Bream Head/Te Whara CONSERVATION TRUST

FOUNDATION NORTH
Te Kaitiaki Pūtea ō Tāmaki ō Tai Tokerau

COMMUNITY WORKING TOGETHER – Mahi tahi!!

Summer Rangers Report: Dec 2025-Feb 2026

Tēnā koutou katoa! E mihi ana ki ngā mana whenua o te rohe nei. The Bream Head/Te Whara Conservation Trust (BHCT) acknowledges the mana whenua of the land.

We thank the community and stakeholders for their continued support of BHCT. We couldn't do it without you!

Operational summary

This report covers December 2025–February 2026. Key points:

- An analysis of annual trapping and camera detection data illustrates a clear shift in catch rates for certain species over the past four years.
- Our regular toxin program was put on hold in late 2025 to allow rodents to breed over summer – we will use these as vectors for mustelid control.
- At the beginning of February, we farewelled Kees and Fern who set off on the adventure of a lifetime.
- This summer, we've welcomed Skye Donovan to fill Kees and Fern's ranger position; Amie Redpath, Wendy Bown and Nate McDonald (former ranger) as causal track clearers; and Pete Mitchell (former head ranger) as the new contractor liaison.
- Stephanie Tong from the Northland Regional Council helped us plan a presence/absence survey for pekapeka/long-tailed bats and analysed the data for us – unfortunately there were no detections, but survey limitations may warrant future surveys.
- We had a successful ōi/grey-faced petrel season with 10 chicks presumed fledged, and a stoat was caught at burrow site A in December.
- A drone survey was completed in December by local Murray Brock from Culture Drones. The survey coincided with the moth plant flowering period.
- The nursery has been humming along over summer with a wide range of volunteers getting stuck in. We have ~7500 plants pricked out in the shade house reading for the winter planting season to come.

Photo: A moody day looking out at the Old Woman.

Predator control

Written by: Tom Flynn-Plummer (BHCT Head Ranger)

Multi-year predator control analysis using trap and camera data

Now that 2025 is over, we can look back at the year of predator control and compare it to previous years to get a sense of our operational progress. Instead of displaying month-to-month catch totals like in previous reports, this analysis uses annual trapping and camera detection results to provide a clearer picture of how our predator control program is performing at a larger scale.

There are some important events and things to note from previous years, all of which can influence predator numbers:

2022

- Considered to be a 'regular' year for rainfall and forest fruit/seed production, although rainfall increased significantly at the tail end of 2022.
- Overall trapping effort was slightly lower with less traps.
- A presumably insignificant 1080 operation using low numbers of rodent vectors was performed in the spring of 2022, meaning mustelids were likely not impacted greatly.
- Trapping effort was thought to be more variable for multiple factors (e.g. different baits and trappers).

