

Lower Upukerora Restoration Group Annual Report 2023/2024

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*Photo 1: Safe and warm under mum, the first plover / banded dotterel chicks of the 2023/24 season.
All photos are credited to Anja Kohler unless otherwise stated.*

Establishment and purpose of LURG

- Vision
 - Restore natural fauna assemblages of the lower Upukerora delta focusing on braided river bed and wetland bird species
 - Encourage public use that is commensurate with the natural and cultural values of the site
 - Restore the flora of the delta to align with historic natural species compositions and provide habitat and food for local native fauna
- Status (Current)
 - The group consists of 100% volunteers.
 - The group has formalised itself to enable the establishment of a bank account in the group's name.
 - A committee is appointed with George Ledgard as the chair, Hannah Edmonds as the Secretary and Sue Marwick as the Treasurer.
 - We are operating under a community agreement with DOC (5 years – signed).
 - The group communicates via a Facebook page and email address (upukrestoration@gmail.com). It meets two to three times a year on an as-required basis, With one meeting at the end of the trapping season serving as an AGM.
 - Trapping resources and supplies are currently donated by volunteers or sectors of the community.

- We received Meridian powerup funding, of which a small proportion is yet to be spent. Remaining funding is there to be spent on necessary items such as advocacy signs, trapping supplies and hardware.
- We continue to maintain an ongoing positive relationship with the Fiordland Trails Trust on trapping and planting activities they are undertaking. George Ledgard is the current key contact with the FTT.

2022/2023 Actions and Results

Threats

Again, aside from predators (feral and domestic) and dogs on the loose, vehicle activity is the main threat to our local populations of river birds. We continue to advocate in the community for responsible use of the riverbed through our Facebook posts, and signage at access points along the river.

The perennial issue of weeds providing cover for predators and reducing the available habitat for nesting areas is still present, although the gravel clearance on the delta undertaken in 2002 followed by floods has still managed to stifle weed (primarily lupin) establishment.

The annual weeding of Tern Island occurred in August, in the 2021-2022 year they successfully bred there but abandoned the site the following year. This year our efforts were rewarded and a small number of birds used the site.



Photo 2: A sign made by Maddie next to a popular 4WD access point in the Lower Upukerora

Trapping

Traps were checked, on average, at two weekly intervals during the breeding season (August to January inclusive). Monthly checks took place outside the breeding season. All data was entered into the TrapNZ trapping application.

Surprisingly, despite significant flooding we only lost one trap. The system of tying traps on a tethered cord attached to a waratah works well. The trap that was lost was the only one in the flood zone not to be tied to a waratah.

Gerrard Hill has still been checking the Upukerora traps established by the FTT over this period, however the trails trust Jobs For Nature funding is coming to an end and the future is uncertain for

the ongoing servicing of this trap network. The FTT has been corresponding with LURG over the future of the trapping program. They are exploring funding opportunities to maintain the network in the short term. LURG does not have the capacity within its volunteer pool or finances to take on the FTT trap network.

We have been running with a core group of trappers which, in general, has been enough to service the network without overburdening individuals with too much work. However, it was acknowledged that some redundancy in our pool of trappers might be nice if people are unavailable for periods of time. Fortunately, we have not had to miss trap checks, but it was agreed that we should see if we can find some more competent and able trappers to supplement our core crew.

Aside from increased catches of rats in the first year of the project (Figures 1 & 2) catches have remained relatively stable through time. There was a thought that numbers caught would drop after the FTT buffer trapping began in October 2021, however this does not appear to necessarily be the case from the data.

There appears to be a trend of increased mustelid numbers (as apparent by increased catch rate) in late spring/summer, justifying intensive trapping during this period, while the birds are nesting/breeding. There doesn't seem to be an apparent seasonal trend in rat catches, with catches fluctuating but not to the magnitude we might see in a beech forest system, which is driven by masting cycles. We are unsure why catch rates were unusually low between January 2022 - July 2022.

