

## Opihi River Bird Survey 2021

Survey Date: Tuesday 9<sup>th</sup> November 2021

Surveyors: Fifteen surveyors took part - Dave Birch, Bruce Gabites, Donna Field, Jim Jolly & Jared, Karen Miles, Mark Parker, Mirella Pompei, Sarah Worthington, Zip Ploeg, Zoe Buxton, Des Smith, Billy Bartrum, Jason Butt & Jean Jack.

The 2021 river bird survey on the upper and lower reaches of the Opihi River was the second in a scheduled set of three annual spring (breeding season) surveys. Weather conditions were warm, calm, and sunny. After weeks of high & fluctuating flows (up to 25 cumecs; too high for survey though not high enough to push birds off the river) the Opihi SH1 gauge on the day read 7.6 cumecs. This flow provided safe travel to surveyors, although it was noted that the reach from Raincliff to Hanging Rock still presented some deeper crossings to negotiate.

Tables 1 & 2 present total counts of river bird species recorded in 2021 alongside previous counts (since 2011) for the upper and lower river survey reaches respectively. As in other years, bird numbers were low within the upper survey reach near Fairlie with waterfowl dominating the counts. Waders included pied stilt, South Island pied oystercatchers and spur-winged plover. Gulls and terns were largely absent, while white-faced heron were frequently encountered.

On the lower river below the Opihi Gorge, the predominant wader and waterfowl assemblage was similar to the upper reach, with the addition of banded dotterel, black-fronted dotterel and Canada geese. In contrast to the upper reach, higher numbers of gulls and terns occur, and breeding colonies of black-billed gulls and black-fronted terns were recorded.

Recent flood events appear to have improved the habitat in both the upper and lower reaches, clearing weeds to leave more areas of suitable open gravel bird nesting and feeding habitat. However, weeds still encroach in places, and vehicle use within the upper reach continues to pose a risk to river birds during the breeding season (Figure 1). River morphology at the mouth presented access difficulties to the survey team. Despite this a spotted shag colony of approximately ninety birds was observed, as well as a colony of fifty or more black-fronted terns.

As in the preceding 2019 survey, counts were recorded against a set of predetermined kilometre markers. This allows river bird habitat occupancy data to be analysed at a finer spatial (Figures 2-4).



**Figure 1.** Pictures from the Upper Opihi survey on 9 November 2021. Left to right: 1) A likely spur-winged plover nest; 2) Vehicle tracks leading to an unfortunate spur-winged plover chick; 3) (upper image) Jason Butt within the clear gravels of the upper Opihi survey reach; 4) Scotch broom covering areas of riverbed habitat.

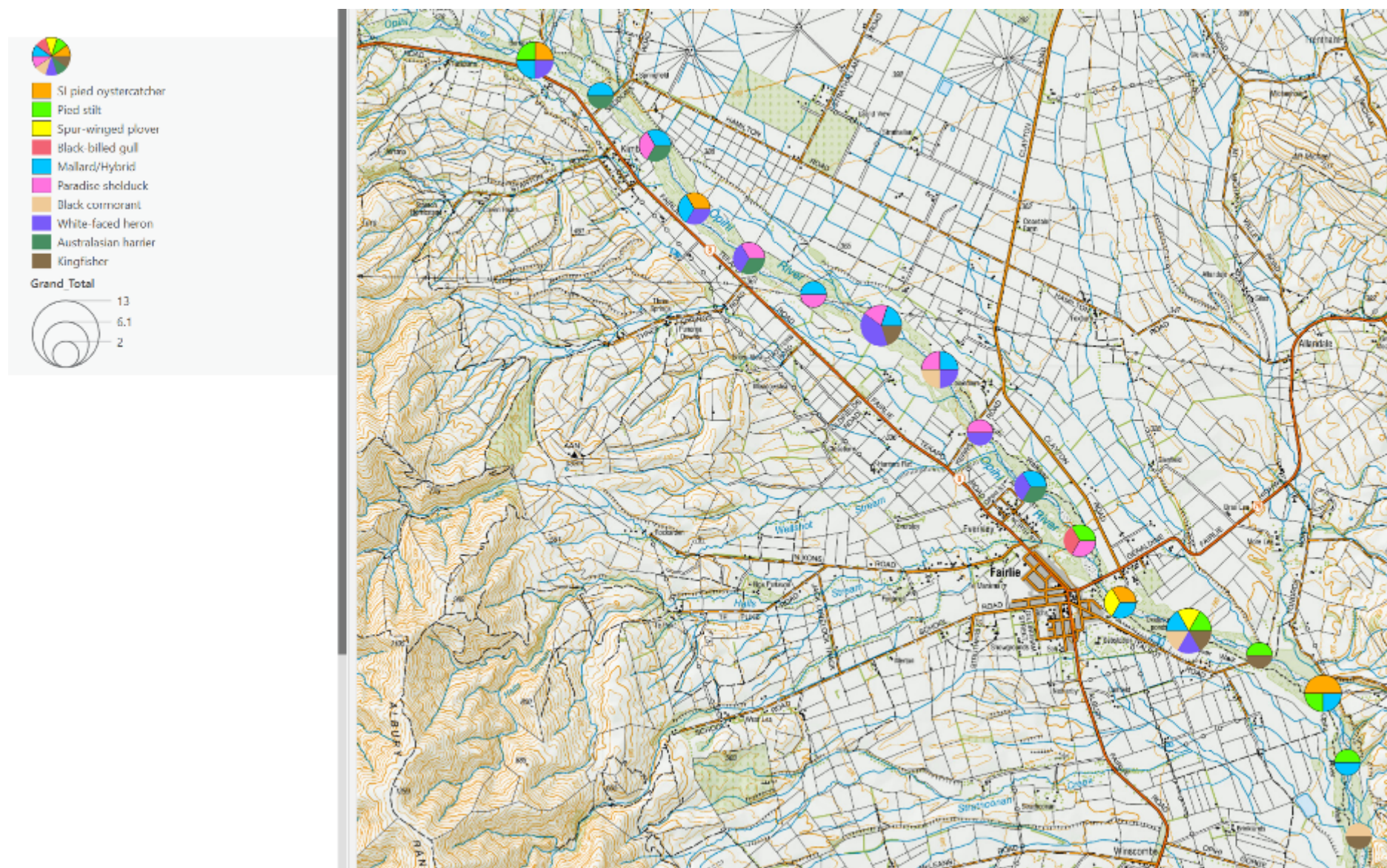
**Table 1** Recent riverbird survey counts within the upper Opihi River (Stoneleigh Road to Opihi Gorge Road).