2023

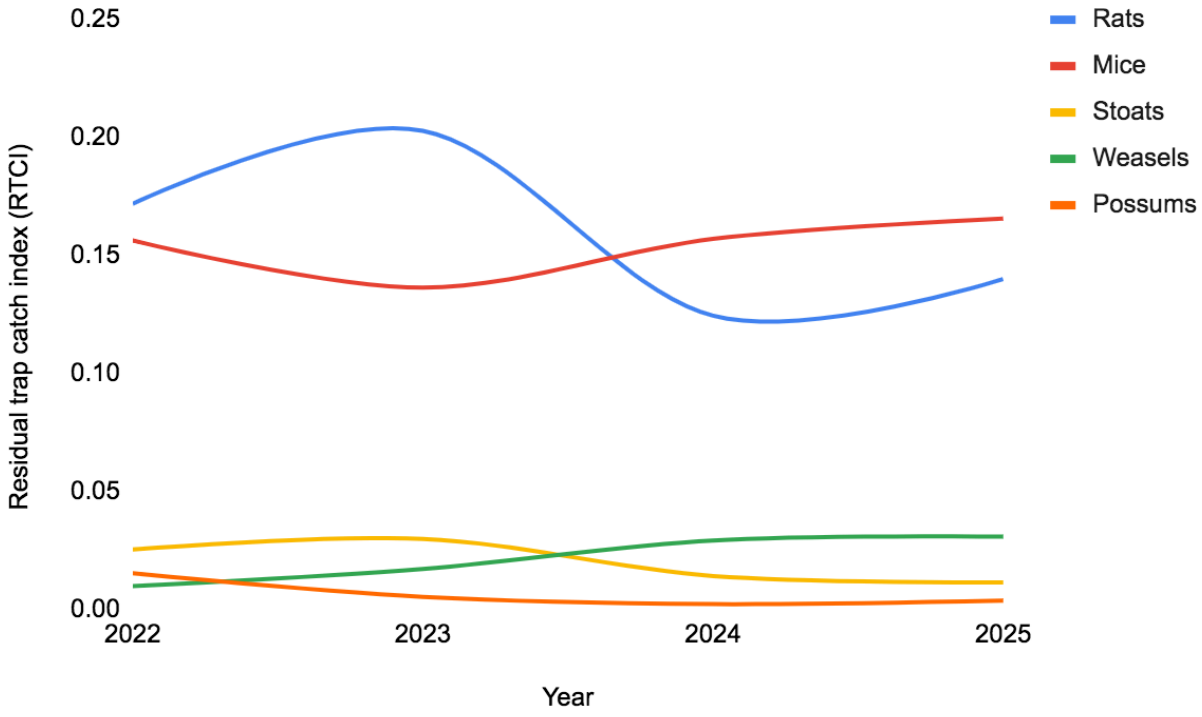
- A significant year for rainfall and forest/seed production.
- Extreme weather events such as cyclones were significant enough to directly impact animal populations in the year, which creates some uncertainty in the data.
- Overall trapping effort remained slightly lower.
- This year focused heavily on controlling the rodent population using toxin, especially from spring onwards.
- Trapping effort became more consistent, with less variation in trappers and the consistent use of optimal bait such as fresh and salted rabbit.

2024

- Impacts from the productive year before still lingered, with a major increase in rodent presence – rodent vectors were allowed to increase over autumn in the lead up to the winter 1080 operation.
- A significant 1080 operation was performed using moderate to high numbers of rodents during winter, with evidence of rodent and mustelid populations decreasing.
- Trapping effort increased with more DOC200 double sets being added to fill gaps in the boundary (January 2024).
- All mustelid traps began being serviced by contractors rather than volunteers, and traps were consistently baited using the best lures available.

