



Vision

The forests and beaches of Abel Tasman are once again filled with the birdsong that awakens and delights visitors.
Kia whakaoho te mauri o te Ata-hapara. Kia rongo, Kia Kite, Ki te reo koro tui o Te Tai tapu

Predator Control Report (post-Covid-19 lock-down)– September 2020

Overview

Abel Tasman Birdsong Trust volunteers are now back in the Park undertaking predator control work after being unable to check traps etc during level 4 and 3 lockdowns. It is great to be back in the Park once again.

The **Abel Tasman Birdsong Trust** has objectives *“to preserve native flora and fauna in Abel Tasman National Park”* and *“to enhance the Abel Tasman National Park and its environs for recreation and enjoyment by residents and visitors now and in the future”*.

The Parks native birdlife is preserved in part by trapping predators (mustelids and rats). Traps are checked by Abel Tasman Birdsong Trust volunteers once or twice per month. The results from trap checking are recorded and entered into the DOC “Animal Pests – Trapping” internet-based application that allows systematic recording of trapping results, data analysis and reporting of rats and mustelids (stoats or weasels) trapped by volunteers.

A grand total of 356 mustelids and 6834 rats trapped since October 2010. We check 576 trap boxes and 650 A24 traps. (Note that ATBT volunteers also check traps up at Canaan. These are reported as part of Janszoon trapping reports as they are within Janszoon’s management area (“management extent” in Trapping Manager) rather than Abel Tasman Birdsong Trust’s)

