

*COMMUNITY WORKING TOGETHER – Mahi tahi!!*

## Rangers' Report – October 2018

### Operational Summary...

Nga mihi

It's been another month full of great mahi out on the reserve with the place full of volunteers, researchers, rangers and bird enthusiasts getting out there and doing the yards. The weather has been pretty kind and it has been a great pleasure to see intense flowering of many plants species, as well as the arrival of new fledglings, the offspring of lizards and young invertebrates – gotta love spring time!

Predator control continues to demonstrate very low toxin take and trap catch rates, except for a possible rat issue on one of the eastern lines below the radar station. We are loading this line up a bit more and checking more often to address this issue. The majority of catches are still showing up on the boundary line system and we have not yet seen any stoats, even though it is coming into the season for stoat young to be active. We have caught a few possums on the boundary over the past few months and these have been caught on the Steve Allen Kat traps recently installed. This trap has the added benefit of being able to catch possums (and even rats), it is a nice and simple trap that seems to not deter cautious predators which is a negative effect of other traps that require entry into a box type system.

In terms of species monitoring we are happy to announce that 47 whitehead/popokatea birds were seen/heard during this season's survey. A high percentage were progeny from last season, revealing that we did indeed have a good successful first season breed in late 2017. Translocation expert Kevin Parker is delighted with this result and congratulates the Trust for the obvious protection of these special manu through our intensive predator control system and for our ongoing monitoring.



*An abandoned GFP egg at the newly discovered burrow site.*

site ranger Adam Willetts has found 13 more GFP burrows (three of which have chicks present) not previously discovered, so the known number of sites and birds is increasing each year. In a related topic, the Trust is now able for the first time to install acoustic recording devices to monitor for other seabirds who may now be starting to use BHSR for breeding, such as common diving petrels, cooks petrels and flesh footed petrels.



*Isabella Hunter-Willetts holds up a weasel caught in a snap trap on the boundary.*

Other happenings this month include the special mouse monitoring project in conjunction with Northtec, DOC and BHCT which is going very well, a new rat toxin/possum line has been put under the northern side of the GFP burrow sites and the rangers have kept the kauri dieback cleaning stations topped up during this already busy start to the Te Araroa walking season.

If you would like to know more about some of these cool items read on and enjoy!

## Monthly predator control results: October 2018

Pest	Total # caught this month	# of Total caught inside reserve (i.e. not on boundary/buffer zone).	# caught this month prev. yr.	# caught 2018 YTD	# caught 2017 YTD.
Rat	3	1 of 3	2	141	64
Possum	1	0 of 1	0	10	12
Stoat	0	0	0	3	7
Weasel	1	0 of 1	1	47	11
Ferret	0	0	0	0	0
Feral cat	0	0	0	1	0
Mouse	20	2 of 20	6	172	12
Hedgehog	1	1 of 1	0	4	16
<b>Totals</b>	<b>26</b>	<b>n/a</b>	<b>9</b>	<b>378</b>	<b>122</b>

## Monthly Species monitoring results/updates: October 2018

Species	Method	#	ID	Sex	Location	Status/comment
Whitehead/ popokatea	Spring 2018 survey	47 individual birds seen or heard.	n/a	See report below	All reserve trap lines surveyed.	See report below
n/a						

## Successful whitehead/popokatea survey – final results are in...

The final results have now been collated in regard to the survey of the known distribution and breeding success of whitehead/popokatea since translocation into Bream Head Scenic Reserve (BHSR) in April 2017. Volunteer bird monitoring coordinator Mike Butcher has done another fantastic job of collating the data from the survey in September, and sightings of distinctly different birds post survey also. I have included his executive summary from his report of the whitehead/popokatea survey below, and this will be added to the BHCT website soon.

