Recent trends for Hunter Estuary waterbird and shorebird populations

Alan Stuart

133 Barrenjoey Road, Ettalong Beach NSW 2257, Australia. alanstuart400@gmail.com

Received 4 June 2025, accepted 17 June 2025, published online 29 June 2025.

Data from monthly surveys of the Hunter Estuary spanning four years during 2021-2025 were compiled and compared with results from the preceding four-year period. The populations of most migratory shorebirds decreased, continuing their long-term trends of decline. Two species, Bar-tailed Godwit *Limosa lapponica* and Common Greenshank *Tringa nebularia*, had stable or near-stable populations in the estuary. Twelve waterbird or non-migratory shorebird species had increased populations and seem to be benefitting from wetland rehabilitation projects in the estuary. That included two species listed as Vulnerable in New South Wales – Magpie Goose *Anseranas semipalmata* and Latham's Snipe *Gallinago hardwickii*. Five waterbird and shorebird species had reduced numbers, perhaps departing the estuary for breeding sites elsewhere: Grey Teal *Anas gracilis*, Pied Stilt *Himantopus leucocephalus*, Red-necked Avocet *Recurvirostra novaehollandiae*, Red-kneed Dotterel *Erythrogonys cinctus* and Black-fronted Dotterel *Elseyornis melanops*.

INTRODUCTION

During 2021-22, Ann Lindsey and I analysed the data from 22 years of Hunter Estuary monthly surveys carried out by members of the Hunter Bird Observers Club (HBOC) (Stuart & Lindsey 2021; Lindsey & Stuart 2021; Stuart & Lindsey 2022; Lindsey & Stuart 2024). The data set spanned April 1999 to March 2021. Some clear trends were identified – in particular, decreasing populations of most migratory shorebirds, and stable or increasing populations of most of the endemic shorebirds and of many waterbird species. We also showed that many of the waterbirds and some of the endemic shorebirds had seasonal variation in the numbers present.

Four years on from doing those analyses, it seemed timely to assess whether any of the trends were continuing. In this report, I summarise the results for the period April 2021 to March 2025 and compare them with those from the preceding 4-year period April 2017 to March 2021.

METHODS

I extracted HBOC's data from the Birdata portal (https://birdata.birdlife.org.au/) and imported them into an MS Excel spreadsheet. For each of the two periods 2017-2021 and 2021-2025, I calculated the average number of birds present for each species, and I also noted the maximum number that had been present and the number of times that the species was recorded. For migratory shorebirds, which mainly are present in their non-breeding season, I calculated their average counts for the November to March period – those being the main months that the birds were present.

To assess the significance of any observed changes, I used the Chi-square test (which compares the number of observations with the expected number of observations) and the t-test (which compares count data from two data sets). For the latter I used two-tailed t-tests assuming unequal variance, with $p < 0.05$ considered significant and $p < 0.01$ highly significant. For the Chi-square tests, values of χ^2 above 3.84 indicate a statistically significant difference in the number of records.

RESULTS

Forty-seven surveys were done during the 2021-2025 period; there was no survey in August 2021 when COVID-19 related travel restrictions were at a peak. In the preceding 4-year period, all 48 of the scheduled surveys took place.

Migratory shorebirds

Table 1 shows the maximum counts and average November-March counts for the main migratory shorebirds recorded in the Hunter Estuary since 2017. Species with fewer than five records in the eight-year period are not reported. Almost all species had lower numbers for the second time period (both their maximum counts and their November-March average counts). There were two

exceptions: Common Greenshank *Tringa nebularia* and Bar-tailed Godwit *Limosa lapponica.* Although the maximum counts for both species were 10-20% lower for 2021-2025 compared with the preceding four-year period, their November-March average numbers for the two periods were similar (down by ~5% for greenshanks, up by ~2% for godwits).

Although the Bar-tailed Godwit numbers for November-March were approximately stable, their May-August counts fluctuated considerably during 2021-2024. In both 2021 and 2024, there were more than 100 birds in the estuary (peak counts 115 in July 2021, 136 in July 2024). The corresponding numbers during 2022 and 2023 were 47 and 76 birds.

