

Tēnā koutou katoa!

In this issue we explore what has happened across our four workstreams, since summer:



**PREDATOR
FREE**



**FOREST HABITAT
RESTORATION**



**FROM
SOURCE TO SEA**



**SEABIRD HABITAT
RESTORATION**

The Halo Project is driven by community input and involvement – thanks to all who participate, give their time, energy, expertise and passion! We really appreciate you.



HAERE MAI WELCOME

To our newest recruits

We are excited to announce that our team is expanding! This means we can expand our work in restoring the natural environment and biodiversity within this area. Guided by a strong board of trustees, we have grown from one part-time contractor to a team of 14 FTE (Full Time Equivalents) over five years. This is reflective of the greater emphasis New Zealanders are putting on the enhancement of our natural environment and the need to integrate biodiversity within mixed mosaic landscapes such as ours.

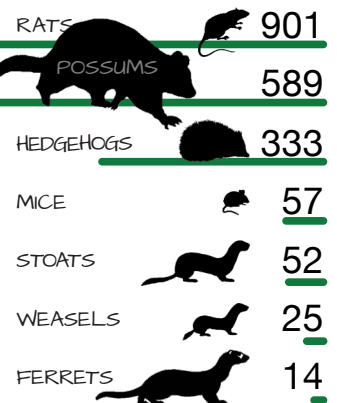
From Silver Peaks to sea, our communities are becoming the kaitiaki of the land, and our volunteers are at the core. Creating jobs for local people inspires transformational change for increased landscape and community resilience. Within this newsletter you will read about our newest recruits and we welcome them all to our team.



Halo Project's newest Source to Sea recruits (from left): Yelah McDougall, Kim Miller, Jordyn Ashcroft, Jeanne Hutchison (our Source to Sea Field Team Supervisor, read more about Jeanne on page 5), Jennifer Lawn (our Source to Sea Project Manager), Michelle Rooke, Rangi Ngamoki, Keenan Bridger

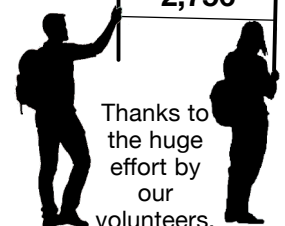
Halo Dashboard
From January to May

Catch data:

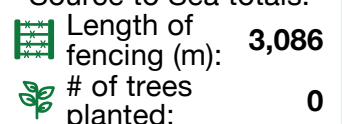


Total catch #: **1,971**
Total # traps: **2,503**

Volunteer
hours
2,756



Source to Sea totals:



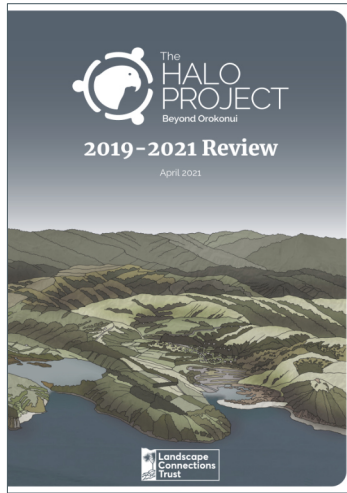


HALO PROJECT

2019-2021 Review

The Halo team are proud to provide a review of our work from 2019 to 2021. It is full of community projects, and how we are helping residents and landowners enhance, protect and connect with this landscape.

This work is only possible with the help of our volunteers, who provide both on-the-ground work and governance. It also would not have been possible without working in partnership with our community and funders.



Download our review from www.halo-project.org.nz/news.

2 Halo at Blueskin Show

We enjoyed talking with locals as well as visitors to Waitati. We had interest from lots of folk who were aware of Halo but not the full extent of our work. We had people sign up to check traps,

people wanting to know more about habitat restoration, and one person showing us a photo of the massive ferret they caught near Karitāne. It could have been mistaken for a red panda – we kid you not!



Halo Project's Predator Free and Source to Sea at the Blueskin Show



PREDATOR FREE

Haere mai Welcome Sophie Bond, Predator Free Project Coordinator

Sophie joined our Predator Free Halo team in January 2021, after volunteering with us for more than six months. She coordinates our community trapping programme, engaging and training residents to trap possums and rats in their backyards and local reserves and supporting volunteers who are so critical to our operations. Sophie has been working with West Harbour residents and groups to set up new traps and traplines, and has been ensuring all our backyard traps are assigned and active.

