



Abel Tasman Birdsong Trust

Trapping Report - February 2017

Overview

Traps are checked Abel Tasman Birdsong Trust volunteers twice per month. The results for 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) caught by volunteers.

A total of 92 mustelids and 1,324 rats have been caught by Abel Tasman Birdsong Trust volunteers since August 2015 when records first were stored in the database. Historic records show that between October 2010 and August 2015, 158 mustelids and 2156 rats were caught, making a **grand total of 250 mustelids and 3,480 rats caught since October 2010.**

January and February 2018 Trapping Results

Trapping results for the two months of January and February 2018 (table 1) show 106 and 15 mustelids were caught compared to the 41 rats and 10 mustelids caught in the previous 2 months.

Table 1: Mustelids and rats trapped for January and February 2018

Line	Mustelids	Rats	Average Percent Rats Per Month Per Total Trap boxes	No of Trap Boxes on Line
A	1	61	24	127
B	0	3	4	39
C	2	9	20	23
H31/1 to H31/12	0	0	0	12
H1 to H62	7	14	11	62
Marahau	1	3	14	11
Stilwell	2	8	18	22
Tinline	0	6	38	8
Pitt Head	0	2	3	32
Lines Combined	13	106	16	336

Note: The rats and mustelids noted as caught are from checking traps twice during the month.

Rat Catch Rate for December 2017 and January 2018

Forty nine (**49**) or nearly half of the rats caught in the last two months were from the single mid January trap check. This was after a heavy rain event on the 4th and 5th January and a very dry November and December (Rainfall only 21mm (79mm historical average) and 10mm (66mm historical average) respectively recorded at Nelson. The dry weather changed abruptly on the 4th and 5th January 2018 with 197 mm rainfall recorded in the first week of January at Marahau. January’s rainfall of 220mm recorded at Nelson was much higher than the historical average of 66mm.

In the mid December 2017 check only four (**4**) rats were caught and only eight (**8**) were caught on the 1st Jan 2018 trap check. See figures below.

Figures 1 & 2: Location of **4** rats trapped (green triangles) from mid Dec 2017 trap check and **8** rats trapped from the 1st Jan check

