

ANNUAL REPORT

2023



Predator
Free
Dunedin



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Cover photo by Craig McKenzie.

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Creating a Predator Free Dunedin where wildlife and communities thrive.

Predator Free Dunedin is a conservation collective working collaboratively to protect native biodiversity and strengthen communities.

Together, our members share a long-term vision to get rid of possums, rats and stoats from Dunedin's urban and rural landscapes by 2050.

Proudly funded by...



Our community

Members



Delivery Partners



Foreword

Sally Peart, Chair

As Predator Free Dunedin completes its fifth year of contributing to the national goal of eradicating possums, stoats and rats by 2050, we have good reason to celebrate the significant biodiversity achievements which have resulted from the collaboration between our community and our three delivery partners, Otago Peninsula Biodiversity Group, The Halo Project and City Sanctuary.

The results being delivered are tangible and audible. We are consistently reminded of how our mahi is benefitting our local environment with reports of increases in numbers of tūī, kererū, pīwakawaka and riroriro in our local communities.

Within the outer three sectors of the Otago Peninsula, operations are focused on mopping up the remaining few possums. The use of thermal drones and scat dogs are being used as tools to provide confidence that the elimination targets are being met.

The City Sanctuary team, amongst other things, have worked to create a 'buffer zone' which will support the elimination efforts on the Peninsula and prevent the re-invasion of possums.

The Halo Project is trialing an AI based tool (FTP) which integrates with A220 traps and enables significant transfer of live data and images, helping inform the elimination efforts and substantially reducing the ongoing resourcing required for surveillance and maintenance.

At the governance level, Predator Free Dunedin has been working with delivery partners to ensure that the skills learned by the staff and volunteers are transferable to other delivery partners. The Board is mindful of some of the challenges ahead, with funding for Predator Free 2050 only guaranteed until 2025. While we hope the incoming Government remains committed to the kaupapa in the predator-free space, we are also focusing on additional funding opportunities. These will enhance our current activities as well as improving engagement with our community, including the business community.

Ko te pae Tawhiti whāia



A handwritten signature in black ink, appearing to be 'Sally Peart'.

Sally Peart

Trust Chair



Our Impact



7,877

devices on the ground



33,000+

volunteer hours



3,500+

different native or
endemic species
observed in Dunedin



57,468

possums removed



25,880

rats removed



1,807

mustelids removed



23

full time staff currently
employed or contracted



67,419

hectares funded to
receive predator
control



5,000+

supporters



Foreword

Rhys Millar, Project Lead

It has now been five years since Predator Free Dunedin launched, with a collective goal of leading our community to eliminate possums, rats and stoats from Dunedin's urban and rural landscapes by 2050.

Looking back, it is heartening to see how far we've come. Together, with our three Delivery Partners, we have removed nearly 60,000 possums, over 20,000 rats and nearly 2,000 mustelids from Dunedin's landscapes.

New tools and techniques have been essential to our progress towards possum eradication. Possum detection dogs were used for the first time on the Otago Peninsula, alongside thermal drone work to locate and remove remaining possums in Sectors 1 to 3.

City Sanctuary have been working hard on a 'coastal buffer zone' to prevent the re-invasion of possums to the Peninsula. Alongside this, they continue to lead community predator control efforts across the city.

Over in the Halo Project, the team continues to make good progress towards the goal of 'zero-density'. Self-resetting AT220 traps are being fitted with an AI tool which will improve the efficiency of predator control by connecting the traps in a network, as well as having the potential to be used as a monitoring tool in the near future.

All of this work could not be done without the involvement of the community and volunteers who this year contributed over 33,000 hours of their time. Community is at the heart of the project, and in addition to our own volunteers, there are now many conservation groups across Dunedin which the project is proud to support.

More and more, we are hearing reports from our local community of increasing native wildlife. Improving native biodiversity should inform all that we do, and we are now implementing outcome monitoring techniques that can be applied across the entire project area.

Collaboration, both between our three Delivery Partners, and outside of our organization, is key to achieving the predator free vision. This year has seen the start of staff sharing across the three Delivery Partners, allowing us to allocate specific skills, or more time, where it is needed most in the landscape.