Sophie has a lot of experience in volunteering with conservation groups, including Aramoana Conservation Group and Otago Peninsula Biodiversity Group, and has been involved in predator control and monitoring.

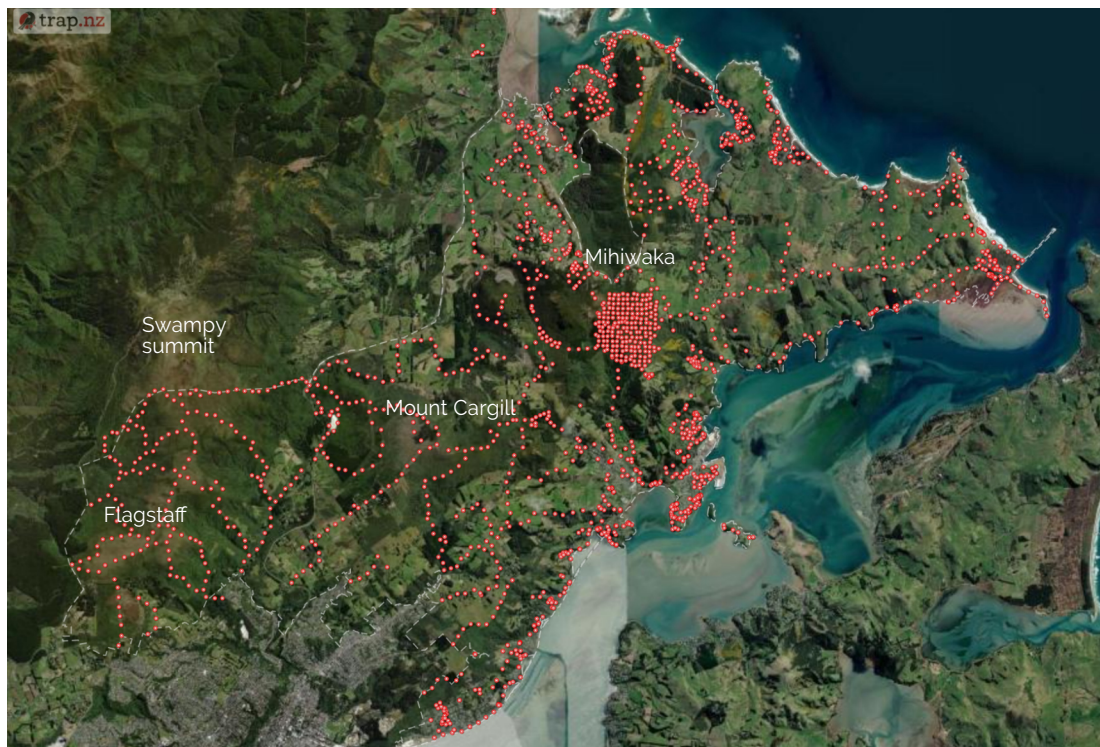
She studied ecology and botany at the University of Otago and has been wanting to work in conservation, where her mahi will benefit native species of Ōtepoti.



Sophie Bond, Predator Free Project Coordinator

Major milestone achieved! Stoat control network complete

The Department of Conservation (DOC) refers to stoats as 'public enemy number one for New Zealand birds', which is why stoats and possums are our two (funded) target species.



All traps across the Halo Project's 12,500 hectares of the Predator Free area

With enormous thanks to our hardy volunteers, our stoat trap network covers the entire Halo Predator Free area (12,500 ha)! We now have around 1,640 traps, giving us an average trap density of one trap per 7.6 hectare. We expect to reduce the stoat population by 90% or more, significantly reducing predation pressure on birds including nesting kākā, as well as insects and lizards.



Volunteer Eva doing the hard yards on Flagstaff



PREDATOR FREE (continued)

New possum and rat trap trial across Heyward Point

Following an initial trial of a new automatic trap, we are now a big step closer to turning our planning into action with the aim of establishing a low-maintenance trap network to succeed OSPRI's landscape-scale possum operations. The AT220 is the first automated multi-species kill trap for possums and rats, and is now in use in several conservation projects around the country.

The initial trial conducted over summer by the University of Otago, and in partnership with Orokonui Ecosanctuary, was designed to answer some practical questions about the trap. The biggest question being whether it poses a risk to inquisitive kākā.