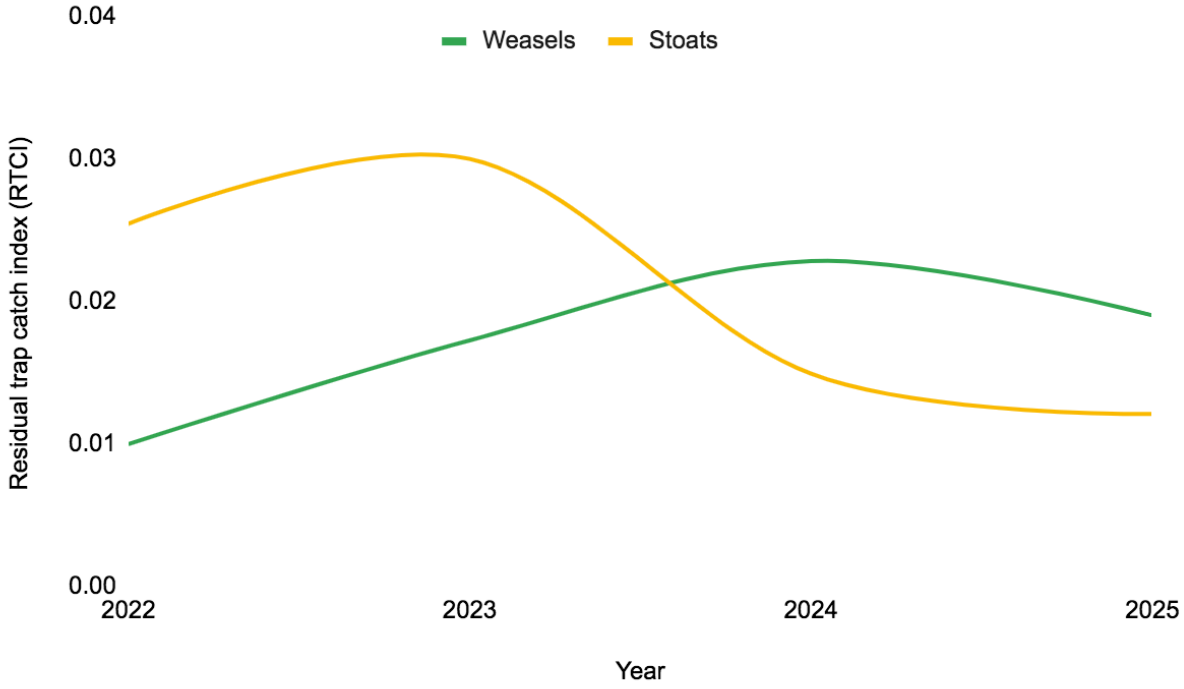
2025

- A major year for rainfall; however, it was not considered to be a major masting year for Northland. Although locally, in the Reserve, the large population of kohekohe masted in the first half of the year.
- The focus was put back on rodents alone, with continuous toxin used to control the still-prevalent rodent population over the entire year. Toxin was pulled out at the tail end of the year to allow ample vectors for the 2026 1080 operation.
- Trapping efforts have remained consistent from the previous year with notable stoat catches at problematic areas such as the Old Woman seabird nesting sites.



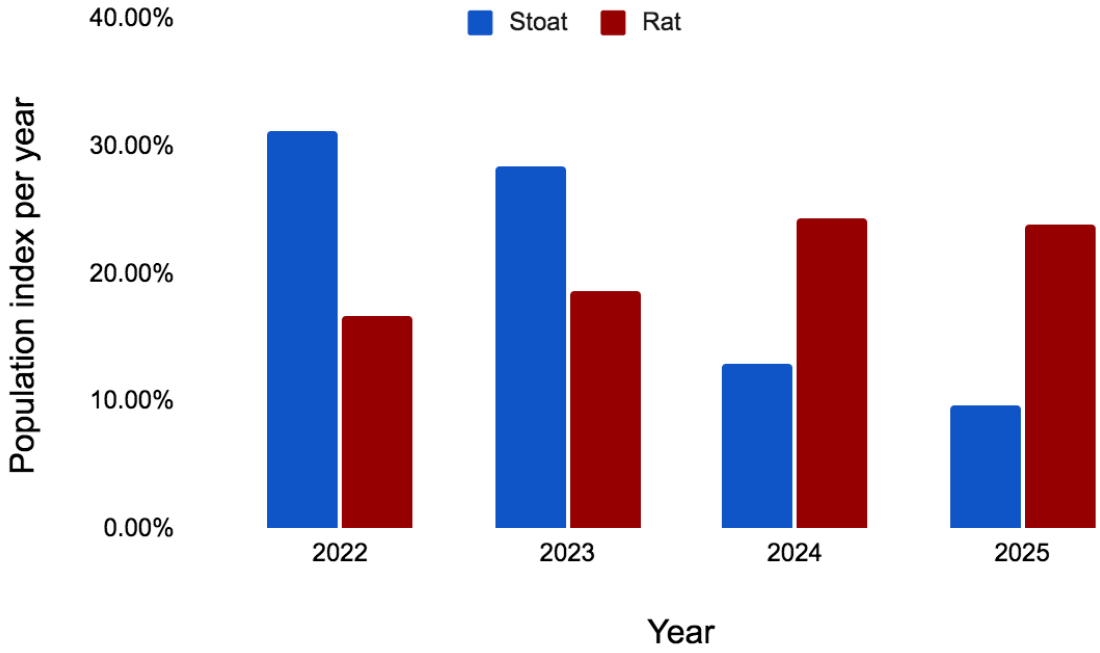
Graph 1: Residual trap catch index (RTCI) over four years for rats, mice, stoats, weasels and possums (pests such as feral cats, hedge hogs and other pests like rabbits have been excluded due to insignificant catch rates) caught across all BHCT trap lines (private land buffer north of the Reserve (Buffer), Ocean Beach Road traps from Urquharts Bay to the Ocean Beach car park/Load the Road (LTR), the northern boundary line to the Reserve (NW boundary and NE boundary) and the traps inside the Reserve itself. Excludes Ocean Beach Recreation Reserve due to its distance from the core project. Total trap numbers on each line differ for each pest (e.g. a snap-e rat trap does not target stoats so cannot be included in the RTCI calculation). RTCI calculation has been calculated with reasonable confidence. Figures such as trap nights across all traps are approximate.

