

Update on monitoring results

Pukunui predator control operation

Monitoring results for feral cats, possums and Rakiura tokoeka/kiwi are available following the aerial predator control operation on Rakiura/Stewart Island in August to protect pukunui/Southern New Zealand dotterel.

Feral cats and possums reduced to undetectable levels

Feral cats and possums have been reduced to such low levels that they were undetectable across the 40,000-hectare operational area for at least three weeks after 1080 bait was applied.

DOC has been monitoring feral cats, possums and kiwi, with a network of 100 trail cameras from Doughboy Bay up and over the tops of the Tin Range where pukunui nest.

We've gathered and analysed more than 400,000 images to compare the abundance and distribution of these species before and after the operation.

Prior to the operation, feral cats and possums were widespread, so it's a huge success that our cameras haven't detected any in the operational area for at least three weeks.

Feral cats are the number one predator of the critically endangered pukunui. This result gives us hope that pukunui will be able to nest in peace and safely raise a new generation of chicks over spring and summer.

The threat of feral cat reinvasion

While this is an encouraging result, the future is far from secure for pukunui. Feral cats will inevitably invade as we know there are still large numbers on the island, including at the non-treatment site at East Ruggedy where we have 50 cameras (see map on page three).

There are also feral cats in the bait exclusion area at Doughboy Bay, and a feral cat was recently caught in a trap just inside the operational area, highlighting how important it is for our rangers to maintain the trapping network as an extra layer of protection.

We want to understand if the operation covered enough ground to enable a successful breeding season as part of the Pukunui Recovery Project.

DOC's camera network will remain active this year to monitor the reinvasion and see how long it takes for feral cats to reach the Tin Range pukunui breeding grounds. We currently have three more weeks' worth of images to process, and will share the results when they are available.



Pukunui/Southern NZ dotterel. Photo: Glenda Rees

Update on pukunui nest surveying

DOC Rakiura rangers are surveying pukunui nests at multiple breeding sites across the island, and so far they have counted 15 eggs across four nests. Nest surveying will continue until December with more eggs - and ultimately chicks - expected but not guaranteed.

The Pukunui Recovery Project aims to increase the pukunui population from 105 to at least 300 by 2035. The next flock count is in April 2026.

Update on rat, deer and kiwi monitoring

DOC has 250 cameras in total across the operational area. This includes 150 cameras set up to monitor rats. We are currently sorting through these images and will share the rat results when they are available.

We are also gathering images of white-tailed deer as part of a broader study by Manaaki Whenua - Landcare Research on the use of deer repellent.

As expected, we have not observed any negative effects on kiwi, with consistent camera observations before and after the operation.



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A pair of Rakiura tokoeka kiwi observed by a trail camera within the operational area on September 3rd.

Predator Free Rakiura

Update on eradication trial

A predator eradication trial was delivered by ZIP in August across 6,500 hectares within the pukunui operational area.

It's the first ever attempt in New Zealand to trial an eradication of three species of rats with 1080.

The results are being monitored with a network of 325 trail cameras, and there are 1.5 million images to be processed.

Unlike feral cats and possums, artificial intelligence cannot accurately differentiate between the three species of rats in trail camera images — a small ship rat can look very similar to a big kiore.

This means the image analysis work must be done mostly by eye, and the data will take longer to process than the pukunui aerial predator control operation.

It's critical that the results are correctly analysed and interpreted as they will inform the next steps for Predator Free Rakiura.

See the latest updates about Predator Free Rakiura: www.predatorfreerakiura.org.nz/

Deer repellent research

ProDeer® deer repellent was used in 1080 baits across four bookable hunting blocks within the 40,000 hectare pukunui operational area.

Deer activity has been monitored for six weeks following the operation with a network of 250 cameras. Memory cards are being retrieved, and they will be sent to Manaaki Whenua – Landcare Research for analysis along with images from DOC cameras in the wider pukunui operational area.

Trail camera monitoring explained

Trail cameras are set up in grids to monitor specific species of interest. They are programmed to take bursts of photos when they sense movement. A lure is set up in front of each camera to attract the animals.

The lure usually consists of fresh rabbit meat wrapped in a wire cage along with two terracotta tubes with a rabbit scent inside them. The photos are processed with the help of artificial intelligence to identify and group photos of individual species and their locations.

