



# Pomona Island Charitable Trust Annual Report 2022/2023



## **Significant Events 2022/2023**

### **Pomona Island**

Pindone operation on Pomona Island to deal with high rat numbers  
Bait station network on Pomona upgraded  
David Cary continuing audio monitoring of kiwi on Pomona  
Trap trigger detection system expanded

### **Rona Island**

Mouse incursion on Rona Island - incursion response mounted  
Rona again used as creche for Haast tokoeka  
Lynley King continuing gecko monitoring project on Rona  
Tracking tunnel network on Rona Island upgraded  
Bait station network tracks improved

### **Communication**

All trap and trapping data transferred to trap.nz  
Public information evening held in August  
Participation in SERN meeting with a presentation and a field trip to Pomona and Rona  
West Arm display currently being updated

### **Trustees**

Fraser Skinner appointed Trustee and Treasurer  
Hannah Edmonds resigned from Trust  
Simon Marwick appointed new Trustee

# Pomona Island Charitable Trust Trustees 2022/2023



Professor Sir Alan Mark  
Patron



John Whitehead  
Chair



Simon Marwick  
Trustee



Fraser Skinner  
Treasurer



Liz Scott  
Trustee



Paul King  
Secretary



Gerard Hill  
Trustee



## **Introduction**

This Annual report records the activities of the Pomona Island Charitable Trust over the financial year from 1<sup>st</sup> April 2022 to 31<sup>st</sup> March 2023.

## **Organisation**

7 meetings were held in the 2022/2023 year.

Meetings were held in April, June, August, October and November 2022 and January and February 2023.

The AGM was held in August 2022.

Fraser Skinner was appointed Trustee and Treasurer in April 2022.

Hannah Edmonds resigned from the Trust in October 2022.

Simon Marwick was appointed Trustee in October 2022.

At the AGM in August:

John Whitehead was re-elected as Chair.

Paul King was re-elected as Secretary

Fraser Skinner was re-elected as Treasurer

The make-up of the Trust at 31<sup>st</sup> March 2023 was therefore:

John Whitehead	Chair
Fraser Skinner	Treasurer
Paul King	Secretary
Liz Scott	Trustee
Gerard Hill	Trustee
Simon Marwick	Trustee

The Trust is registered as a charitable entity under the Charities Act 2005 (CC22629). This registration enables the Trust to be exempt from tax, which means that anyone donating money to the Trust can claim the tax back on their donations. The Trust files annual returns which are available for public viewing on the Charities Services website.

## **Relationship with DOC**

We are awaiting a new Chief Ranger (Biodiversity) to be appointed in the Te Anau office before we obtain a new DOC/Trust liaison officer.

We would like to thank several staff in the DOC Te Anau office who have assisted the Trust this year: Pete McMurtrie, Jenny Rickett, Crystal Brindle, Jo Marsh, Jamie McAulay.

The trust liaises with DOC Haast over kiwi matters.

## **Funding**

We are grateful to the following for financial support during 2022/2023 (Excluding GST)

DOC Haast (\$8000) for protection of kiwi habitat

Sale of traps to DOC as a fundraiser (\$800)

Friend's donations (\$8630) - this includes several significant donations from AAT Kings NZ tourism, through Fiordland Jet (\$4,900)

West Arm donation box (\$807)

Interest (\$2506)

Gary Chisholm continues to fund the trap trigger detection system through generous donations.

## **Predator control Pomona Island**

### **Rats**

15 trips to Pomona Island have been completed since March 2022, principally to carry out pest control and monitoring.

Between April 2022 and March 2023, 615 rats were removed from stoat traps on Pomona Island.