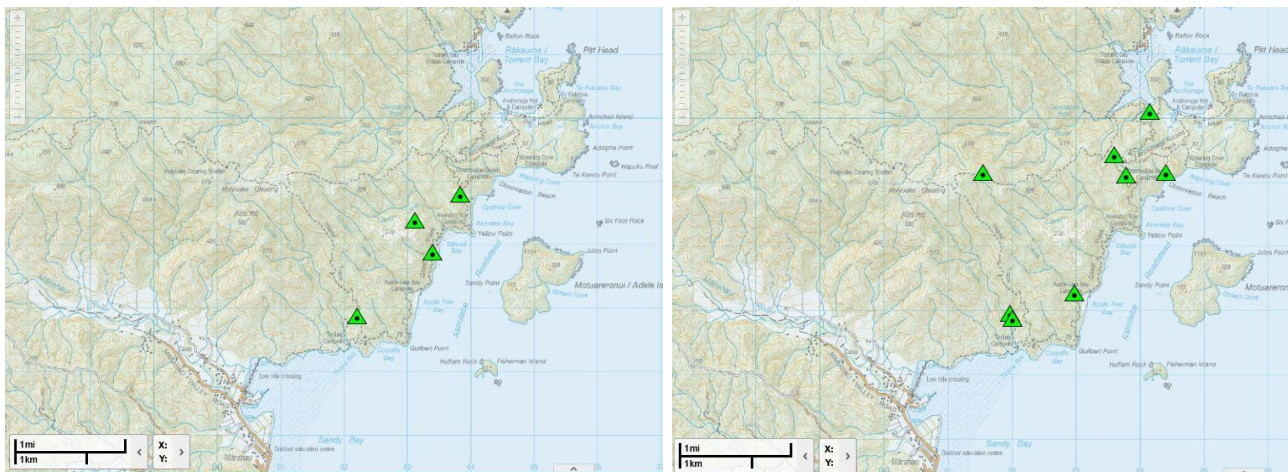
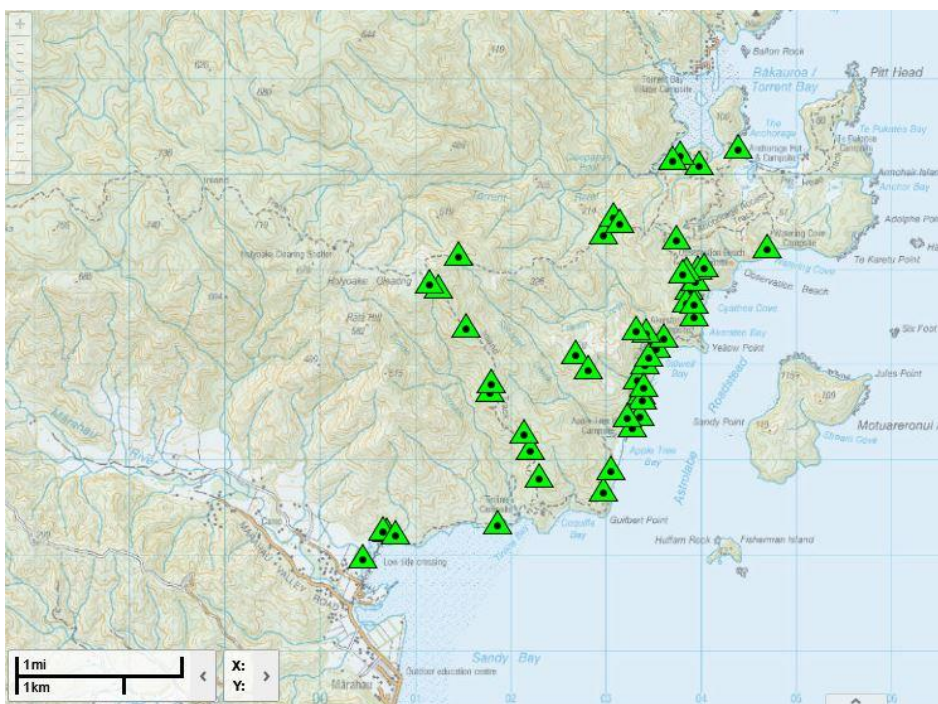


Figure 3: Location of **49** rats trapped (green triangles) from mid January 2018 trap check



The largest increase in rats caught in mid January was along the Coastal Track from Gilbert Point to Observation Beach. The big question is why the large increase in rats trapped in mid January 2018. Was it entirely due to the weather patterns? What does it mean if anything for our future operations?