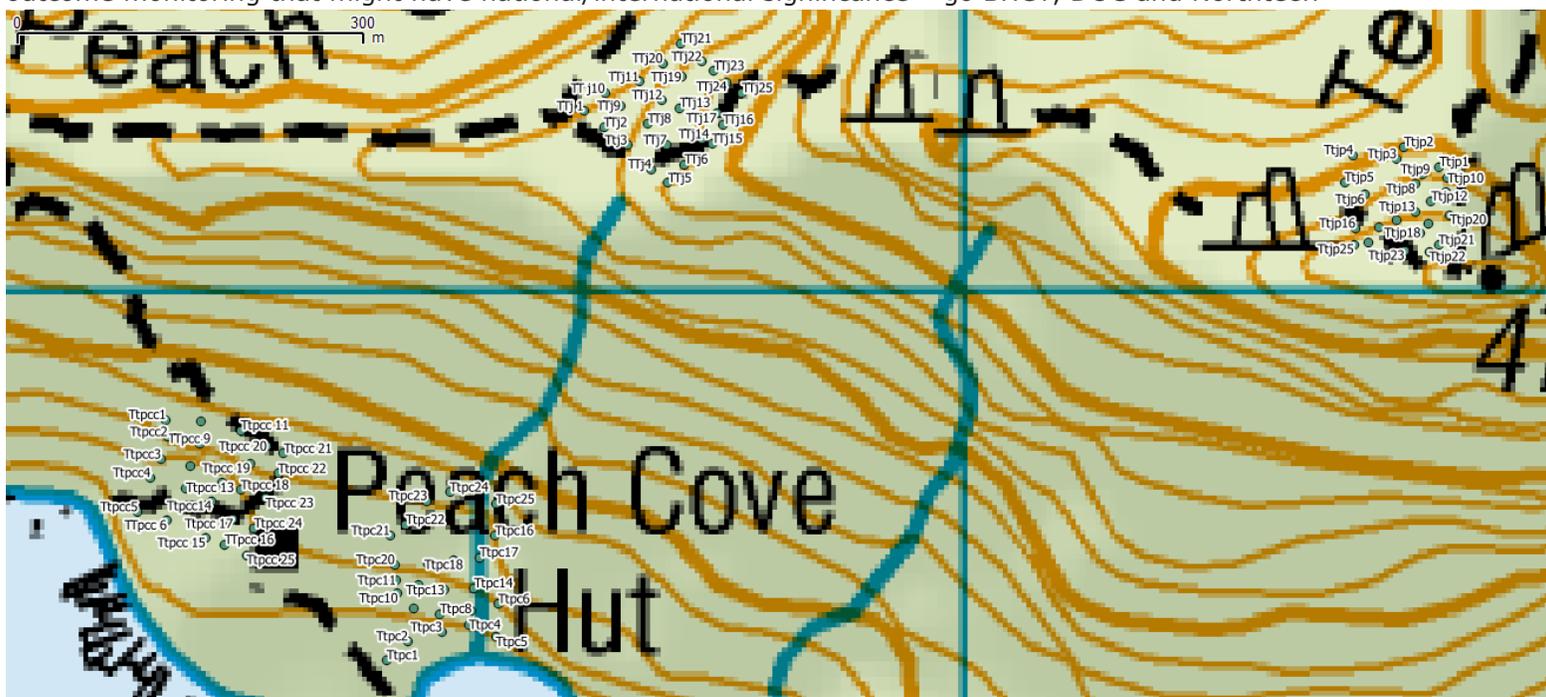
One thing is for sure, our introduced birds seem to be doing quite well indeed and able to breed happily. Hopefully in the not to distant future, there will be flocks of these birds seen throughout the year all over the reserve (and possibly throughout our peninsula)!

- One hundred (50 pairs) of Whitehead/Popokatea were translocated and re-introduced into Bream Head Scenic Reserve in May 2017
- A preliminary survey (Wilkes and Jones, September-October 2017) indicated wide dispersal within the Reserve and some breeding occurring
- A formal, full Reserve survey was planned for September 2018 using toxin bait stations as the sites (already GPS located) and male territorial calls played back as the attraction mechanism
- Forty-seven Whitehead/Popokatea were recorded during the survey period
- 11/47 birds were confirmed as banded – an 11% recovery of the original released population
- 14/47 birds were confirmed as un-banded indicating they were progeny of the 2017 breeding season
- 22/47 birds were of unknown banding status due to either being heard only or too fast to be able to confirm banded status in the field

- The large number of unknown status birds indicates the confirmed banded and confirmed un-banded results should be regarded as conservative
- This initial detailed survey indicates a potentially successful re-introduction of Whitehead/Popokatea to Bream Head.
- A repeat of the survey in either 2019 or 2020 should be considered to further confirm the status of the reintroduction.

## Mouse Project...

As previously discussed, the Trust has been working with Northtec and DOC to plan, install, maintain and monitor an intensive mouse control/monitoring project at key species' locations within BHSR. The 25m by 25m grid network has now been fully installed with toxin bait stations and tracking tunnels installed at both species sites, and tracking tunnels at the two control sites. (The Trusts' normal grid for control to rat level is 100mx50m). The tracking tunnels were set with peanut butter and ink cards prior to the bait stations being loaded with toxin in order to ascertain a baseline index of the relative abundance of mice prior to the effect of the toxin. Toxin has now been added so monitoring will continue into next year to cover seasonal variations in rodent behaviour. The first tracking results returned no rats (yay!!) and a lower than expected abundance of mice, with the sites nearest to the Peach Cove Hut indicating the highest number of cards with mice foot prints. This information will be very important when correlated with the ongoing monitoring of the survival and breeding of each particular threatened species. Will control at this intensity suppress/eradicate mice, if so will a reduction in mice abundance positively affect species survival/breeding, what level of mice population is required to gain these positive results (suppressed or eradicated, and if suppressed what percentage)? The outcome of this monitoring project will be analysed by DOC species expert Dr James Reardon, and any positive findings could be added to the protocol on mouse control and/or monitoring. It's really awesome to be working with these agencies on positive species outcome monitoring that might have national/international significance – go BHCT, DOC and Northtec!!



