

## Summer 2020-2021

Tēnā koutou katoa!

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



### 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.



## SOURCE TO SEA PROJECT

*Introducing the Source to Sea project*

### Need help protecting waterways or wetlands on your property?

We may be able to help you! We have funding for three years to fence and plant waterways and wetlands in Coastal Otago, with fencing to be completed in the first year.

We are actively looking for landowners to work with, in places where waterway protection will have the biggest impact on improving water and habitat quality.

With the area covering roughly 124,000 ha from North Dunedin to the Shag River, we've brought together all available data to help us determine hotspots or priority areas to target with fencing and planting.

**What would you need to contribute?** This will depend on your site. If your site is a top priority, there may be no financial contribution required. Contributions (including cash and in-kind labour) for fencing and planting at other sites may range from 20-70% depending on:

- the impact restoration will have on water quality and biodiversity;
- whether you have an environmental plan for your land;
- if you've done any previous environmental work on your property.

### *Haere mai Welcome*

Haere mai Jennifer Lawn, Source to Sea Project Manager for the Halo Project.

We are delighted that Jen has joined us, bringing her experience and passion in environmental, farm and volunteer management.



*Jennifer Lawn, Source to Sea Project Manager*

### *Jobs with Source to Sea*

We will be recruiting a field team to carry out the Source to Sea work alongside landowners and community groups. We'll be looking for a Field Team Supervisor early in the new year. If you're interested in working in with us, keep a look out on our website and facebook page: [www.facebook.com/halobeyondorokonui/](http://www.facebook.com/halobeyondorokonui/)