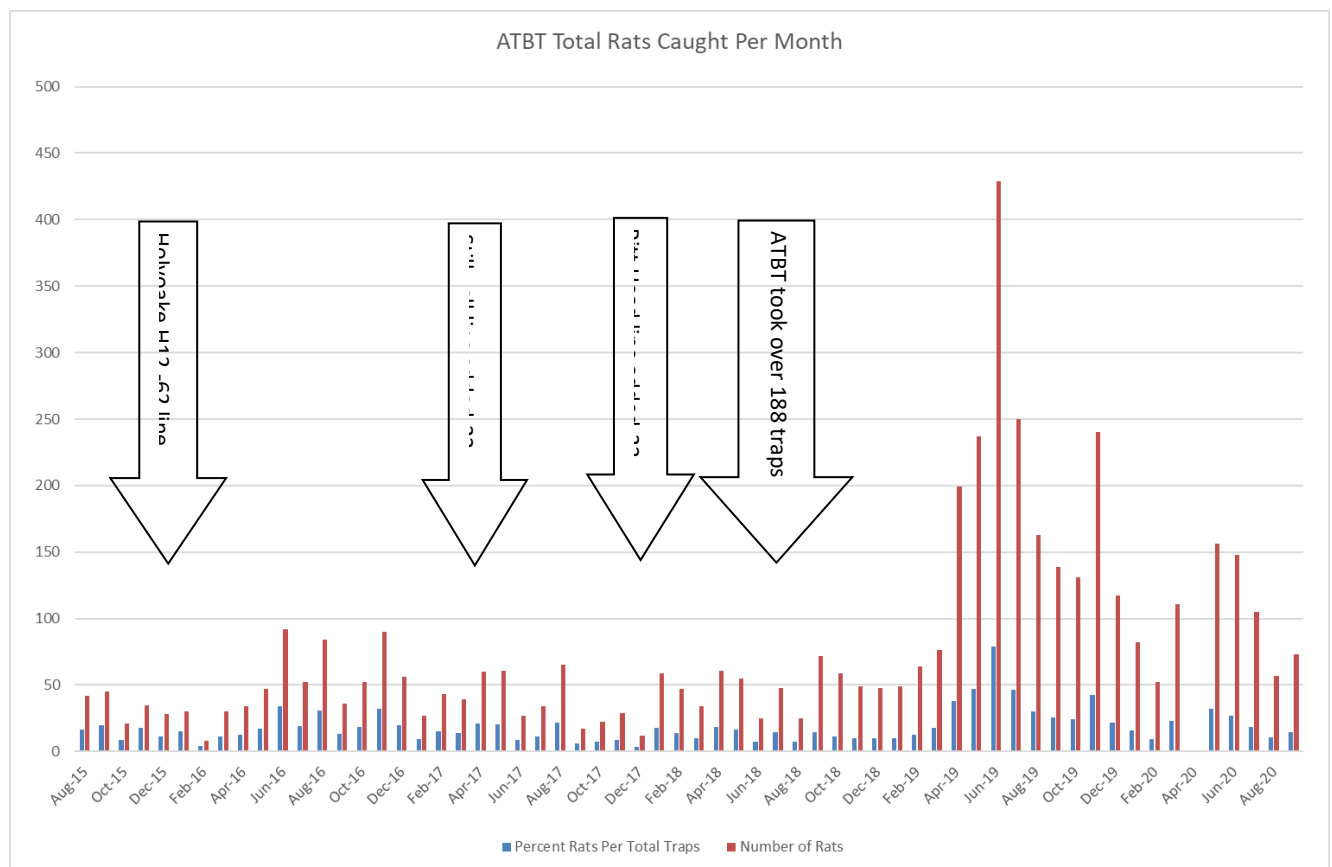
May to September 2020 Trap Box Results

Trapping results for the **5 months** for May to September 2020 (table 1) show **25** mustelids and **539** rats were trapped. No traps were checked in April 2020 due to the Covid-19 Level 4 and Level 3 lockdown. Table 1: Mustelids and rats trapped for May to September 2020

Line	Mustelids	Rats	Average Percent Rats Per	No of Trap Boxes on Line
A	4	175	24	145
B	1	13	7	39
C	0	16	14	23
H31/1 to H31/12	0	19	32	12
H1 to H62	5	61	20	62
Marahau	2	13	16	16
Stilwell	1	4	9	22
Tinline	0	14	35	8
Pitt Head	2	18	11	32
Awaroa Head	2	23	14	42
Coastal Track 1	2	36	19	37
Coastal Track 2	2	43	24	36
Coastal Track 3	2	52	32	33
Coastal Track 4	1	56	28	40
Boundary Ridge Box	2	13	11	29
Lines Combined	25	539	20	576

Question 1: What is the trend in rat numbers trapped by ATBT volunteers?

Chart 1 below shows the monthly % rats trapped per total trap boxes (blue line) and total rat numbers trapped per month (red line) since August 2015.



The chart shows rats trapped in August and Sept are back down to pre-beech mast levels of April 2019. No rats were trapped in April 2020 due to lockdown.

New double set trap box replacement of old single set trap boxes

Allan Barker is building new double set trap boxes over the next few years that will replace old single set trap boxes that increasingly require regular maintenance. To date 80 new double set trap boxes have been built and deployed from A1 to A76 and C1 to C4. Trapping Manager database has been updated to reflect the new double set traps.

Question 2: Where were rats trapped in May to September 2020?

The map below shows the “density” clusters of rats trapped over the five months May to September 2020. Numbers in red circles represent clusters of rats trapped in adjacent traps. The higher the number in a red circle the higher the “density” of rats trapped. Green triangles indicate only one rat trapped in a trap.

Map 1: Rats trapped May to Sept 2020



The cluster map shows in the last five months the highest density of rats trapped were near Tinline on the Coastal Track (16, 22, 17); the upper Holyoake track (13, 10); along the Coastal Track opposite Adele Island (16, 17, 22); the Coastal Track between Torrent River and Torrent Village (18,14); and near Awaroa (15).

A24 Trapping Overview

Abel Tasman Birdsong Trust received a Lotteries Grant called “Heart of the Park” (HOTP) for extending the current A24 trapping network in the Falls River and Moncrieff Reserve areas. This will help both birdlife in the area and reduce the risk of predators crossing the Astrolabe and invading Adele Island.