The maps on the next pages show the results for feral cats, possums and kiwi before and after the operation.



One of our cameras observed a feral cat pounce on a rat sniffing around a lure prior to the operation on June 23rd.

Community meeting in Oban

We are hosting a **community meeting** for people to learn more about the results from the pukunui predator control operation.

There will be two sessions at the **Oban Community Centre at 1pm and 7pm on October 28.**

For more information

Contact DOC and ZIP: Email: pukunui@doc.govt.nz

Find out more online:

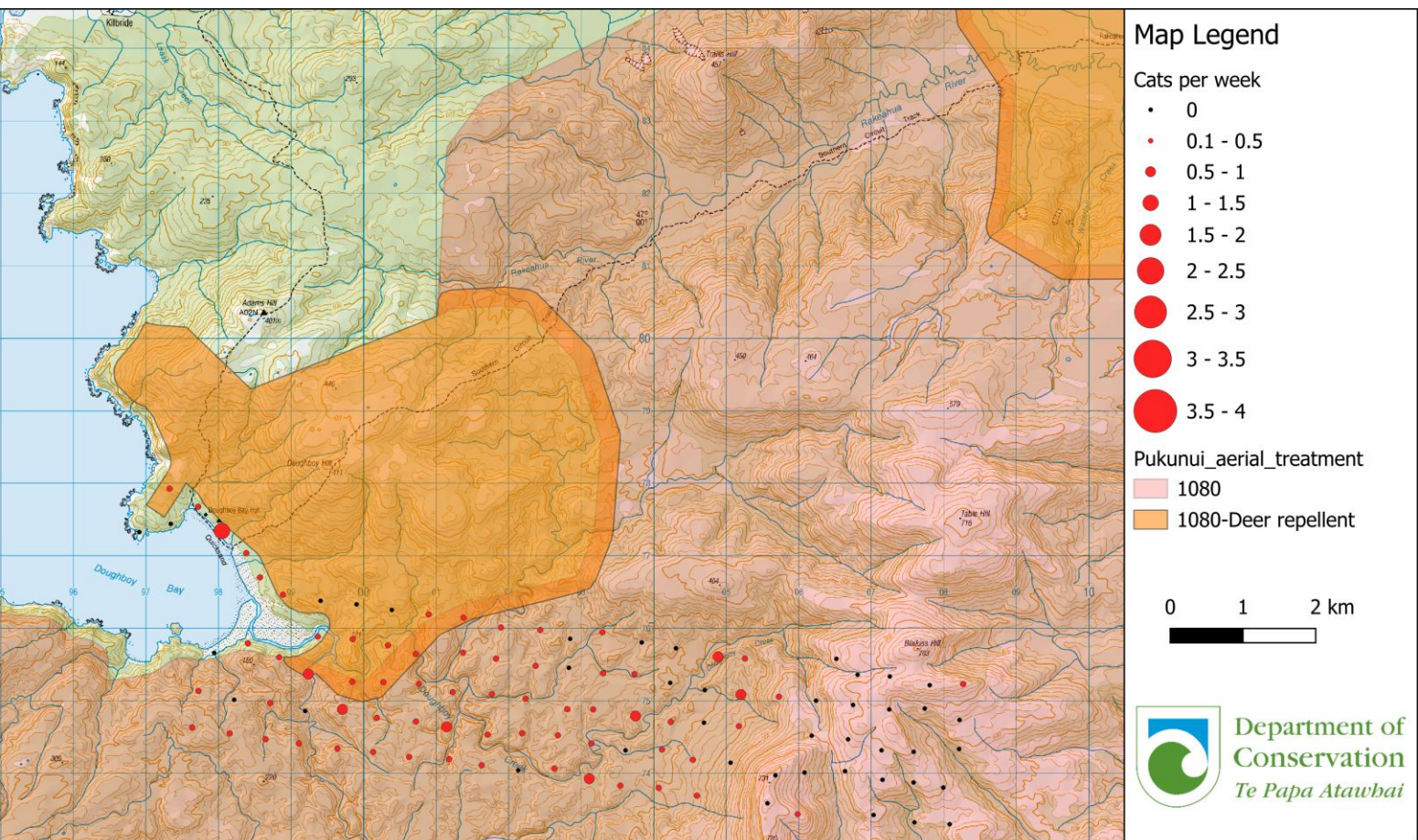
See updates and detailed maps of predator control on public conservation land: www.doc.govt.nz/nature/pests-and-threats/pesticide-summaries

