

## Lower Hakatere / Ashburton River Annual River Bird Survey 2023



Survey Date: Saturday 25<sup>th</sup> November 2023

Surveyors: Nine surveyors took part – Edith Smith, Oliver Hall, Amy-Grace McIlraith, Fraser McKenzie, Arthur Bensana, Louise Schwass, Brittany Earl, Andy Hirschberg, and Jean Jack.

The 2023 river bird survey was undertaken on sections of the lower Hakatere River by nine surveyors on November 25<sup>th</sup>, 2023. Surveyor numbers limited the survey to the lower reaches of the river compared to what was covered in 2020 (Figure 1). The lower three sections of the Hakatere have been measured consistently 9 times and cover the area from Blacks Road to the sea and includes three different sections (Figure 2). As in the 2020 survey, counts were recorded against a set of predetermined kilometre markers. On the day of the survey flows were 12.41 cumecs at Ashburton River SH1 gauge, and the weather fine and warm, with a moderate breeze. This survey was the first time we attempted to record all bird species observed along the river. This allows the bird counts to be considered 'complete' surveys and incorporated into a national ornithological atlas study<sup>1</sup>.

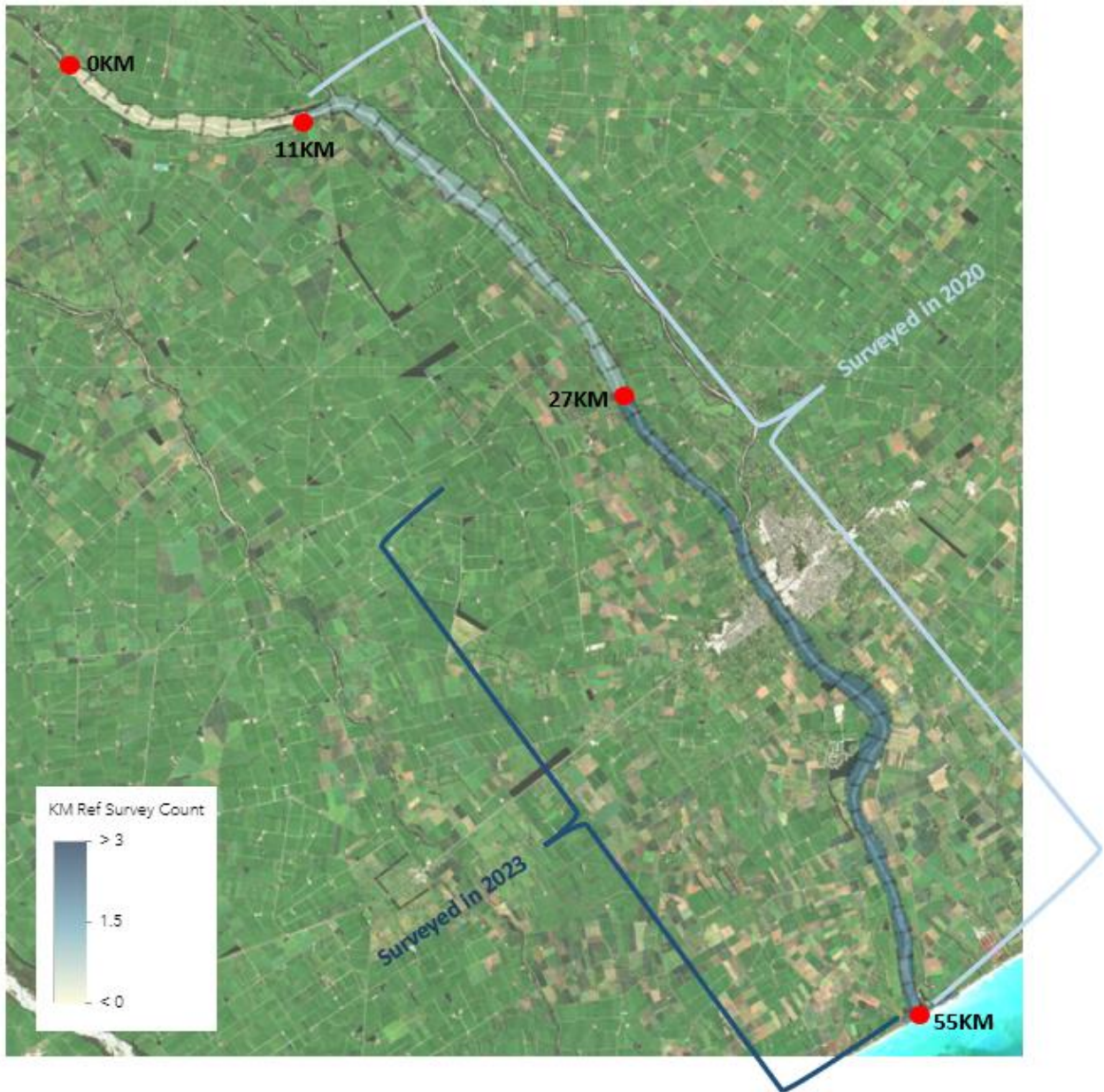
Table 1 presents total river bird counts made from Blacks Road (28km) to the sea (55km) during the 2005 through to the 2023 survey. Counts of river bird species remained somewhat consistent with fluctuations between years. Most notably counts of pied stilt and banded dotterel and black-fronted dotterel were down on previous years with 2023 being the lowest counts recorded for banded dotterel and black-fronted dotterel since 2005 surveys (Figure 3).