Collaboration with other organisations, and our community is the project's greatest strength. Thank you to all of our funders, members, partners, volunteers and supporters for increasing Dunedin's birdsong.



Rhys Millar

Project Lead



About the Predator Free Dunedin Trust

The Predator Free Dunedin Trust is the governance body for our work.

The primary goal of the Trust is to eradicate predators from Dunedin's urban and rural landscapes by administering grants from core funders, providing strategic project management to the wider community, and enabling effective community engagement and communications efforts that will further public support and build the social license for the Predator Free Dunedin vision.

Purpose

"The Predator Free Dunedin Trust promotes the conservation, preservation and protection of New Zealand's native species to enrich our environment and communities through the long-term goal of eradicating introduced predators, such as possums, mustelids and rodents from Aotearoa."

Board

Predator Free Dunedin's board is elected by member organisations to provide strategic oversight and advice that ensures goals and outcomes are being met effectively. An Independent Chair is appointed by Trustees to lead this group.



Sally Peart
Independent Chair



Kent Chalmers
Trustee



Mark Hanger
Trustee



Matt Harcombe
Trustee



Hoani Langsbury
Trustee



Jordana Whyte
Trustee

Legal name of Entity:

Predator Free Dunedin Charitable Trust

Type of Entity and Legal Basis:

Charitable Trust and Registered Charity

Charity number:

CC56089

Business location:

Dunedin, New Zealand

Auditors:

Crowe's

Bankers:

SBS Bank

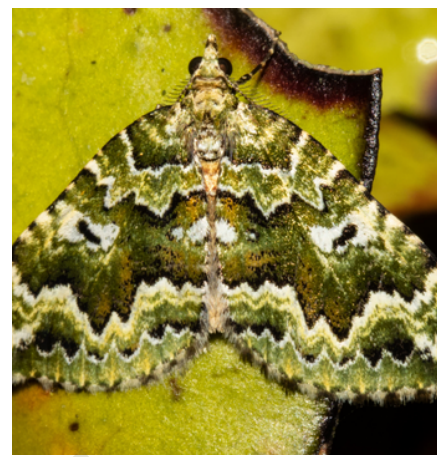
IRD number:

127 004 960

Date of establishment:

20 September 2018





Outcome one:

To promote the conservation, preservation and protection of New Zealand's native species.

Outcome two:

To implement long-term programmes that will eradicate introduced mammalian predators, such as possums, mustelids and rodents.

Outcome three:

To educate, engage and raise the awareness of the public, with respect to the conservation, protection and preservation of New Zealand's native species and the need for predator control of mammalian predators to achieve that goal.

Outputs:

Three grants were provided to the Otago Peninsula Biodiversity Trust (\$543,943), the Landscape Connections Trust (\$894,480), and Dunedin City Council (\$543,943). These enabled our Delivery Partners to carry out strategic and coordinated predator control that contributes towards our wider vision for a Predator Free Dunedin by 2050.

Overheads and operational costs supported governance, financial management, project management and stakeholder engagement to enabled strategic predator control operations, public engagement, and the alignment of research and innovation with operations. Regular newsletters, media stories, and social media content helped to further engage with stakeholders and the general public.



Collaboration and community



Community science for possum reports

The second year of our 'Spotlight on Possums' event was very successful, even gaining live coverage on TV One Breakfast!

The community science project is aimed at getting people involved in conservation and promotes the use of our 'Report a Possum' tool. It allows members of the public to report any possum sightings from anywhere across Dunedin. These reports feed directly to our operational teams on the ground.

Despite the cold, hundreds of people across Dunedin went out to look for possums in the trees and bushes of backyards and reserves during the week long Spotlight on Possums in June. Over 160 reports were made with 73 people seeing a possum.

Thanks to the efforts of the community, we now have a better understanding of how many possums are in Dunedin, which helps us figure out the best places to focus predator control efforts.



Kākā working group

In May this year, representatives from the Halo Project, Predator Free Dunedin, Department of Conservation, Te Rūnanga o Ōtākou, Kati Huirapa Runaka ki Puketeraki, and Orokonui Ecosanctuary gathered together for the day.

The main purpose of the event was to build trust and confidence in current and emerging predator control tools and processes and, through this, build stronger partnerships together.