Over four years, there appears to be a clear shift in catch rates for certain species (Graph 1). To interpret these trends, we'll focus only on the BHCT predator control program (excluding external factors) and assume this method of tracking pest populations (RTCI) corresponds to their actual presence in the area. The trends suggest that increased rat control results in more mice, and increased stoat control results in more weasels (Graph 2). It is well documented that rats will displace mice through competition. There is also reason to believe that stoats do the same to weasels. External influences aside, BHCT has always done a great job of controlling rats and, in the last two years, stoats – this will have a positive effect on native species. We expect to see higher densities of mice when rodents and stoats are controlled, as well as influxes of weasels when stoat territories are vacated.



Graph 2: Residual trap catch index (RTCI) over four years for stoats and weasels caught across all BHCT trap lines, excluding Ocean Beach. Method replicated from Graph 1.

It is very encouraging to see strong trends using the RTCI. However, analysing trap data is always difficult due to a range of external factors. There is no doubt that major environmental fluctuations and dynamics within the pest populations themselves (e.g. interspecific and intraspecific competition and/or feeding behaviours) will be impacting our results. This is why it is really important to have other methods of monitoring populations.



Graph 3: Population index per year. Percentage of trail cameras (total = 34*) within the Reserve that detected either rats (red) or stoats (blue) per month from 1 January 2022–31 December 2025. These percentages were then averaged across respective years to give an overall index for the given year. *Camera numbers fluctuate if there are technical difficulties.

Using the trail camera network provided by Predator Free Whangārei (PFW), we can monitor pest populations using a camera detection population index. Graph 3 specifically focuses on rats and stoats. These are the two major species we are controlling during our 1080 operations, so we are very interested to analyse these data.

Average annual detections of stoats are significantly higher in 2022 and 2023 compared to 2024 and 2025. The opposite trend is observed for rats. It seems very likely that the stoat population significantly decreased post 1080 operation (mid 2024). Sustained trapping effort and the lasting impacts of the 1080 operation indicate that results can last well into the following year (2025).

Both monitoring methods (RTCI and trail cameras) indicate our predator control program has had a significant impact on target species (e.g. stoats). I am confident this will have positive impacts on native species in the Reserve. It is critical we monitor all that we can whilst we continue to improve our predator control efforts. We have a 1080 operation coming up in autumn 2026, and these results discussed give us great confidence in the program.

It feels like a new way of doing things in recent years. A major emphasis was put on mustelid control in 2022. BHCT has always tried its best to control mustelids whilst also keeping rodent numbers low. It is very difficult to find the right balance of control, but one thing for sure is that the team is working tirelessly to figure out the puzzle. I am very optimistic about the future.

Bi-annual 1080 operation date set for May–June 2026

We would like to say a huge thank you to PFW once again for their ongoing support of our operation. They have done us another huge favour and offered to help us co-ordinate our 1080 operation under their blanket permission.

Currently, our plan is to pulse the non-toxic pre-feed for two weeks in May 2026. We will very swiftly switch this product out for toxic 1080 pellets to control any remaining possums as well as rats. Our regular toxin program was put on hold in late 2025 to allow rodents to breed over summer – we will use these as vectors for mustelid control.

The 2024 operation was done in July (winter). Results from this operation suggest that a slightly earlier operation would maximise the time that rodents are actively feeding as forest resources start to become scarce, and their population is at carrying capacity.

Changes to the ranger and operations team

Written by: Tom Flynn-Plummer (BHCT Head Ranger)

Farewell to Kees and Fern

At the beginning of February, we farewelled Kees and Fern who set off on the adventure of a lifetime. They are now exploring the jungles of South America and look to be having an amazing time.