See updates about track access and safety on public conservation land: www.doc.govt.nz/parks-and-recreation/know-before-you-go/alerts

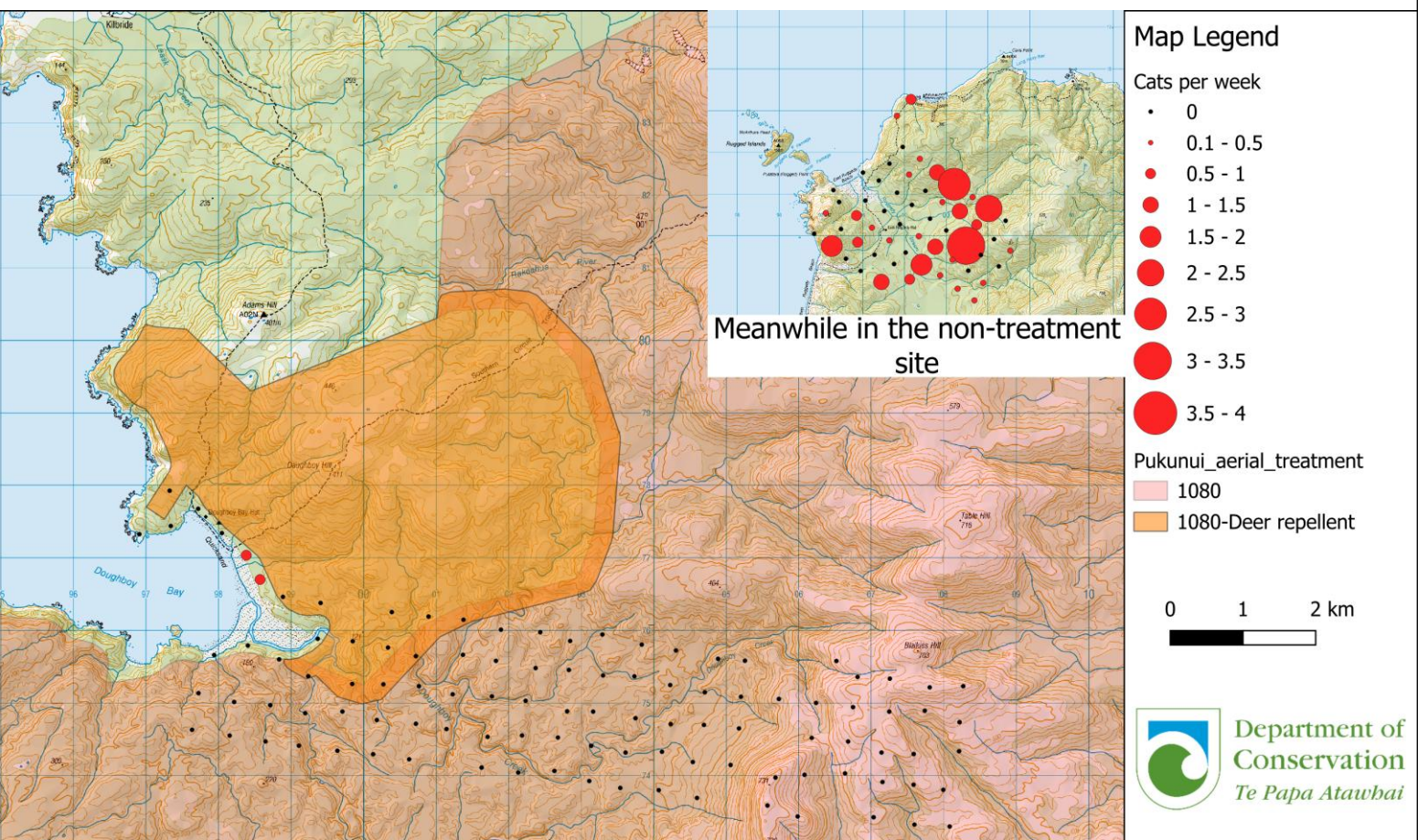
Get Rakiura hunting updates: www.doc.govt.nz/parks-and-recreation/things-to-do/hunting/where-to-hunt/southland/stewart-island-rakiura-hunting/

