

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 – February 2021

Overview

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). Abel Tasman Birdsong Trust volunteers check traps 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 374 mustelids and 7073 rats trapped since October 2010. Volunteers check 576 trap boxes and 650 A24 traps. (Note that ATBT volunteers also check traps up at Canaan. These will be reported by Project Janszoon until their configuration is finalised as part of the 'stoat optimisation' project).

October 2020 to February 2021 Trap Box Results

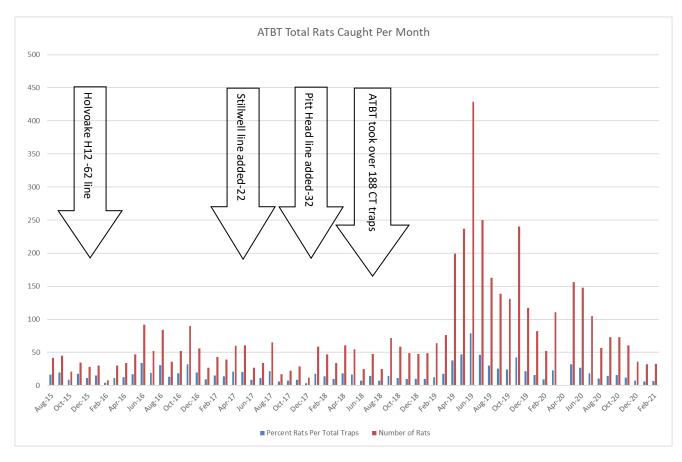
Trapping results for the **5 months** for October 2020 to February 2021 (table 1) show **18** mustelids and **239** rats were trapped.

Line	Mustelids	Rats	Avera	ige Percent Rats Per	No of Trap Boxes on Line
A	4	71		10	
В	0	19		10	39
С	1	6		7	23
H31/1 to H31/12	4	10		17	12
H1 to H62	2	20		6	62
Marahau	1	7		9	16
Stilwell	1	14		13	22
Tinline	3	7		18	8
Pitt Head	0	1		1	32
Awaroa Head	0	7		3	42
Coastal Track 1	1	16		9	37
Coastal Track 2	1	30		17	36
Coastal Track 3	0	18		14	33
Coastal Track 4	1	19		10	40
Boundary Ridge Box	0	9		8	29
Lines Combined	18	239		10	576

Table 1: Mustelids and rats trapped for October 2020 to February 2021

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 October 2020 to February 2021 are down, particularly December 2020 to February 2021. **Rats caught as percentage of box traps for January and February 2021 are the lowest in since September and October 2017**. No rats were reported trapped in April 2020 due to lockdown.

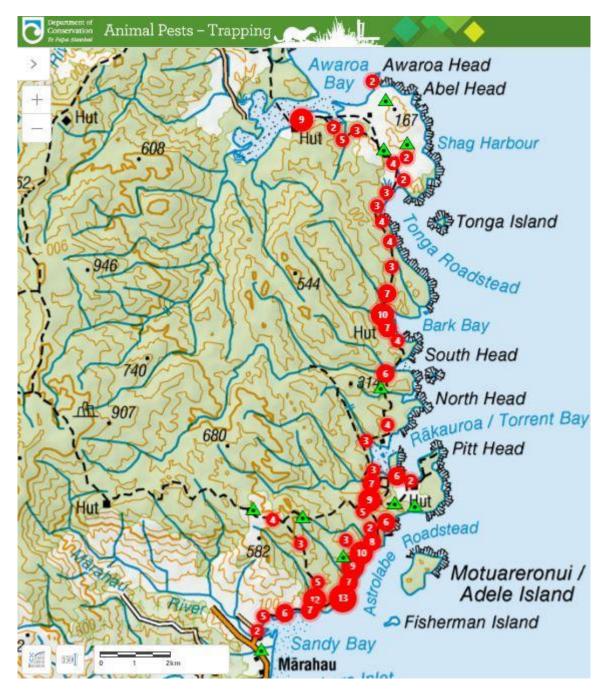
New double set trap box replacement of old single set trap boxes

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. New double set trap boxes have been built and deployed from A1 to A82 and C1 to C4. The Trapping Manager database has been updated to reflect the new double set traps.

Question 2: Where were rats trapped in October 2020 to February 2021?

The map below shows the "density" clusters of rats trapped over the five months October 2020 to February 2021. 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 October 2020 to February 2021



The cluster map shows in the last five months the highest density of rats trapped were from near Tinline (12) and opposite Adele Island on the Coastal Track (13, 9, 10, 8); along the Coastal Track near Bark Bay (10); and near Awaroa Hut (9).

A24 Trapping

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 rodents (rats and mice) 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. (see Appendix for map of ATBT A24 coverage)

Tracking tunnels and strike counters are being used to assess the performance of the A24 network.

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 March 2021 in the ATBT A24 trapping networks are depicted in on the two maps opposite. There are 10 tracking tunnels per line. The yellow dots indicate the presence of rats in a tunnel.

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

Site	June 2	March 21	
Falls River 20:	50%	42%	10%
Falls River 16:	44%	10%	0%
Falls River 21:	50%	20%	0%
Falls River 13:	60%	50%	0%

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

Site	June 20	September 20	March 21
Moncrieff M8	40%	30%	20%
Moncrieff M9	30%	10%	10%
Torrent T7:	13%	21%	10%
Torrent T6	10%	0%	0%
Torrent T5	20%	20%	11%
Pitt Head P3	0%	0%	10%
Pitt Head P4	20%	10%	0%

Overall, the average tracking tunnel results for all of the HOP FTT lines was 31% for June 2020, 19% for September 2020, and 9% March 2021.