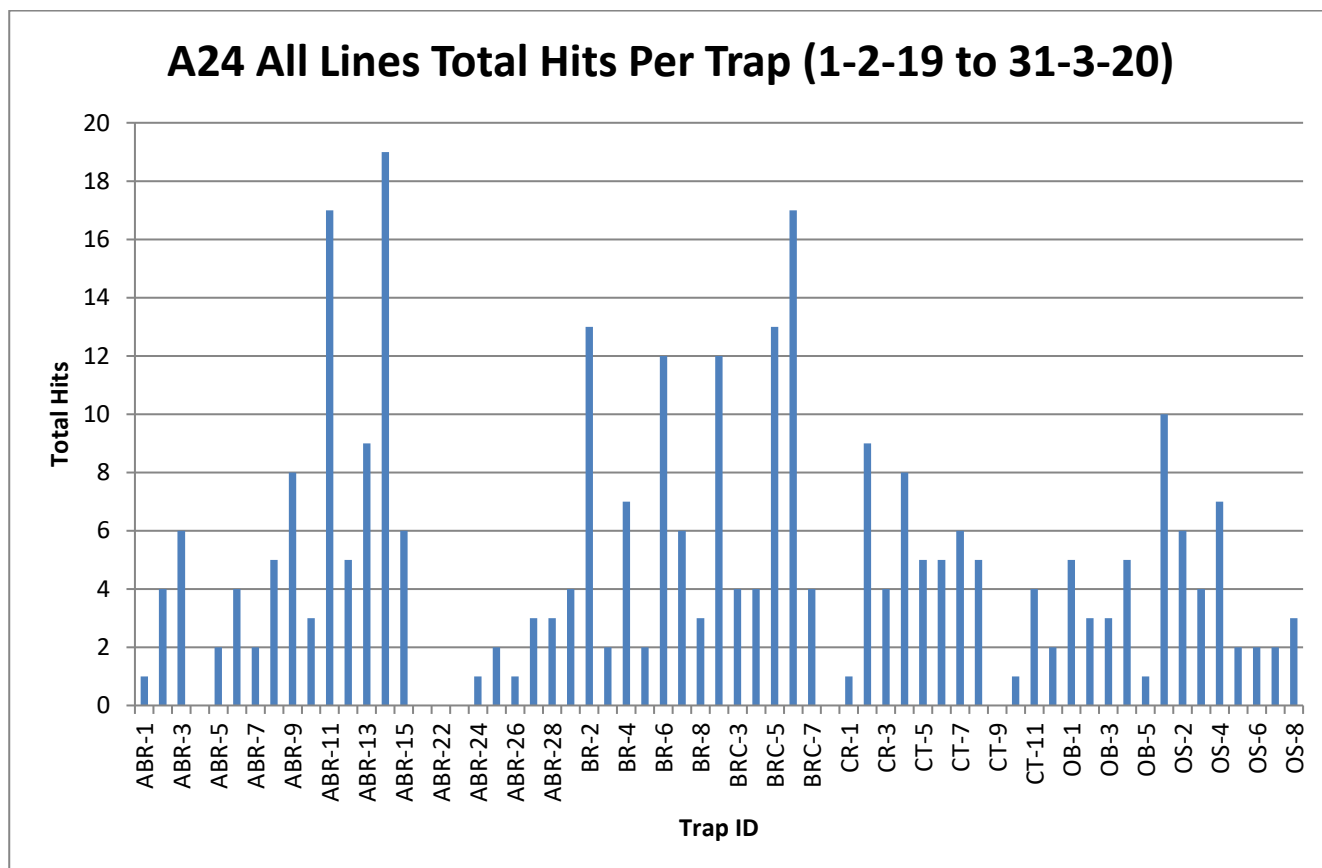
A total of 650 Goodnature A24 self-resetting traps are now in operation south of Bark Bay, Falls River, Torrent Bay, Pitt Head and the Moncrieff Reserve areas.

Trail cameras and strike counters along with tracking tunnels are being used to assess the performance of the A24 network.

A24 “kills” from trap lines in the Moncrieff Reserve

The performance of A24 traps have been monitored for most of the traps within the Moncrieff Reserve. The chart below shows strike counter counts for these traps. The range of total strikes across these traps varies from 0 for ABR4 to 19 for ABR14. 17 strikes for ABR11 and BRC6 are also high strikes.

Note: ABR16 to ABR23 have no strikes recorded as these traps did not have strike counters.