Learn more about why 1080 is used to control introduced predators: www.doc.govt.nz/nature/pests-and-threats/methods-of-control/1080

Feral cats – pre and post operation monitoring

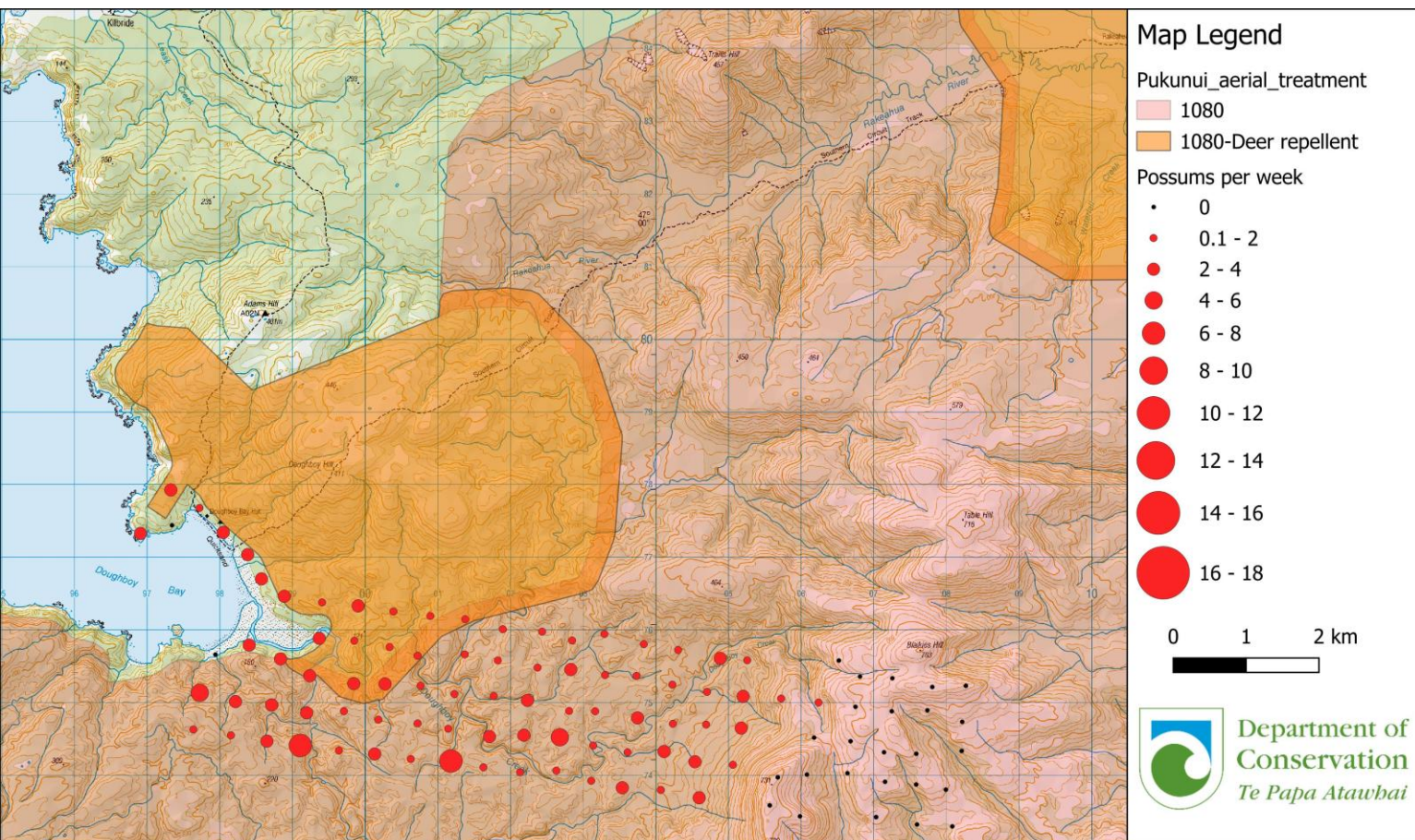


Trail camera image index for CATS on the on the cat grids, PRIOR to the Pukunui pest control operation. These results are for the period 06/05/25 to 22/08/25