## Operational facility update...

Planning for the operational facility roof is coming along nicely with architectural and engineering specifications almost complete and ready to go to council for consent. The Department of Conservation have confirmed \$30,000 funding of the facility shelter structure, a major contribution to the project. Once consent is granted (hopefully) key Trust volunteer Marc Lawrence will build the structure in his own voluntary time. Anyone keen to help Marc with this build project would be greatly appreciated as there will be some heavy lifting required which could be shared and reduced with more hands on deck.

## Kauri Dieback stations kept busy...

It's that time of year again when Te Araroa walkers descend upon the reserve in great numbers, bringing with them smiles and great stories but also a heightened risk of spreading Kauri Dieback disease into the reserve. The Bream Head Scenic Reserve (BHSR) is currently not infected with the deadly disease which is spread by soil movement, and we would really like to keep it that way. This does put a lot of pressure on the basic cleaning stations currently located at the three main entrances, with most pressure on the station above Ocean Beach as walkers head up to the summit of Bream Head/Te Whara. The Trust rangers/volunteers are trying to keep up with the demand and keep the stations topped up with trigene sterilisation liquid, and ensuring the brushes and signs are in good condition. DOC are trialling some larger cleaning stations that self-replenish water via a roof system, as well as new sterilisation liquid application tools built in. Once these have been fine-tuned the BHSR is to receive two of the new stations to be installed on the main Te Whara ridge track as it intersects the Peach Cove Track, and the other at the start of the Mt Lion/Maturiki steps. The only section of public track that has Kauri within the risk zone of soil movement is up on the steps leading to the summit of Mt Lion/Maturiki. Please always clean your gear before each trip into the reserve, which involves removing all traces of soil. This is more conveniently done the day/night before. Let's hope we can keep the disease out of BHSR so this ecological and sociological treasure is kept safe for future generations, after all – that's what a conservation reserve should do first and foremost.



The basic cleaning station above Ocean Beach, with spray bottle and refill liquid.

## Weed of the Month

(from the Whangarei Heads Weed Action website <http://weedaction.org.nz/weed-of-the-month/>)



### Watch for white flowers to spot Chinese privet!



Now is the time to spot this month's 'Weed of the Month' – the lesser known Chinese privet, or 'small-leaved privet' (*Ligustrum sinense*). It is related to the larger tree privet, but behaves a bit differently and flowers NOW, rather than in summer. Not hugely distinctive most of the year, when it starts flowering it really stands out. It is high on our hit list of weeds to target because it is spreading out from a number of problem areas, but is not yet widespread across the Heads. We have the opportunity to stop it becoming another major weed of the Heads.

### How do I control it?

- Pull or dig seedlings. Leave to rot on site or mulch (you can use a lawn mower).
- Cut stump application: Cut at ground level and immediately treat stump with (5g metsulfuron/1L water). Metsulfuron works best, however undiluted glyphosate can also be used, but extra care is required when working with undiluted herbicides. Cut stems can be left on site to rot down, or mulched.
- Frill and fill: make a deep cut into the sapwood at regular intervals around the base of the tree, taking care not to ring-bark the plant. Immediately saturate the cuts with (20g metsulfuron/1L water). Wait until the liquid subsides/absorbs and then apply again.
- Drill & fill: Drill (c.12mm drill bit) sloping holes into the sapwood at 10cm intervals around the base of the trunk, & immediately fill each hole with (20g metsulfuron/1L water). Top up all holes after initial fill has absorbed. Metsulfuron works best however undiluted glyphosate can also be used but extra care must be taken when using undiluted herbicide.
- Spray, best in spring and autumn, with (5g metsulfuron+10ml penetrant/10L water).

Follow up 6-monthly. Easiest to spot during spring flowering. Bared areas reseed profusely. Replant bared areas (after seedlings appear naturally) to minimise seedling growth. **CAUTION:** when using any herbicide or pesticide PLEASE READ THE LABEL THOROUGHLY to ensure that all instructions and safety requirements are followed.

## Coming up in November:

**Climbing Asparagus weed control...**The Trust rangers and DOC rangers will combine our powers to tackle the two known infestations of Climbing Asparagus and suppress it hard so no matures are left standing, therefore no further seedling is allowed.

**Acoustic recording...**The acoustic recorders will be installed around Mt Lion/Maturiki as a new site for absence/presence monitoring of possible new seabirds to the reserve.

**Banding GFP chicks...**Hopefully Trust ranger Adam Willetts and seabird expert Cathy Mitchell will be able to carefully band some (if not all) of the six GFP chicks in November.

Mauri ora (good spiritual health!)

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