The species present in greatest numbers since April 2021 were Sharp-tailed Sandpiper *Calidris acuminata* and Bar-tailed Godwit *Limosa lapponica*. However, Sharp-tailed Sandpiper results were affected by a brief influx in October-November 2023, peaking with a count of 1195 birds. The next highest count for them in the 4-year period was 253 birds in September 2021. In contrast, during 2017-2021 there was a major El Niño event in Australia, leading to dry conditions inland. As a result many thousands of Sharp-tailed Sandpipers were regularly present in the estuary (Stuart 2019).

Data for Double-banded Plovers *Charadrius bicinctus* are not presented in **Table 1** as they are mainly present elsewhere in the Hunter Region in winter months (Fraser & Lindsey 2016). There were five records for them in 2017-2021 (maximum count 60 birds; the 4-year average count was nine birds) and only two records in 2021-2025 (maximum count two birds). Similarly, I have not presented data for Ruddy Turnstones *Arenaria interpres* because they only infrequently roost within the estuary, preferring to roost at coastal rock platforms (Stuart & Lindsey 2021).

Table 1. Maximum counts and average November-March counts for migratory shorebirds in the Hunter Estuary 2017-2021 and 2021-2025. Species with statistically significant trends ($p < 0.05$) for November-March counts are shown in red.

Species	April 2017 – March 2021		April 2021 – March 2025		Pop^{n} Trend[1]	p (t-test)
	Max count	Nov-Mar Avg.	Max count	Nov-Mar Avg.		
Pacific Golden Plover *Pluvialis fulva*	390	176	195	107	D	0.038
Whimbrel *Numenius phaeopus*	74	33	48	21	D	0.091
Far Eastern Curlew *Numenius madagascariensis*	172	114	135	89	D	0.065
Bar-tailed Godwit *Limosa lapponica*	968	466	745	473	S?	0.454
Black-tailed Godwit *Limosa limosa*	100	40	44	19	D	0.005
Great Knot *Calidris tenuirostris*	4	2	1	1	D	0.175
Red Knot *Calidris canutus*	273	24	69	5	D	0.046
Sharp-tailed Sandpiper *Calidris acuminata*	4583	1075	1195	125	D	0.004
Curlew Sandpiper *Calidris ferruginea*	155	59	78	32	D	0.076
Red-necked Stint *Calidris ruficollis*	60	7	19	9	I?	0.890
Terek Sandpiper *Xenus cinereus*	6	4	6	2	D	0.022
Common Sandpiper *Actitis hypoleucos*	2	1	3	1	D	0.787
Grey-tailed Tattler *Tringa brevipes*	41	22	27	12	D	0.010
Common Greenshank *Tringa nebularia*	135	57	117	54	S	0.822
Marsh Sandpiper *Tringa stagnatilis*	96	31	43	13	D	0.006

[1]Population trends: D – decreasing; I – increasing; S – stable.

Waterbirds and non-migratory shorebirds

A total of 65 waterbird and non-migratory shorebird species were recorded in the Hunter Estuary during 2021-25 (Note: I have treated the Latham's Snipe *Gallinago hardwickii* as a migratory waterbird not as a shorebird, because of its preference for fresh-water habitat rather than saline habitat). Twelve of those species had statistically significant population increases compared with the 2017-2021 results, and three species had statistically significant population decreases. The 15 species are listed in **Table 2**, with the *p* value from the t-test comparisons of the two data sets.

Table 2. Average monthly counts in the Hunter Estuary 2017-2021 and 2021-2025 for waterbirds and non-migratory shorebirds having statistically significant population changes.