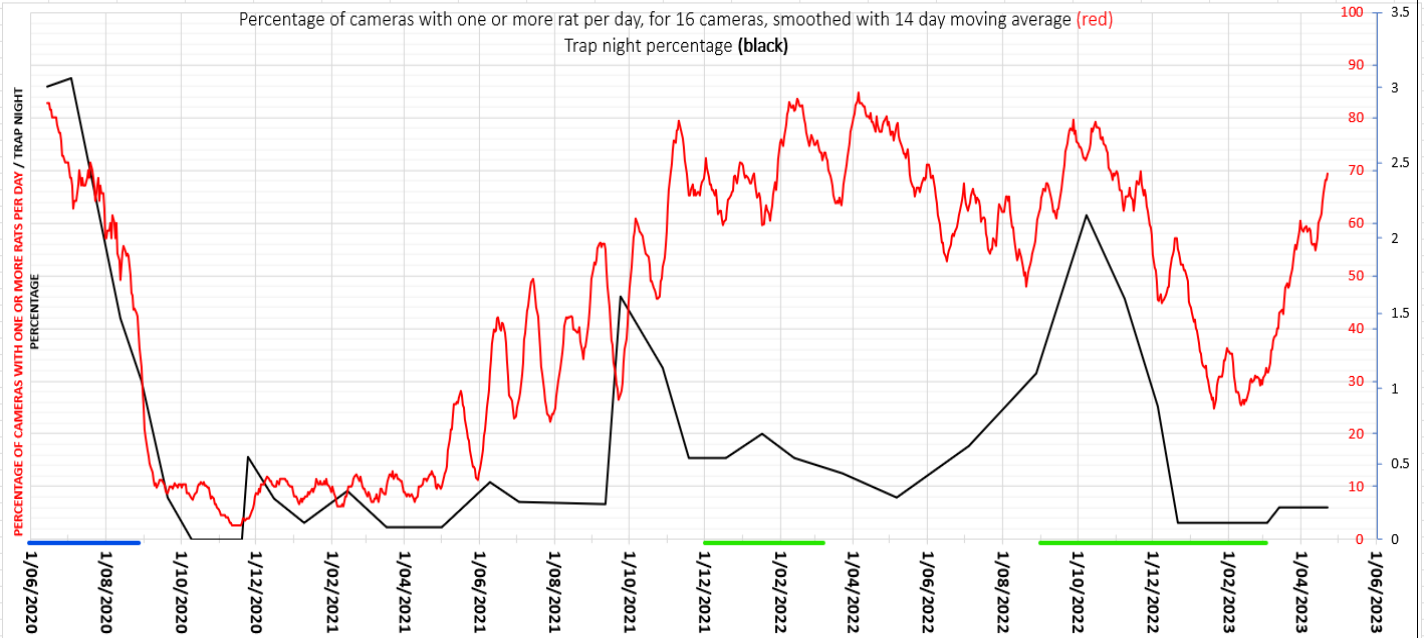
During this period, two attempts at rat control were made using pindone in bait stations. The first operation started in October 2021 and continued until May 2022, when all bait was removed. The bait uptake was low. Rat numbers started to increase in the spring of 2022, when a second pindone operation was initiated by trustees. Contractors were engaged (CWAC) to carry out three bait station fills in November 2022. The operation continued until March 2023 when all bait was removed.



