The purpose of the trip was to introduce leg flagging to the Chinese as well as help them to capture and handle waders in a safe way. Most of the Chinese participants had banded birds before, mostly passerines but three had been on AWSG north west expeditions and another had visited Sydney to watch waders. So the experience was there.

Dr Chu Guozhong, whom I had first met in Broome in 1996, and more recently on Phillip Island just three weeks ago, met us on our arrival on Beijing. Beijing is immense and it took an hour to get to the hotel from the airport and we were still in the city. The hotel was in the wonderfully named Fragrant Hills, and was called with some logic the Fragrant Hills Hotel. After the first of many fantastic meals we retired ready for an early bird watching start followed by a quick flight to Dandong where the workshop was being held.

The birding was quite good with Grey-headed Woodpecker and heaps of stuff that I had seen in Europe. There were some new birds like Chinese Nuthatch, Azure-winged Magpie and Chinese Greenfinch but the people were the highlights. They walk up a hill, some backwards, shouting at the top of their lungs playing transistor radios, with the news on. Tai Chi is popular as well. All this must work as the most wizened little character, without a tooth in his head could be seen marching stoutly up the steepest part of the hill as though it was flat. All this was quite baffling but they were all very polite and thought we were odd having binoculars around our necks and being quiet, without spitting. Strange people Caucasians.

After lunch we were whisked of to the airport to catch our plane and we were informed that boarding passes were not needed, just grab a seat anywhere. We were also informed that the airport we were heading for didn't have a computer. Why we were told this I never worked out but no one else seemed to be worrying so I thought it best not to as well.

The following week was spent catching and leg flagging waders during the night and the days were spent talking about waders and eating. We were put up in the best hotel in Dandong and they were very good to us as we trooped in at midnight covered in mud. Not many hotels in Australia would be so benevolent and when I cleaned my muddy trousers and shoes in the bathroom the maid didn't even come at me with an axe.

We had three nights catching, the first two with bright moonlight and so we only caught 33 birds. The third night cloud cover obscured the moon and 59 birds were caught. The people on the workshop learnt very quickly the techniques needed to make and apply leg flags, as well as the best way to get close to roosting birds so that they could look for flags. This we considered as important as putting leg flags on. The combination for people to look for is green over orange both on the upper right with the metal band on the lower left. After the first night we had banded a single Bar-tailed Godwit and this was seen on a fish pond with 3000 of its mates 5 kilometres away from its banding site. The double flag combination on the upper leg was very obvious and although the orange flag was seen first the green immediately became apparent.

On the last night of banding we controlled a bird with an orange leg flag on that had been banded by the VWSG about 2 months previously at Corner Inlet. This proved to be not just a highlight but one of the last banding acts, as the last day of catching was washed out by heavy rain.

In the small area of mudflats and fish ponds we counted 120,000 waders. Mostly Bar-tailed Godwit and Dunlin but with a fair selection of Eastern Curlew and Eurasian Curlew, Whimbrel, Great Knot and Grey Plover. Odd things like Large Sand Plover, Terek Sandpiper and Kentish

Plover were also there with Eurasian Oystercatcher, Little Ringed Plover, Marsh Sandpiper and Greenshank of the Common kind. Two kinds of Redshank, Common and Spotted increased in numbers while we were there and the first Turnstones appeared before our very eyes. Red Knot were present but only in small numbers as was Wood and Common Sandpipers and two Green Sandpipers were found in a drainage ditch. David found the prize wader. This was The Stumpy Greenshank, also called Spotted or Nordmanns Greenshank a very rare bird indeed.

Flag sighting totals

Species	White	Orange	Yellow	Blue
Bar-tailed Godwit	10	13	11	2
Great Knot	0	1	3	0
Grey Plover	1	0	1	0

A Yellow over White flag combination on a Barwit was also seen but the origins of this is not clear. Also a colour banded bird was seen that was part of a study conducted by Danny Rogers in Broome. This bird was a three year old and on its maiden flight to Siberia.

Catching totals

Species.

Bar-tailed Godwit	70
Dunlin	14
Great Knot	4
Grey Plover	2
Terek sandpiper	1

Total **91**

The final day was spent chasing souvenirs and visiting the spectacular Summer Palace needless to say it was May the first and what is the biggest public holiday in China? May 1st. To coin one of the biggest understatements it was very busy. I also brought a genuine fake Rolex that is still going to this day, much to everybody's surprise, but it does look good.