This indicates quite a high rat tracking in June followed by a fall in rat tracking in September and a bigger fall in March 2021 across all FTT lines.

The current target is below 15% tracking.

Overall, there is very little mouse tracking.

For comparison the 5 FTT lines behind Awaroa tracked at: 80%, 70%, 74%, 80% and 100%. This area does not receive any treatment for rats e.g. 1080 or A24 trapping.





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

Mustelid numbers trapped in December 2020 and January 2021 were up following the usual trend of higher mustelid capture during the months December to February. February 2021 mustelid capture is back down indicating a shorter mustelid peak.

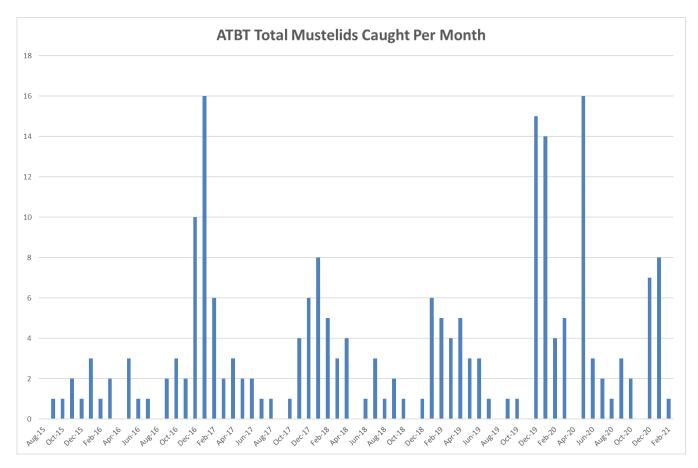
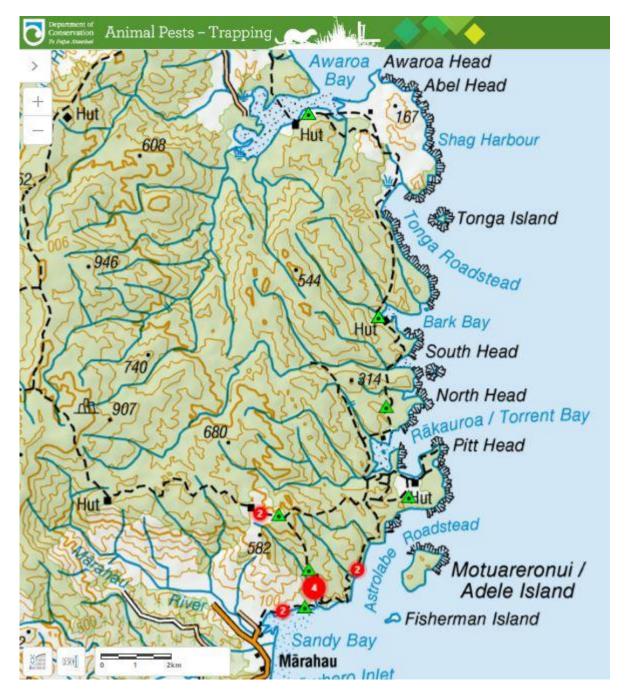


Chart 2: ATBT total mustelids trapped per month from August 2015.

Question 2: Where were mustelids trapped?

Map 4: ATBT mustelids trapped October 2020 to February 2021



Mustelids (stoats and weasels) were predominantly trapped near Tinline; on the Holyoake line; opposite Adele Island; with one mustelid caught near Watering Cove, north of Torrent Village, near Bark Bay, and at Awaroa Hut.

Volunteer Photographs from the Park

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

The beautiful white (*Metrosideros perforate*) and red rata (*Metrosideros fulgens*) in flower during January and February





The unusual sighting of a trap door spider (*Mygalomorphae nemisiidae*). Closed then open.





The very rare Bearded Orchid (*Calochilus paludosus*) spotted when Koa and Alistair were out checking a new stoat line in the Moncrieff Reserve in November 2020.

Photo by Alistair Sheat

Biff clearing a mustelid from one of Allan's new double set traps.

Photo by Meg Simpson





Acknowledgements

A special thanks to all the Birdsong Trust volunteers for giving their time checking traps (and acting as impromptu visitor advisers 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).

Bruce Vander Lee and team (Project Janszoon (PJ) partners and advisers)

Water taxi companies for carrying volunteers into the Park. Abel Tasman Kayaks who host the Marahau shed and Bruce Reid who hosts the Motueka shed.

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.

Bill Franklin and DOC Marahau team for boating in batches of new trap boxes in and old boxes out from Akersten Bay and Cyathea Cove.

Finally, to all the Park visitors who show interest and support for all the work of the Abel Tasman Birdsong Trust. A special thanks to those that catch water taxis into the Park and contribute part of their taxi fare to ATBT's conservation efforts.

cpartment of Conservation Te Papa Asautori Animal Pests – Trapping -3 Bark Bay Bark Bay Hut & Campsite SA Bark Ba South Head +andfly Bay Ø River Falls Pinnacle Island Bare Knot 479 renchman Bay North Head Tôtara Rocks dary Bay 419 Ballon Rock Rākauroa / 4 Pitt Head Tou 131 Torrent Bay Village Calupsit The Te Pukatea Bay Inchorage stea 489 Anchorage Het & Campsite Poplatia Popl Armchair Isla 205 Anchor Bay Torion River 214 519 Adolphe Po 10 H Te Karetu Point Hering Cove Observation Beach 140 Cyathea Cove Six Foo kersten Bay Yellow Point 1500 0 0.5 1km 13z Jules Point -74 100

The following map shows ATBT's A24 trapping network. The red triangles represent a A24 trap.