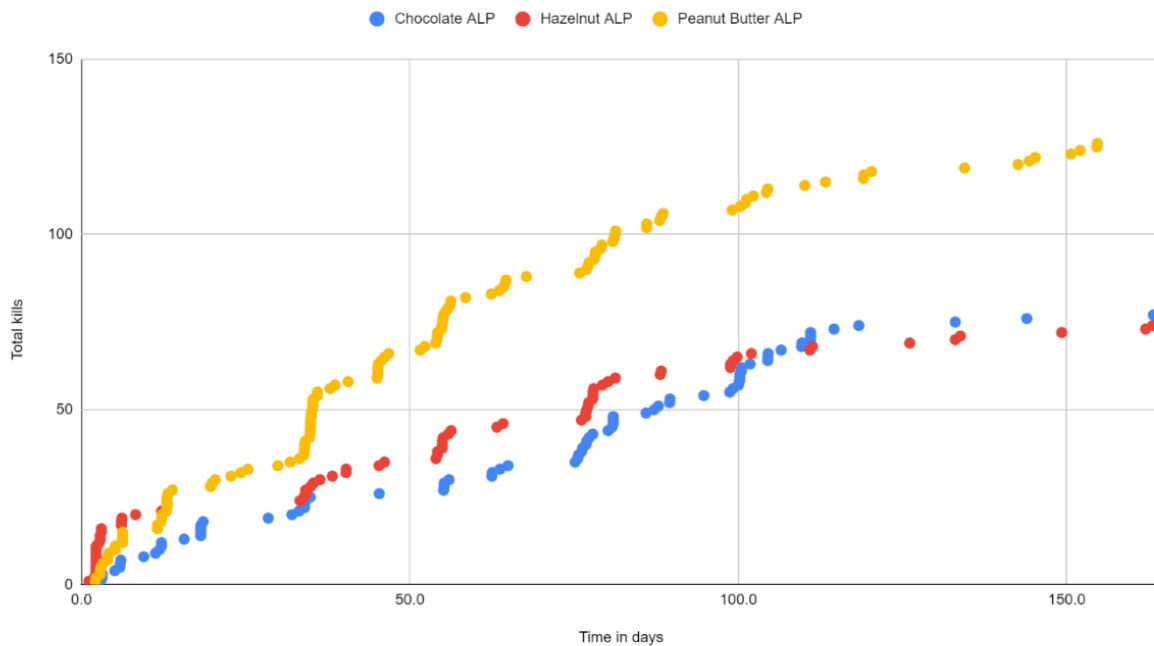


Trap ABR4 that had no kills has been removed to a more productive site. Trap CT9 that had no kills in 12 months has been moved from a patch of kanuka to a new site 10 metres along the trap line and secured to an old beech tree. In its new location the trap has had **10** kills in the last 9 months.

Goodnature A24 lure trial

Goodnature, the developers A24 traps, used 60 of the ATBT A24 traps in the Moncrieff Reserve for a five-month lure trial. The trial was for assessing three different lure types: chocolate (standard lure), peanut butter, and hazelnut. The trial lures were deployed on 11th and 12th March 2020 and finished August 2020. “Chirps” were used on the traps to monitor ‘kill’ performance. Chirps are like strike counters but when you check the trap, the Chirp sends data to the Chirp phone app via Bluetooth™. A graph and table of the results are below that shows that the peanut butter lure was better than both hazelnut and chocolate lures.

Total kills over time



Lure	Kills	Traps	Average Kills
Chocolate	77	18	4.3
Hazelnut (V1)	74	20	3.7
PB (V3)	126	20	6.3
Total	277	58	
P-value Choc vs Hazel		0.53	
P-value Choc vs PB		0.09	
P-value Hazel vs PB		0.010	

Footprint Tracking Tunnel Results

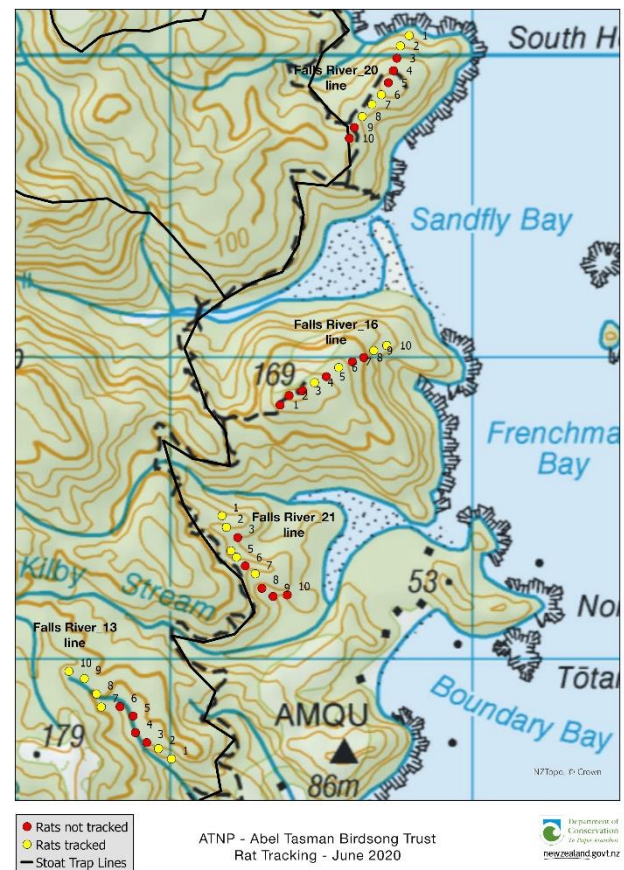
Tracking tunnels (FTT) are used to provide a snapshot the level of rodent (rat and mice) activity.

Tracking tunnel results for June and September 2020 in areas that ATBT has A24 trapping networks (see Appendix for map of ATBT A24 coverage) are depicted in on the two maps. There are 10 tracking tunnels per line. The yellow dots indicate the presence of rats.

For the FTT lines south of Bark Bay show rat tracking as follow:

Site	June	September
Falls River 20:	50%	42%
Falls River 16:	44%	10%
Falls River 21:	50%	20%
Falls River 13:	60%	50%

This indicates quite high rat tracking in June followed by a fall in rat tracking in September across all FTT lines.