Species	April 2017 – March 2021		April 2021 – March 2025		*p* (t-test)
	Max count	Avg. count	Max count	Avg. count	
Species with significantly increased populations					
Australasian Darter *Anhinga novaehollandiae*	7	2	11	3	0.005
Chestnut Teal *Anas castanea*	2141	256	2393	475	0.046
Dusky Moorhen *Gallinula tenebrosa*	6	2	65	9	0.009
Great Egret *Ardea alba*	59	10	117	20	0.005
Latham's Snipe *Gallinago hardwickii*	6	1	55	10	0.026
Little Egret *Egretta garzetta*	10	3	29	7	<0.001
Magpie Goose *Anseranas semipalmata*	6	1	27	8	0.018
Musk Duck *Biziura lobata*	2	1	13	4	<0.001
Pacific Black Duck *Anas superciliosa*	172	51	505	86	0.018
Purple Swamphen *Porphyrio porphyrio*	46	15	111	37	<0.001
Royal Spoonbill *Platalea regia*	90	24	168	41	0.001
Wandering Whistling-Duck *Dendrocygna arcuata*	2	<1	8	8	0.013
Species with significantly decreased populations					
Grey Teal *Anas gracilis*	2533	487	1500	215	0.016
Pied Stilt *Himantopus leucocephalus*	1008	416	785	264	0.009
Red-necked Avocet *Recurvirostra novaehollandiae*	5644	1481	2316	364	<0.001

Three species had statistically significant increases in their number of records – Musk Duck *Biziura lobata*, Magpie Goose *Anseranas semipalmata* and Dusky Moorhen *Gallinula tenebrosa* (see **Table 3** for details). For all three species, the Chi-square value was above 6.63, thus the changes can be considered highly significant. Two other species had near-significant changes (χ^2 slightly below 3.84): Latham's Snipe *Gallinago hardwickii* and Eurasian Coot *Fulica atra*.

No species had statistically significant decreases in number of records although for the Common Tern *Sterna hirundo* and Red-kneed Dotterel *Erythrogonys cinctus* the changes could be considered near-significant. Common Tern had one record for 2021-2025 compared to seven records for 2017-2021, χ^2 3.02. Red-kneed Dotterel had 12 records for 2021-2025 compared to 23 records for 2017-2021, χ^2 2.65. The population change (average of 16 birds when present during 2017-2021, average of 6 birds when present during 2021-2025) for Red-kneed Dotterel also was near-significant (*p* 0.077), and similarly for the Black-fronted Dotterel *Elseyornis melanops* (average count 22 when present 2017-2021 and then average count 13 when present 2021-2025, *p* 0.057).

Table 3. Species with statistically significant ($\chi^2 > 3.84$) or near-significant increases in number of Hunter Estuary records for 2021-2025 compared with 2017-2021.

Species	April 2017 – March 2021		April 2021 – March 2025		Chi-square (χ^2)
	Avg. count	Records	Avg. count	Records	
Species with significantly increased records					
Magpie Goose *Anseranas semipalmata*	6	1	8	11	6.94
Musk Duck *Biziura lobata*	1	8	4	26	8.86
Dusky Moorhen *Gallinula tenebrosa*	4	11	9	28	6.91
Species with near-significant increase in records					
Latham's Snipe *Gallinago hardwickii*	2	10	10	21	3.44
Eurasian Coot *Fulica atra*	129	20	75	34	3.41

DISCUSSION

Migratory shorebirds

Stuart & Lindsey (2021) identified that most migratory shorebird species in the Hunter Estuary had decreasing populations. The three exceptions from that study were Sharp-tailed Sandpiper *Calidris acuminata*, Grey-tailed Tattler *Tringa brevipes* and Pacific Golden Plover *Pluvialis fulva*. The populations of all three species had increased, mainly over 2010-2020 (marginally so for the Grey-tailed Tattler). However, all three now have significantly decreased populations in the Hunter Estuary compared to the 2017-2021 period. For the latter two species, the Hunter Estuary trends now reflect those for the East Asian – Australasian Flyway (EAAF). However, it is a different story for Sharp-tailed Sandpipers. Rogers *et al*. (2023) found that Sharp-tailed Sandpiper numbers had increased by ~20% in the EAAF in the past ten years. The population decrease in the estuary is contrary to the Flyway trend and most likely is because of specific climatic conditions. Inland Australia was dry for much of 2017-2021, bringing Sharp-tailed Sandpipers to wetter coastal areas. Conversely, it mostly was wet in the inland during 2021-2025, and hence fewer birds were in coastal areas. Indeed, apart from a brief incursion during October-November 2023, peaking at 1195 birds, the median count of Sharp-tailed Sandpipers in the estuary in the past four years was just 45 birds.