Species	Year				
	2011	2013	2014	2019	2021
<b>Waders</b>					
Banded dotterel	0	0	0	0	0
Black-fronted dotterel	0	0	0	0	0
Black stilt	0	0	0	0	0
Pied stilt	18	0	4	0	15
South Island pied oystercatcher	3	0	5	0	10
Spur-winged plover	4	0	0	0	3
Australasian bittern	0	0	0	0	0
<b>Gulls and terns</b>					
Black-billed gull	0	0	0	0	3
Black-fronted tern	0	0	0	0	0
Caspian Tern	0	0	0	0	0
Southern black-backed gull	0	0	0	0	0
White-fronted tern	0	0	0	0	0
<b>Cormorants</b>					
Black cormorant	0	0	0	0	4
Little pied cormorant	1	0	1	0	0
Pied cormorant	0	0	0	0	0
<b>Waterfowl</b>					
Mallard and mallard-grey duck hybrid	19	0	31	0	35
Grey teal	0	0	0	0	0
Canada goose	0	0	0	0	0
Australian coot	0	0	0	0	0
NZ shoveler	0	0	0	0	0
Paradise shelduck	10	0	17	0	18
Black swan	0	0	0	0	0
Scaup	0	0	0	0	0
<b>Other</b>					
Australasian harrier	0	0	0	0	4
Kingfisher	0	0	0	0	6
Royal Spoonbill	0	0	0	0	0
White-faced heron	1	0	6	0	11

**Table 2** Recent riverbird survey counts within the lower Opihi river (excluding the river mouth).

Species	Year				
	2011	2013	2014	2019	2021
<b>Waders</b>					
Banded dotterel	0	16	0	3	3
Black-fronted dotterel	3	20	15	14	2
Black stilt	1	0	1	0	0
Pied stilt	137	1	62	83	119
South Island pied oystercatcher	32	49	11	44	31
Spur-winged plover	39	33	17	94	25
Australasian bittern	1	0	0	0	0
<b>Gulls and terns</b>					
Black-billed gull	300	1621	1	503	307
Black-fronted tern	162	82	129	36	160
Caspian Tern	0	0	1	0	0
Southern black-backed gull	79	12	19	23	1
White-fronted tern	6	25	0	0	16
<b>Cormorants</b>					
Black cormorant	14	12	8	15	5
Little pied cormorant	1	16	6	10	2
Pied cormorant	0	113	0	1	0
<b>Waterfowl</b>					
Mallard and mallard-grey duck hybrid	143	106	149	107	136
Grey teal	8	0	2	0	0
Canada goose	6	6	1	0	2
Australian coot	1	0	0	0	0
NZ shoveler	0	40	0	1	0
Paradise shelduck	56	6	37	34	47
Black swan	0	0	0	0	0
Scaup	0	0	0	1	0
<b>Other</b>					
Australasian harrier	1	7	3	3	7
Kingfisher	13	4	7	1	8
Royal Spoonbill	0	0	0	0	1
White-faced heron	7	1	14	17	15