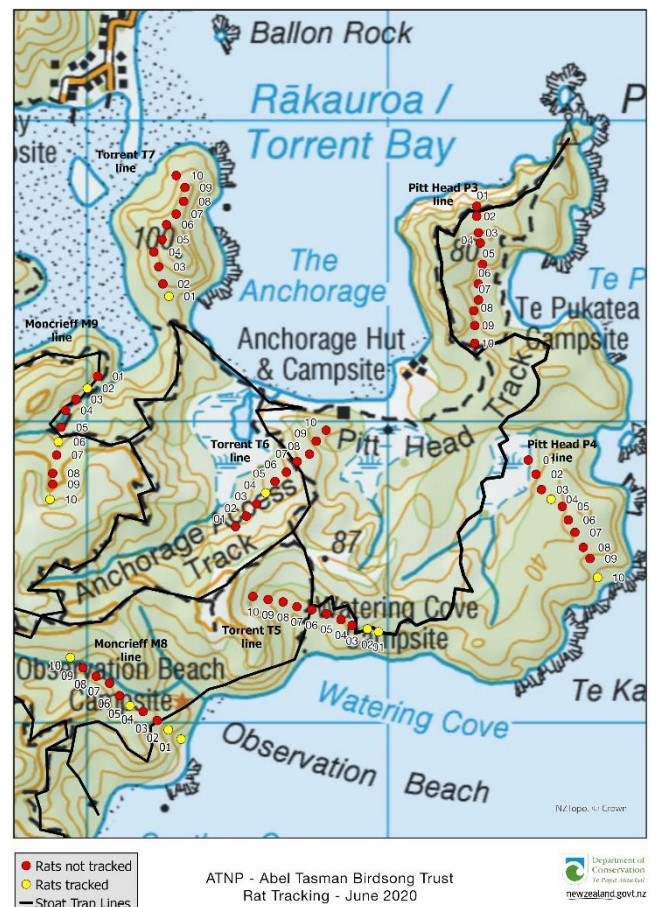
Rat tracking in the Moncrieff/Pitt Head area were as follows:

Site	June	September
Moncrieff M8	40%	30%
Moncrieff M9	30%	10%
Torrent T7:	13%	21%
Torrent T6	10%	0%
Torrent T5	20%	20%
Pitt Head P3	0%	0%
Pitt Head P4	20%	10%

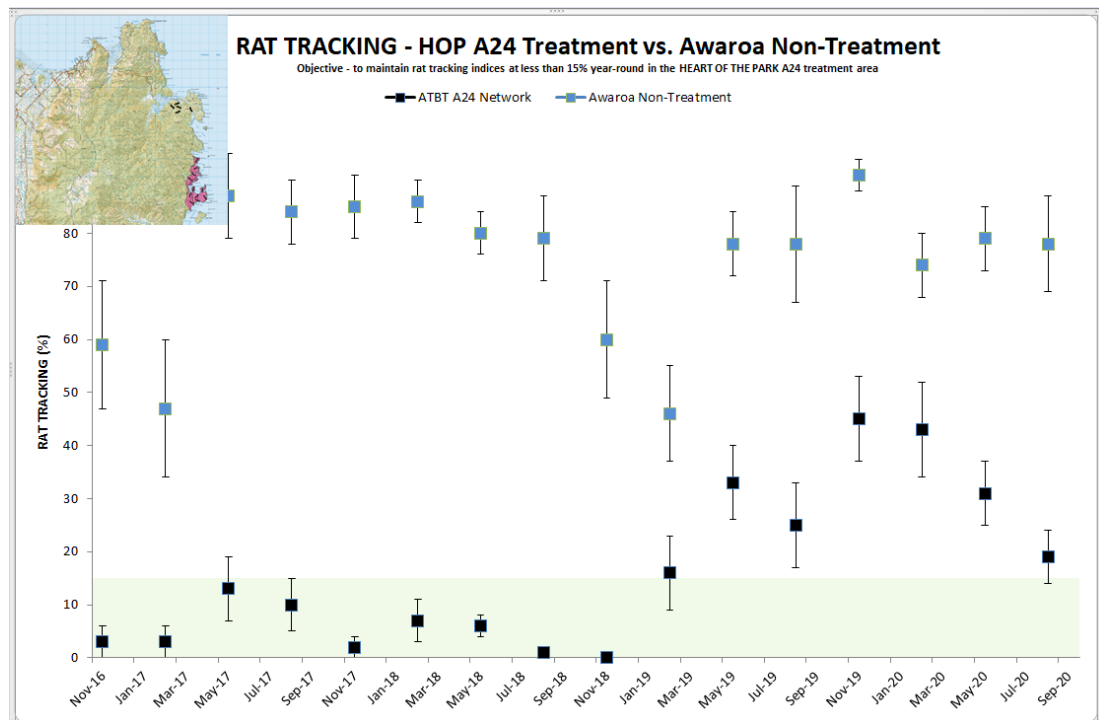
The average tracking tunnel results for all of the HOP FTT lines was 31% for June and 19% for September.

