

Upper Hakatere / Ashburton River Annual River Bird Survey 2023



Above (Clockwise from top left): 1) A banded dotterel egg found during the survey 2) Native mat plant flowering 3) The survey team walking up to the start of the survey 4) Manon focuses in on a wrybill.

Survey Date: Saturday 4th November 2023

Surveyors: Twelve surveyors took part – Manon Prin, Amy-Grace McIlraith, Arthur Bensana, Andy Hirschberg, Billy Bartrum, Michelle Ingham, Edith Smith, Jen Dodson, Lynn Adams, Jess Cochrane, Jean Jack, and Frances Schmechel.

The 2023 river bird survey on the upper reach of the Hakatere / Ashburton River was undertaken by twelve surveyors on November 4th 2023. This year marks the 29th survey of the upper Ashburton section and the 4th survey using both section and KM reach method to capture data at a finer scale. The number of surveyors were similar to previous years 2020 (10), 2021 (9) and 2022 (12). Flows at the Mt Somers gauge was 12.5cumecs, and the weather partly cloudy and moderate, with a light breeze. As in 2020, 2021, and 2022 counts were recorded against a set of predetermined kilometre markers which is the entire stretch of river section called Buicks Bridge to Blowing Point (Figure 1).

Table 1 presents total river bird counts made from 1981 through to the 2023 survey. Figure 2 infers count trends of banded dotterel, South Island oystercatcher, black-fronted tern, and wrybill from the 1981 survey through to the 2023 on the Upper Hakatere River. Waders from the 2023 survey included (in order of abundance) banded dotterel, South Island pied oystercatchers, pied stilts, wrybill, and spur-winged plover. Notably, the total counts of all wader species increased from 2022 (Figure 2). Frequent observations were made of banded dotterel nests, chicks, and breeding behaviour, and one wrybill egg and chick were observed. Counts of black-fronted tern were up on recent years the highest since 2010, while southern black-backed gull numbers and black-billed gull numbers remain very low (Figure 3). As in previous years river birds were concentrated in the upper half of the river section with fewer birds observed past the fourth kilometre marker where the river narrows (Figure 4) indicating that the upper section (KM 0, 1, 2 and 3) of the Buicks Bridge to Blowing Point section has the best quality habitat for breeding river birds. Recent flood events and weed control works have improved the habitat quality of the lower section and a higher number of river birds (figure 5), including banded dotterel, were counted within KM 5 and 6 (Table 2).

The riverbed remains relatively weed free, with recent high flows increasing the area of clear gravels throughout the site, particularly in the lower sections of KM 3 (Figure 4). Locations of grey willow and lupin above the bluff were noted and sent to DOC Geraldine staff who, alongside Forest & Bird, LINZ and ECan, continue to address weed issues of the site.



Figure 1: The reach surveyed between Buick and Blowing Point bridges during the 2023 river bird survey with kilometre markers used for the data collation of counts.