Papers published using VWSG data in 2001/02

Gosbell, K. & Minton, C. 2001. The biometrics and moult of Sanderling *Calidrus alba* in Australia. **Stilt** 40: 7-22.

Gunn, T. & Pert, P. 2001. Powdercoating of ABBBS bands – An example using Crested Tern bands. **Stilt** 38: 56.

Kraaijeveld-Smit, F. Minton, C., Jessop, R. & Collins, P. 2001. Age structure, biometrics and moult of Pied Oystercatcher *Haematopus longirostris*, in Victoria. **Stilt** 40: 29-37.

Minton, C. 2001. Summary of overseas sightings of waders leg flagged in Victoria and south eastern South Australia. **Stilt** 39: 45-47.

Minton, C., Jessop, R., Collins, P. & Graham, D. 2001. Sightings of waders leg-flagged in Victoria: Report Number 8. **Stilt** 39: 48-60.

Financial Reports 2000/01 and 2001/02

Two Financial Reports are included in this Bulletin. This is because the 2001 Bulletin was produced in April 2001, before the end of the 2000/2001 financial year. The 2002 Bulletin has reverted to the more usual July timing and thus is able to contain the 2001/2002 financial year report as well.

VWSG Financial Statement 2000/01

The Group's financial position remains satisfactory, with a cash balance at the end of the financial year slightly higher (at \$20,073.17) than at the start of the year. However some \$6,000.00 of this is committed to being used to complete the Coast Action/ Coast Care programmes.

Major expenditures continue to be incurred in relation to the maintenance, upgrading and replacement of cannon netting and associated equipment used in fieldwork. A generous grant of \$1,690.00 from Coast Action/Coast Care assisted this, but the actual level of expenditure on equipment (\$3863.00) greatly exceeded this.

The underlying pattern (if Coast Action/Coast Care grants and expenditure are separated out) of expenditure exceeding income is likely to continue into the 2001/2002 financial year, but the Group's resources are more than sufficient to cope with this without recourse to a change in membership fees at the present time

Rosemary Davidson – Treasurer
Clive Minton – Chairman

Financial Statement from 1st July 2000 to 30th June 2001- Victorian Wader Study Group Inc.

Income	\$	Expenditure	\$
Subscriptions	2040.00	Printing Bulletin	1721.50
Bank Interest	1056.73	Postage, stationary, photocopying	1216.01
Sale of T-shirts	442.00	Excess on boat to Mud Islands	220.00
Donations	335.00	Bank and Govt charges	42.33
H. Gibbs \$30.00		Purchase of T-shirts	353.65
K. Melaine \$30.00		Boat hire-Port Germaine	20.00
J. Limb \$260.00		Miscellaneous expenses	96.20
Surplus from AGM food	140.00	Sub-total	3669.69
Surplus from Manns Beach rent	27.00		
Mud Islands boat hire rebate	230.00	Equipment	
Sale of colour bands to NSW Nat Parks & Wildlife Service	30.00	Nets, ropes and making	672.01
Sale of fuses to NW Expedition	520.00	Electronic balances	508.00
Sale of fuses to Qld Parks & Wildlife Service	100.00	Fuses	1791.90
Sub-total	4920.73	Powder coating of bands	110.00
		Colour bands (Darvic)	364.00
Coast Action/coast Care Grants		Cannon materials	313.50
Equipment	1690.00	Radio batteries, lights etc	827.48
Oyc breeding success project	8920.00	Trailer registration and repairs	285.00
		Camouflage nets	269.00
TOTAL INCOME	15530.73	Stool repairs	50.00
		Keeping cage materials	300.57
Cash balance 01/07/2000		Ropes, glue, tapes and grease	483.87
Petty Cash	22.90	Shackles	52.65
Bank of Melbourne Account	1078.30	Windbreak poles	101.68
Macquarie Account	17724.21	Sub total	6129.66
Total	18825.41		
		Coast Action/Coast Care expenses	
		Fox baiting project - labour	704.00
		Oyc breeding success project	3759.62
		Labour, equipment, travel expenses	
		Sub-total	4483.62
		TOTAL EXPENSES	14282.97
		Cash balance 30/06/2001	
		Petty cash	31.85
		Bank of Melbourne Account	1416.55
		Macquarie Account	19164.27
		Total	20612.67
		Unpresented cheques	539.50
		Net Total	20073.17
TOTAL CASH	18825.41	TOTAL CASH	20073.17
+ income	15530.73	+ expenditure	14282.97
	34356.14		34356.14

Financial Statement from 1st July 2001 to 30th June 2002- Victorian Wader Study Group Inc.