Kees put in a huge two year effort with us. In those two years, he put in some serious mahi on the hill. His development as a ranger here was inspiring. By the end of his time, he was managing key projects for us as well as working full time as a field ranger doing some of our hardest lines! Besides being an amazing ranger, Kees is also an incredible human being who is kind, calm and always willing to help his mates out. Thanks Kees for being such an amazing friend and colleague!

Fern spent six months with us job sharing with her partner Kees. Fern who has grown up doing this kind of mahi made an instant impact on the hill itself and behind the scenes. She’s been an absolute weapon in the bush and brings a contagious positive energy each day. Your effort has been amazing Fern, so thank you!

Photo: Ranger crew saying goodbye to Kees and Fern. Left to right: Hadden, Tom FP, Kees, Fern, Skye and Tom G.

Welcoming Skye

We were able to fill the field ranger role in January when Skye Donovan came on board. Since then Skye has been learning the ropes and already putting in big days on the hill!

Photo: Skye Donovan during a day of moth plant control.

New casual track clearers coming on

Due to myself (Tom FP) being injured from December–February, we were able to get in a few casual rangers to help with track maintenance. We now have Amie Redpath, Wendy Bown and Nate McDonald (former ranger) helping out. They have been going hard the past month doing some massive track maintenance missions in the heat. Thanks team!

Pete Mitchell back in the mix

Former head ranger Pete Mitchell came on board as the new contractor liaison. His role is slowly defining itself, but his initial focus is to help contract rangers plan, prioritise and communicate with the Trust. Thanks for coming in and making such a great impact, Pete!

Pekapeka presence/absence survey

Written by: Tom Flynn-Plummer (BHCT Head Ranger)

Pekapeka/bats are the only terrestrial native mammals in Aotearoa New Zealand and include three species: the long-tailed bat (Chalinolobus tuberculatus); the lesser short-tailed bat (Mystacina tuberculata), which is divided into three subspecies; and the greater short-tailed Bat (M. robusta), which is likely extinct.[1] Foraging long-tailed bats frequent forest edges and leave their roosts before sunset, whereas short-tailed bats live deep in the forest and usually emerge only when it is fully dark.

The long-tailed bat is classed as 'Nationally Critical' and short-tailed bat subspecies range from 'Nationally Vulnerable' to 'Recovering'.[2] Long-tailed bats were common throughout the motu in the 1800s, although by 1900–1930 they were becoming scarce in many districts. Causes of their decline include habitat loss, predation, and exclusion of bats from roosts by introduced mammals, birds, wasps and human interference. Despite their low numbers, long-tailed bats are still widely distributed.

Pekapeka were once thought to be present in this area and it is possible that they still are – so we wanted to find out! A big thanks to Stephanie Tong at the Northland Regional Council for helping us out with this. She helped us plan the survey and analysed the data for us.

We performed a bat presence/absence survey within the Reserve over the summer holiday period. The acoustic recording devices were left out in select areas (the top ridge, southern coast, and northern boundary). There was an emphasis put on areas near water bodies and forest edges where possible. For around three weeks over December/January, the recorders remained in place.

Photos: Fern (left) and Kees (right) setting up the recorders.

The results showed zero bat detections. This either means that bats are not present in this area or, if they are, they exist in very low numbers. There were some limitations with our survey, including the fact that we surveyed outside the optimal time, which is thought to be March. We will hopefully repeat this survey in the near future to check back in on the pekapeka.

[1] O'Donnell, C. F. (2000). Conservation status and causes of decline of the threatened New Zealand Long-tailed Bat Chalinolobus tuberculatus (Chiroptera: Vespertilionidae). *Mammal Review*, *30*(2), 89-106.
[2] https://www.doc.govt.nz/nature/native-animals/bats-pekapeka/

Ōi/grey-faced petrel

Written by: Tom Grinsted (BHCT Ranger)

Stoked to report we had a successful ōi/grey-faced petrel season with 10 chicks presumed fledged.

In December, eight birds were banded, weighed and wing measurements were taken. Two additional birds (confirmed via burrow scope) were present – we were unable to reach these birds due to burrow length / lack of study lid.