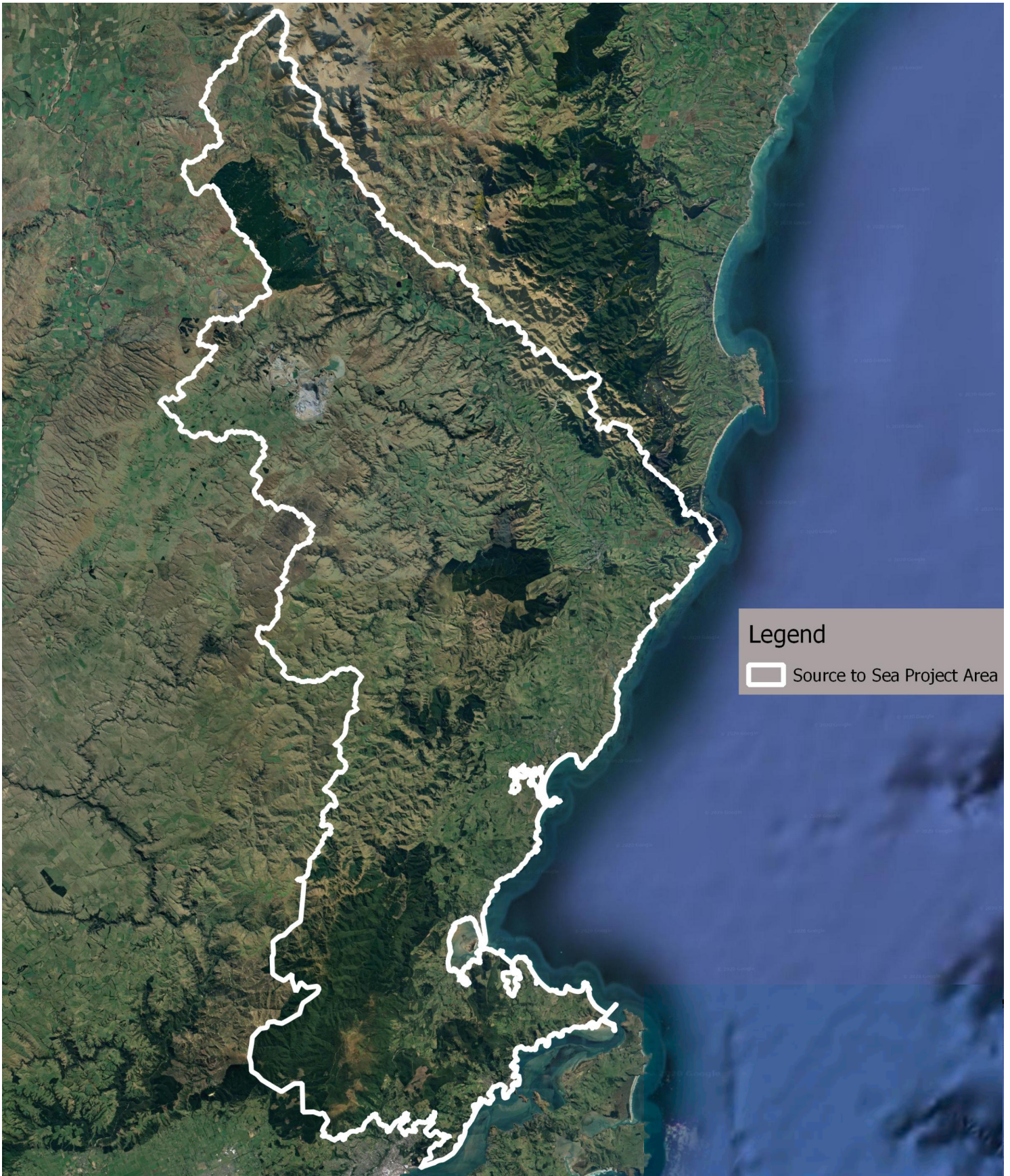


# SOURCE TO SEA PROJECT

Project Area



Department of Conservation  
Te Papa Atawhai



*The Halo Project wants to work with landowners in priority areas within the Source to Sea project area (as shown in map above).*

Are you interested in taking part or know someone that could be?

Visit [www.haloproject.org.nz/register](http://www.haloproject.org.nz/register) to register your interest or for more information contact Jennifer Lawn: 021 651 939

Get in early because we will start fencing in January.

This project is supported by the Te Uru Rākau One Billion Trees Fund, Provincial Development Unit, DOC Community Fund and Otago Regional Council's ECO Fund.



**Te Uru Rākau**  
Forestry New Zealand



# PREDATOR FREE

*Haere mai Welcome*

Haere mai Conor Houghton, Predator Free Project Coordinator. Conor started work with us in September and has a background in rural pest control. He's also an avid conservationist and has a keen interest in community conservation projects.

Conor's work is very much field based, working on the stoat trap network: setting up new trap lines, as well as checking and servicing current traps. Stoats beware! There are around 100 new traps operating in rural areas including Mt Cargill Rd, Upper Junction, Pigeon Flat, North Orokonui, Holmes Bush and Burns Reserve. Trapping effort is having an impact: so far this season fewer stoats have been caught around Orokonui's fence.



*Conor Houghton, Predator Free Project Coordinator*

## Predator Free Communities

This year we have continued to work closely with residents across West Harbour as we work towards our project boundary where fellow Predator Free Dunedin partner, City Sanctuary operate, from Signal Hill Reserve back through the City.

With many new backyard possum and rat traps on the ground we are delighted to hear that residents are witnessing the positive biodiversity benefits of decreased predator numbers. Broad bean crops are growing, bird life is flourishing, and native trees are showing signs of reprieve and recovery from possum browse.

From early 2021 we will be begin working with the Maia and Ravensbourne communities. Residents will receive a backyard pest detection kit in their letterboxes so backyard predators can be identified and targeted. Our 'host a possum trap' scheme will be available and we also have two types of subsidised rat traps in wooden boxes available to help decrease rodent numbers.