*Rat damage to traps on Pomona Island*

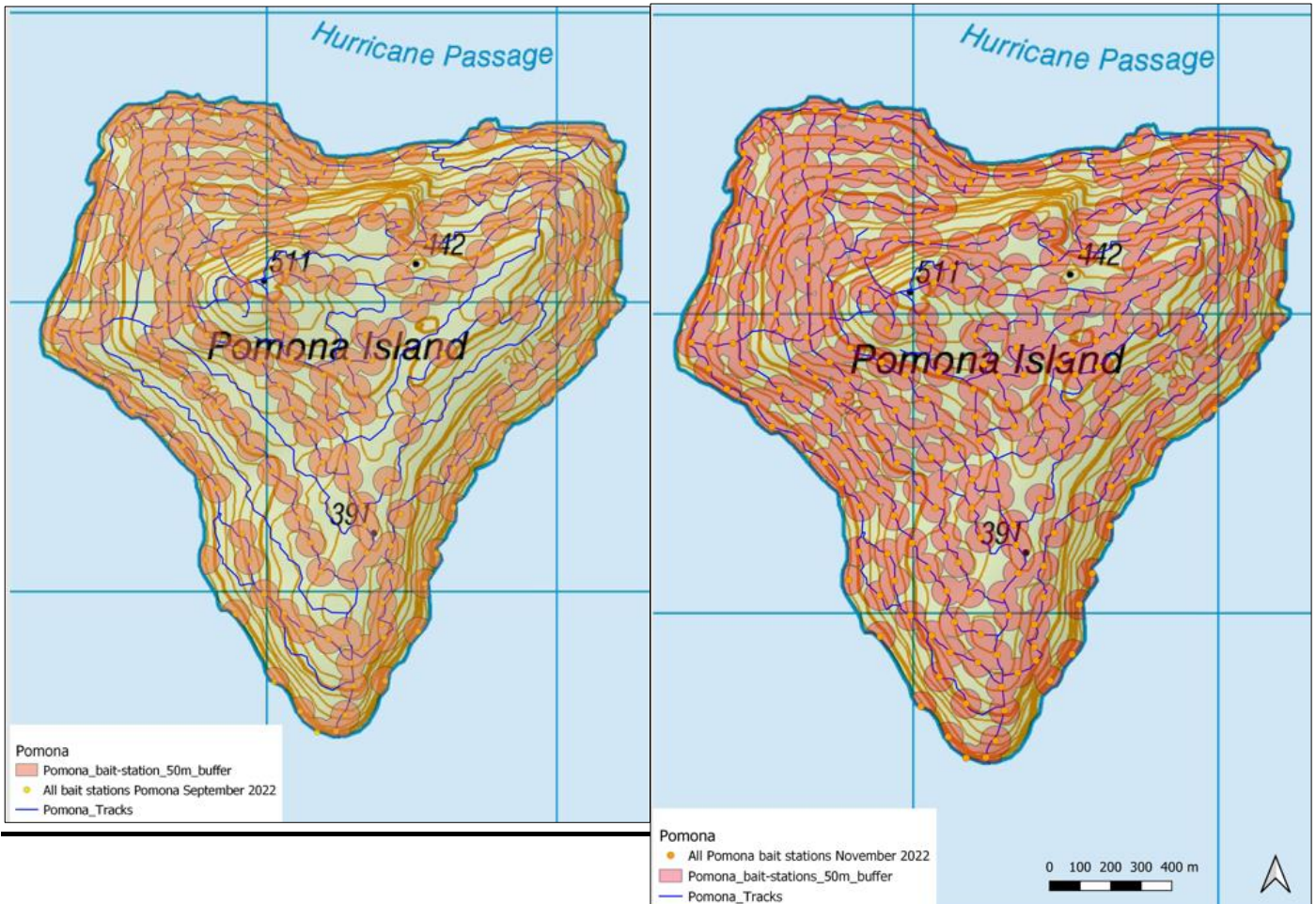
The differing effect of these two periods of toxin use can be seen clearly on the graphs below. The blue bar shows the timing of the brodifacoum operation in 2020. Green bars show timing of recent pindone operations. During 2021/22, bait was not taken by rats, as the camera data shows high numbers and low trap night percentages, indicating that the rats were not hungry. Bait uptake was much higher in spring 2022 and into 2023, and rat numbers dropped, however, not to such low levels as in summer 2020/21.

It is hoped to pursue further poison operations in the next few years to keep rat numbers to absolute minimums, and keep stoat numbers at zero.



The bait station network on Pomona Island has been upgraded to improve coverage. Previously, there were 179 bait stations. Simon Marwick was contracted to add another 85 stations, taking the total to 264 stations. The two 50m buffer maps below show the improved coverage.

Left: before upgrade. Right: after upgrade.



## Stoats

9 sightings of a stoat on camera have been made since April 2022, and no stoats were caught in traps. It is thought that there may be a solitary stoat on the island at present.

A stoat seen on camera in May 2022 (left) and February 2023 in the daytime (right)



## Camera monitoring

Our camera network across Pomona has continued to operate well, giving a reliable measure of the rat population, together with detecting stoats. There are now two Automatic Lure Dispensers, which are popular with kiwi.

Left: A family of rats seen on camera on Pomona Island

## Trap Trigger Detection System

The trap trigger detection system has continued to be upgraded this year by Gary Chisholm, with help from volunteers. There are now 14 stoat traps with the trigger system installed, as well as a solar-powered roving repeater. Technical problems have caused a couple of outages. Pomona Island is a harsh environment for electronics and is proving to be an excellent test area for the system.

## Pomona Mainland Traps

The Southland Trailer Yacht Squadron, led by Ross Forrester, serviced the traps to the north of Pomona Island approximately every 2 months. They sailed out to Hurricane Passage 5 times during the year, and caught 4 stoats and 31 rats in the 72 traps. They also service the traps at Stockyard Cove, to the south of Pomona Island.

## Predator control Rona

20 trips have been completed to Rona and 6 to the Rona Mainland since March 2022, to undertake pest control and monitoring.