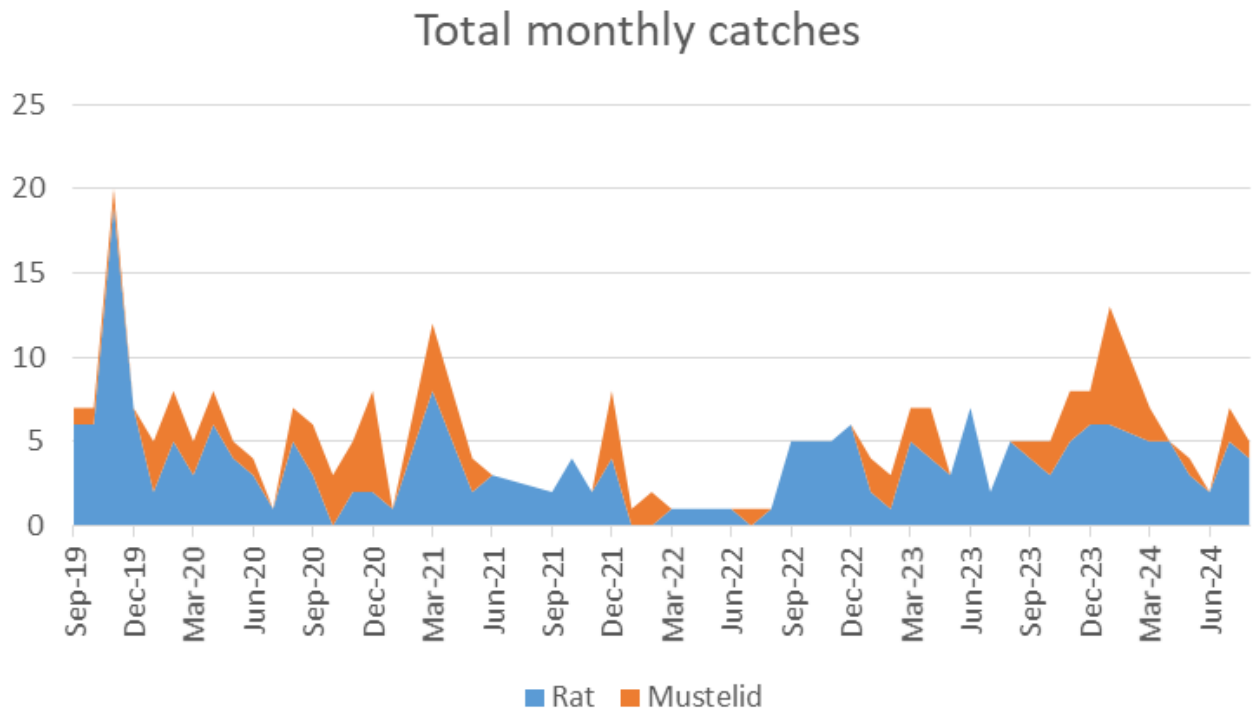


Figure 1: Monthly trapping results from the project's inception, September 2019 to 30th August 2024.