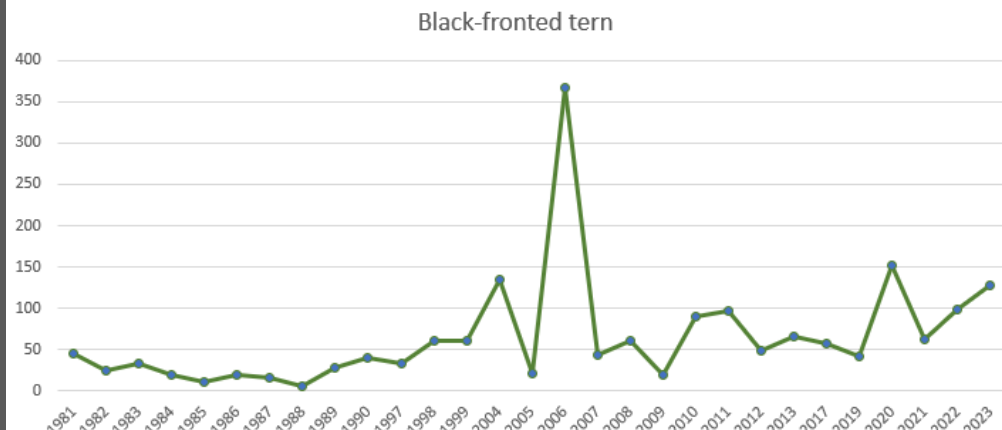
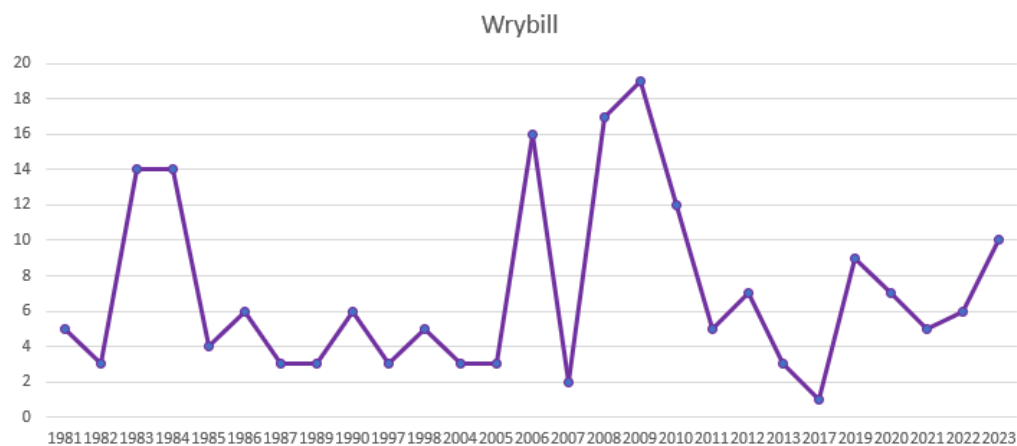
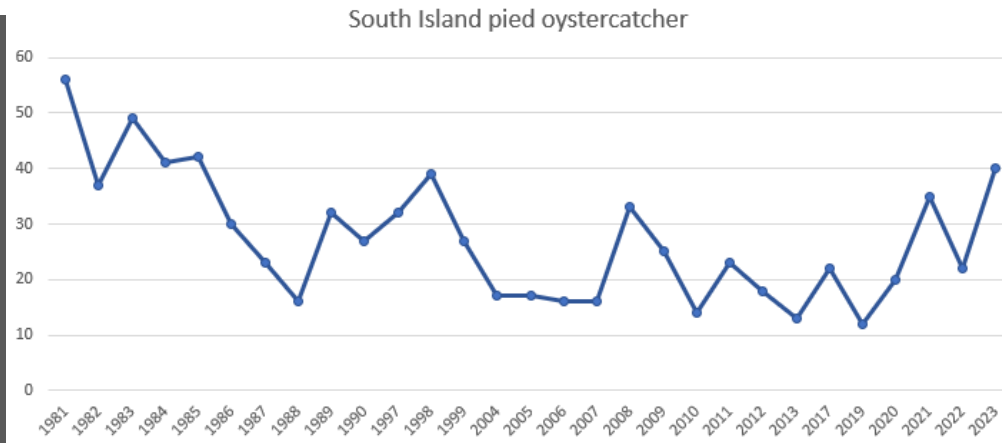
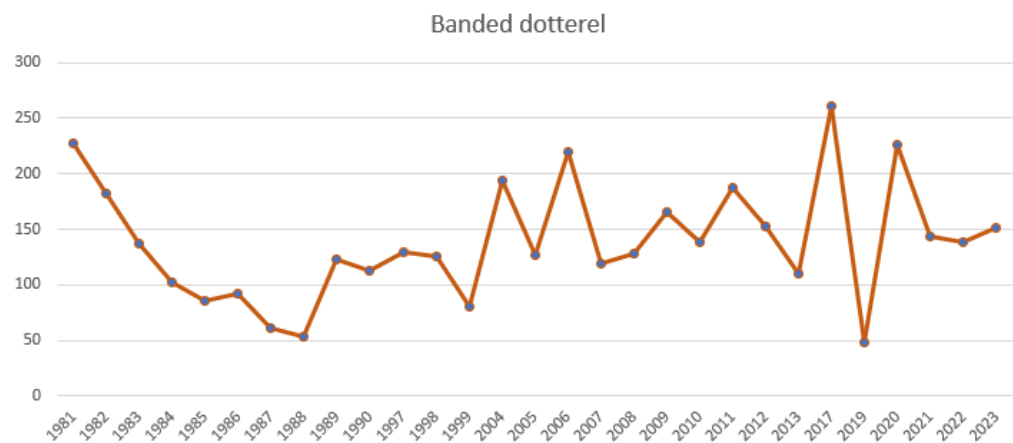
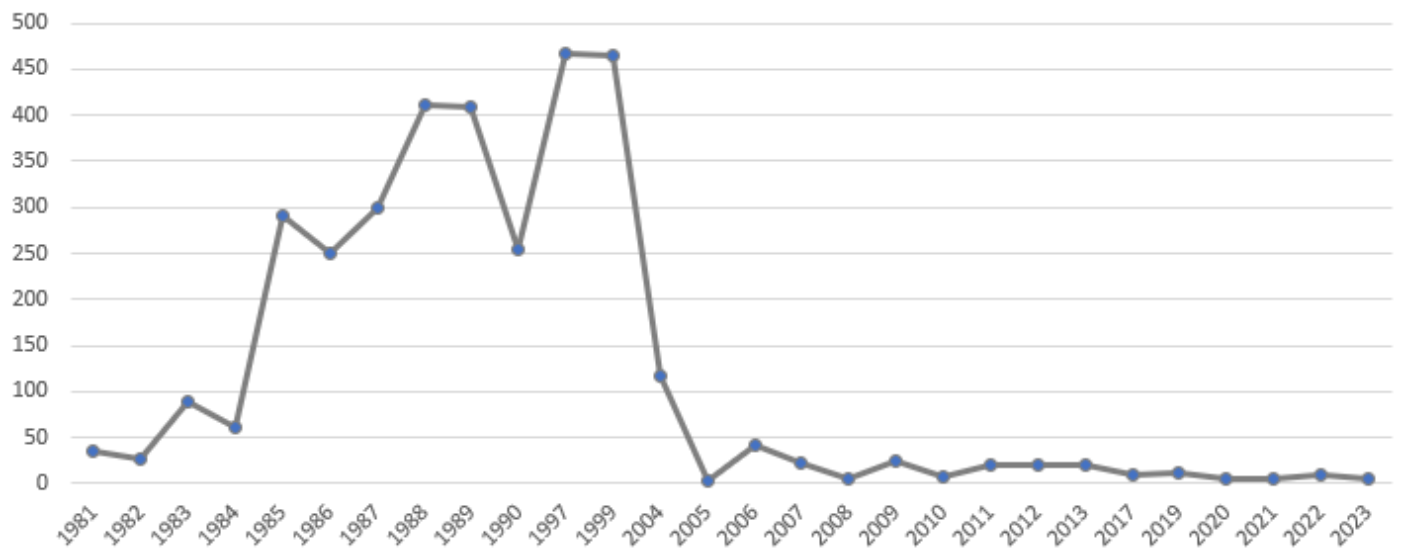