### **Rats**

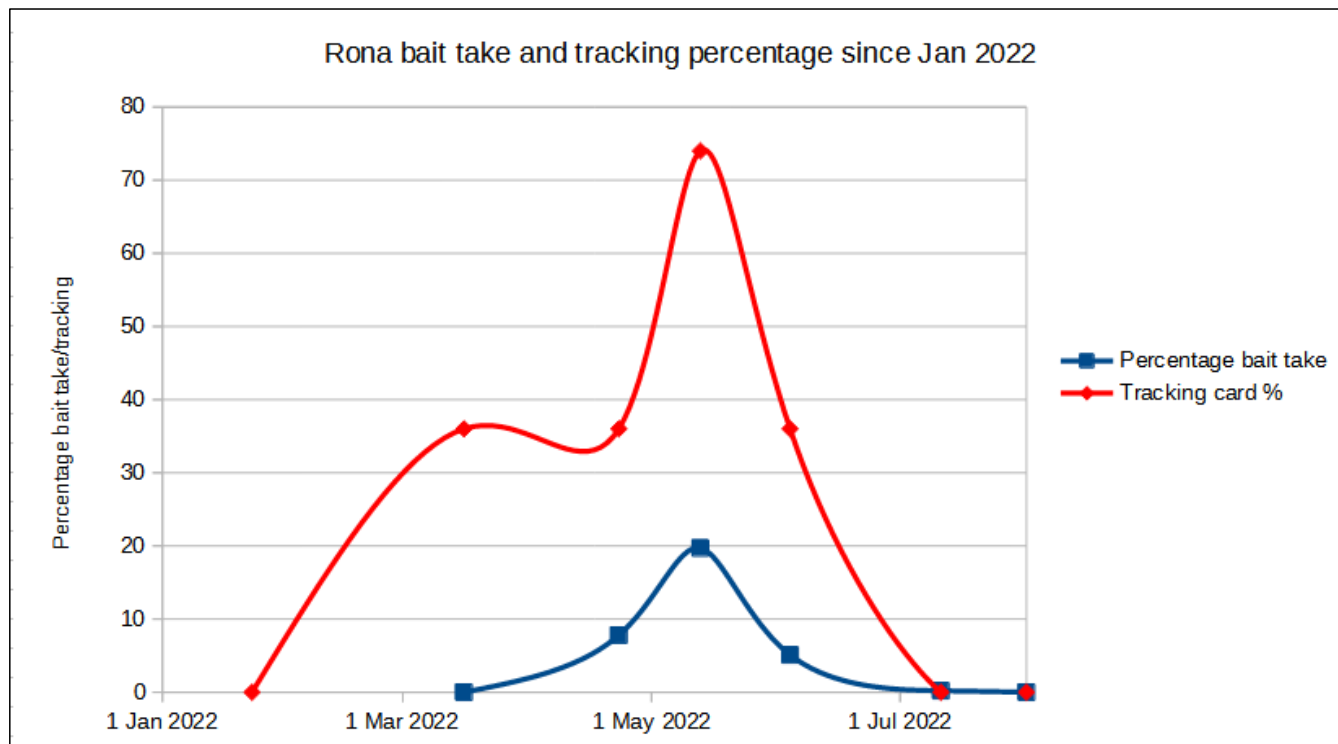
One rat was caught in a trap in April 2022. No other rats were detected until February 2023, when a possible rat sighting on camera was recorded.