The numbers for most other migratory shorebirds in the Hunter Estuary have continued to decline, reflecting national trends. There are two exceptions – Bar-tailed Godwit and Common Greenshank. For both species, the population trend in the estuary is contrary to that for the overall EAAF. The greenshanks are regularly at Tomago Wetland, and their population stability probably reflects the successful rehabilitation efforts at that site (Lindsey & McNaughton 2012; Lindsey 2021). The reason for the recent stability of the Bar-tailed Godwit population is unclear – it is contrary to the EAAF population trend which has had a 47% decrease in the past ten years, for subspecies *baueri* which occurs locally (Rogers *et al*. 2023).

Waterbirds and non-migratory shorebirds

From 22 years of Hunter Estuary surveys, spanning 1999-2021, the populations of 16 waterbird species were found to be increasing (Lindsey & Stuart 2021; Stuart & Lindsey 2022). For 11 of those species, populations appear to have stabilised in the past four years (or, at least, to have not significantly further increased). However, the numbers for four species have continued to increase significantly: Chestnut Teal *Anas castanea*; Pacific Black Duck *A. superciliosa*; Purple Swamphen *Porphyrio porphyrio*; and Royal Spoonbill *Platalea regia*. A fifth species, Eurasian Coot *Fulica atra*, had lower average numbers but an increased number of records (34 records compared with 20 for the two time periods).

Twelve waterbird species, including the four mentioned above, have experienced population increases over 2021-2025 compared with 2017-2021. The changes for these 12 species perhaps affirm the ongoing benefits from the wetlands rehabilitation projects at Ash Island, Hexham Swamp and Tomago (see Stuart & Lindsey (2021) for details of those projects). Importantly, the list includes two threatened species classified as Vulnerable in NSW: Latham's Snipe *Gallinago hardwickii*; and Magpie Goose *Anseranas*

semipalmata. Both species had increased numbers of records as well as increased populations.

Three species had significantly decreased populations: Grey Teal *Anas gracilis*; Pied Stilt *Himantopus leucocephalus*; and Red-necked Avocet *Recurvirostra novaehollandiae*. Notably, all three are known to breed inland when conditions are favourable (Cooper *et al*. 2014), which was the case for much of 2021-2025. It is salient that two other inland-breeding species, Red-kneed Dotterel and Black-fronted Dotterel, had near-significant decreases in their number of records in the Hunter Estuary during 2021-2025.

Lindsey & Stuart (2024) found that the numbers of Common Terns in the Hunter Estuary fluctuated – in some years none were present, but several other years had 30 or more individuals. It is unclear whether the paucity of records of them during 2021-2025 is part of the previous pattern of variability or if it reflects a permanent change.

The Hunter Estuary continued to be important for Chestnut Teal, with at least 1% of the total population (i.e. counts of more than 1,000 birds) having been recorded in six of the 47 surveys – March-April 2023, July-September 2023 and February 2025.

CONCLUSION

During April 2021 to March 2025, 81 shorebird or waterbird species were recorded in the Hunter Estuary. Comparison with records from the preceding four-year period showed that most of the migratory shorebirds had decreasing populations and that most of the waterbirds and non-migratory shorebirds had stable or increasing populations. Two migratory shorebirds had stable or near-stable populations – Bar-tailed Godwit and Common Greenshank.