There were 20 traps placed on four properties that are frequently visited by kākā, with trail cameras monitoring each trap. The researcher recorded every animal interaction with the trap, day and night over a 10-week period. Kākā were recorded near the trap only four times throughout the trial; none of the interactions were near the trap mechanism (or 'kill zone'), and they all occurred during daylight. The trap's 'daylight lockout' function, that sets the trap only during hours of darkness, is an important safety feature to employ. Traps are baited with a mayonnaise-based lure.

Over the next few months, we will be engaging with landowners to set up 115 of these traps as a large-scale trial to test their effectiveness. All going well, we hope to rollout a network of traps across the 12,500 ha Predator Free landscape.

What's that trap?



Conor installing the first AT220 trap



AT220 trap in stunning location



Self resetting AT220 possum/rat trap

The AT220 is the first automatic kill trap for both possums & rats.

NZ AUTOTRAPS AT220



Designed to increase trap catch and reduce reliance on labour, it can reset 100 times or last up to six months before its battery needs recharging and lure refilling. It has sensors which recognise whether the catch is rat or possum and records the information on a microchip.

An important safety feature is that it has a daylight lock out feature, meaning the trap can be active at night and safe during the day (through use of a light sensor). With traps set only at night, we reduce risk to non-target and domestic animals yet maintain an effective tool for nocturnal predators.

Rats often eat possum lure from Trapinators without setting off the traps, leaving traps less attractive and needing servicing. Able to remove these rats and re-lure, these traps remain attractive and available for possums.

Traps are tree-mounted (where possible) or mounted on an upright stand at least one meter above the ground with a ramp for possums and a 'rat ladder' hanging below the trap opening.

The AT220 has satisfied the NAWAC guidelines for possums and ship rats, making it a humane kill trap for both species.

Ravensbourne gully forest protection

Halo's backyard trapping programme is helping revive the Ravensbourne Environmental Trust and achieve its vision to protect the native species in a Ravensbourne gully.

We have been working with several gully landowners - and members of the trust that has been dormant, since the death of the founding trustee in 2018 - to reinvigorate the gully protection work.

The vegetated gullies in Ravensbourne are valuable habitat corridors for wildlife, linking Ravensbourne with Burns Reserve on Signal Hill. The steepness of this deep gully protected the bush-clad council land from sale and development early last century. Then, in 1970, a large adjacent property was purchased by people wanting to protect and enhance the native trees and wildlife.

In 1999, the late Christina Gibb, began forest restoration work on her property of more than an acre of forest remnant at the top of the gully, placing a QEII covenant on part of the property in 2004. With the help of friends and neighbours, weeding (mainly gorse and sycamore), planting and track cutting extended through the gully. In 2005, with the support of the community, Christina established the Ravensbourne Ecological Trust which took over ownership of the gully from the Dunedin City Council.

Now with traps along the track and work underway in the bottom half of the gully, the reconnected trustees and residents can continue to protect the native species within the dense native bush.



PREDATOR FREE (continued)

Outdoors work experience a win-win arrangement

Angus, a 16 year old King's High School student, has been helping us since the end of March, and has been putting his hunting and outdoors skills to good use. Great at tracking animals and spotting sign, he's been helping the team check traplines, learning how to enter data on Trap.NZ, cutting tracks and installing traps.

It's a win-win arrangement set up through his school's careers advisor. Angus enjoys the work and is

thinking a career in conservation or animal pest management could be rewarding. Roles in our field typically require some office time, but are largely outdoors and physical, also requiring a community and volunteers focus, suiting good communicators with strong organising/ planning skills. Work placements are a great way for people to see what a job really entails and are great for our team and community.



Thank you Angus for your hard work

The problem with hedgehogs

While we are not directly targeting hedgehogs (we target possums, stoats and rats), by-catches are important to record. Controlling hedgehogs has a significant benefit for our wildlife. Hedgehogs are abundant throughout Aotearoa, even in the alpine zone, preying on insects including wētā, snails, lizards and frogs, as well as eggs of ground-nesting birds.

A University of Otago study by Professor Phil Seddon and Nick Foster (PhD candidate) found that a single hedgehog can eat around 60 critters in a 24-hour period. In the alpine zone, it's wētā for breakfast, lunch and dinner.

You can read more about their research in Aoraki National Park in The Guardian, article from the 8th May 2021, *'Killing machines: humble British hedgehog causes havoc in New Zealand'*.