The current target is below 15% tracking.

Only Pitt Head area as measured by P3 and P4 FTT lines has achieved the <15% target.



The diagram below shows tracking tunnel results since 2016. The results called Awaroa Non-treatment is where there is no A24 trapping network and is given for comparison with ATBT's A24 network call Heart of the Park (HOP).

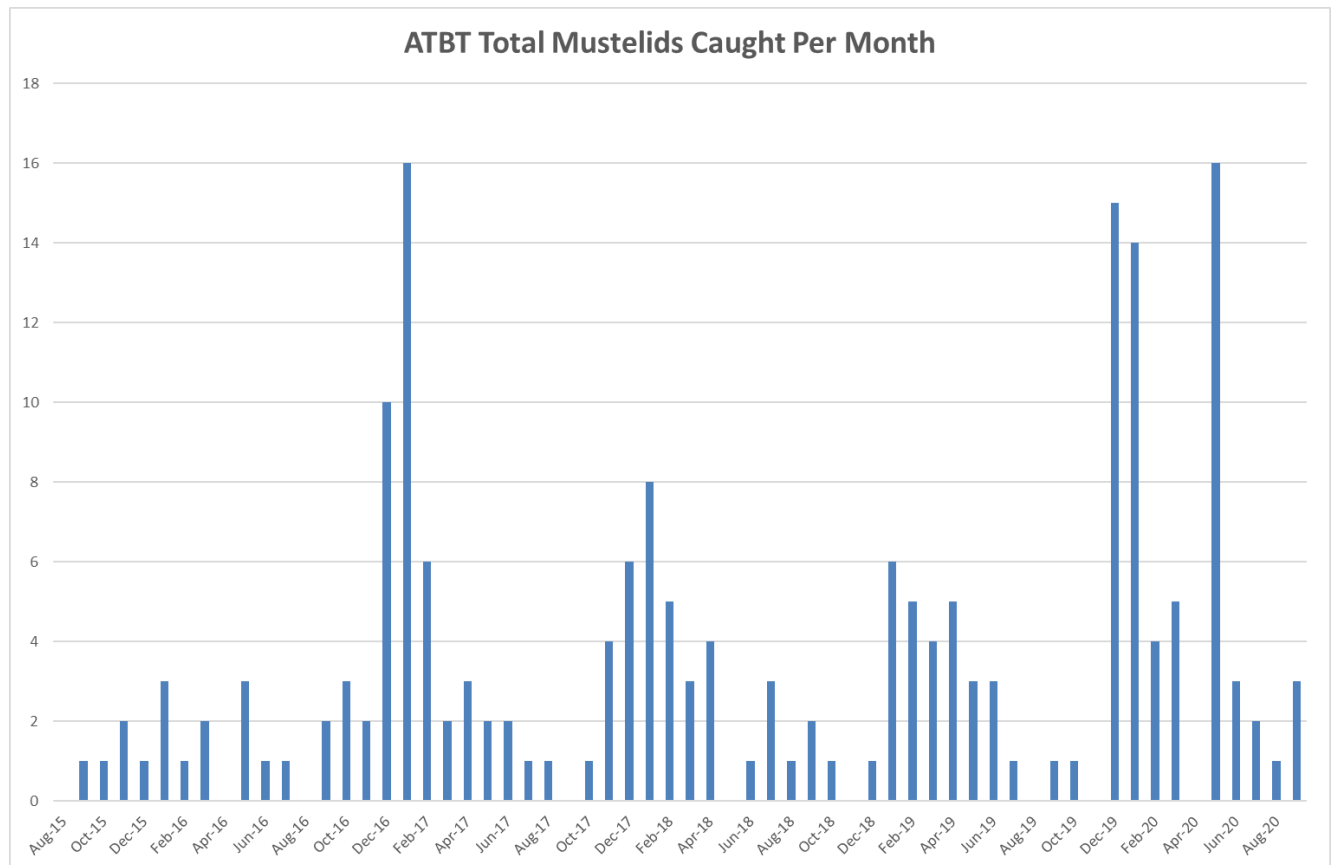


The Heart of the Park (HOP) FTT results are down to 19% overall, showing good trends post-beech mast. These results are certainly a lot better than the 78% being recorded in the Awaroa non-treatment area.