To cap off a brilliant summer at the ōi/grey-faced petrel site, a stoat was caught at burrow site A in December. Although a weasel was seen at burrow site B in late December (the first time we have ever recorded a weasel at the ōi/grey-faced petrel sites), pleasingly no stoat has been seen on cameras since. So, hopefully we have caught the current 'resident'.

Year	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Adults	7	11	10	16	15	15	15	14	14	14
Chicks fledged	0	10	5	0	9	0	0	0	0	**10**

Photos: Left: ōi/grey-faced petrel fledgling testing its wings. Right: Weasel at the ōi/grey-faced petrel study site.

The results above indicate that our intense focus on stoats the past few years is moving in the right direction. The seabird nesting sites are a part of the bigger picture for overall ecological restoration, but more immediately are a great indicator of stoat control. Every year since the 2020/21 season, eggs and/or chicks have been primarily predated by stoats. This has been consistently evidenced each year until the 2025/26 season. Adding to that, it is the first time a weasel has shown up at the site, further indicating a current absence of stoats.

It goes to show that well planned toxin operations as well as meticulous trapping can hold the door open enough for species such as the ōi/grey-faced petrel to succeed in their breeding efforts. We just have to keep at it!

Pest plant control

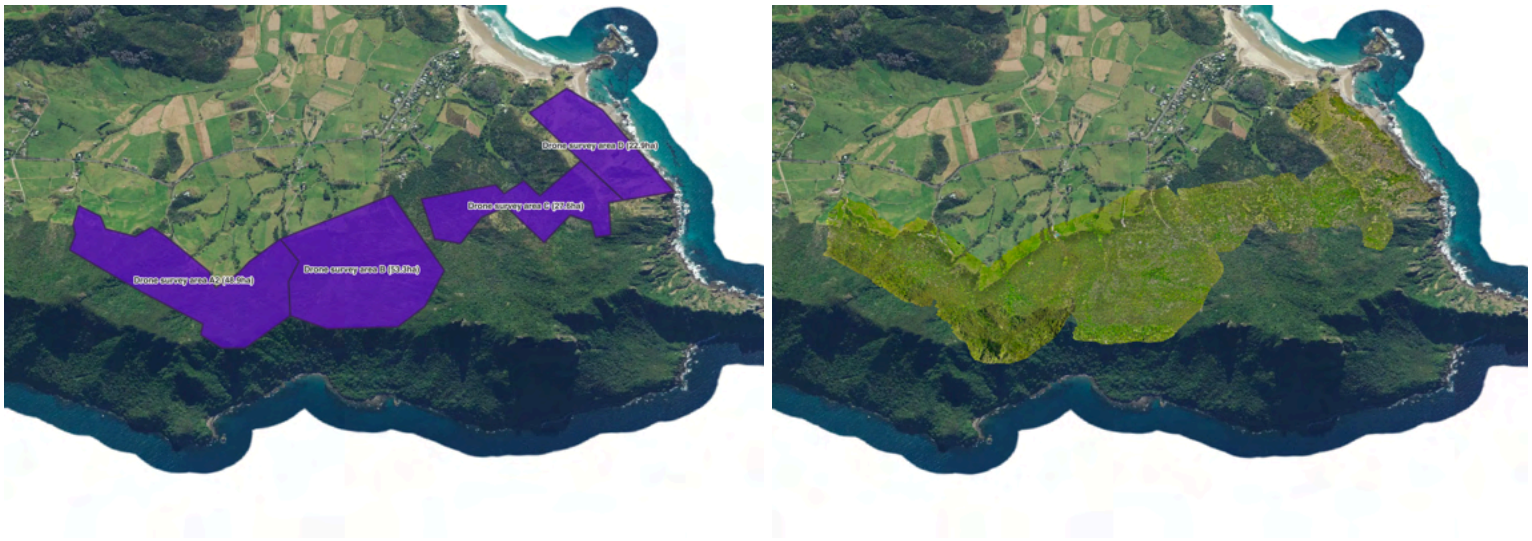
Written by: Tom Grinsted (BHCT Ranger)

Drone survey

The planned drone survey was completed successfully in December by local Murray Brock from Culture Drones. The survey coincided with the moth plant flowering period.

The resulting survey is already aiding pest plant control work in the Reserve. Ground teams are using drone imagery to pinpoint moth plant infestations.

