



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 – May 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 381 mustelids and 7297 rats trapped since October 2010. Volunteers check 576 trap boxes and 650 A24 traps. (Note that ATBT volunteers also check traps up at Canaan and Falls River. These will be reported by Project Janszoon until their configuration is finalised as part of the ‘stoat optimisation’ project).

March to May 2021 Trap Box Results

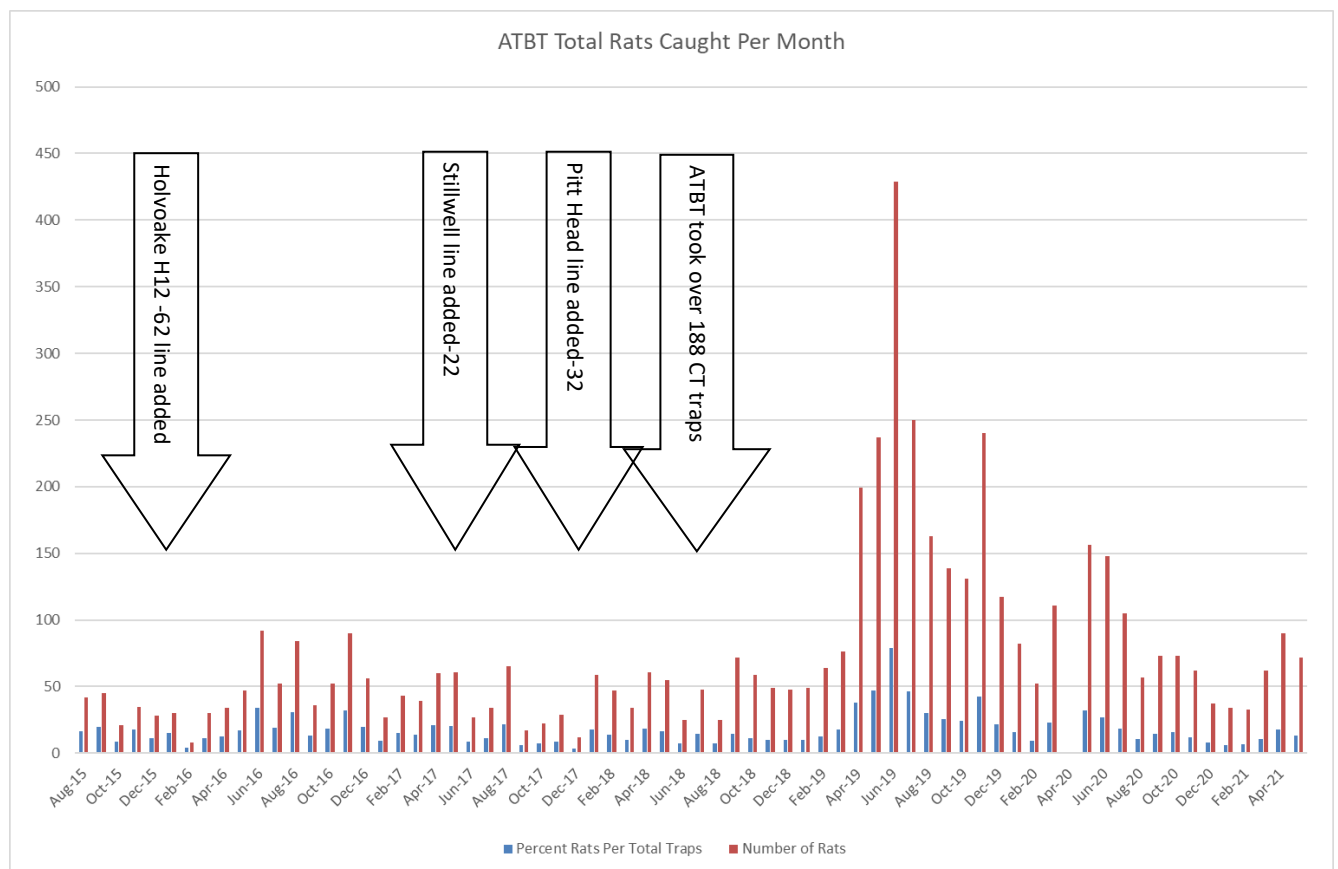
Trapping results for the **3 months** for March 2021 to May 2021(table 1) show **7** mustelids and **224** rats were trapped.