Figure 2: Counts of banded dotterel, South Island pied oystercatcher, wrybill, and black-fronted tern from 1981 to 2023 for the Upper Hakatere section Buicks Point to Blowing Point Bridge.

Southern black-backed gull



Black-billed gull

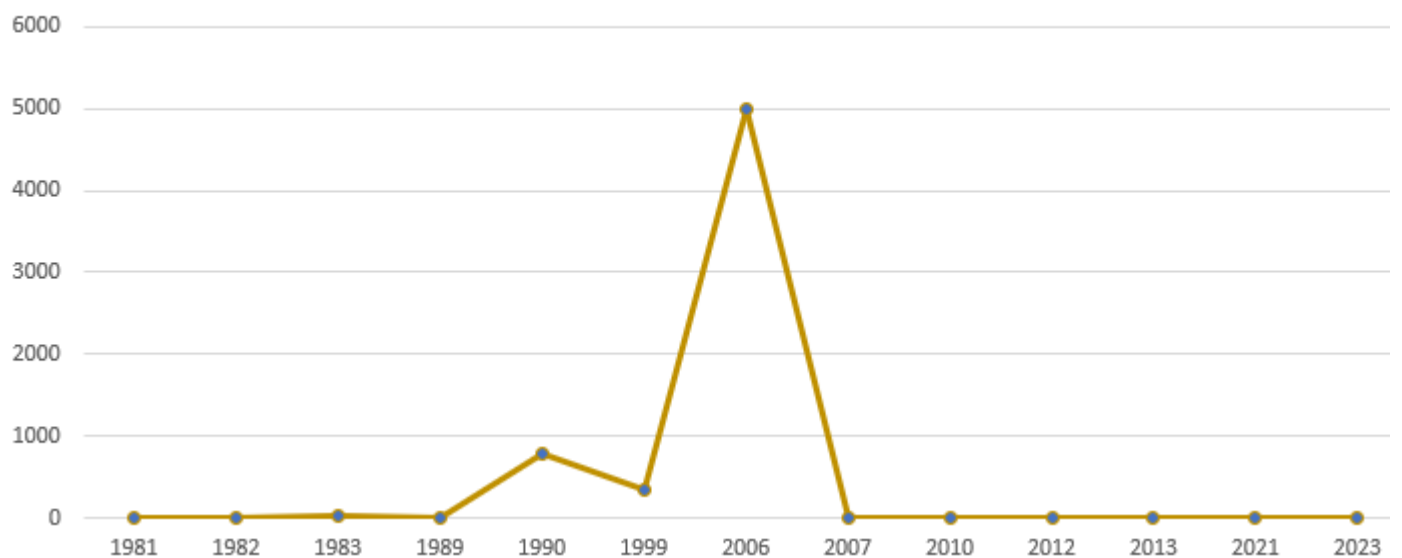


Figure 3: Counts of southern black-backed gull and black-billed gull from 1981 to 2023 for the Upper Hakatere section Buicks Point to Blowing Point Bridge.