### **Mice**

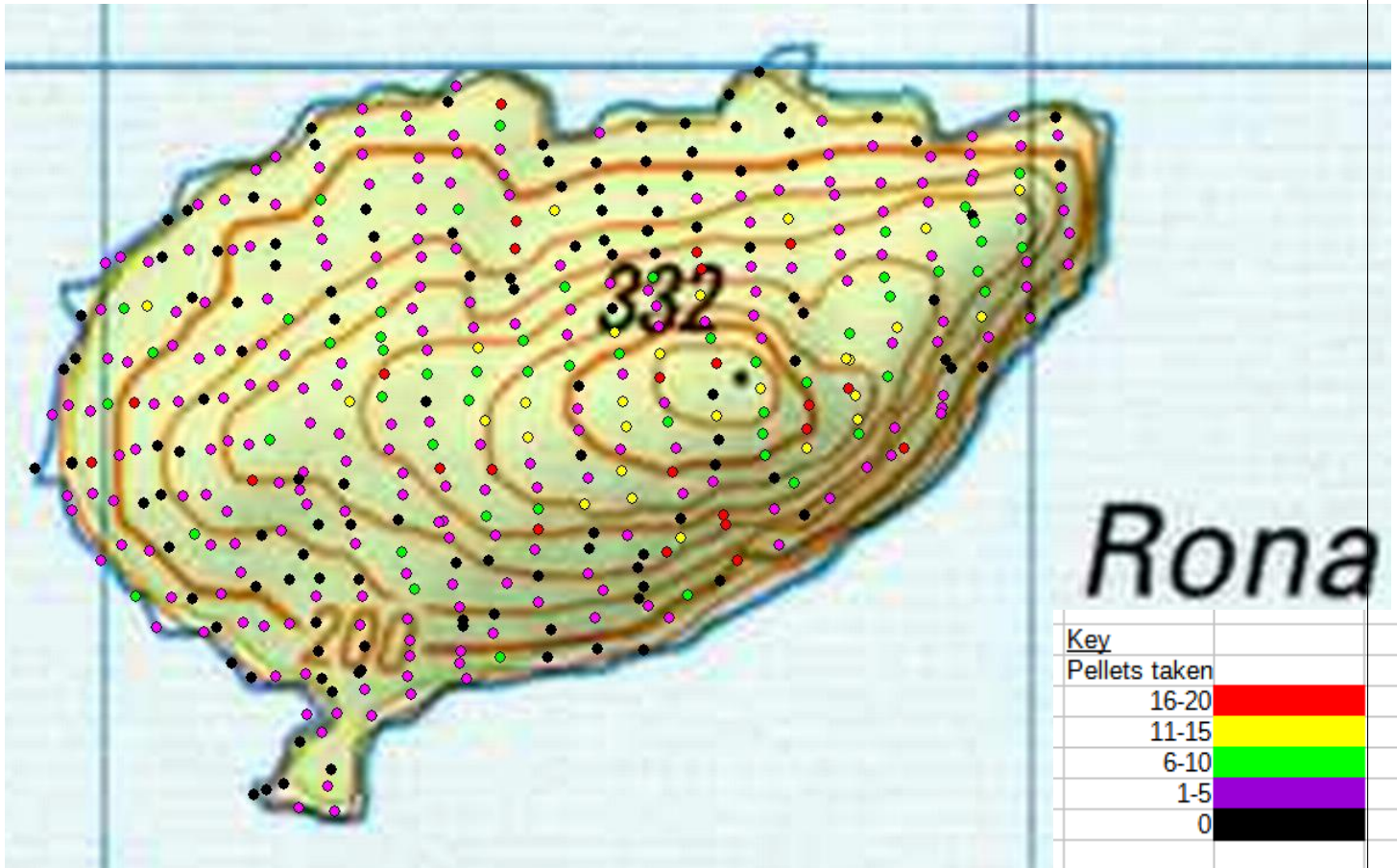
Mouse footprints were detected on tracking cards in March 2022, the island having previously been clear of mice since November 2020. The Trust mounted an incursion response with the help of DOC, using the existing bait station network to administer brodifacoum. On 9<sup>th</sup> April 2022, all bait stations were filled with 20 pellets of brodifacoum. The bait take was monitored over the next few months and bait stations topped up to 20 pellets. By mid-July, all tracking cards were clear of mouse footprints and the bait take had dropped to zero. See graph below. Over the winter of 2022, 14 trips to Rona were undertaken as part of the incursion response.



*Volunteers ready for another day on Rona Island*



At the peak of the incursion, mice were widespread across the island. The map below shows the number of pellets taken from each bait station in a 2 week period during late April 2022.



*Dawn briefing and drop-off for Rona Island mouse incursion work*

Meanwhile, the tracking card network was increased to 120 tunnels, placed along the bait station lines for easy servicing. Simon Marwick was contracted to improve the bait station network, re-labelling bait stations and remarking the bait station lines.

Close monitoring using the tracking card and camera networks continued. Mice were again detected in mid-February, 2023. This is thought to be a new incursion due to very warm lake temperatures over the summer. We are currently formulating a response with longer term goals in mind.

## **Camera Monitoring on Rona**

The network of 10 cameras across the island continues to work well and Automatic Lure Dispensers are now in operation in front of two of the cameras.

## **Rona Mainland traps**

Rodents and mustelids are an ongoing threat to Rona. The mainland traps to the north and west of Rona were serviced and the job of servicing these traps has been taken over by Kev and Mush from Manapouri. During the year, 6 stoats, 49 rats and 5 mice were caught around the Beehive and North Rona shorelines.

## **Haast Tokoeka**

### **Pomona**

Haast Tokoeka are regularly seen on most of the 16 cameras across Pomona Island. Various estimates of the population give around 30 individuals.