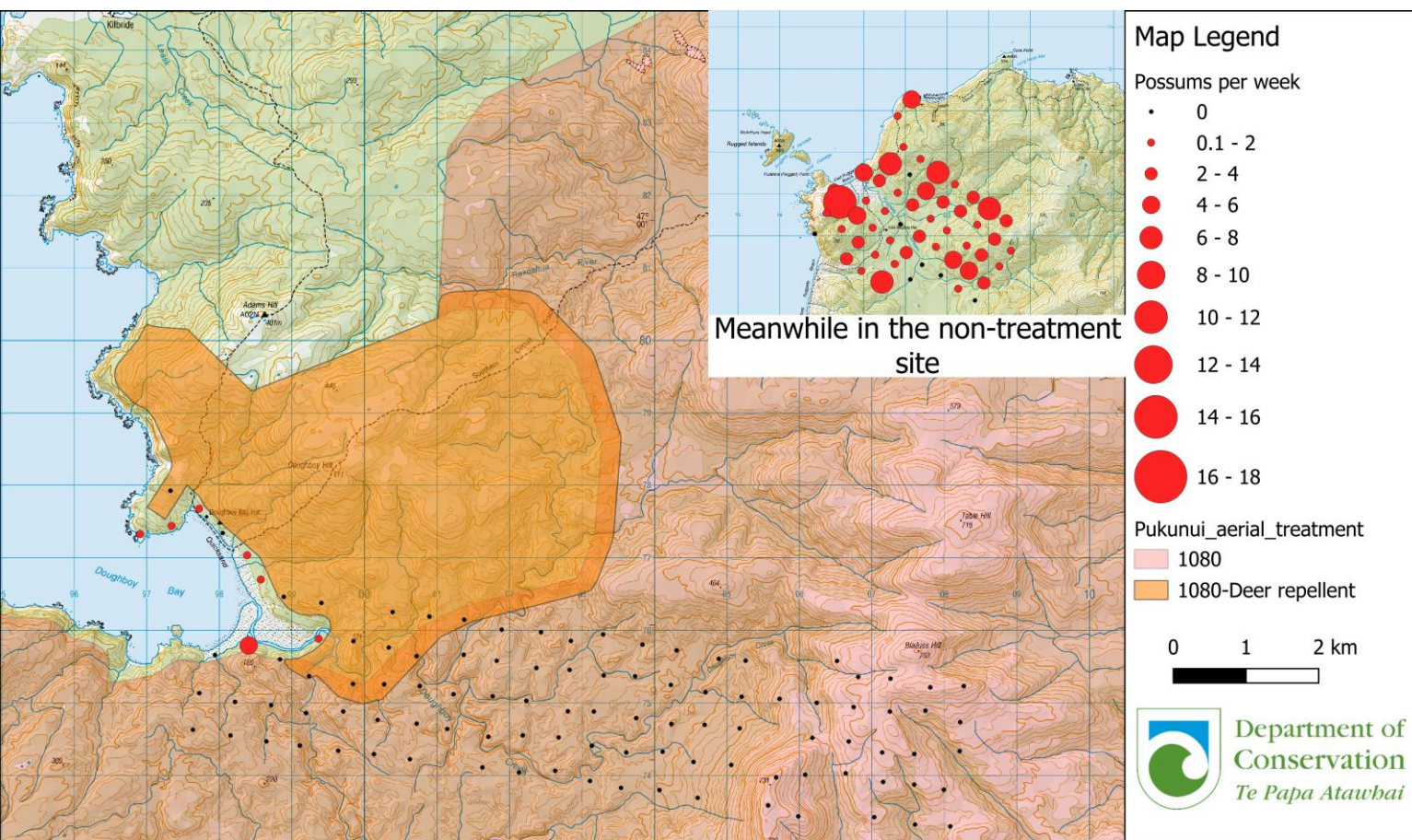


Trail camera image index for CATS on the on the cat grids, AFTER the Pukunui pest control operation. These results are for the period 22/08/25 to 13/09/25