The counts of colonial nesting gull and tern species often fluctuate greatly between years due to the use of different rivers by the birds in any given year. This is highlighted by the large increase in black-billed gull and southern black-backed gull counts, whilst a decrease in black-fronted tern counts from 2020 to 2023 (Table 1). The lower Hakatere river is known to support important populations of Tarāpuka (black-billed gulls) and black-fronted terns with 1 and 2 colonies being recorded respectively. Once again, the Tarāpuka colony was located by the SH1 bridge, with a total count of more than 3,000 adult birds on the day of the survey (Figure 4). Following the survey Environment Canterbury continued monitoring the colony to determine its success. It was estimated that the colony

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<sup>1</sup> 1 The New Zealand Bird Atlas project. See <https://ebird.org/atlasnz/home>

supported 3,200 breeding adults, up to 500 non-breeding adults, 1650 nests, and between 2,500 and 3,000 fledglings. Another tarāpuka colony with over 400 nests was also later recorded on the Ashburton North Branch, downstream of the Springfield Road West ford.

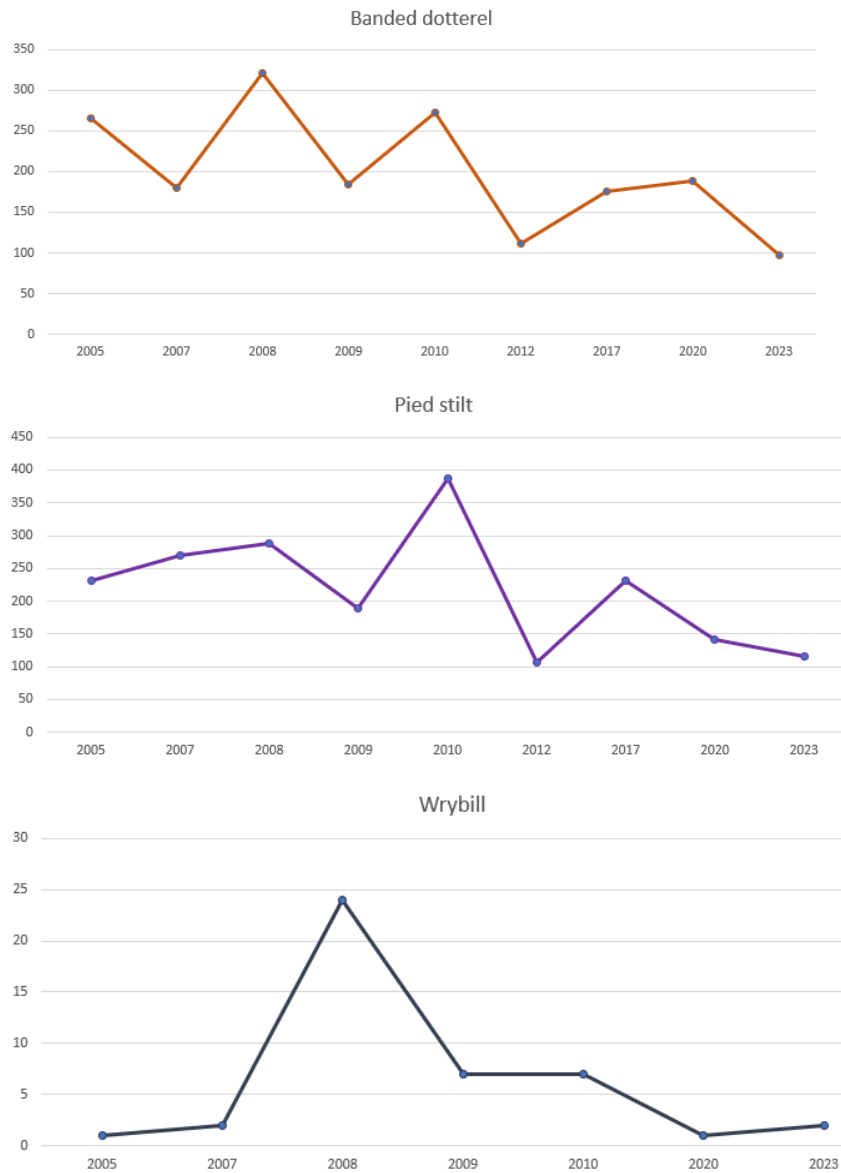


**Figure 1.** A comparison of the river bird KM reach survey extent covered in 2020 (from Valetta Bridge) and 2023 (from Blacks Road; blue filled sections). River bird counts are recorded against each of the 1KM sections.

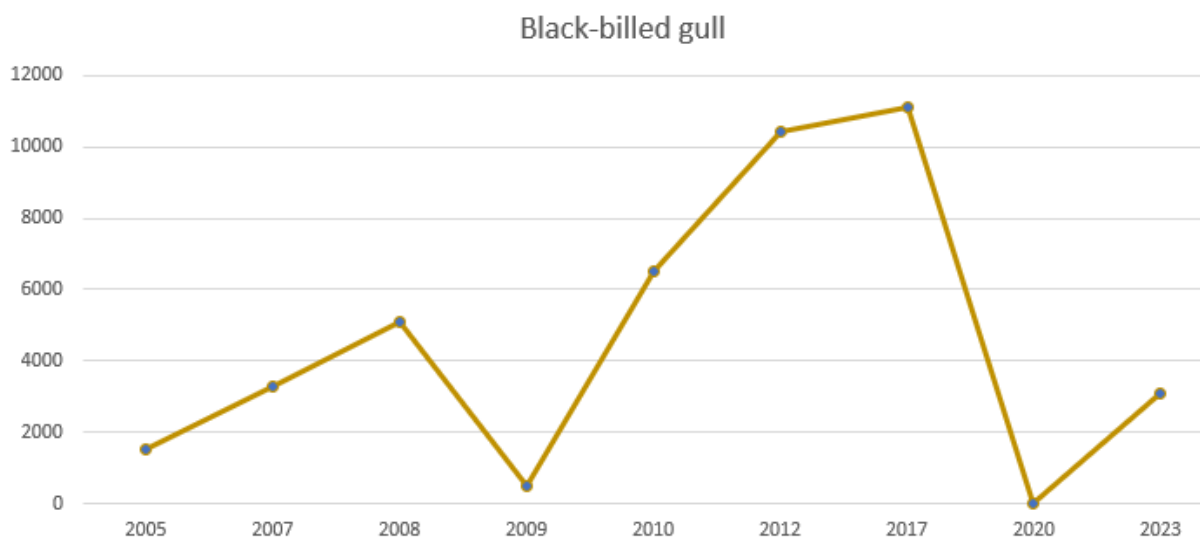
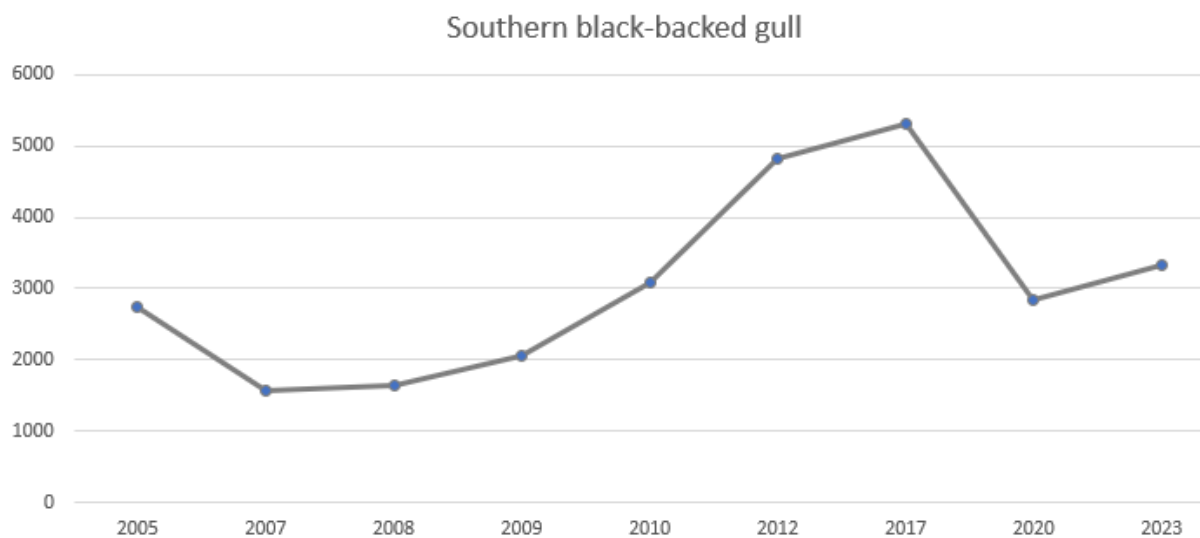




