Rona experienced a mouse incursion over summer 2021-22 Detected in March this year

Before this, Rona was free of all predators (rats, stoats, mice) although has had sporadic incursions One lone rat in 2019 – a male which we didn't catch. Not on the island any more 2020 – mouse incursion, dealt with by 2 fills of bait stations. No mice detected between Sept 2020 and March 2022

Rona is a valuable island as it is: Used for kiwi creche (Haast Tokoeka) Gecko population Incredible invertebrate population. All would be affected by a resident mouse population

Very special having a completely predator-free island on Lake Manapouri











Buncrana Island

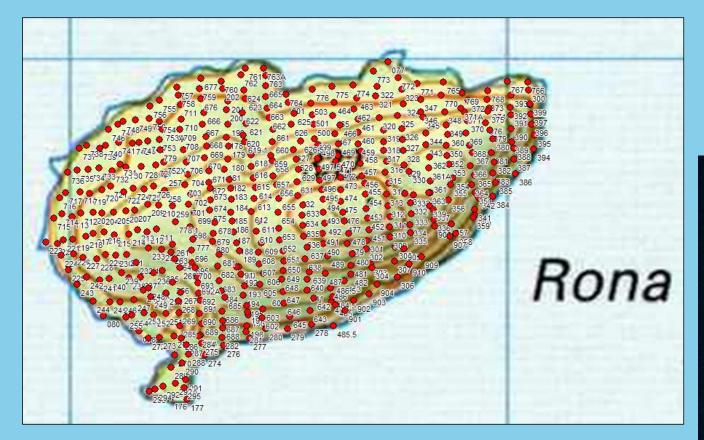
How did it happen?

600m from mainland

Extensive trap network on mainland and Rona but not specifically for mice. Pressure on the mainland mouse population

Lake surface reached 18 degrees over summer

Ideal for swimmers Climate change – this will happen more frequently

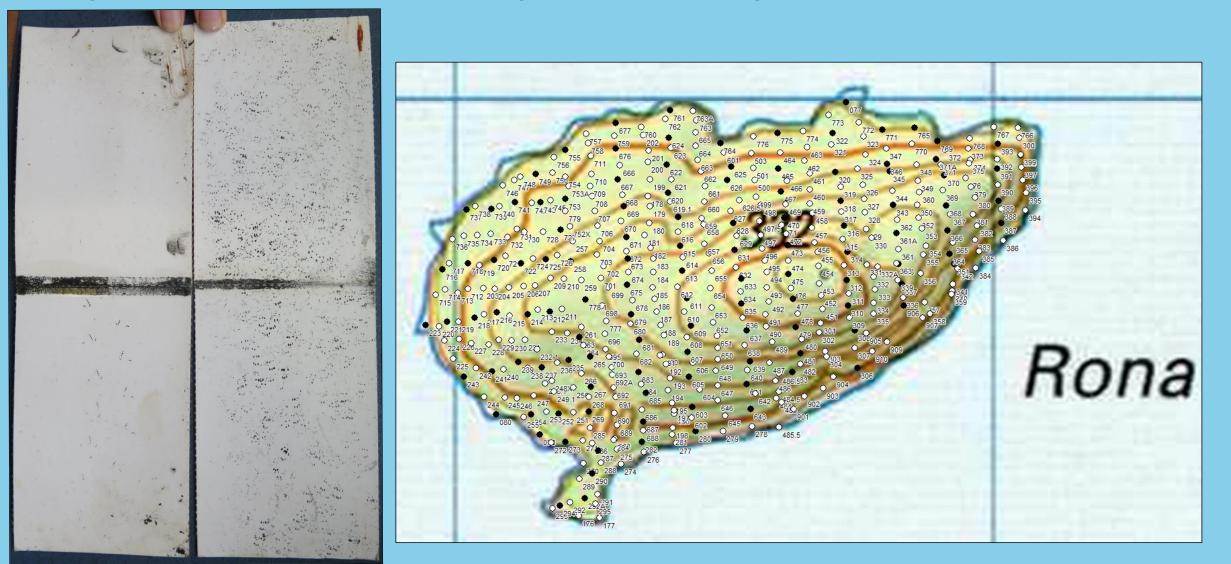


How we dealt with it.....

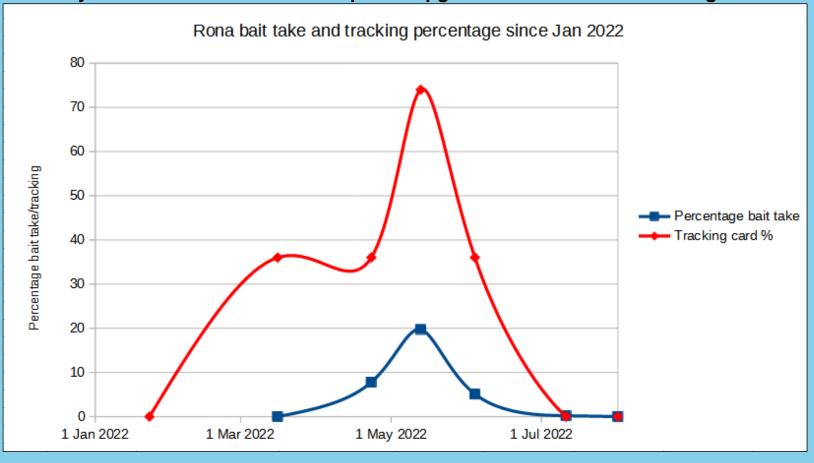
We have a network of 450 bait stations on Rona At 25m x 50m grid With advice from a TAG (DOC) it was decided to fill bait stations with brodifacoum, and also step up monitoring using tracking tunnels, cameras and mouse traps.



Tracking tunnels and cards – we now have 116 tracking tunnels on 100m x 50m grid



9<sup>th</sup> April – 20 pellets in each bait station Every 2-3 weeks, we topped up bait stations and recorded bait take Reduced to 10 pellets in June, reduced to 5 pellets in July Also checked existing tracking cards Upgraded bait station and tracking card networks 14 trips were made to the island during the bait and monitoring operation, operation done by volunteers. A contractor helped to upgrade the bait station labelling.



#### Rona bait take 13/05/22

#### Rona

- Rona bait stations 13th May 2022\_0\_BT
- Rona bait stations 13th May 2022\_1-5\_BT
- Rona bait stations 13th May 2022\_6-10\_BT
- Rona bait stations 13th May 2022\_11-15\_BT
- Rona bait stations 13th May 2022\_16-20\_BT
- Rona bait stations 13th May 2022\_MISSED\_BT

Map showing current traps, cameras and tracking tunnels on Rona Island.



All bait was removed at the end of August. Total input to environment approx 6kg brodifacoum

We have continued monitoring using tracking tunnels, cameras, and by checking mouse traps No mice have been detected – as of November 2022 we are mouse-free! We are also better prepared for the next incursion.....