Overall, the meeting was a great success. The shared values of all organisations were acknowledged, and a plan for future get-togethers and further relationship building between organisations was established.

Parties came away happy with the tools being used to remove invasive predators and protect taonga species.



Ngā haumāuiuitanga

Achievements to date

Large-scale predator eradication projects

Taranaki: 2,000 ha of Kaitake farmland is in the defence phase where possums have been eliminated. Hit their goal of having one-in-five households involved in the trapping programme.

South Westland: 45% (43,574 ha) of the project area is in the defence phase and is effectively free from rats, stoats and possums.

Walheke Island: Tracking to eradicate stoats by December 2023. Rat trials have started to provide information that will be helpful in any attempt to eradicate rats from the Island.

Hawke's Bay: 5,500 ha of the Māhia Peninsula is possum-free and the project is on track to eliminate possums from the whole peninsula by December 2023 (14,600 ha).

Wellington: Weasels and stoats have been eliminated from Miramar Peninsula (1000ha) since July 2020, and Norway rats since January 2022. Ship rats have now been eliminated from 850ha of the peninsula, with elimination of the remaining animals underway.

Dunedin: On track to remove possums from Otago Peninsula by Sept 2024. Predator Free Dunedin is mopping up the last remaining possums in the first three operational sectors of Otago Peninsula (approximately 4,400 ha).

18

Large-scale predator eradication projects

3

of these projects are iwi-led.

Currently covering **790,590 ha**

Predator Free Peninsula



This year, the Otago Peninsula Biodiversity Group (OPBG) have been using a combination of tools and expertise to remove possums and are getting closer to the goal of complete elimination by the end of 2024.

The outer areas of the Peninsula are now down to very low possum numbers. Removing the last few individuals from an area is always a challenging part of predator eradication. Strategic placement of trail cameras, different traps, drones, trained dogs, and skilled hunters are some of the tools being used.

The majority of possums left on the Peninsula reside in the largest management area 'Sector 4'. This area runs from Portobello to the urban end of Waverley and Shiel Hill. Beyond Portobello (Sectors 1, 2, and 3), possum numbers are now very low, so OPBG want to limit reinvasion into that area.

To crack down on Sector 4, OPBG pulled together all their resources; staff, contractors, dogs, and different devices.

Landowners were given a list of control techniques to choose from and the team used whatever was most effective and appropriate for each property. The team started from The Cove and worked their way systematically across all of Sector 4, ending in Sandymount. During this operation, the team and contractors removed a total of 1024 possums. Community volunteers contributed an extra 93 catches, bringing the total to 1117 possums.

Community catches in the area have been decreasing since this operation, which is a good indicator of decreased possum numbers. Early in the year, community catches across the whole Peninsula were around 48 per month. In August, that dropped down to just three.

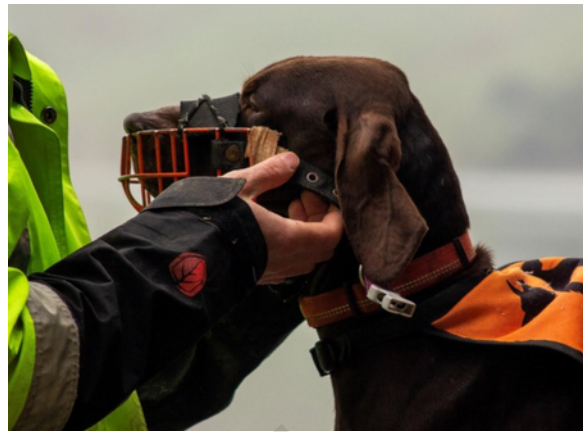
Detection dogs have proved to be an extremely useful tool for detecting and removing possums on the Peninsula. Hoegh Hunting and their dogs visited the Peninsula twice this year, focusing on searching for possum sign in Sectors 1, 2, and 3, where final mop up operations are occurring.



These searches proved successful at locating and removing remaining possums that had avoided traps.

Alongside detection dogs, OPBG and PFD have been making use of drone technology to track down the remaining possums with the help of High Country Contracting. The team used a drone to cover almost the entire area within Sector 3. The drone has thermal imaging capability as well as a heavy-duty spotlight. A scan of the terrain is monitored in real time by staff, with a motorbike and shotgun at the ready to deal with any possums spotted. The team were delighted that not a single possum was found in Sector 3.