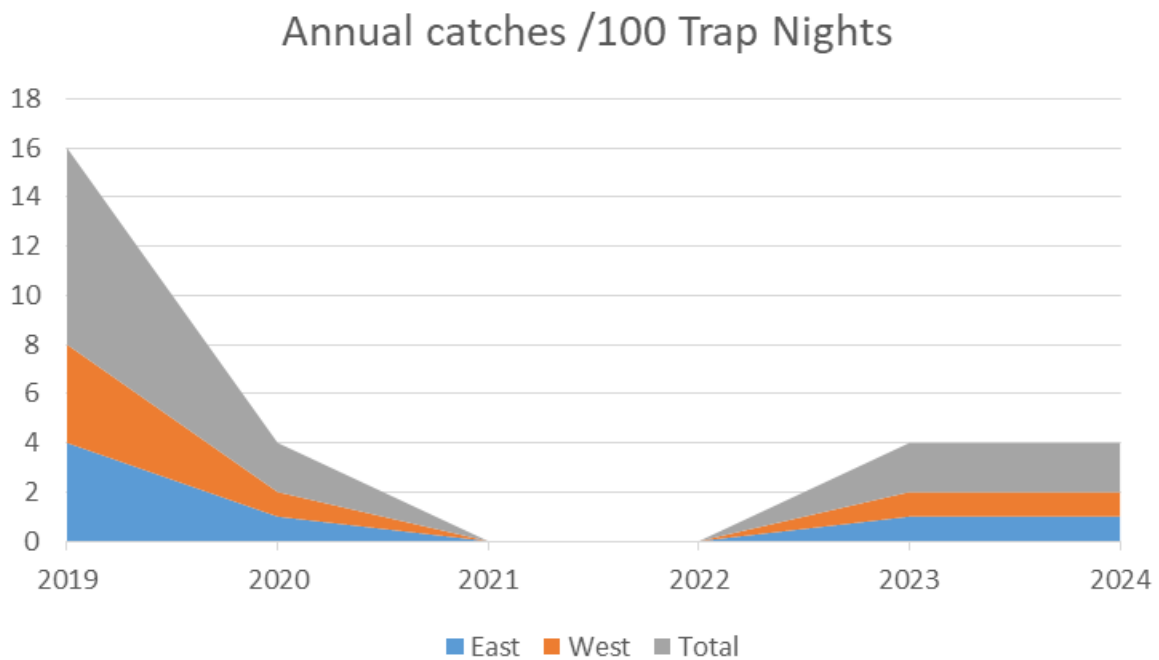


Figure 2: Standardised annual trapping results from the project's inception (Catches/100 trap nights), September 2019 to 30th August 2024.