Long term, the potential for the images to assist in pest plant reporting / fundraising is huge. On ground photo points are limited in this respect. The drone eye view tells the story much more powerfully. Funding dependent, the intention is for BHCT rangers to repeat the survey bi-annually to monitor pest plant control progress and outcomes.



Photos: Left: Drone survey areas. Right: Drone survey results.

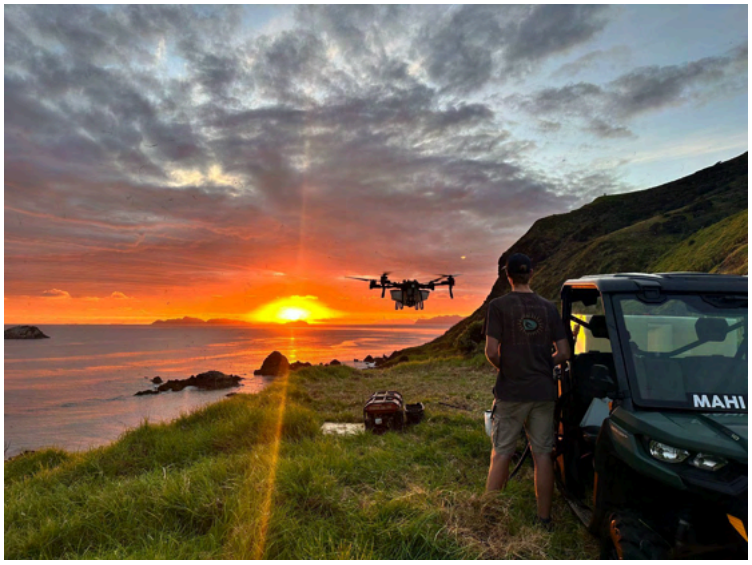
Photo: Moth plant showing in the canopy near the main track up Te Whara from Ocean Beach.

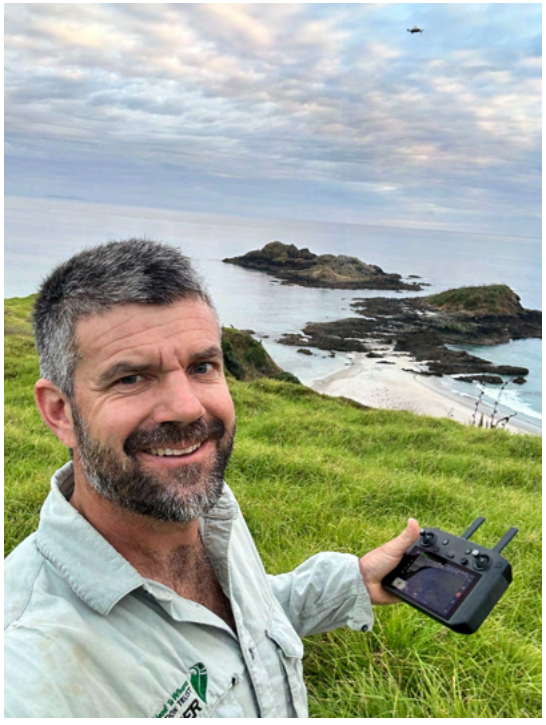
Photo: Moth plant showing in the canopy near G line.

Drone spray operations

As far as drone spray operations are concerned the summer period has been a busy time. Stu McLeod from Mahi Drones has been targeting pampas and moth plant in the 'Lighthouse' and 'Rupert’s Valley' control areas.

Photos: Pampas control drone flight paths near Ocean Beach.





Photos: Clockwise from top left: 1. Mahi Drones operating near Ocean Beach. 2. Stu from Mahi spraying pampas. 3. Early start to take advantage of low wind conditions. 4. Weed eating a drone landing area up Rupert's Valley. 5. Tom G. having a spin on the survey drone. 6. Refilling the spray reservoir.

Revegetation/Nursery

Written by Tom Grinsted (BHCT Ranger)

The nursery has been humming along over summer with a wide range of volunteers getting stuck in. We have ~7500 plants pricked out in the shade house reading for the winter planting season to come.