Income	\$	Expenditure	\$
Subscriptions	1415.00	Postage, stationary, photocopying, phone	449.50
Bank Interest	670.55	Incorporation charges	66.00
Sale of net and firing box to NSW N.P. & Wildlife Service	1020.00	Bank and Govt charges	25.99
Sale of fuses to Charles Sturt Uni	200.00	Transport of net to New Jersey	119.22
Sale of net to New Jersey Forestry and Wildlife Service	550.00	Boat hire-Mud Islands	100.00
Sale of firing boxes to NW Expedition	500.00	Purchase of T-shirts	27.00
Payment for radio batteries- AWSG	222.75	Sub-total	787.71
Sale of Bulletin	5.00	Equipment	
Surplus from AGM food	134.00	Slides for lectures	67.10
Surplus from Manns Beach rent	17.00	Fuses	1114.00
Donation H.Phillipson	15.00	Powder coating of bands	110.00
		Colour bands (Darvic)	1063.28
		Callipers	122.20
Total Income	4749.80	Radio batteries	881.60
		Trailer registration and repairs	109.40
		Cannon materials	586.10
		Stool repairs, wind break poles	109.70
		Firing box, circuit tester, switches	459.50
		Ropes, glue, tapes	215.23
		Shackles	52.97
		Grease, screwdrivers, batteries	135.85
Cash balance 01/07/2001		Sub total	5026.63
Petty Cash	31.85		
Bank of Melbourne Account	877.05	Coast Action/Coast Care expenses	
Macquarie Account	19164.27	Oyc breeding success project	345.68
Total	20073.17	Labour, equipment, travel expenses	
		TOTAL EXPENSES	6160.02
		Cash balance 30/06/2002	
		Petty cash	19.45
		Bank of Melbourne Account	607.60
		Macquarie Account	18103.00
		Total	18730.05
		Unpresented cheques	67.10
		Net Total	18662.95
TOTAL CASH	20073.17	TOTAL CASH	18662.95
+ income	4749.80	+ expenditure	6160.02
	24822.97		24822.97

As foreshadowed in last year's Financial Report, expenditure (\$6160) exceeded income (\$4749) in the financial year ending 30 June 2002. Even excluding expenditure under the previously funded Coast Action/Coast Care project (\$345) the differences was nearly \$1100. The loss would have risen to close to \$3000 if a VWSG Annual Bulletin had been produced in the 2001/02 financial year (as is usual).

Continuing heavy expenditure on equipment (\$5026) is the principal cause. However the benefits of this are clearly illustrated in the VWSG's increased catching success during the last three years. Cash reserves can cover the situation for the present, but at some time in the future subscriptions will have to be increased to bring income in line with, hopefully by then, a reduced level of ongoing expenditure.

Of the total net cash reserves of \$18,662.95 on 30 June 2002 approximately \$6000 is committed to being spent during 2002/03 on the Coast Action/Coast Care project relating to Pied Oystercatcher breeding success-monitoring in Corner Inlet. The remainder (c.\$12,000) are the genuine cash assets of VWSG.

Rosemary Davidson – Treasurer
Clive Minton - Chairman



Obituary - Henry Norman Burgess Wettenhall (1915 - 2000)

Ornithologist and Paediatrician

Norman Wettenhall was a distinguished Senior Physician at the Royal Children's Hospital, Melbourne from 1948-73, specialising as a Paediatric-Endocrinologist in the 1970's and holding the title of Honorary Consulting Endocrinologist since 1980. His interest in endocrinology lead him to become one of the first two specialists to work on hormone disorders in children in Australia.

Apart from his outstanding medical career Norman Wettenhall was also a keen ornithologist and conservationist and for at least 25 years undertook fundraising for the Royal Australasian Ornithologists' Union (RAOU). Norman joined the RAOU in 1945 and shortly afterwards in 1947 married his wife Joan. They attended their first RAOU Congress and Campout at Lake Barrine on the Atherton Tableland in 1953. Norman's fundraising abilities lead single handedly to sufficient funds being available for the RAOU to run in partnership with the CSIRO, the 16th World International Orthinological Congress in Canberra in 1974, which lead to the RAOU becoming the primary ornithological body in Australia.