Drone technology and specialist dog teams will become increasingly important as the team clears more areas of possums and seek out the remaining individuals.



Regular monitoring shows that there has been a notable increase in tūī, korimako (bellbird), and kererū populations.



Increased reports from the community of more fruit produced on fruit trees.



Reports from residents of over 10 different tūī visiting their bird-feeders!



Kererū are moving into new territories further down the Peninsula. The increasing numbers and spread of tūī and korimako has been described as 'remarkable'.



City Sanctuary



City Sanctuary continues to build on incredible community trapping efforts to bring possum numbers down to zero in key areas of the city. The focus is to create safe habitat for native wildlife within the city, and to protect possum re-invasion into the Otago Peninsula and Halo Project zones.

This year the project began shifting to a 'detect and remove' approach at the crucial northern and coastal boundaries. This is where monitoring efforts are amplified to locate individual animals, using cameras, auto-lure pumps, sticky fur seeker devices and physical searching for scat and markings.

In the northern boundary suburbs of Leith Valley, Pine Hill and North East Valley, where the aim is to reduce possums to 'zero detectability', the team have intensified trapping efforts, deploying more traps on council reserves and recruiting residential trappers. Thanks to the diligent efforts of staff, volunteers and backyard trappers, more than 1900 possums have been removed from the northern suburbs since traps opened three years ago.

This area is home to Dunedin's only known urban population of titipounamu (rifleman) at Ross Creek Reserve and the well-loved Botanic Garden where gardeners this year reported one of the best spring displays of flowering magnolia trees due to less damage by possums.

On the other side of town, a web of 145 possum traps now covers the hills surrounding Kew and St Clair. This has been a priority as the area is likely a corridor for possums to get to the coastal buffer bordering the Peninsula. Almost 450 possums have been removed from key habitat, including some of the GPS-collared possums from the Manaaki Whenua study last year!

While large parts of South Dunedin are densely urban and industrial, forming a barrier for possums between the Peninsula and the rest of the city, a corridor of vegetation along the coast links St Clair to the Peninsula. Preventing possums entering the soon-to-be possum free Peninsula is top priority. No possums have been detected by trapping and monitoring lines, indicating possum numbers are very low.



Despite this, City Sanctuaries are intensifying surveillance for detection, as density estimates based on habitat type suggest this urban coastal zone could be home to around 45 possums.

To prove there is no threat of reinvasion from the city, the team will be expanding monitoring efforts and implementing the 'detect and remove' approach targeting elusive possums. A network of night-vision cameras will provide panoramic insight into any possums moving in the area, while staff scour the landscape with thermal imagers. This work is carefully phased to align with OPBG's possum elimination plan, to help mop up any remaining possums at the entrance to the Peninsula.



Inspiring communities is core to the City Sanctuary project. This year the team has been supporting local trapping groups and sharing knowledge with other similar projects around the country. A highlight of the year was celebrating the official launch of Aroha Kaikorai Valley and expansion of Brighton Trapping Group's area.

To date, more than 11,000 predators have been removed from Dunedin City. It's exciting to see volunteers, backyard trappers, and community groups increase across the city as more people feel inspired to work toward a predator free Dunedin.



Tomtit and South Island Robin spotted in the Signal Hill area.



Kākā sightings in Leith Valley, Woodhaugh, and North East Valley. Residents are encouraged to report sightings to the Kākā Database (kakadatabase.orokonui.nz)



"Big improvement' in tree health at Dunedin's Botanic Garden where flower buds and new growth were left untouched by possums.



Halo Project



The Halo Project continues to broaden its scope, and with this, large scale benefits are now being seen across the landscape and community.

Since 2018, Halo have been working to get possums down to 'zero density' within a 10,000 hectare area surrounding Orokonui Ecosanctuary. Zero density means that the number of animals in the area are so low that they can't reproduce. The Halo team are proud to be tracking well towards achieving this goal.