Possums – pre and post operation monitoring

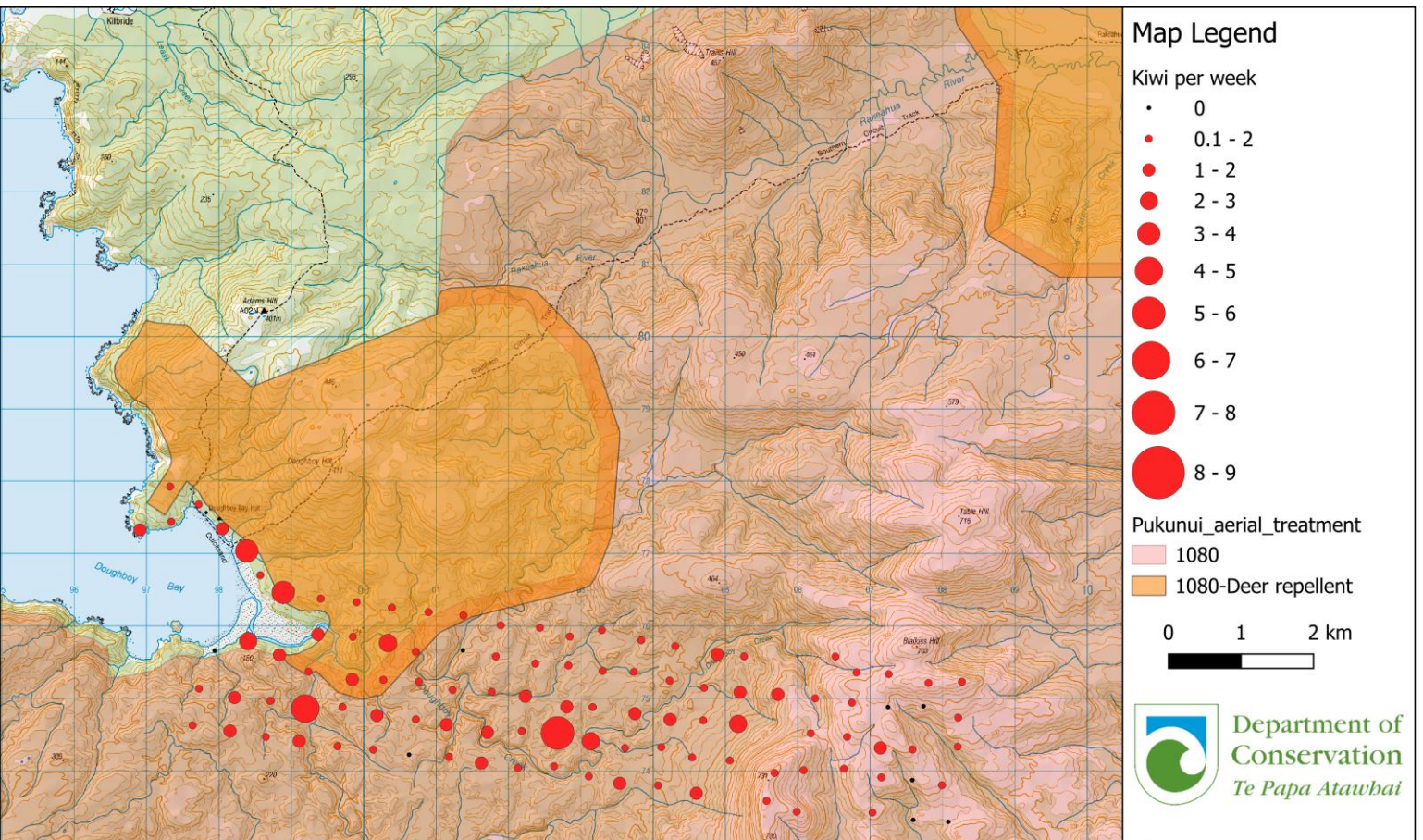


Trail camera image index for POSSUM on the on the cat grids, PRIOR to the Pukunui pest control operation. These results are for the period 06/05/25 to 22/08/25