Species ● Banded dotterel ● Pied stilt ● SI pied oystercatcher ● Wrybill

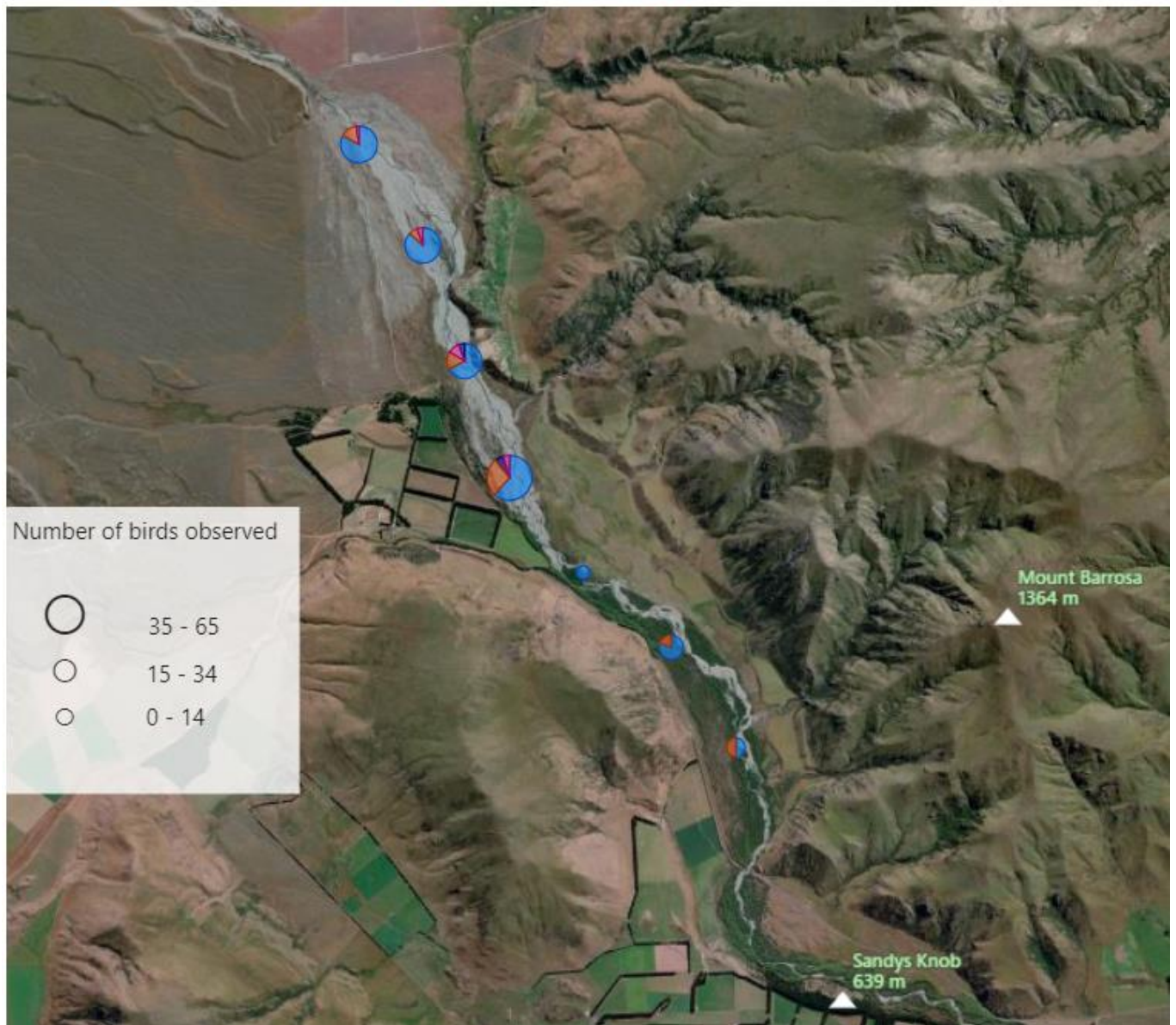


Figure 4: Counts of river birds observed during the 2023 bird survey by KM sections.