Table 1: Mustelids and rats trapped for March to May 2021

Line	Mustelids	Rats	Average Percent Rats Per	No of Trap Boxes on Line
A	0	74	17	145
B	0	8	7	39
C	0	6	9	23
H31/1 to H31/12	0	7	29	12
H1 to H62	0	10	8	62
Marahau	1	11	23	16
Stilwell	0	6	9	22
Tinline	0	5	21	8
Pitt Head	1	3	3	32
Awaroa Head	0	8	19	42
Coastal Track 1	2	16	14	37
Coastal Track 2	1	9	8	36
Coastal Track 3	0	27	27	33
Coastal Track 4	0	25	21	40
Boundary Ridge Box	1	2	3	29
Lines Combined	7	224	14	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.



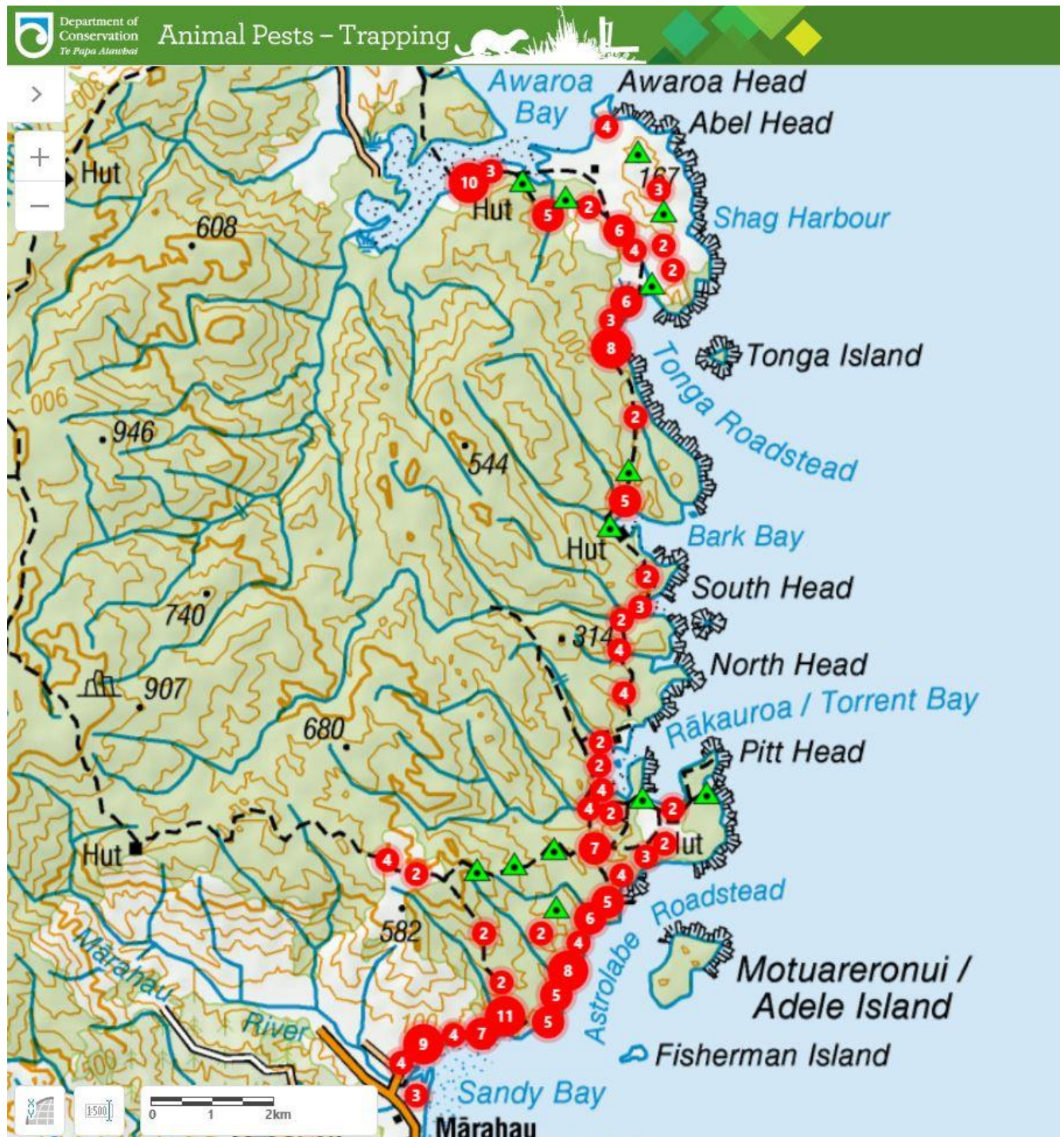
The chart shows rats trapped in **March to May 2021** are back up compared to the previous three months, but not as high as the same period in 2020 and much less that the same period in 2019; the during the beech mast.