His love of birds and great gift of getting people to work harmoniously together lead him to become a member of the RAOU Council in 1975 and President from 1978 to 1983. During this time he saw the RAOU outgrow its first HQ at North Melbourne and move to larger premises at Moonee Ponds. Norman was again involved in the relocation of Birds Australia to its current headquarters at East Hawthorn. The establishment of three bird observatories, Rotamah Island, Victoria, Barren Grounds near Woollonging, N.S.W. and Broome W.A., were also helped by his effort and experience.

After his Presidency ceased in 1983, Norman continued to fill crucial roles within the RAOU; as member of the Research and Library Committees, Chair of the Finance Advisory Committee and its fund raising subcommittee and the Centenary Committee. Using his expertise, Norman oversaw the publication in 1984 of the Atlas of Australian Birds and was instrumental in raising over \$5 million dollars to enable the publication of the prestigious standard reference, *Handbook of Australian and Antarctic Birds*.

His contribution to conservation in Australia was formally acknowledged in 1985 when he was made a Member of the Order of Australia and in 1989 when the RAOU recognised his outstanding efforts by making him a Fellow.

Another passion of Norman's from the 1950's was the collection of finely illustrated volumes on natural history and birds. In 1995 Norman sold this magnificent collection, said to be the best collection of Australian natural history ever assembled, to create the Wettenhall Foundation a philanthropic trust which makes grants for conservation projects. Since the formation of this Foundation over \$2 million dollars have been paid into it to 'support and encourage research, education and recording of all aspects of the natural living environment'. Norman's ability to quietly and congenially bring together the promotion of knowledge of birds and the involvement of members will be missed.

VWSG association

Clive Minton has provided the following note on Norman's role in relation to wader studies.

Norman was a member of the VWSG almost since its formal inception in 1978/79 and he and Joan attend most annual general meetings. His greatest contribution was the positive and encouraging attitude he had to the group's work and to wader work in Australia overall. He and Joan participated in the third AWSG Expedition to NW Australia, in 1982, and this led to his strong support for an RAOU (Birds Australia) bird observatory to be set up at Broome in WA. It was Norman who negotiated the provision of two chalets, by Lord McAlpine, which resulted in the Broome B.O. commencing operations in 1988.

It was Norman's vision, as RAOU President at the time, which led to the creation of the Australasian Wader Studies Group in 1981. Recognising the huge dearth of knowledge about waders he raised funding to bring together for a meeting in Melbourne representatives from each state/territory in Australia and from New Zealand. The enthusiasm and commitment generated led to a five-year continent – wide count programme for which the Australian National Parks and Wildlife Service (now Environment Australia) funded a full time coordinator (initially John Martindale and subsequently Brett Lane).

It is certainly very true to say that without Norman's contribution, especially in the formative years, VWSG and AWSG and wader studies overall in Australasia would not have achieved what they have. *Editors Note: Further information on Norman Wettenhall's career can be obtained from <http://www.asap.unimelb.edu.au/bsparcs/biogs/P003207b.htm> or his obituary in Emu (Vol 100) or Wingspan (March 2001).*



Obituary - PROFESSOR J. MICHAEL (MIKE) CULLEN

14 December 1927- 23 March 2001

On the 23rd March 2001, Professor John Michael Cullen, known to all as "Mike", died in a car accident on his way to Monash University where he had held one of the Chairs of Zoology from 1976 until his retirement in 1992.

Mike started his academic career studying mathematics at Wadham College, Oxford University to study mathematics but in his undergraduate years he changed to zoology. Mike spent some time at the nearby Edward Grey Institute for Ornithology where he found encouragement for his first ornithological project on the ecology of Marsh Tits. He remembered fondly that the then head of the Institute, David Lack, once told him that all that is required for good field research is "a note-book and a bicycle". Of much greater significance in shaping his future was a series of lectures given at the Institute by the newly arrived Dutchman Niko Tinbergen. Mike obtained a first class degree, was awarded a Christopher Welch scholarship and began a Doctor of Philosophy with Tinbergen on the behaviour of the Common Tern on the Farne Isles off the coast of Northumberland (it was here he saved a young Clive Minton from "starving" to death). The now widely-used term "allopreening", to describe mutual preening behaviour.

In 1975 Monash University in Melbourne established a second Chair in Zoology and Mike started there in early 1976. He became involved immediately in the projects of colleagues and in the encouragement and supervision of students, many of whom now play important roles in academia, research and wildlife management in Australia and overseas.