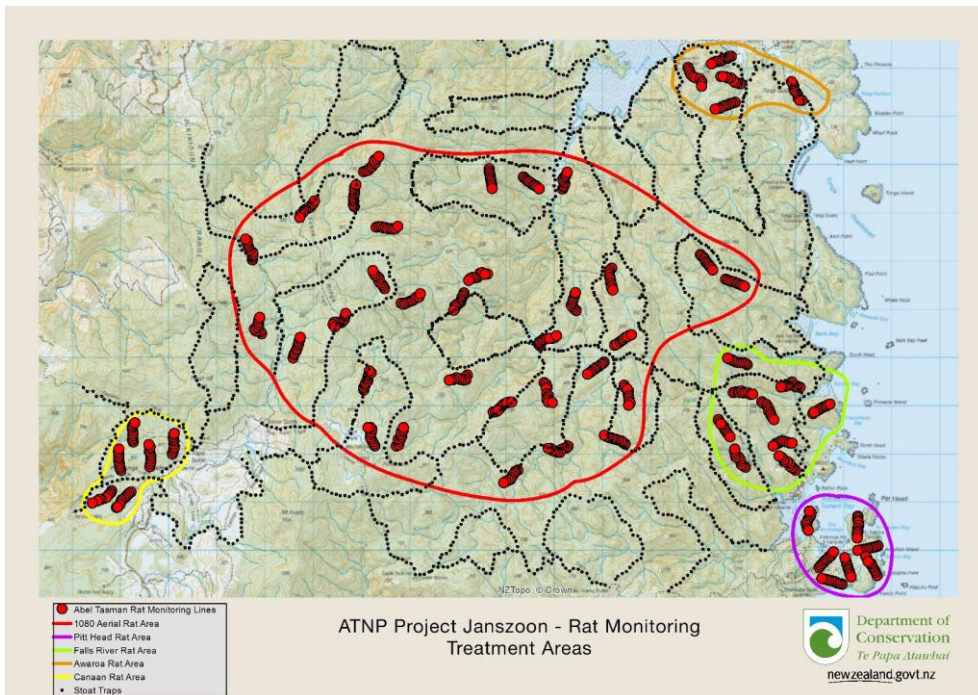
Pitt Head and Torrent Bay A24 Trapping

The Pitt Head project is going well. The last replacement traps are scheduled to be installed in April. Tracking tunnel results continue to show low rat numbers (see below excerpts from Project Janszoon (PJ) Pest Control Report January and February – Sian Reynolds). In March the A24 bait will be changed to Pics peanut butter for the next 6 months.

The extension to the A24 area is complete. See appendix for the map of the A24 network and related stoat lines.

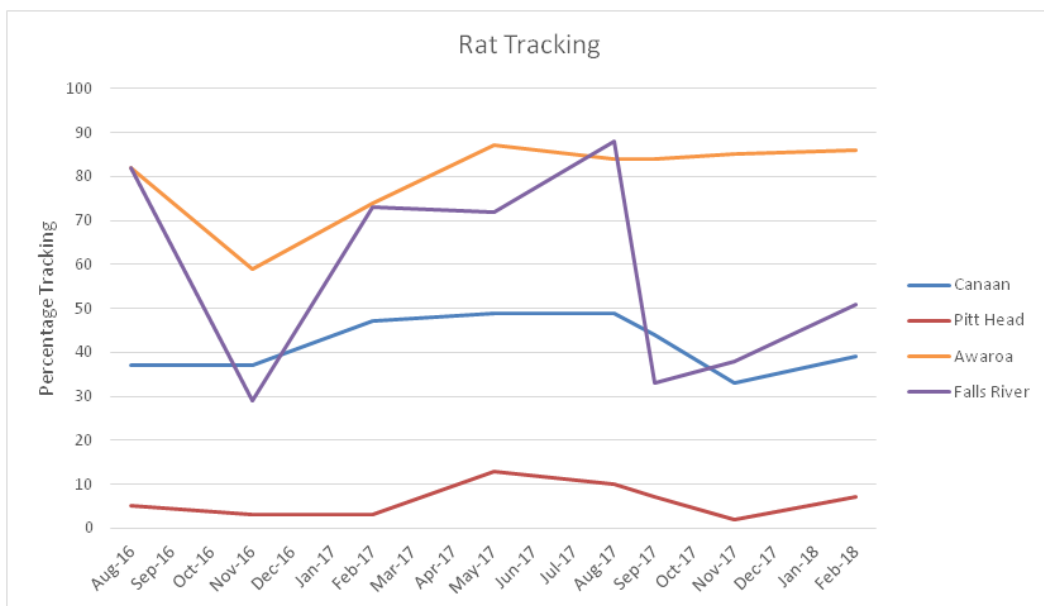
Project Janszoon Rat Monitoring¹

Rat monitoring is undertaken quarterly in the park (February, May, August and November) and produces a Foot Tracking Index (FTI) presented as a percentage. There are five different predator control treatments in Abel Tasman National Park and monitoring is undertaken in each treatment area (Figure below). There are a total of 59 rat monitoring lines within southern Abel Tasman (see map below).



Rat monitoring tracking tunnel locations in southern Abel Tasman National Park to fit the five different predator control treatment sites. There are seven rat monitoring lines in the Pitt Head area where A24s provide rat control.