ACKNOWLEDGEMENTS

At least 20 HBOC members participated in the 2021-2025 surveys and considerably many more than that if taking into account the earlier years. I thank them all for their involvement, and I also acknowledge the vital assistance and cooperation we received from the NSW National Parks and Wildlife Service and from Hunter Local Land Services. Ann Lindsey from HBOC coordinated the survey teams each month and she also refereed the initial draft of this article – her comments were very helpful.

REFERENCES

Cooper, R.M., McAllan, I.A.W. and Curtis, B. (2014). An atlas of the birds of NSW and the ACT. Volume 1. (New South Wales Bird Atlassers Inc: Woolgoolga, NSW.)

Fraser, N. and Lindsey, A. (2016). The status of the Double-banded Plover in the Hunter Region, New South Wales. *The Whistler* **16**: 53-63.

Lindsey, A. and McNaughton, N. (2012). Birds of Tomago Wetlands, Hunter Wetlands National Park 2007-2012. *The Whistler* **6**: 1-10.

Lindsey, A. (2021). The Birds of Tomago Wetland after reinstatement of tidal flushing. *The Whistler* **15**: 6-26.

Lindsey, A. and Stuart, A. (2021). Hunter Estuary surveys: Results for large waterbirds. *The Whistler* **15**: 78-96.

Lindsey, A. and Stuart, A. (2024). The status of gull and tern species in the Hunter Estuary. *Stilt* **77**: 13-22.

Rogers, A., Fuller, R.A. and Amano, T. (2023) Australia's migratory shorebirds: Trends and prospects. (Report to the National Environmental Science Program. University of Queensland, Brisbane.)

Stuart, A. (2019). Recent high counts of Sharp-tailed Sandpiper in the Hunter Estuary. *The Whistler* **13**: 56-61.

Stuart, A. and Lindsey, A. (2021). Shorebird surveys in the Hunter Estuary 1999-2021. *Stilt* **76**: 47-63.

Stuart, A. and Lindsey, A. (2022). Hunter Estuary surveys: results for waterfowl, grebes, crakes, rails and gallinules. *The Whistler* **16**: 15-35.

APPENDIX

All species recorded between April 2017 and March 2025.

Species	April 2017 – March 2021 (from 48 surveys)					April 2021 – March 2025 (from 47 surveys)				
	No. of records	Avg.	Max	Nov-Mar Avg.	May-Aug Avg.	No. of records	Avg.	Max	Nov-Mar Avg.	May-Aug Avg.
Australasian Bittern *Botaurus poiciloptilus*	0					1		1	1	
Australasian Darter *Anhinga novaehollandiae*	40	2	7	2	3	43	3	11	3	4
Australasian Grebe *Tachybaptus novaehollandiae*	26	11	55	9	12	33	18	92	18	19
Australasian Shoveler *Spatula rhynchotis*	29	18	132	15	27	23	16	53	31	19
Australian Gull-billed Tern *Gelochelidon macrotarsa*	30	16	99	8	26	22	9	21	6	10
Australian Painted-snipe *Rostratula australis*	0					1		1	1	
Australian Pelican *Pelecanus conspicillatus*	48	71	160	79	51	46	88	421	82	99
Australian Pied Oystercatcher *Haematopus longirostris*	42	5	39	5	3	44	5	12	5	4
Australian Shelduck *Tadorna tadornoides*	2	3	4	4	1	2	1	1		1
Australian Spotted Crake *Porzana fluminea*	3	2	3	2		2	3	4	1	4
Australian White Ibis *Threskiornis moluccus*	48	101	1126	155	65	47	139	386	179	112
Australian Wood Duck *Chenonetta jubata*	37	18	101	21	12	37	19	62	17	16
Baillon's Crake *Zapornia pusilla*	2	2	2			2	1	1	1	
Banded Lapwing *Vanellus tricolor*	1	1	1		1	0		0		
Banded Stilt *Cladorhynchus leucocephalus*	1	2	2	2		0		0		
Bar-tailed Godwit *Limosa lapponica*	46	326	968	466	136	46	296	760	473	91
Beach Stone-curlew *Esacus magnirostris*	1	0	0			0		0		
Black Swan *Cygnus atratus*	47	127	429	94	141	46	140	380	118	147
Black-fronted Dotterel *Elseyornis melanops*	40	22	80	6	37	27	13	61	5	20
Black-necked Stork *Ephippiorhynchus asiaticus*	20	2	5	2	1	13	2	4	2	2
Black-tailed Godwit *Limosa limosa*	35	30	100	40	3	29	14	44	19	1
Buff-banded Rail *Hypotaenidia philippensis*	8	1	2	1	1	14	2	9	3	1
Caspian Tern *Hydroprogne caspia*	42	9	43	9	10	38	10	37	7	12
Cattle Egret *Bubulcus ibis*	36	18	97	19	21	39	17	154	15	9
Chestnut Teal *Anas castanea*	48	256	2141	328	226	47	475	2393	436	550
Common Greenshank *Tringa nebularia*	41	44	135	57	18	32	41	117	54	5
Common Gull-billed Tern *Gelochelidon nilotica*	3	1	1	1		1	1	1		1
Common Sandpiper *Actitis hypoleucos*	14	1	2	1		12	1	3	1	1
Common Tern *Sterna hirundo*	7	16	54	16		1	1	1		1
Curlew Sandpiper *Calidris ferruginea*	34	43	155	59	13	23	27	78	32	1
Double-banded Plover *Charadrius bicinctus*	10	9	60	1	16	1	2	2		2