Mike contributed to the ornithological fabric in Australia in many ways. He was on an advisory committee to a Federal Senate Investigation of Christmas Island guano mining and the future of the rare Abbott's Booby and supervised the studies of distribution and breeding there from 1979 to 1985. He also did consultancy work for the Federal Government on the effects of tourism on penguins at Bowen Island in Jervis Bay. He served on the Royal Australasian Ornithologists Union Field Investigation Committee (later known as the Research Committee), from 1976 to 1988. He was also the organiser of the 'Rolling Bird Survey' and secretary of the Victorian

Group of the RAOU in 1983-84. However, he made his most conspicuous contribution to ornithology in this phase of his professional life through his association with Little Penguins, particularly at Phillip Island and on the St Kilda breakwater near Melbourne.

Mike Cullen had a major influence on the development of ethology-the study of animal behaviour, on a generation of Australian ornithologists and on the study of Little Penguins. His enthusiasm for the truth and generosity of spirit were exceptional and infected those around him, while his modesty and demeanour surprised most. He put the interests of others and science ahead of his own throughout his career and his ease with mathematics permeated his enormous influence on zoology for more than 50 years. It has been a rare privilege, a pleasure and an inspiration to have known and worked with Mike. His contribution to ornithology in Australia and to ethology will last well beyond his time.

Mike took an interest in the analysis of wader data and undertook the early computerization and analysis of Red-necked Stins data from VWSG catches.

Peter Dann

Editors Note: Further information on the career of Mike Cullen can be found in Emu.

VWSG Membership List July 2002

Rick Aitchison
Richard & Margaret Alcorn
Charles Allen
Terri Allen
Mark Anderson
Peter Anton
Gabrielle Archard
Allen Archbold
Bruce Atkin
Steve & Robyn Atkinson
Mark & Terry Barter
Graham & Jenny Beal
Lauren Beasley
Rob & Gail Berry
Mark Bezuijen
Pat Bingham
Malcolm & Judy Brown
Paul & Anna Buchhorn
Margaret Cameron
Jeff & Sarah Campbell
Smathie Chong
Maureen Christie
Alah Clarke & Marj Reni
Rohan Clarke
Mike Connor
Dave Cropley
Rosemary Davidson
Michael Dawkins
John Dawson
Ren & Norma de Garis
Julie Deleyev
Jill Dening
Lee Duclos
Andrew Dunn
Dianne Emslie
Alice Ewing
Jon Fallaw & Becky Haywood
Richard Forster
Tim Gale
Dave Gerard
Gail, Colin & Heather Gibbs
Peter & Melanie Gibbs
Dave Gillison
Ken & Carlene Gosbell
Andrew & Kath Gosden
Doris Graham
Bob Green
Nicole Grenfell
Tim Gunn & Petina Pert
Angie Gutowski
Tony Habraken
Sue Harris
Neville & Robin Hatten
Brian & Toni Hayward
Peter Hermans
Faye Hill

Margaret Hollands
Vivien Holyoake
Peter Houston & Marguerite Cordell
Tania Ireton
Angela Jessop
Ros Jessop & Peter Collins
Penny & Murray Johns

Barbara Khalifa
Irma Kluger
Ken & Femmie Kraaijeveld
Leona Knight
Tessa Lamin
Brett Lane
Rowena Langston
Janet Limb
Laurie Living
Maira Longden
Sue & Andy Longmore
Richard & Debbie Loyn
Donald & Meg Macmillan
Ellen McCulloch
Pat McWhirter
Krystii Melaine
David Melville
Clive & Pat Minton
Barbara Moss & Peter Mitchell
Stewart Monckton
Melanie Mumford
John Munro
Brenda Murlis
Priscilla Park
Hugo Phillipps
Gareth Phillips & Family
Gordon Phillips-Ross
Heather & David Phillipson
Murray Portbury
Thomas Putt
Susan Quirk
Jim, Jenny, April & Shane Reside
Roger & Annabel Richards
Ken, Annie & Danny Rogers
Thierry & Joanne Rolland
Paul & Natalia Rose
Neville & Nancy Roussac
Graeme & Margaret Rowe
Stuart & Liz Sarrailhe
Debra Saxon-Campbell
Ira Savage
Clinton Schipper
Andrew Silcocks
Charles Silveira
Howard Simco
Jenny Skewes
Colin Smith
Roger Standen
Will & Angela Steele
Iain, Sandy, Sally, Anna & James Stewart
Bob Swindley
Sally Symonds
Susan Taylor
Deryn Thomas
Pavel Tomkovich
Leon Trembath
Lyn Turner
Pal Van Loon
Helen Vaughan & Rodney McFarlane
Inka Veltheim
Mark Walker
Keith Ward
Andrew Wells
Mike Weston
Ross Williamson