**Figure 2.** An overview of the river bird survey sections covered in this summary (Blacks Road to Ashburton HWY 1 Bridge, Ashburton HWY 1 Bridge to Waikanui School Road and Waikanui School Road to Sea).



**Figure 3.** Counts of six river birds from 2005 - 2023 for the 3 river sections (Blacks Road to Ashburton HWY 1 Bridge, Ashburton HWY 1 Bridge to Waikanui School Road and Waikanui School Road to Sea).

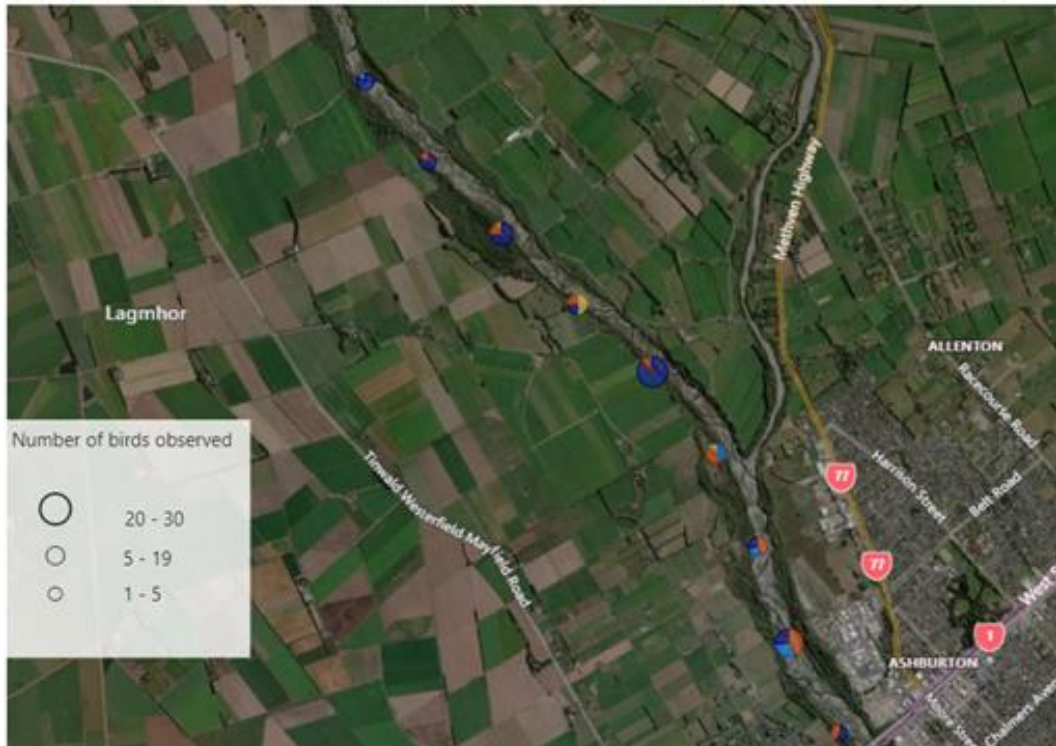


**Figure 4:** Counts of southern black-backed gull and black-billed gull from 2005 - 2023 for the for the 3 river sections (Blacks Road to Ashburton HWY 1 Bridge, Ashburton HWY 1 Bridge to Waikanui School Road and Waikanui School Road to Sea).