Last year, the Halo Project operational area was expanded to include a 33,000 hectare 'buffer zone', west of State Highway 1. Within one section of this buffer zone, a comprehensive network of 421 automatic, self-resetting AT220 traps have been established by the team to act as a 'buffer' against reinvasion into the area. The AT220's are game changers for the project, as they reset and re-lure automatically, with the ability to reset 100 times or last up to 6 months before batteries need recharging or lure needs refilling. This technology has proved to be incredibly useful at targeting possums in hard-to-reach areas throughout every day of the year.

The Halo Project are now the largest user of this trap in the country. They have installed more than 800 AT220 devices in total and plan to install yet a further 1,000 across the buffer zone. These devices have removed over half as many predators (9,834) than all other devices in this period combined (17,946).

While these numbers deserve celebration, it's the outcomes that make the work all worthwhile – healthier forests, less predation on taaka species, cleaner waterways, connection and shared purpose for local communities.



Alongside possums, the Halo Project have also been targeting mustelids. A network of over 1,000 DOC150/DOC200/DOC250 devices have been installed in the Halo 'zero density' zone. This network also targets hedgehogs and rats which all helps to reduce the threat of introduced predator incursion at Orokonui Ecosanctuary. Dedicated volunteers take care of these devices, checking and re-setting them around 16 times a year.



Halo's 'host a possum trap' scheme continues to gain popularity within the community. To date, the current total number of backyard possum traps is at 340!

As introduced predator numbers continue to drop, the team expects to see more trees flowering and fruiting, as well as lush canopy growth. This lush canopy will support increasing native wildlife such as birds and lizards.



Study finds a significant increase in native foliage cover at study locations on Mihiwaka from a mean of 62.4% cover in 2016 to 74.8% cover in 2020



South island robin/kakarūwai increasingly seen in the Halo Project area. A combination of existing wildlife populations and birds moving beyond the fence at Orokonui Ecosanctuary.



Increasing reports of kākā in the area and loud birdsong.



Research and Innovation

Exploring new AI assisted predator control and monitoring

FTP Solutions is a global technology company developing an exciting new tool which aims to improve our ability to monitor both native and pest species, as well as improve introduced predator removal efforts.

The FTP devices are being connected to AT220 automatic, self-resetting traps in the Halo Project area. This creates a joint network of traps that communicate with each other. These devices detect when a predator approaches a trap, take a series of images of that predator, and then automatically classify the introduced predator using AI and machine learning techniques to decide whether it is a target, or non-target species. This addition to the AT220 traps will be extremely useful as it ensures that the traps will deactivate if any animal other than the targeted introduced predator interacts with it.

This tool will be particularly useful in areas with low numbers of predators. It will instantly let the Halo team know when an introduced predator has approached a trap so the team can then target their resources to where they are most useful and beneficial, ultimately improving the efficiency of the project.

In addition to improving introduced predator control efforts, this device has the potential to be used for native biodiversity monitoring. Essentially a smart AI camera, these devices could communicate the presence of specific native species with team members instantly. This would be far more efficient and cost effective than standard trail cameras.



Financials

The Trustees are responsible for preparing the financial statements and ensuring that they comply with generally accepted accounting practice and fairly reflect the financial position of the Predator Free Dunedin Trust as at 30 June 2023 and the results of their operations for the year ended on that date.

The Trustees consider that the financial statements of the Predator Free Dunedin Trust have been prepared using appropriate accounting policies, consistently applied and supported by reasonable judgments and estimates and that all relevant financial reporting and accounting standards have been followed.

The Trustees believe that proper accounting records have been kept which enable, with reasonable accuracy, the determination of the financial position of the Predator Free Dunedin Trust and facilitate compliance of the financial statements with generally accepted accounting practice.

The Trustees consider that they have taken adequate steps to safeguard the assets of the Predator Free Dunedin Trust, and to prevent and detect fraud and other irregularities. Internal control procedures are also considered to be sufficient to provide a reasonable assurance as to the integrity and reliability of the financial statements.

The Trustees are pleased to present the financial statements for the year ended 30 June 2023. The Financial Statements are approved and authorised for issue.