Species	April 2017 – March 2021 (from 48 surveys)					April 2021 – March 2025 (from 47 surveys)				
	No. of records	Avg.	Max	Nov-Mar Avg.	May-Aug Avg.	No. of records	Avg.	Max	Nov-Mar Avg.	May-Aug Avg.
Dusky Moorhen *Gallinula tenebrosa*	11	4	6	4	2	28	9	65	9	5
Eurasian Coot *Fulica atra*	20	129	850	207	58	34	75	464	111	55
Far Eastern Curlew *Numenius madagascariensis*	47	78	172	114	26	47	61	135	89	22
Freckled Duck *Stictonetta naevosa*	2	3	5	3		0		0		
Glossy Ibis *Plegadis falcinellus*	5	8	13	8		1	1	1		
Great Cormorant *Phalacrocorax carbo*	26	2	8	3	2	30	6	46	4	2
Great Crested Grebe *Podiceps cristatus*	0		0			4	2	2	2	2
Great Egret *Ardea alba*	48	10	59	11	6	47	20	117	26	7
Great Knot *Calidris tenuirostris*	10	2	4	2		3	1	1	1	1
Great Pied Cormorant *Phalacrocorax varius*	47	18	66	26	8	44	14	47	21	7
Greater Crested Tern *Thalasseus bergii*	45	9	29	9	6	42	9	32	11	9
Greater Sand Plover *Charadrius leschenaultii*	2	1	1	1		0		0		
Grey Teal *Anas gracilis*	43	487	2533	327	557	44	215	1500	130	195
Grey-tailed Tattler *Tringa brevipes*	40	19	41	22	6	29	11	27	12	3
Hardhead *Aythya australis*	30	48	452	53	19	23	17	123	17	9
Hoary-headed Grebe *Poliocephalus poliocephalus*	11	14	45	8	21	11	12	47	6	14
Latham's Snipe *Gallinago hardwickii*	10	2	6	2		21	10	55	12	
Lesser Sand Plover *Charadrius mongolus*	1	1	1			0		0		
Lewin's Rail *Lewinia pectoralis*	2	2	2	2		1	1	1	1	
Little Black Cormorant *Phalacrocorax sulcirostris*	47	27	151	17	36	47	27	118	25	23
Little Curlew *Numenius minutus*	0		0			1	1	1	1	
Little Egret *Egretta garzetta*	37	3	10	3	2	47	7	29	7	7
Little Pied Cormorant *Microcarbo melanoleucos*	46	7	27	6	7	46	9	22	8	9
Little Tern *Sternula albifrons*	7	4	12	5		6	10	33	5	33
Magpie Goose *Anseranas semipalmata*	1	6	6	6		11	8	27	11	5
Marsh Sandpiper *Tringa stagnatilis*	28	25	96	31	14	22	10	43	13	1
Masked Lapwing *Vanellus miles*	48	124	364	149	106	47	114	397	155	82
Musk Duck *Biziura lobata*	8	1	2	2	1	26	4	13	5	2
Nankeen Night-Heron *Nycticorax caledonicus*	1	6	6		6	1	1	1		1
Mallard *Anas platyrhynchos*	1	1	1	1		0		0		
Pacific Black Duck *Anas superciliosa*	46	51	172	48	49	47	86	505	66	75
Pacific Golden Plover *Pluvialis fulva*	38	108	390	176	9	39	64	195	107	4
Pectoral Sandpiper *Calidris melanotos*	1	1	1	1		1	1	1	1	
Pied Stilt *Himantopus leucocephalus*	48	416	1008	450	406	40	264	785	286	268
Pink-eared Duck *Malacorhynchus membranaceus*	6	79	338	32		11	12	28	21	3