### KM reaches 27-36

Species ● Banded dotterel ● Black-fronted dotterel ● Pied stilt ● SI pied oystercatcher ● White-fronted tern ● Wrybill



### KM reaches 37-47

Species ● Banded dotterel ● Black-fronted dotterel ● Pied stilt ● SI pied oystercatcher ● White-fronted tern ● Wrybill



### KM reaches 48-55

**Species** ● Banded dotterel ● Black-fronted dotterel ● Pied stilt ● SI pied oystercatcher ● White-fronted tern ● Wrybill



**Figure 5:** Lower Hakatere river bird survey observations 2023 from Blacks Road to the river mouth (KM reaches 27-55). Counts of adult river birds are shown as pie charts and are proportional to the total number of birds counted.

**Table 1.** Total counts of waders, and gulls and terns from Blacks Road (28km) to the sea (55km) during the 2005, 2007, 2008, 2009, 2010, 2012, 2017, 2020, & 2023 surveys.

Species	Years								
	2005	2007	2008	2009	2010	2012	2017	2020	2023
<b>Wader</b>									
Wrybill	1	2	24	7	7	0	0	1	2
Banded dotterel	265	180	321	184	272	111	175	188	97
Black-fronted dotterel	66	64	54	26	31	32	39	61	18
Eastern bar-tailed godwit	0	0	0	0	2	0	0	0	0
Pied stilt	232	270	289	190	387	107	231	142	115
Royal spoonbill	0	0	0	0	0	0	2	0	3
South Island pied oystercatcher	90	67	78	365	81	80	50	43	55
Spur-winged plover	125	71	119	68	69	54	70	37	88
Turnstone	10	0	5	0	9	0	0	11	0
Variable oystercatcher	0	0	0	0	1	2	0	2	2
<b>Shags</b>									
Black shag	10	13	8	16	3	15	6	11	4
Little black shag	0	0	1	0	0	0	4	3	0
Little shag	10	14	10	1	13	0	30	26	0
Pied shag	0	0	0	0	0	0	0	0	1
Spotted shag	3000	192	2000	3950	49	194	0	0	0
<b>Waterfowl</b>									
Canada goose	99	148	33	74	95	56	81	58	10
Grey duck	3	6	0	0	6	0	0	0	0
Grey teal	60	65	12	12	177	22	24	76	0
Mallard duck/ Hybrid	399	230	272	202	340	145	217	235	173
New Zealand scaup	0	0	0	1	0	0	0	0	0
New Zealand shoveler	2	3	0	5	3	0	7	4	0
Paradise shelduck	34	24	34	24	71	31	67	34	66



**Table 1 (continued).** Total counts of waders, and gulls and terns from Blacks Road (28km) to the sea (55km) during the 2005, 2007, 2008, 2009, 2010, 2012, 2017, 2020, & 2023 surveys.

Species	Years								
	2005	2007	2008	2009	2010	2012	2017	2020	2023
<b>Gulls and terns</b>									
Black-billed gull	1505	3289	5077	509	6488	10436	11123	15	3104
Black-fronted tern	168	43	81	55	163	197	113	130	103
Caspian tern	0	1	5	0	0	1	3	1	0
Red-billed gull	12	18	20	130	0	8	0	0	0
Southern black-backed gull	2734	1569	1651	2052	3095	4827	5317	2833	3336
White-fronted tern	193	78	190	33	300	256	11000	1	3
White-winged black tern	0	0	0	0	0	0	2	0	0
<b>Heron</b>									
White-faced heron	22	15	14	2	20	15	6	14	7
<b>Raptor</b>									
Swamp harrier	9	7	1	5	3	6	3	3	1
<b>Passerine</b>									
New Zealand pipit	4	0	0	0	0	0	0	4	0
Welcome swallow	6	14	10	5	59	1	1	0	0
<b>Other</b>									
California quail	0	0	0	0	0	10	0	0	3
Kingfisher	3	4	1	4	6	4	2	0	1