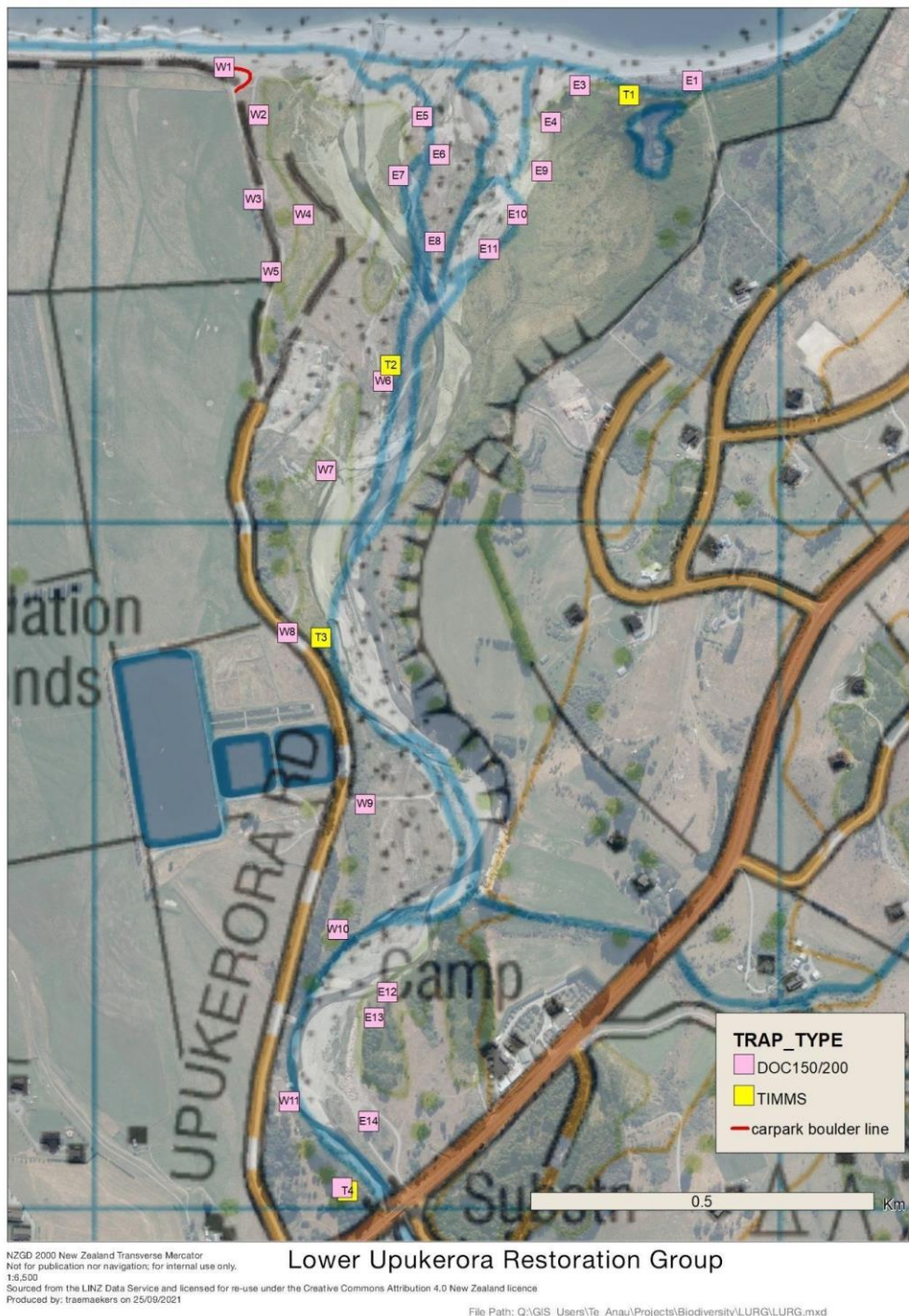


Figure 3: Location of the traps serviced in the 2023/24 season

Monitoring

River bird monitoring was undertaken by LURG volunteers Anja Kohler and Maddie van de Wetering this season, with Anja undertaking the majority. This is the third season that river birds have been monitored by LURG.

Volunteer hours from 30th May 2023 – 17th Mar 2024 amounted to 259 hours and 44 minutes in the field plus well over 100 hours data entry.

Tarapirohe / Black fronted terns

Only about 12- 15 pairs used Tern Island producing approx. 7 fledglings, and another 1-2 fledglings from 2-3 pairs from the Delta, plus a few from a small colony outside our monitoring area, by the gravel works upstream of Tern Island.

The maximum number seen was a group of about 140 coming in to roost with black billed gulls on the lake shore on 25th Aug 2023.

Pohowera / Banded dotterels

2023/24 had the worst banded dotterel breeding success of the three years monitored.

A total of 25 nests were found and a further 5 breeding attempts where chicks were seen but no nest had been found.

Observations: 12 pairs on the Delta, 6 pairs on the Plains, 6 pairs and 1 lone male from the S. Arm to the river mouth.

Banded dotterel breeding summary across all LURG monitoring sites	2023/24	2022/23	2021/22
Number of territories	25	21	20
Number of pairs	24	20	17
Total number of nests found	25	19	16
Number of successful nests (chicks known to have left nest- found nests only)	12 (48%)	15 (79%)	9 (56%)
Number of failed nests	13 (52%)	4 (21%)	7 (44%)
Number of young known to have left the nest (found nests only)	27	32	19
Number of young known to have fledged (found nests only)	4 – 6 (19% chance of a hatched chick fledging)	18 (56% chance of a hatched chick fledging)	8 (42% chance of a hatched chick fledging)
Number of successful breeding attempts (fledged at least 1 chick -from found nests only)	4 (16%)	9 (47%)	5 (31%)
Total number of breeding attempts known (including those where chicks were seen but we had not found a nest for this attempt)	30	23	25
Total number of fledglings produced (including those for whom a nest was not found)	7 – 9	19	14
Number of fledglings produced per pair	0.29 – 0.38	0.95	0.82

Colour banded dotterel ‘O(range) Flag’ metal band number was read via a photo and the record sent to the Banding Office – he is over 13 years old and was banded at North Bay, King Island, Tasmania, so has travelled over 2039km to get to Lake Te Anau!

Tarapūka / Black billed gulls

No nesting at the Delta or any of our study sites. Large (1600+) breeding colony seen by Anja at Balloon Loop. Juveniles and small/medium flocks were observed using the area at the river mouth. Three freshly dead gulls were found on the 16th December at the Delta and reported to MPI (no action taken).

Tōrea / South Island pied oystercatchers

A few pairs nested in the paddocks between South Arm Dr and the river mouth from 13th Aug onwards. Three chicks are known to have fledged (they were difficult to monitor as were located on private land). Two fields were ploughed up between 1 – 7 Oct which would have destroyed any nests present. No pairs nested at the Delta or Plains.

Poaka / Pied stilts

No pied stilts nested in the Westend (S. Arm Dr to river mouth) monitoring area.