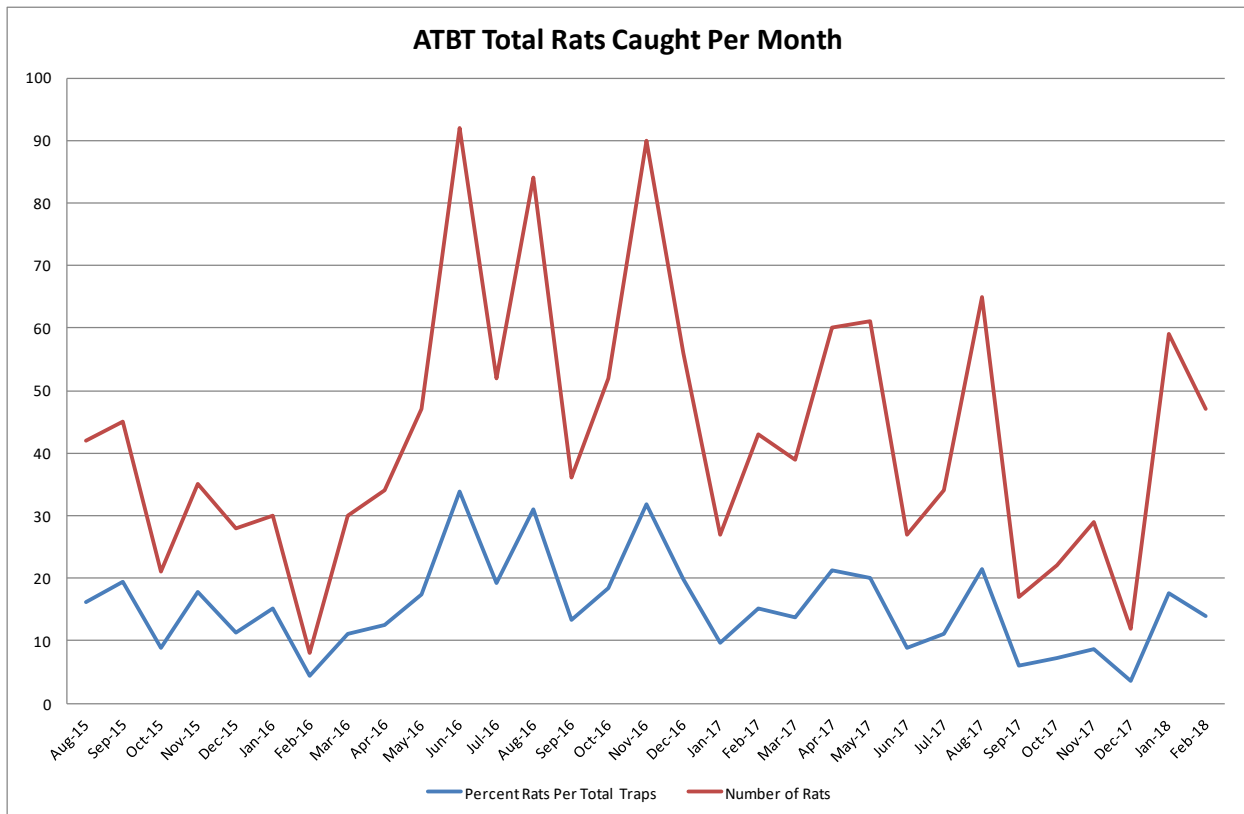
February rat monitoring results shows that the A24 network at Pitt Head continues to provide good rat control with rat tracking sitting at 7%. This is much lower than other areas of the Park where rat monitoring is undertaken (Figure below).



¹ Project Janszoon Pest Control Report, Abel Tasman National Park, January and February 2018, Prepared by Sian Reynolds – Ranger Supervisor (Project Janszoon)

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

The chart below shows the monthly % rats caught per total trap boxes and rat numbers caught per month since August 2015.



The chart shows the very large increase in rats caught in January 2018 compared to November and December 2017. February's rat catch was slight down on January, but still high.

The increase in the number of rats caught, particularly since December 2015, would be in part due to more trap boxes in operation as in the table below.