Species	April 2017 – March 2021 (from 48 surveys)					April 2021 – March 2025 (from 47 surveys)				
	No. of records	**Avg.**	**Max**	**Nov-Mar Avg.**	**May-Aug Avg.**	**No. of records**	**Avg.**	**Max**	**Nov-Mar Avg.**	**May-Aug Avg.**
Plumed Egret *Ardea plumifera*	16	4	22	3	1	20	3	10	4	2
Plumed Whistling-Duck *Dendrocygna eytoni*	0		0			3	1	2	1	
Purple Swamphen *Porphyrio porphyrio*	45	15	46	17	12	45	37	111	24	49
Red Knot *Calidris canutus*	16	76	273	24	2	22	14	69	5	1
Red-capped Plover *Charadrius ruficapillus*	39	21	158	15	33	28	16	103	18	18
Red-kneed Dotterel *Erythrogonys cinctus*	23	16	96	6	26	12	6	16	3	9
Red-necked Avocet *Recurvirostra novaehollandiae*	44	1481	5644	897	2055	33	364	2316	202	412
Red-necked Stint *Calidris ruficollis*	19	10	60	8	16	9	6	19	9	
Royal Spoonbill *Platalea regia*	47	24	90	22	22	46	41	168	46	30
Ruddy Turnstone *Arenaria interpres*	3	1	2	2		0		0		
Sharp-tailed Sandpiper *Calidris acuminata*	38	820	4583	1075	24	25	120	1195	125	23
Silver Gull *Larus novaehollandiae*	48	114	373	146	76	47	145	1291	222	90
Sooty Oystercatcher *Haematopus fuliginosus*	25	6	15	5	4	28	6	19	5	9
Spotless Crake *Zapornia tabuensis*	3	1	2	1	2	3	2	4	1	3
Straw-necked Ibis *Threskiornis spinicollis*	33	47	965	125	16	24	22	140	11	35
Striated Heron *Butorides striata*	27	1	4	1	1	17	2	3	1	2
Terek Sandpiper *Xenus cinereus*	23	3	6	4	1	13	2	6	2	
Wandering Whistling-Duck *Dendrocygna arcuata*	2	2	2	2		3	7	8	6	7
Whimbrel *Numenius phaeopus*	37	24	74	33	9	36	16	48	20	4
Whiskered Tern *Chlidonias hybrida*	7	33	103	20		6	4	11	6	2
White-faced Heron *Egretta novaehollandiae*	48	77	221	48	107	46	83	242	71	100
White-necked Heron *Ardea pacifica*	20	2	8	1	2	11	3	9	5	2
White-winged Black Tern *Chlidonias leucopterus*	0		0			1	5	5		5
Yellow-billed Spoonbill *Platalea flavipes*	1	1	1			0		0		