Hedgehogs are solitary mammals, well-defended against predators except for pigs. They live for up to four years, reproducing in spring and summer, typically producing 2-3 hoglets. Hedgehogs are not territorial.

During the breeding season, more young adult males can be found roaming for mates. Trap catches over winter should decline as they hibernate from May to September.

Is your cat a Halo cat?

Responsible cat ownership is the best way that your cat can be a Halo Cat. We support this by providing 200 free microchips and registrations for pet cats (thanks to Companion Animal NZ Register).

According to the Vets Association of New Zealand (VANZ), responsible cat ownership means:

- desexing (neutering) AS SOON AS POSSIBLE to prevent unwanted cats and kittens;
- microchipping and registering on the NZCAR;
- avoiding negative impacts on other people, animals and the environment.

You could also consider not replacing your cat when it dies.

VANZ recommends owners should:

- not allow cats to stray from their property;
- ensure cats do not predate on vulnerable, native wildlife. Measures to reduce predation include the use of deterrent collars, curfews, confinement and the use of cat aviaries (also known as a "catio");
- ensure cats do not use neighbours' gardens for toileting.

Microchipping your companion cats

We've teamed-up with Vetlife Waikouaiti who are inserting microchips for only \$20.

The first 50 companion cats microchipped under the Halo Project in Waikouaiti will receive a Black Hawk goodie bag & a first Broadline spot-on treatment FREE.

Book in ANYTIME with Wendy and the team at Vetlife Waikouaiti.

Phone 03 465 7613 or email waikouaiti@vetlife.co.nz.

Vetlife can also neuter pets.

How microchipping your cat helps

If your cat goes missing, having it microchipped and registered with NZCAR will help reunite you with your cat. Ensure your details are up-to-date by contacting: **info@animalregister.co.nz or phone 0508 LOSTPET (5678 738).**

Councils, vets and the SPCA have microchip readers which quickly identify the owner's contact details.

In the future we will undertake multi-species predator control in areas of high conservation value, such as around Orokonui Ecosanctuary. In the unlikely event your cat gets caught we want to be able to return it to you as fast as possible.

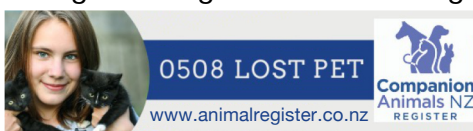


Otago Polytechnic pop-up clinics

Recently, we teamed-up with the Otago Polytechnic's School of Vet Nursing to microchip 60 pet cats in two pop-up evening microchipping clinics. We are grateful to Companion Animals NZ for the microchips and want to say a massive THANK YOU to OP staff & students for their valuable time.



Vet Nursing staff member, Vicki Letchford holding a cat; a vet nursing students inserts a microchip





PREDATOR FREE (continued)

Kei hea ngā kākā? Where are the kākā?

Many of you will be aware of this project set up by Orokonui Ecosanctuary to help everyone better protect kākā when they venture beyond the fence's protection (we wrote about it in our last newsletter - over summer). Predators are a big issue for kākā but several other factors also threaten the survival and wellbeing of these special birds.

With an easy-to-use database for anyone to record their kākā encounter (whether heard, seen or photographed), it's exciting to see where these birds visit and

frequent. Recent observations include Ross Creek, Opoho Creek and the Botanic Gardens (www.kakadatabase.oroikonui.nz). The kākā team are asking for photos of kākā, from the last 13 years, if you know the location the photo was taken. Send photos to kaka@oroikonui.nz.

Ways you can help protect kākā: record all sightings on the kākā database; trap predators on your property; manage your pets; and protect old trees. Mature native trees provide food and shelter, they also love large macrocarpas.



South Island Kākā by Craig McKenzie

It is best **not** to leave food out for kākā.

For more info check out the kākā database - it's more than just a database!



SOURCE TO SEA

Haere mai Welcome Jeanne Hutchison, Field Team Supervisor

Our highly experienced Field Team Supervisor, Jeanne, started with us in March, immediately setting to work to help recruit our Field Team.

Jeanne has a background in landscaping and plant conservation and previously ran the Conservation Volunteers NZ Work Skills programme here in Ōtepoti, training and helping people gain skills and confidence for work while delivering environmental conservation gains.

We've recruited six fine people to work together mainly preparing

sites, planting and tree releasing. Swamped with applications, it was hard work selecting the successful applicants. But we have gathered an exceptional team of keen and capable people from a range of backgrounds to work, learn and grow together over the coming year, of what will be tough physical work (see photo on front page).