SIGNATURE:

NAME:

POSITION:

DATE:

The following statements are to be read in conjunction with the accompanying Notes and the Audit Report, which can be downloaded at our website (www.predatorfreedunedin.org)



STATEMENT OF FINANCIAL PERFORMANCE

For the year ended 30 June 2023

	2023	2022
REVENUE		
Donations and Grants Received		\$ 2,251,414
Cost Recovery		\$ 11,327
TOTAL REVENUE		\$ 2,262,741
EXPENDITURE		
Costs Relating to Providing Services		\$ 290,905
Grants and Donations Made	\$ 1,954,355	\$ 1,645,818
Other Expenses		\$ 104,348
TOTAL EXPENSES		\$ 2,041,071
PROFIT FOR YEAR		\$ 221,670



BALANCE SHEET

As at 30 June 2023

	2023	2022
ASSETS		
Current Assets		
Bank Accounts and Cash		\$1,697,945
Debtors and Repayments		\$13,346
Inventory		\$ 607
GST Refund		\$ -
TOTAL CURRENT ASSETS		\$1,711,898
LIABILITIES		
Current Liabilities		
GST Payable		\$57,936
Accounts Payable		\$20,374
Rounding		\$ 1
Grant Funds Not Yet Distributed		\$1,359,309
TOTAL CURRENT LIABILITIES		\$1,437,621
NET ASSETS		\$274,278
ACCUMULATED FUNDS		
Capital contributed by owners or members		\$ -
Accumulated surpluses or (deficits)		\$272,278
Reserves		\$ -
TOTAL ACCUMULATED FUNDS		\$272,278



STATEMENT OF CASH FLOWS

As at 30 June 2022

	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash was received from:		
Donations, fundraising and similar receipts		\$ 3,508,530
Interest, dividends and other investment receipts		\$ —
Net GST		\$75,707
Cash was applied to:		
Donations or grants paid		\$1,645,557
Payments in relation to providing services		\$402,772
NET CASHFLOW FROM OPERATING ACTIVITIES		\$1,535,907
CASH FLOWS FROM INVESTING AND FINANCIAL ACTIVITIES		
Cash was received from:		
Capital contributed from owners or members		\$ —
Cash was applied to:		
Payments to purchase Investments		\$ —
NET CASHFLOW FROM INVESTING AND FINANCING ACTIVITIES		\$ —
NET CASH FLOWS		\$1,535,907
NET INCREASE/(DECREASE) IN CASH		
Opening Cash		\$162,038
Net Change in Cash		\$1,535,907
Closing Cash		\$1,697,945



STATEMENT OF ACCOUNTING POLICIES

As at 30 June 2023

1 Statement of Accounting Policies

Basis of Preparation

Predator Free Dunedin has elected to apply PBE SFR-A (NFP) Public Benefit Entity Simple Format Reporting – Accrual (Not-For-Profit) on the basis that it does not have public accountability and has total annual expenses of equal to or less than \$2,000,000. All transactions in the Performance Report are reported using the accrual basis of accounting. The performance report is prepared under the assumption that the entity will continue to operate in the foreseeable future.

2 Specific Accounting Policies

Accounting policies which materially affect the financial statements have been applied as follows:

Goods & Services Tax

All amounts are recorded exclusive of GST except for debtors and creditors which are stated inclusive of GST.

Income Tax

Predator Free Dunedin Trust is wholly exempt from New Zealand income tax having fully complied with all statutory consistent conditions and exemptions.

Bank Accounts and Cash

Bank accounts and cash in the statement of cash flows comprise cash and bank balances (including short term deposits) and original maturities of 90 days or less.

Revenue

Predator Free Dunedin receives the bulk of its revenue from key funding providers: Predator Free 2050 Limited, Otago Regional Council, Dunedin City Council, Wenita Forest Products (New Forests), and City Forests.

Grants and donations are recorded as revenue on receipt unless there is a 'use or return' condition attached. Grants or donations with use or return conditions are recorded as a liability until the conditions have been satisfied and are recorded as a liability until the conditions have been satisfied and are recorded as revenue.

Fixed Assets

The Trust owns no property, plant and equipment as at balance date.

Tier 2 PBE Accounting Standards

The Trust has not adopted any Tier 2 PBE Accounting Standards in preparation of these accounts.

Changes in Accounting Policies

There have been no changes in accounting policies during the financial year.





**Predator
Free
Dunedin**

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Dunedin 9054

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