A pair were found next to Tern Island with four chicks, all of whom fledged, although one was subsequently found dead on 7th Jan. At least two pairs of stilts nested at the Delta. These produced 3 chicks between them, all of whom are suspected to have fledged. The river bird survey on the 21st Dec recorded 30 adult pied stilts and 9 chicks, most of whom were outside our monitoring areas so were not intensively monitored.

Unusual sightings

Variable oystercatcher 2/7/2023

Leucistic South Island Pied Oystercatcher 10/07/2023

Bittern 15/08/2023, 29/08/2023, 9/09/2023

Bar tailed godwit (immature bird 08/10/2023), 12/10/2023, 14/10/2023 (different immature bird)

Dead titi on lakeshore 12/12/2023

White winged black tern in breeding plumage (21/12/2023)

Other

Our annual river bird survey was conducted on 21/12/2023 - a couple of weeks later than planned due to Environment Southland removing gravel from a ~200m section of river. This was still happening during the survey so it probably was not totally comparable to previous years.

5 Minute Bird Counts were undertaken monthly.

Most of our monitoring trips were recorded in EBird to contribute towards the NZ Bird Atlas.

Key Dates:

Species and event	Date in 2023/24 season	Date in 2022/23 season	Date in 2021/22 season
Banded dotterel			
First mating seen	5/08/2023 (Delta)	After first nest found so N/A	11/08/2021
First banded dotterel nest found	14/08/2023 (Delta)	22/08/2022 (Delta)	04/09/2021
First date O(range) Flag seen	13/08/2023	25/09/2022	11/08/2021
Last date O(range) Flag seen	08/01/2024	15/01/2023	1/12/2021
First chicks seen	30/09/2023 (TL Tern Is)	16/09/2022 (Delta)	05/10/2021 (TL Tern Is)
First banded dotterel fledgling seen	14/12/2023 (Delta)	09/11/2022	11/11/2021
South Island pied oystercatcher (SIPO)			
First SIPO of the season seen	16/04/2023	29/05/2022	27/06/2021
First SIPO nest suspected	13/08/2023 (mating seen 5/08)	10/08/2022	04/09/2021
First chicks seen	17/10/2023 (approx. 10 days old)	14/09/2022	16/09/2021
First fledgling seen	N/A	1/10/2023	15/11/2021
Last SIPO sighting of the season	1/01/2024	1/01/2023	21/01/2022
Pied Stilt			
First pied stilt of the season seen	04/08/2023	31/07/2022	2/08/2021
First pied stilt nest suspected	4/11/2023	22/10/2022	24/10/2021
First pied stilt chicks seen	27/11/2023	6/01/2023	03/11/2021
First fledglings seen	31/01/2024	02/02/2023	23/11/2021
Last pied stilt sighting of the season	11/02/2024	25/03/2023 (still one juv present at time of writing 25/03/23)	12/02/2022

Black fronted tern			
First black fronted tern of the season seen	30/06/2023	21/07/2022	24/07/2021
Mating seen	21/10/2023 (Tern Is)	25/10/2022 (Tern Is) 29/10/2022 (Tern Is)	16/10/2021 (Tern Is)
First black fronted tern nest suspected	21/10/2023 (Tern Is)	21/10/2022 (Tern Is) 10/11/2022 (Delta)	16/10/2021 (Tern Is)
First chick seen	20/11/2023 (Tern Is)	18/12/2022 (Delta)	22/11/2021 (Tern Is)
First fledgling seen	21/12/2023 (Tern Is)	10/01/2023 (Delta)	21/12/2021 (Tern Is)
Last black fronted tern sighting of season	28/02/2024 (as of 17/03/2024 – not 100% sure we won't see them again)	10/03/2023	02/04/2022
Black billed gull			
First mating seen	08/10/2023	N/A	28/08/2021
First nest suspected	N/A	N/A	N/A
First fledglings seen	16/12/2023		
Pipit			
Last sighting of season (breed elsewhere)	02/09/2023	29/08/2022	03/10/2021
First of season (return for winter following breeding elsewhere)	27/01/2024	15/01/2023	28/03/2022
Skink (McCann's skink?)			
First sighting of the season	23/10/2023	01/10/2022	30/12/2021