No rats were reported trapped in April 2020 due to lockdown.

Question 2: Where were rats trapped in March to May 2021?

The map below shows the “density” clusters of rats trapped over the five months March to May 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 March to May 2021



The cluster map shows in the last three months the highest density of rats trapped were from near the beginning of the Coastal Track (9), Tinline (11), opposite Adele Island on the Coastal Track (8); the south end of Onetahuti (8), and near Awaroa Hut (10).

Heart of the Park Sanctuary Project

In December 2018, the Abel Tasman Birdsong Trust received a Lotteries Grant called “Heart of the Park” (HOTP) for extending the current A24 trapping network into 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. The Lotteries Grant part of the project was due for completion on the 3rd May 2021. See appendix for the map of the Heart of the Park Sanctuary project.

The overall purpose of HOTP project was to establish a 565ha sanctuary to be called “Heart of the Park Sanctuary” where rat and stoat predator populations will be reduced to near zero in coastal bush habitat within the Abel Tasman National Park.

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 2 for map of ATBT A24 trap coverage)

Rat and stoat pests will be monitored throughout the Sanctuary project to ensure the objective of the Sanctuary is being achieved and/or make changes to the project based on the data generated by the monitoring. The monitoring method used for the Sanctuary project will be a mix of trap catch e.g. Catch-Per-Unit-Effort (CPUE) and tracking tunnels as these tools are already in use and provide a baseline prior to establishing the Sanctuary.

Heart of the Park Project Progress

Tracking tunnel (FTT) results can be seen and discussed in the next section.

Rats Trapped

The map opposite shows rats trapped by trap boxes within the HOTP Sanctuary area for one year from June 2020 to May 2021.

Rats are still being caught fairly consistently in box traps within the area of the HOTP project from Bark Bay to Yellow Point.

Some of this will be due to rats migrating into the HOTP area from the western boundary of the project – the B trap line (Holyoake track to Torrent River) and Coastal Track between Torrent River and Bark Bay.

However, rats continue to be trapped well within the HOTP project boundary (within the blue lined area).

This includes well within the A24 network in the Pitt Area (yellow lined area).



It is worth noting the year June 2020 to May 2021 was a relative quiet time for rat captures (as indicated by Chart 1 showing the trend in trapped rat numbers) compared to January to December 2020 which was a beech mast year. During this year a significant number rats were trapped, even within the Torrent/Pitt head A24 network (yellow circle) that was finally installed by April 2017.



Going forwards it is important to continue the work of optimising the performance of the A24 network. It is planned to use trail cameras and strike/Chirp A24 counters to provide data for this performance improvement, and ultimate protection of birdlife within the coastal area of the Abel Tasman National Park.