Figure 5: Clear gravels of the lower reach of the survey area – looking upstream at the surveys end.

Table 1: Total count of river birds between Buicks and Blowing Point bridges between 1981 through to the 2023 survey.

[illegible]

Table 2 (continued): Total count of river birds between Buicks and Blowing Point bridges between 1981 through to the 2023 survey.

Species	Year														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2017	2019	2020	2021	2022	2023
Wader															
Wrybill	3	16	2	17	19	12	5	7	3	1	9	7	5	6	10
Banded dotterel	127	220	119	128	166	138	188	152	110	261	48	226	143	139	151
Black-fronted dotterel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pied stilt	0	0	0	0	0	0	2	0	0	0	0	5	0	5	6
South Island pied oystercatcher	17	16	16	33	25	14	23	18	13	22	12	20	35	22	40
Spur-winged plover	6	10	6	7	8	4	21	6	12	19	3	9	7	2	6
Cormorants (shags)															
Black shag	3	2	1	2	1	3	1	1	4	2	1	2	2	2	0
Little shag	0	0	0	1	1	2	0	2	3	0	0	0	0	0	0
Waterfowl															
Black swan	0	16	0	4	0	0	0	0	0	0	0	0	0	2	0
Canada goose	4	0	8	6	2	10	23	6	14	0	0	2	4	13	13
Duck species	0	0	0	0	0	0	0	0	0	0	0	8	7	6	6
Grey duck	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0
Grey teal	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Mallard duck	9	6	1	8	0	4	12	8	8	0	6	0	0	0	0
Paradise shelduck	6	0	1	6	1	2	10	8	4	28	2	2	20	13	13
Gulls and terns															
Black-billed gull	0	5000	8	0	0	3	0	14	1	0	0	0	2	0	5
Black-fronted tern	21	367	44	60	20	90	97	49	66	57	41	151	63	98	127
Red-billed gull	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
Southern black-backed gull	2	41	22	4	24	7	19	19	21	9	11	4	5	9	4
Heron															
Bittern	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White-faced heron	1	0	1	12	5	1	1	0	0	3	0	3	3	3	1
Passerine															
New Zealand pipit	0	14	31	14	23	22	1	0	26	8	0	40	14	27	16
Welcome swallow	2	0	0	0	4	2	0	0	0	0	6	0	0	0	0
Raptor															
Eastern falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Swamp harrier	0	0	1	0	3	5	0	0	5	0	0	0	2	3	0

Table 2: Total count of river birds observed between kilometre markers 0km – 4km during the 2020, 2021, 2022, and 2023 survey.

Species	Kilometre Markers (Figure 1)															
	0km – 1km				1km – 2km				2km – 3km				3km – 4km			
Survey Year	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
<i>Wader</i>																
Banded dotterel	75	59	38	34	72	36	50	33	21	15	8	25	56	28	36	40
Pied Stilt	3	0	0	0	0	0	0	0	1	0	5	2	1	0	0	4
Sl pied oystercatcher	6	18	3	6	2	2	4	3	5	5	2	6	2	5	7	18
Spur-winged plover	6	1	0	2	0	1	0	0	0	2	0	0	3	2	0	0
Wrybill	3	3	1	1	2	0	1	2	0	2	2	4	2	0	2	3
<i>Gulls and Terns</i>																
Black-billed gull	0	0	0	0	0	2	0	5	0	0	0	0	0	0	0	0
Black-fronted tern	72	6	13	5	18	47	70	4	23	8	3	27	37	2	7	89
Southern black-backed gull	1	0	0	0	0	0	1	1	0	2	2	0	1	0	1	1

Table 2 (continued): Total count of river birds observed between kilometre marker 4km – End of the Upper Hakatere during the 2020, 2021, 2022, and 2023 survey.

Species	Kilometre Markers (Figure 1)															
	4km – 5km				5km – 6km				6km – 7km				7km – End of Upper Hakatere			
Survey Year	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
<i>Wader</i>																
Banded dotterel	2	2	2	3	0	0	2	12	0	2	3	4	0	0	0	0
Pied Stilt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sl pied oystercatcher	0	5	4	0	5	0	2	3	0	0	0	4	0	0	0	0
Spur-winged plover	0	1	0	2	0	0	0	2	0	0	2	0	0	0	0	0
Wrybill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gulls and Terns</i>																
Black-billed gull	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
Black-fronted tern	0	0	5	2	1	0	0	0	0	0	0	0	0	1	0	0
Southern black-backed gull	0	0	0	0	2	1	5	2	0	2	0	0	0	0	0	0