Jim Wilson
Prue Wright

Dept. of Defence, Swan Is. Queenscliff
Eyre Bird Observatory
French Is. Head Ranger FINP
Highland Ringing Group, Scotland
Hong Kong- Geoff Carey
Japan- Kiyu Ozaki Bird Mig. Res. Cent.
Korea- Jin Young Park
Melb. Water (Werribee Sew. Farm)
NRE Geelong
NSW Wader Study Group
NWA WSG- Chris Hassell
NZWSG- Adrian Riegan
Queensland Wader Study Group
Rhyll Gen Man Phillip Is Nature Park
Parks Victoria, Foster
Parks Victoria, Queenscliff
Parks Victoria, Wonthaggi
Senckenbergische Bibliothek
Taiwan Dr W H Fang
Victorian Ornithological Research Gp
Wash Wader Ringing Group
And landowners on whose property the group
operates in Victoria

Bulletins also sent to

Arthur Rylah Institute
Australian Bird & Bat Banding Scheme
Australasian Wader Studies Group
Barren Grounds Bird Observatory
Birds Australia
Bird Observers Club of Australia
Broome Bird Observatory
CSIRO Library, ACT

CONTENTS		
VWSG Office Bearers		2
Summary of VWSG activities from January 2001 to June 2002	C. Minton	3
Numbers of waders processed by VWSG to December 2001	C. Minton	10
Wader banding totals – VWSG 2001	C. Minton	11
Wader banding totals – VWSG January to June 2002	C. Minton	12
VWSG wader catches 1975 to December 2001	C. Minton	13
Annual wader banding totals by VWSG	C. Minton	14
VWSG catch record – Waders	C. Minton	15
Location of waders caught in Victoria and South Australia	C. Minton	16
Waders leg-flagged by the VWSG in Victoria (orange)	C. Minton	17
Waders leg-flagged by the VWSG in South Australia (orange/yellow)	C. Minton	18
Fieldwork programme 2001, 2002		19
Recoveries of waders banded in Victoria 2000/01	C. Minton, R. Jessop, P. Collins, J. Deleyev.	22
Recoveries of waders banded in South Australia 2000/01	C. Minton, R. Jessop, P. Collins, I. Stewart.	32
Recoveries of waders banded elsewhere 2000/01	C. Minton, R. Jessop, P. Collins, J. Deleyev.	32
Sightings of leg-flagged waders from Victoria. Report No. 9.	C. Minton, R. Jessop, P. Collins, J. Deleyev, L. Beasley.	34
Sightings of leg-flagged waders from SA. Report No. 2.	C. Minton, R. Jessop, P. Collins, I. Stewart, M. Christie.	53
Tern breeding and banding 2001 & 2002	C. Minton, R. Jessop, P. Collins	58
Tern recovery report	C. Minton, R. Jessop, P. Collins	61
Year 2001 Arctic breeding success as measured by the percentage of first year birds in wader populations in Australia 2001/02 austral summer.	C. Minton, R. Jessop, P. Collins, C. Hassell	66
Variations in apparent annual breeding success of Red-necked Stints and Curlew Sandpipers between 1991 and 2001.	C. Minton, R. Jessop, P. Collins	72
Anderson Inlet wader survey – January 2000 to May 2002.	J & A. Whitelaw	76
Broad-billed Sandpiper and Long-toed Stint	G. Beal	83
Visible migration from Victoria	D. Graham	84
My first bird banding experiences	M. Mumford	85
A brief trip to China	P. Collins	86
Location of waders caught in Victoria and South Australia	C. Minton	16
Waders leg-flagged by the VWSG in Victoria (orange)	C. Minton	17
Waders leg-flagged by the VWSG in South Australia (orange/yellow)	C. Minton	18
Fieldwork programme 2001, 2002		19
Recoveries of waders banded in Victoria 2000/01	C. Minton, R. Jessop, P. Collins, J. Deleyev.	22
Recoveries of waders banded in South Australia 2000/01	C. Minton, R. Jessop, P. Collins, I. Stewart.	32
Recoveries of waders banded elsewhere 2000/01	C. Minton, R. Jessop, P. Collins, J. Deleyev.	32
Sightings of leg-flagged waders from Victoria. Report No. 9.	C. Minton, R.	34