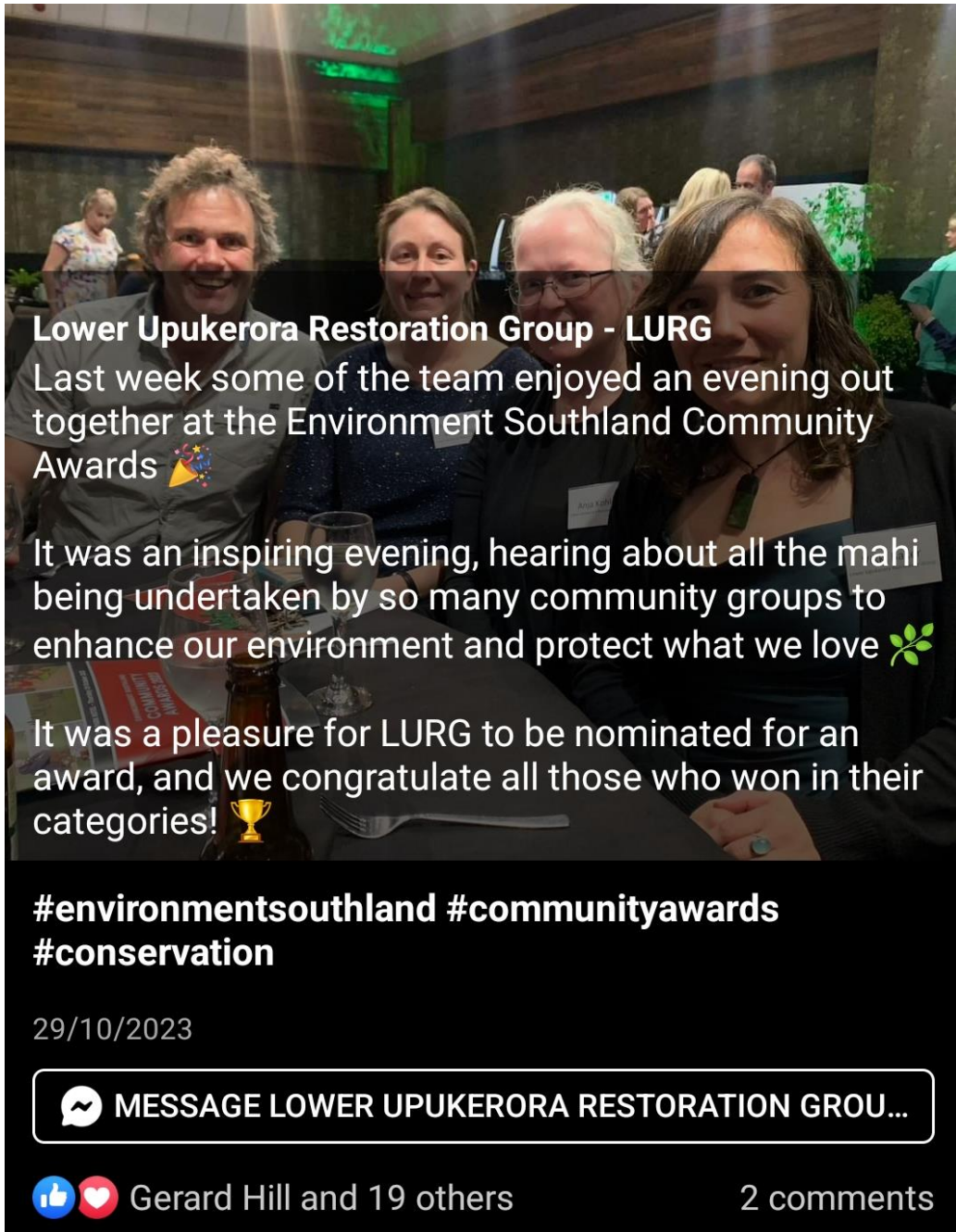
Advocacy

Our Facebook page continues to be a real strength of the group. Vikki was able to support the group for the season but has had to resign from her role due to work commitments - thanks for your mahi Vikki!! Hannah and Anja have been posting in her absence. Slotted into these updates are community awareness posts about the threat of dogs, vehicles and predators. The group receives positive comments and it is easy to engage the community in a timely manner. Signs to increase awareness were put out, with some handmade ones handmade by Maddie adding a personal touch. A new design template was developed by Lila Iedgard as part of a school art project. The sign incorporates the artwork of a number Te Anau Primary students who coloured in templates of oystercatchers. Signs will be made from this template for the 2024 breeding season.