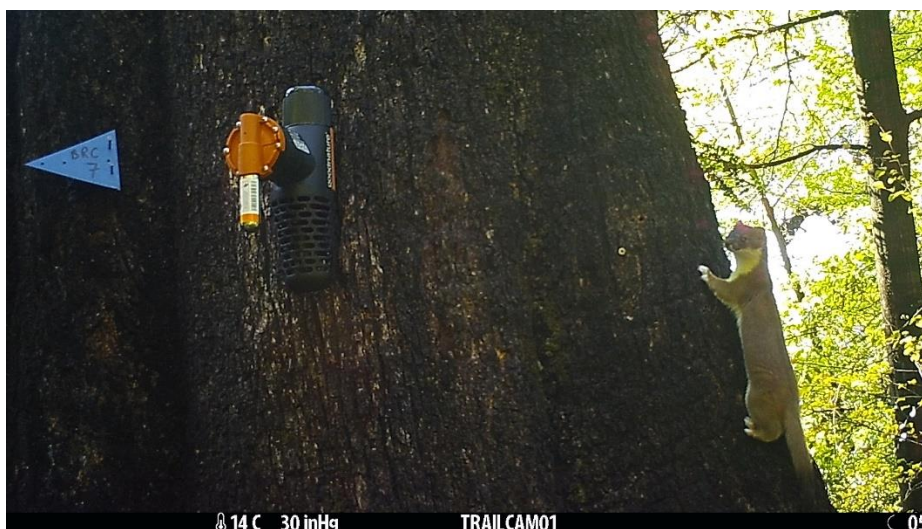
Question 3: What is the trend in mustelid numbers trapped?

Mustelid numbers trapped in August and September 2020 are back down to usual monthly levels. During lock down no mustelids were recorded as trapped in April 2020, April results were recorded as part of May's total. Interestingly the 16 mustelids trapped in May 2020 was much higher than the expected 8 to 10 mustelids trapped (twice February and March). Perhaps stoats and weasels enjoyed a more peaceful Park during lock down.

Chart 2: ATBT total mustelids trapped per month from August 2015.