We are always looking for people to help setup and check traps, if you are keen on getting involved, please contact us [info@haloproject.org.nz](mailto:info@haloproject.org.nz)

## What's that trap?

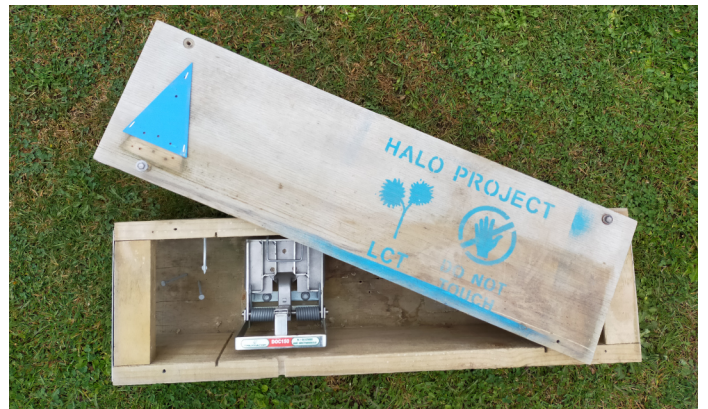


*From left to right, the DOC series traps; DOC150, DOC200 and DOC250*

The Predator Free Halo Project uses the DOC series traps to target mustelids. Traps are safely housed in a wooden tunnel and screwed shut to protect from accidental by-catch such as domestic pets and native birds.

The trap mechanism is similar to a sandwich press. Predators enter through a small hole at one end of the trap and head through the tunnel towards the lures. To get to the lure they must walk over the trap treadle, their weight triggers the mechanism and the 'sandwich press' slams shut. These traps

## DOC SERIES TRAPS



*Halo Project DOC150 trap in wooden housing*

are humane kill traps that have satisfied the National Animal Welfare Advisory Committee (NAWAC). We use an egg as a visual lure and either fresh rabbit, dehydrated rabbit or dehydrated fish blocks as scent lures.

There are three sizes of DOC traps which are designed to target stoats, weasels, rats, and hedgehogs. They are all triggered at different weights with the DOC250 being able to humanely target the largest of the mustelid family, the ferret.

## Halo Dashboard

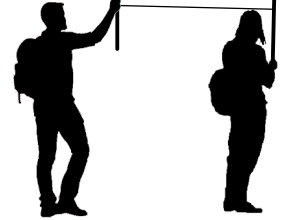
This year we have removed:

RATS	788
POSSUMS	613
HEDGEHOGS	223
MICE	214
STOATS	76
WEASELS	40
FERRETS	20

Total #: 1974

Total # traps: 1743

Volunteer hours  
6127

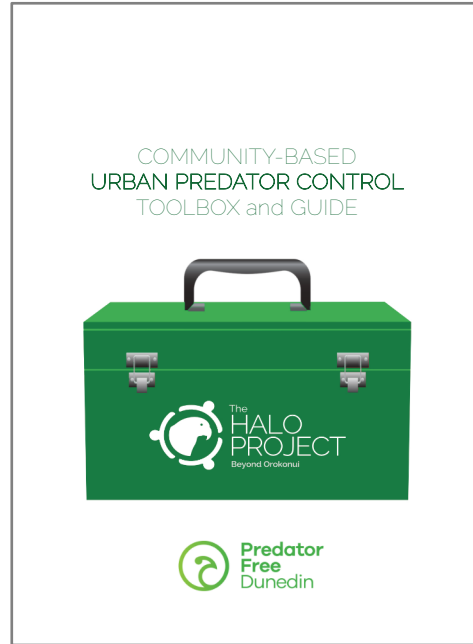


Thanks to the huge effort from our volunteers.

PFD Annual Report

Urban Predator Trapping Toolbox

Forest restoration planting guide



The Halo Project is a proud Delivery Partner to Predator Free Dunedin. The work of our volunteers makes a huge contribution to the progress of the city-wide collaboration and collective vision.

The **Predator Free Dunedin Annual Report** is available online and shows our work and progress in a wider context.

Launched last month at an info-sharing evening at DOC, the first edition of our **Community-based Urban Predator Control Toolbox** can be viewed on our website's resources page.