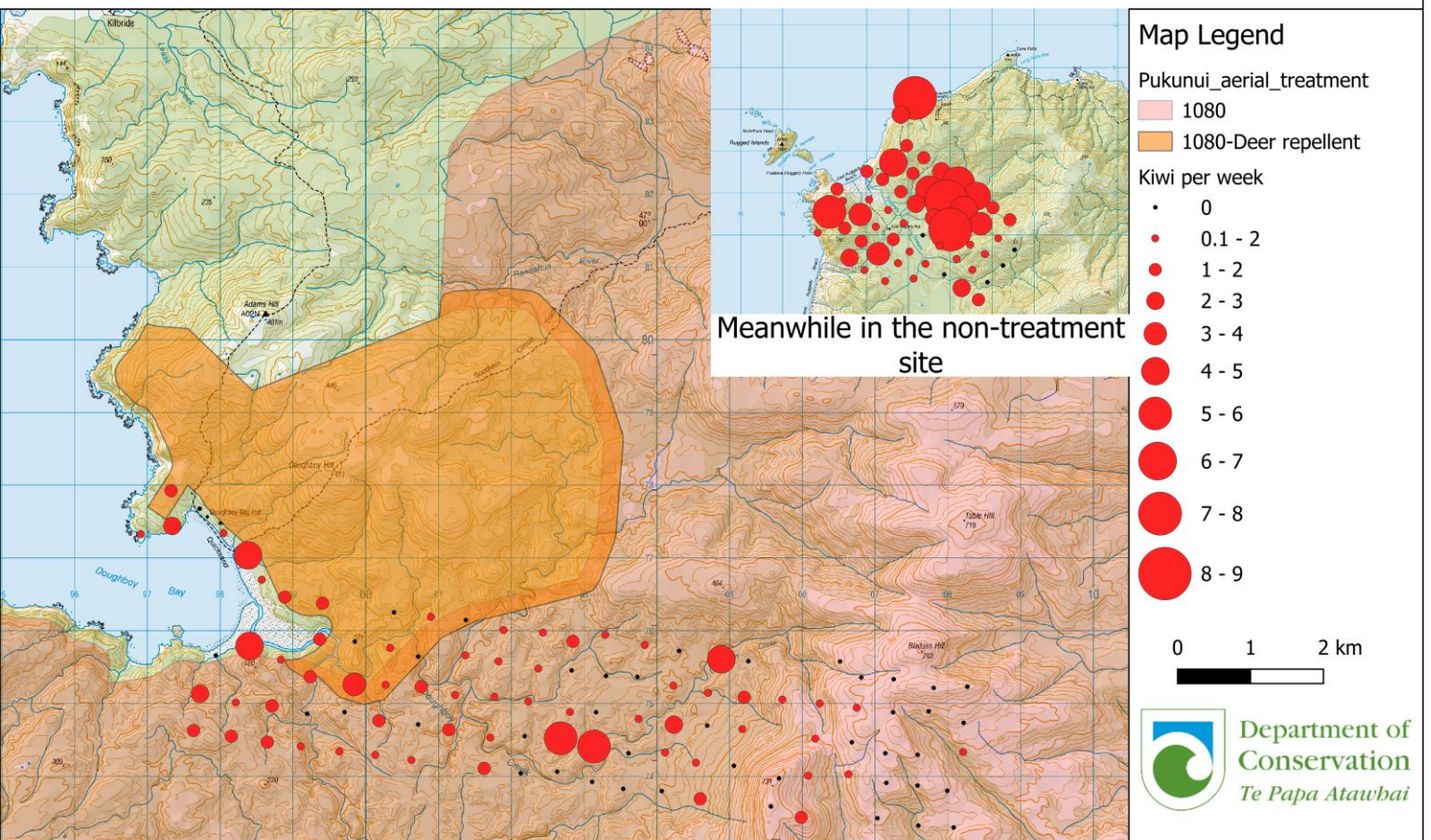


Trail camera image index for POSSUM on the on the cat grids, AFTER the Pukunui pest control operation. These results are for the period 22/08/25 to 13/09/25

Kiwi – pre and post operation monitoring



Trail camera image index for KIWI on the on the cat grids, PRIOR to the Pukunui pest control operation. These results are for the period 06/05/25 to 22/08/25



Trail camera image index for Kiwi on the on the cat grids, AFTER the Pukunui pest control operation. These results are for the period 22/08/25 to 13/09/25