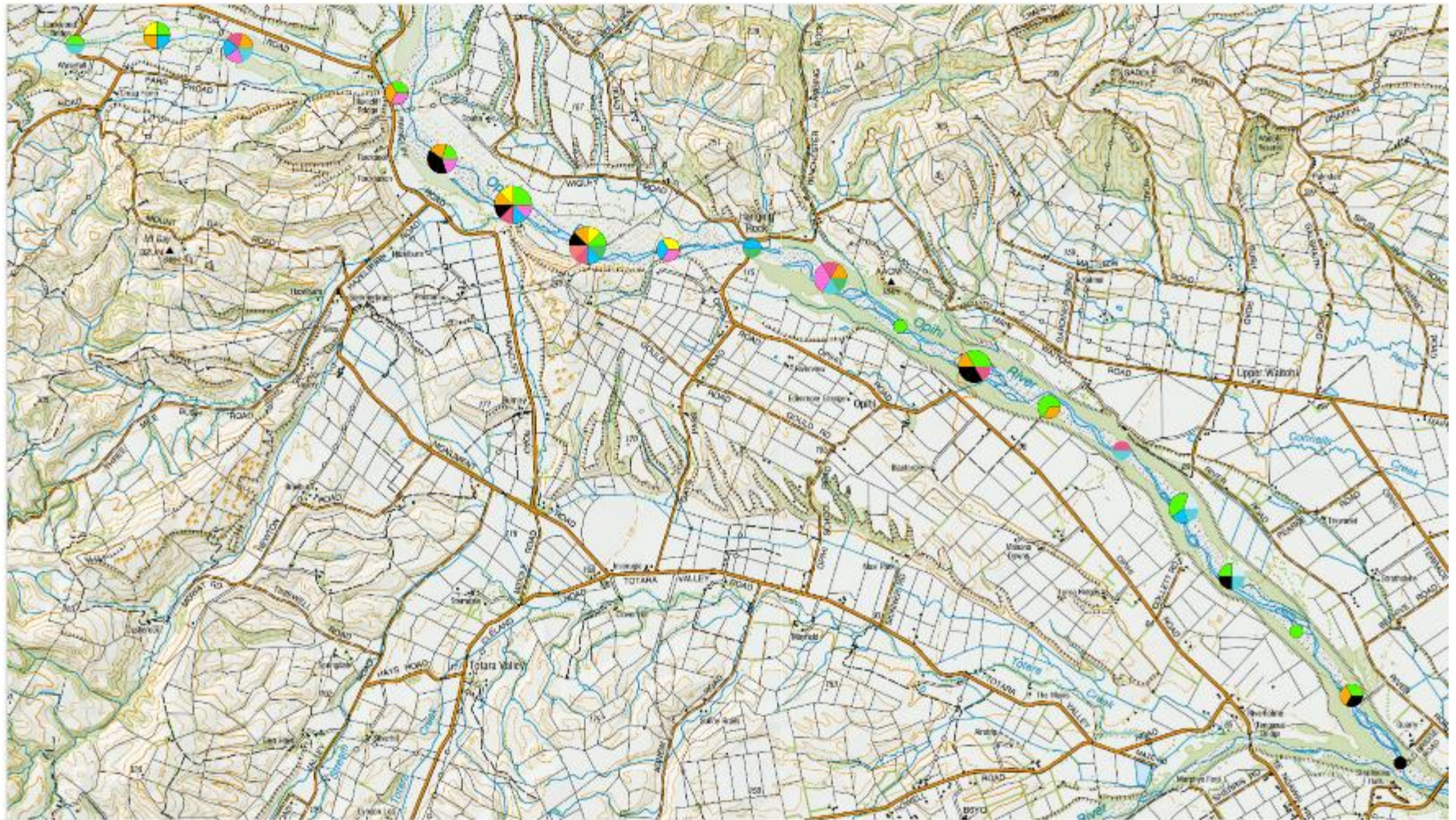


**Figure 1** Upper Ophi river bird survey observations 2021 by one kilometre survey sections. Counts of adult river birds are shown as pie charts and are proportional to the total number of birds counted.



## Species

- Banded dotterel
- Black-fronted dotterel
- Pied stilt
- Spur-winged Glover
- SI pied oystercatcher
- Variable oystercatcher
- Eastern bar tailed godwit
- Black-billed gull
- Black-fronted tern
- White-fronted tern
- Southern black-backed gull
- Black cormorant
- Pied cormorant
- Little pied cormorant
- Spotted shag
- White-faced heron
- Mallard/Hybrid
- Paradise shelduck
- Canada goose
- Royal Spoonbill
- Kingfisher
- Australasian harrier



**Figure 3** Lower Opihi river bird survey observations 2021 from below the gorge to Pleasant Point.





**Figure 4** Lower Ophi river bird survey observations from Pleasant Point to the river mouth. The black-billed gull / Tarāpuka colony of approximately 300 birds was observed within KM25 which is c.5km downstream of the Pleasant Point bridge.