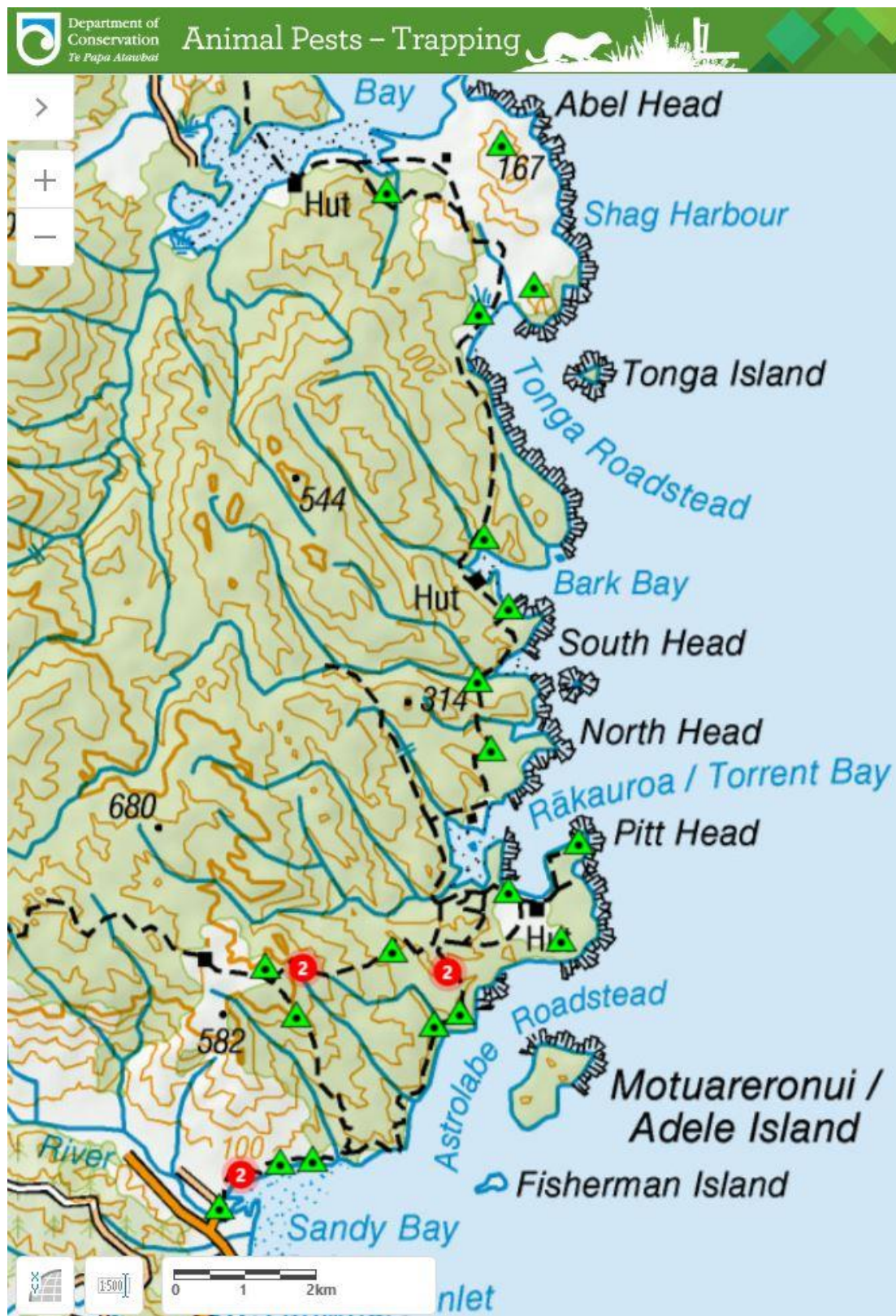


The photo below is a stoat caught on a trail camera set up on a large beech tree above Cyathea Cove. The photo was taken on the 20th May 2020. Other images of this stoat show it climbing further up the tree. Another stoat was found trapped on the 16th May on A line further up behind Cyathea so clearly there are more than one of these predators out hunting. Trail camera photos of stoats were also taken April 2020 and back in November 2019, also on this tree.



Question 2: Where were mustelids trapped?

Map 4: ATBT mustelids trapped May to Sept 2020



Mustelids (stoats and weasels) were predominantly trapped south of Torrent Bay.

Volunteer Photographs from the Park

The following photographs of small and beautiful flora were taken by volunteers Beryce and Don while out trap checking in the Park.



Pixie Eyelash fungi



False Morel fungi



Cyrtostylis rotundifolius native orchid



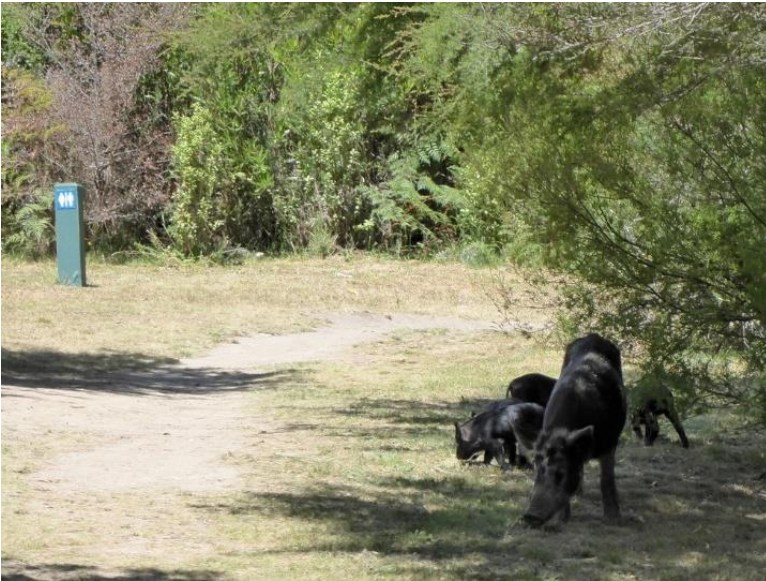
Pterostylis banksia native orchid

Please send in your interesting photos while you are out in the Park – thanks Alistair (saxby.sheat@gmail.com)

Pigs in the Park

Pigs in growing numbers have been doing a lot of damage to newly planted rimu on the Tinline Nature walk and to the Coastal track.

A large sow with four piglets romping around her at Tinline campsite!



Bolty from DOC has been giving the Rata Hill, Tinline and Coquille Bay area a bit of clean-out over the past year with good effect. Well done Bolty and keep up the good work on protecting the Park's native flora.



Bolty's baleful boar is bygone. We are bereaved but not bereft. (Ref Marieann Keenan)

Acknowledgements

A special thanks to all the Birdsong Trust volunteers for giving their time checking traps (and acting as impromptu visitor advisers (for consistency below), guides, and promoters of Birdsong Trust work).

Thanks to Peter Minchin for adding trapping data to the database for CT and Awaroa trap lines.

Abby Butler (Volunteer Coordinator and adviser), assisted by Fran Forsey.

Helen Otley and Jim Livingstone (DOC partners and advisers).

Andrew Macalister and team (Project Janszoon (PJ) partners and advisers)

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Concessionaires whose levy component contributes to the funding of Abel Tasman Birdsong Trust operations. Sponsors and donors for their contributions.

Pic Picot and Pics Peanut Butter for peanut butter for A24 trap lures.

William Sheat for updating the spreadsheet that analyses the trapping data for producing graphs and data tables in this report.

Michelle and Regan Bridge for helping distribute and position the new trap boxes from A19 onwards.

Bill Franklin DOC Marahau for boating in batches of new trap boxes into Tinline and Apple Tree Bay

Finally, to all the Park visitors who show interest and support for all the work of the Abel Tasman Birdsong Trust.