The 2026 winter planting site has been sprayed with the selective herbicide Haloxyfop. A drone was used for this operation. Rangers have been learning to recognise the efficiency and effectiveness of this tool. Planting wells will be weed-eated at the site prior to the community planting day. Pathways will be left unplanted in this area to facilitate human traffic to the beach adjacent to the planting site.

January / February is a crucial period for seed sourcing for the next planting season. Kānuka, harakeke, and tī kōuka have been harvested and stored.

Photos: Clockwise from top left: 1. Volunteers at the Working Bee hard at work. 2. Tom G and Skye receiving a generous donation to the nursery by the Ocean Beach Boardriders Club. 3. Seed sourcing for next year's planting season. 4. Weeding the shadehouse.

Education update

Written by: Tom Grinsted (BHCT Ranger) and Lil Craig — Education committee chair and Trustee

86 students between the ages of 7 and 10 from One School Global based in Maungaturoto visited the Reserve. Tom G spoke to the kids at the start of the Smugglers walk, giving them an intro to BHCT and our operations. The kids were a curious and knowledgeable bunch!

Update from Predator Free Whangārei

Written by: Vicky Vajda McNab – Communications and Engagement Coordinator

It's been a busy few months for our PFW field team dealing with high live capture results while managing weather impacts from heat, high humidity and intense rain events.

Shout out to the BHCT team for shutting down our leghold devices in the Bream Head and Taurikura area for the Christmas break, and to Kiwi Coast for their help in Taurikura and Reotahi.

After two months of no detections in our southern working blocks from Te Whara to northern McLeod Bay, we have detected a handful of incursions that we are working on. This forces us to review our buffer plan during a very active time of the year in possums' lifecycles, with young males detaching from mothers and travelling afield.

Scat-mapping by our internal certified possum detection dog (CPDD) team has been a game-changer. After months of intense trapping and no recent detections in a particular area, our dog team – Gaelyn and Shaka – sniffed out a possum hotspot. The intel led to extra traps being installed and the capture of the rogue possum. We then followed up with a thermal drone inspection with no further possums detected.

In early February, we had our second bi-annual five-minute bird count in Kauri Mountain. Originally set to happen in November last year – we had to postpone it twice due to rain – timing wasn't perfect, with loud cicada noise proving challenging, but it was still good to support the baseline creation of outcome monitoring for this area. Over time, this information will strengthen our understanding of bird species presence, relative abundance and seasonal variations, with an opportunity to link these results to an expected increase in forest health following the removal of possums and the suppression of rats and stoats. This time, we had the support from the Predator Free Russell team, an opportunity to exchange learnings and share a bit of our beautiful rohe with our visitors.

Photos: Left: our teammate Katelyn showing Ocean Beach to Serena, from the Russell Landcare Trust team at the 5MBC. Right: Guardians on the Lookout at Whangārei Heads School

Our Whangārei Heads School programme 'Guardians on the Lookout' is back up and running. Our kaimahi (teammates) are instructing year 7 and 8 tamariki how to set up monitoring cameras. By logging the images captured, the Guardians will be able to confirm the absence of possums, monitor the presence of other predators, as well as native wildlife. These cameras are part of our lean detection network, meaning the tamariki will be actively contributing to our project.

Coming up in Autumn (March-May 2026)

Continued weeds work alongside Aki Tai Here: As usual, we will keep the ball rolling with weeds. The team has been getting a lot done this year.

May 1080 operation: As mentioned throughout this report, we will be doing another 1080 operation this autumn, which we are eager to see the results of. Again, thanks PFW!

Rodent tracking tunnel survey: Unfortunately we weren't able to do a survey during summer – we had to prioritise our moth plant control at the time. The good news is that we will do the key pre-operational survey in April/May.

Vespex wasp control operation: We are currently on standby for a wasp operation in the next month or so. Numbers and activity have not caused major concern yet.

Track maintenance: We now have quite the crew on board helping with fixing our toxin lines that are constantly needing attention due to tree fall, slips, and overgrowth.

A huge thank you to all of our supporters!
Mauri ora — keep well!

Tom Flynn-Plummer (Head Ranger)
Mobile: 0278768833
Email: bhctrangers@gmail.com