Starting now, the Field Team will begin their training and get underway with site preparation and planting.



Jeanne Hutchison, Source to Sea Field Team Supervisor deseeding harakeke

Partnerships for action

We started looking for landowners to work with in January, and with East Otago Catchment Group's help connecting us with farmers in priority hotspots around Pleasant River, Waikouaiti and Waihemo Shag River, we have more interest than we can keep up with!

Working with over 30 landowners, we're developing restoration plans, landowner agreements and we are

fencing-off wetlands and streams. Six landowners are officially signed up and fencing has been completed at three sites.

We have a range of native plants being grown for us – in nurseries and by residents of the Department of Corrections. Seed collection is underway for the plants we'll need in year two and year three of our project and 97 pallets of planting supplies have been ordered!

For some landowners we are helping their restoration dreams come to fruition. To others, we are helping them meet their regulatory obligations with planting as a bonus.

Whatever the reason (and every landowner is different), we are happy to see environmental protection being advanced at such important sites, and people working with their neighbours to make a real difference to biodiversity.



Te Taha Poti / Merton Tidal Arm



Waihemo Shag River Mouth from Matakaea Shag Point

Regionally Significant Wetland

Te Taha Poti / Merton Tidal Arm (midground in left) is a regionally significant wetland and one of our sites for protection. You can see the Waikouaiti River and catchment in the background, looking North from Ohineahi, near Karitāne.



SOURCE TO SEA (continued)

We need furniture!

We have leased a site for a Source to Sea depot, but it is empty. We have put a wish list together of items we would love to have to make our depot warm and workable for our newest recruits after they have been out planting all day during winter.

Depot wish list: couches, comfy chairs, coffee table, table and chairs, desks, lockers, notice board, bookshelf/shelving, wall hooks/ brackets, carpet/ rug, kitchen stuff such as crockery and cutlery, measuring jugs, funnels, cleaning equipment, such as vacuum cleaner, sweeping brush, boot cleaner, outdoor stuff, such as wheelbarrow, plastic bins, plastic portable table, step ladder, trowels, tarps, good condition power tools such as drill, grinder, multi-plug box, extension leads, laptops, heaters and a dehumidifier!

Please email a photo to info@haloproject.org.nz if you have any unwanted items that you would like to give to us to help make our depot comfy.



THANK YOU

The Halo Project wishes to thank all our volunteers, supporters and funders for their ongoing support.

ecofund

Environment. Community. Otago.
Te Ao Turoa. Hapori. Ōtākou.



PROVINCIAL
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a-rohe o
Ōtēpoti



Otago
Regional
Council



CONTACT THE RIGHT PERSON

If you wish to get hold of us, you can use the generic email: info@haloproject.org.nz, or choose from below:

Director

Rhys Millar

027 3877 866

rhys@haloproject.org.nz

Predator Free Project Manager

Jonah Kitto-Verhoef

027 451 9951

jonah@haloproject.org.nz

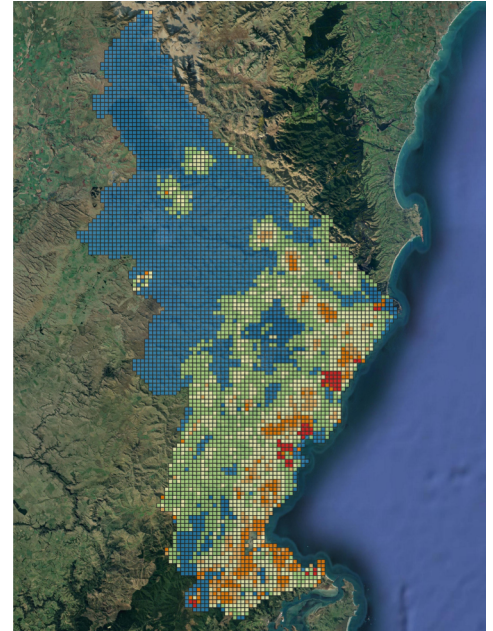
Source to Sea Project Manager

Jennifer Lawn

021 651 939

jennifer@haloproject.org.nz

Updated Site Prioritisation Map



We have updated our Source to Sea Site Prioritisation Map (above). It shows areas containing priority sites for protection in red (highest priority) and orange (second highest priority).

For a closer look, visit our website: www.haloproject.org.nz/source-to-sea.