The toolbox is for residents who wish to start their own habitat restoration or wildlife protection project. We welcome all feedback, which we'll use to improve and update the resource over time.

Also recently launched, our **Forest restoration planning and planting guide** can be purchased from us for \$10. Designed for landowners of Dunedin, North Otago and East Otago who have space to plant trees, it's an easy to read guide through the process of planning, funding and managing your plantings. With 12 plant lists for different site types, you'll find it helpful no matter the size of your project (or your dream!).



**FOREST HABITAT RESTORATION**

*Forest Restoration Planting Days*

In late August/ early September, 150 volunteers (many local and many university students from UniCrew) helped us plant 1,200 native trees on three coastal properties. These were the first plants in the ground associated with our Forest Habitat Restoration programme; more planting is planned for next year.

The plants are surviving but are stressed by the strong winds and dry weather along the coast. Good news is that plant losses have been minimal, and that the guards are working well against rabbits and hares and are reducing moisture loss. Plants on more sheltered sites are doing well. What they all need now is rain!



Volunteers planting at Potato Point, August 2020

*Kei Hea Ngā Kākā?*

Launched in October, Kei Hea Ngā Kākā? (Where are the kākā?) is a citizen science project initiated by Orokonui Ecosanctuary to learn more about where kākā are going, what they are doing and whether they are safe. We can all help by reporting all kākā observations (seen or heard) on [Orokonui's Kākā Database](#), and tell your friends and neighbours to do the same.

The purpose is to observe where they go and what they do so we can understand the risks to kākā. The more observations the better. Take a look for

yourself, you're bound to find something interesting, like a recent report of kākā in Port Chalmers! There are already more than 100 observations you can view. Also, see

[Facebook.com/wherearethekaka](https://www.facebook.com/wherearethekaka)



South Island Kākā by Craig McKenzie



# SOURCE TO SEA PROJECT

Source to Sea Education Programme



DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

Four more schools have completed their first year of investigations into the health and workings of their local catchment. The programme uses a cross-curriculum enquiry model, drawing on science, maths, geography and history. Now seven schools have baseline data and an understanding of their local catchment.

Getting their hands wet exploring streambeds, netting insects and searching for koura (freshwater crayfish) was the best part of the programme for most students. Closely followed by the lab session with microscopes to identify the creatures they had collected, and the touch-tank in the University's Aquavan.

### What did the students discover?

**St Leonards School** visited McDermid's Creek and found low levels of ammonia, nitrates, nitrites and phosphorus; a healthy abundance and variety of freshwater insects and koura but no fish. They gave the stream a rating of B/B- (scored between A+ and F). Students also learned that Sawyers Bay School, studying the same stream, had found fish below (but not above) a series of dams, downstream of their site.

Possible future actions: "Write to council with their findings about the effect of the dams; design possible solutions for fish to travel upstream; help to plant the stream banks at the golf course; share their story and continue monitoring stream health."



**Sawyers Bay School** also studied McDermid's Creek catchment, with very similar results. The questions these young scientists posed at the end of their enquiry shows the depth of engagement:

- How did our results compare with other schools?
- Why were the dams built on the stream?
- What creatures might be there that we didn't catch?
- Why are there different substances such as nitrates in the stream?
- Has the reservoir changed the stream?

Possible future actions: "Field trip each year to see what changes over time; share our story; write to council to share findings about the effect of the dams; help with planting at the golf course and downstream; keep exploring the GIS interactive map."



**Port Chalmers School** explored the catchment of Cold Water Creek in Deborah Bay. They gave the stream an 'A-' rating.



Questions for further exploration:

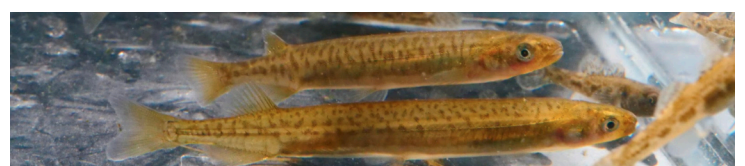
- What might we find if we did our study at a different time of the year?
- How could we collect data over time?
- Has anyone else studied the stream?
- Where might the sediment present be coming from? Does the railway or farming have any affect on the stream?