Environment awards

In June 2023 the group was nominated for an Environment Southland environmental award. Unfortunately we were unsuccessful but it was nice to be acknowledged through our selection for the awards.



Volunteer Hours (minimum)

Bird Monitoring

Monitoring	259 hrs
Data entry & Reporting	100+ hrs

Trapping and weeding

It takes approximately 5 hours to check all the traps. Traps were checked 16 times during the course of the year. In addition we had one weeding event on Tern Island.

Trapping	95 hrs
Working Bee's (weeding)	12 hrs

Administration (incl. FTT liaison)

Annual Report & TrapNZ	20 hrs
Liaison with DOC and FTT	16 hrs
LURG Meeting Attendance	50 hrs

TOTAL: 530 hrs (minimum)

2024/25 Actions

- **Trapping:** To maintain the LURG trapping programme around the lower Upukerora delta to lower predator numbers. Focus predators are rats, stoats, hedgehogs, feral cats, weasels and ferrets.
- **Monitoring:** To continue monitoring indigenous birds nesting and roosting in the Lower Upukerora Delta area. This will enable us to determine if the current predator control regime allows or contributes towards positive breeding and recruitment in banded dotterels, black-fronted terns and black-billed gulls.
- **Long term planning:**
The establishment of a committee has formalised the group and enabled it to bank the remaining Meridian money, and any other funds that come our way in the future to maintain our activities. At the June 2024 end of year AGM it was discussed whether the group wanted to consider taking on more trapping if the Fiordland Trails Trust were not prepared to continue servicing the traps they had established. The answer from the volunteers was the same as the year prior - a resounding no; adding these traps to our trap network would place too much burden on our volunteer capacity, and adding more volunteers would also do the same. It was agreed we were keen to see the Trails Trust maintain their trapping program beyond the Jobs for Nature funding period. It was also noted that if any individuals within LURG could assist the trust in procuring more funds to maintain this trapping this would be a beneficial outcome for both projects. George has offered his assistance to the FTT in this space.
- **Advocacy and awareness:**
Our key actions are to:
 - Raise public awareness of site fauna values and of braided river birds: Maintain Facebook posts.
 - Deter dogs and 4WDs from accessing the Lower Upukerora River breeding and roosting areas: Signage maintained at all access points. Work with stakeholders to limit vehicle access to the river bed.
 - Work with the local schools where possible, and we are capacity permits, to help in producing advocacy material for use by LURG and raise the awareness of the values in the area with the younger generations.
- **Remaining Meridian money:**
Utilise the remaining \$1,056 For items such as signs, bait (rabbit) for traps and other expenses to the program.
- **Continue to support the FTT biodiversity restoration work:**
Continue to liaise with the FTT on planting, monitoring and trapping projects.

Acknowledgements

Volunteers

Many thanks to all the volunteers who made the fifth year of this project such a success. The ease with which the group works together and delivers the mahi has made the project so simple to manage. Thanks to all for your efforts!

Meridian

Thanks to the Meridian Power Up Fund for providing the flexibility to spend the remaining funding on other items of importance to the group, such as trapping equipment

Edge Effect

Although a subcontractor to the FTT. Gerard has been a big supporter of the group and has gone out of his way to ensure both programs are complementary and keep us informed of what he is up to.

Fiordland Trails Trust

Thank you for leading and delivering the Kaimahi for Nature project which will provide a significant boost for biodiversity in the area, as well as for recreation. We also wish to acknowledge their funding support for the monitoring which is allowing the intensity and quality of the monitoring and reporting to be maintained.

Other supporters of the project

There are many other supporters of the group in the wider community and we look forward to meeting you or seeing you in the lower Upukerora in the future. Many thanks for your support and kind words.