Volunteer David Cary has continued to run audio monitoring of Haast Tokoeka across Pomona Island. He is using around 10 audio moths at different locations at a time, although he has used numerous different sites over the course of the project.

There are further details and statistical analysis of his project at <https://skraak.kiwi/>

### **Rona**

After a short break as a creche site, Rona is now hosting juvenile Haast tokoeka. Since February 2023, 3 kiwi have been in residence.

Trust members and volunteers have been involved in releases, catching and medical checks for the kiwis on Rona.

Camera data has so far given the best indication that the population is breeding, as young birds can be identified on the camera network. Left: Adult Right: Juvenile

Below: Adult (left) and juvenile (right) at W01 on Pomona Island





## Keas

Several sightings of keas have been made on Pomona Island, and have been observed getting up to mischief. The character in the photo (right) is named Wheki and is known to authorities. (The Kea conservation Trust, <https://keadatabase.nz/birds/wheki>)



*Right: Wheki at G05 on Pomona Island*

## Rona Island geckos

Monitoring of the Kōrero gecko – “*Woodworthia* Otago/Southland large” was continued over the summer of 2022/23.

8 semi-permanent monitoring sites were set up in November 2022 on the NW shoreline of Rona. The sites have between 2 and 4 tracking tunnels lured with canned fruit. They were changed 7 times during the monitoring season.

Very encouraging results were obtained indicating a good population of geckos across the island. For example, Site 2 (R18), which has 3 tracking tunnels, recorded gecko prints 21 out of a possible 24 times.



Gecko prints were picked up on a rodent card in the middle of the island. This is the first positive sign of geckos living well away from the shoreline sites. There were 3 visual encounters with live adult geckos and small (young) gecko prints were seen on the cards. This evidence of young geckos is important for the health of the population and monitoring in the future will help understand Rona’s Korero. In the future the monitoring will tell us any impacts of mice on the population.

*Lynley King setting up a gecko monitoring tunnel on Rona Island*

## **Bird Monitoring**

A spring 2022 bird call count was taken on Rona.

Pomona bird monitoring is transitioning towards audio monitoring using electronic devices.

## **Health and safety**

The Trust has continued with their improved Safety Toolbox briefings at the start of every trip to the islands. All volunteers are briefed on Emergency Procedures, and have several methods of summoning assistance including PLBs.

## **Data collection and analysis**

All of the trapping, monitoring devices and bait stations have been transferred to the new trapping system <https://www.trap.nz/> It is being used mostly for navigation in the field using mobile devices, and for data storage and analysis.

## **Volunteers**

This year, volunteers have contributed a total of 1655 hours on Pomona and Rona since April 2022, representing 38 trips to the islands.

Two new volunteers have taken over the work of servicing traps around Rona emptying the mainland traps North and West of Rona. The Trust also thanks the Invercargill Trailer Yacht Squadron for servicing the trap network on the mainland to the north of Pomona Island.



## **Boat Transport**

Nick and Maree Key of Southern Frontiers Ltd Water Taxi Service are thanked for providing reliable and friendly transport to Pomona and Rona islands.

## **Communications**

In August, a meeting was held at DOC Te Anau, to inform the local community of recent work of the Trust.

Several topics were covered including:

- Kiwi Audio Monitoring
- Mouse incursion update
- What do cameras tell us on the islands?
- Gecko monitoring on Rona
- Trap trigger detection system

We also showed Andrea Vance's movie "This is how it ends episode 7 The Island" which was partly filmed on Pomona Island, and features Trust Chair John Whitehead.

In November, the Trust ran a presentation and field trip for the SERN meeting which was based in Te Anau. Members of SERN appreciated a field trip to both Pomona and Rona Islands, where we were able to further explain the work of the Trust.

Signage has been updated on Pomona and Rona Islands, to impress on visitors that some degree of quarantine of invasive plants and animals is required.

Lynley King has produced three issues of the popular "Pomona Post" newsletter this year. These are available on the Trust website <https://pomona-island.org.nz/news>



## **Conclusion**

The 2022/23 year has been one of hope and setbacks. On Rona, a significant effort to eradicate mice was followed by disappointment when mice were rediscovered on the island. On Pomona, attempts to control rat numbers with pindone were only partially successful. On a positive note, we have a breeding population of Haast tokoeka on Pomona and kiwi in the Rona creche.

### **Trustees of the Pomona Island Charitable Trust May 2023**