Possible future actions: "Find ways to make sure the stream stays as good as it is, or even improves; monitor the stream over time; share information with our communities."



**Karitane School** students travelled to Macraes Flat to find the source of the North Branch of the Waikouaiti River. Which they found in a swampy area with ponds made by gold miners long ago. At Buckland's Crossing they found a long finned eel, galaxids and upland bullies. Students gave the North Branch a C/C+ for stream health. The lack of bankside vegetation, elevated water temperature, invasive oxygen weed, phosphates, algae affected the score.

Possible future actions: "Grow and plant native plants in the catchment; remove oxygen weed; talk to council about litter problems; educate our community about our findings; share our information; support other groups doing work on the river."

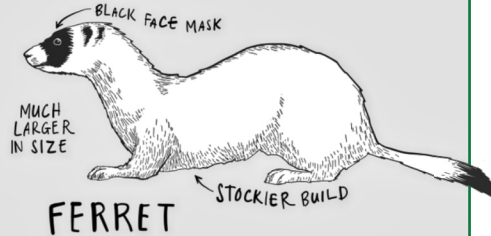
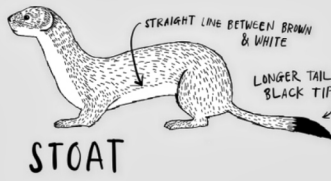
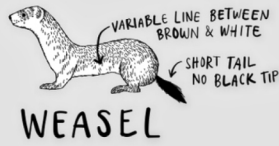


## FERRET CARCASSES WANTED



OSPRI contractors are doing possum control throughout the Halo Project area to eradicate bovine TB. Possums are the main cause of the disease in cattle and deer herds. Ferrets are used to check if TB still remains in possum populations as ferrets can catch the disease from eating possum carcasses but are unlikely to spread it.

Any ferrets you catch can help us eradicate TB. If you catch a ferret, please call James Horton (*not Halo James*) on 022 183 1042. Anything fresh (pre-maggot stage) is welcome. Make sure you wear gloves when handling the animal and double bag and freeze it if possible.



## FREE MICROCHIPS FOR CATS

**Pet Doctors** at The Gardens Vet only charge for the cost of a consultation (\$20 vet nurse, or \$55 for vet) if you ask for a free microchip. NZ Companion Animal Register provides the free microchip and registration.

A microchipped and registered missing pet is three times more likely to get home when lost, and if lost, will get home faster!

If you want to book in for a microchip for your cat, please contact the **Gardens Vets** 03 473 0387.



## THANK YOU

Volunteer appreciation celebration night

What an amazing evening we had celebrating the efforts of our volunteers!

Over 100 people attended the event held at Carey's Bay Hotel. Spot prizes, certificates of appreciation, marvelous food and fantastic company; we are honoured to have such dedicated and committed people driving the projects. Thanks to everyone who attended, we look forward to another successful year.

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



Korora by Craig McKenzie

### Summer season reminders for keeping wildlife on beaches safe:

- If you spot wildlife on the beach take time to inform others of the sighting and make sure you give the animals plenty of space.
- If you find sick wildlife please report immediately to DOC at 0800 DOC HOT (0800 362 468).
- Walk your dog on a lead when on or near the beach. Even if your dog isn't known to attack wildlife their presence can still be very stressful to animals, which impacts breeding and eating.



Department of Conservation  
Te Papa Atawhai



Lottery Grants Board  
Te Puna Tahua  
LOTTO FUNDS FOR YOUR COMMUNITY



Predator Free  
Dunedin



DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti



Otago Regional Council