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 May 2021 in the ATBT A24 trapping networks are depicted in the two maps below. 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 20	Sept 20	Mar 21	May 21
Falls River 13:	60%	50%	0%	0%
Falls River 16:	44%	10%	0%	0%
Falls River 20:	50%	42%	10%	0%
Falls River 21:	50%	20%	0%	0%

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

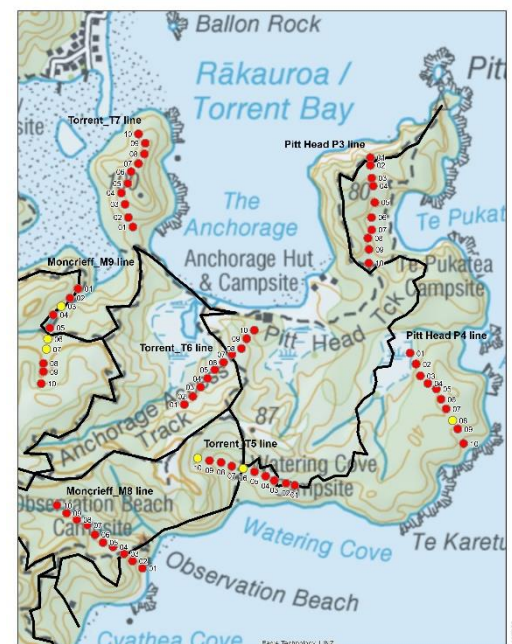
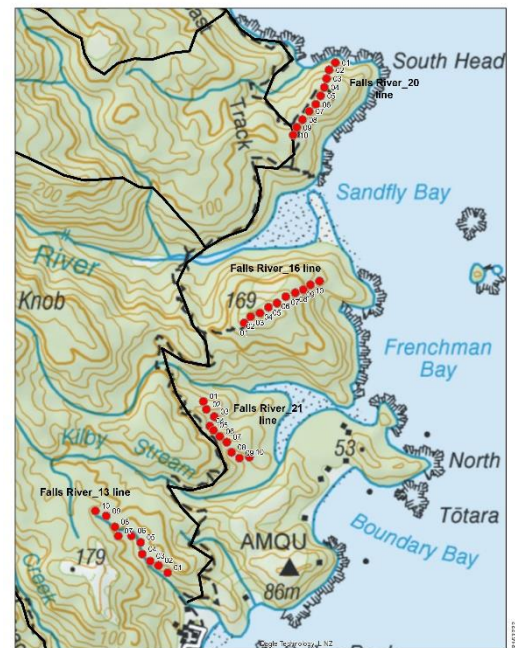
Site	June 20	Sept 20	Mar 21	May 21
Moncrieff M8	40%	30%	20%	0%
Moncrieff M9	30%	10%	10%	30%
Pitt Head P3	0%	0%	10%	0%
Pitt Head P4	20%	10%	0%	11%
Torrent T5	20%	20%	11%	20%
Torrent T6	10%	0%	0%	0%
Torrent T7:	13%	21%	10%	0%

Overall, the average tracking tunnel results for all of the HOTP FTT lines was 31% for June 2020, 19% for September 2020, 9% March 2021, and 5% May 2021. A great result to date for the A24 networks and the HOTP project.

This indicates a continued fall from high rat tracking in June 2020 to May 2021 across all FTT lines except for Moncrieff M9, Torrent T5, and Pitt Head P4 that showed an increase from the March 2021 FTT check.

Overall, there is very little mouse tracking in the May 2021.

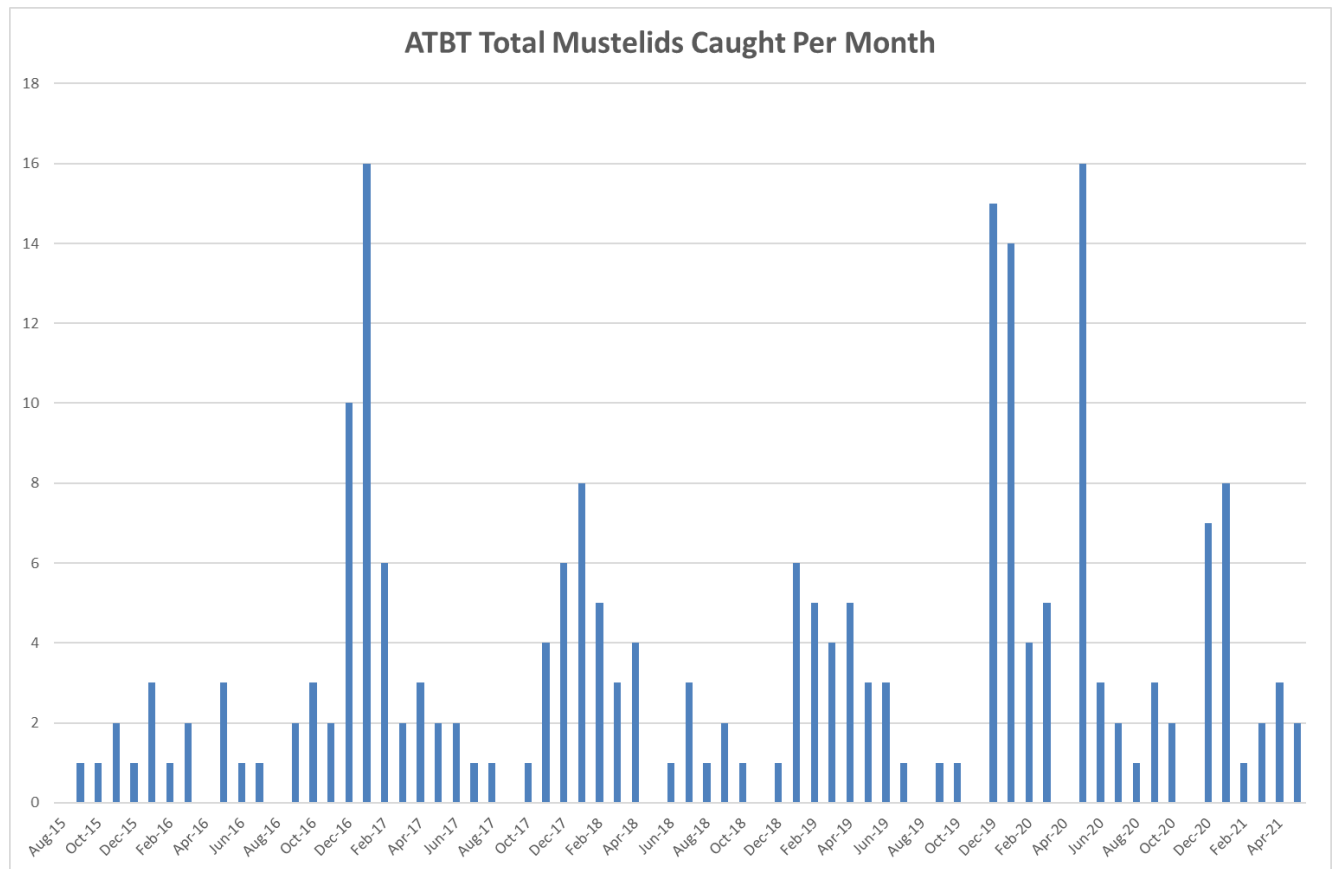
For comparison the 5 FTT lines behind Awaroa for May tracked at: 100%, 100%, 70%, 100% and 100%. This area does not receive any treatment for rats e.g. 1080 or A24 trapping.



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

Mustelid numbers trapped in March to May 2021 were low 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 March to May 2021



Mustelids (stoats and weasels) were trapped along the coast from Marahau to Awaroa Head. There have been sightings of a stoat at both Pitt Head and Cyathea Cove in 2021 that may account for a stoat caught in both locations (hopefully).

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. There are not so many flowers out in the in the Park from March to May but lots of fungi.

The very beautiful purple coral fungus *Clavaria zollingeri* and other coral fungus *Ramaria*.



Yellow Chanterelle fungus and gilled fungus



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.

Jim Livingstone, Chris Golding, and Helen Otley (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.

Appendix 1 Map of the Heart of the Park Sanctuary Project



Appendix 2: Area covered ATBT A24 trapping network

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