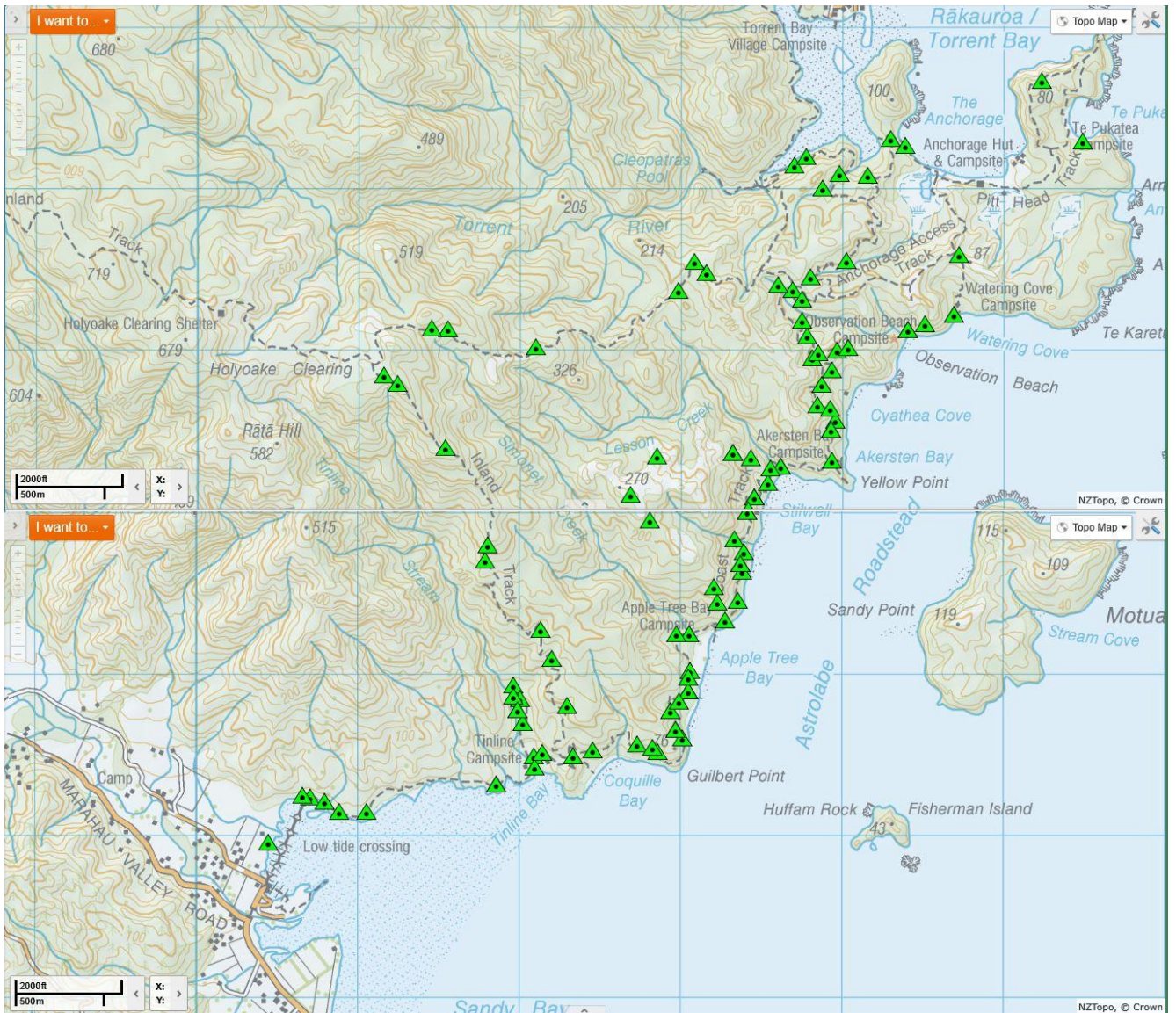
Trap additions since August 2015

Date	Location	Number of Boxes	Trap type
December 2015	H12 to H62	51	51 double set
March 2016	H31/1 to H31/12	12	12 double set
October 2016	B32 to B39	8	8 single set
May 2017	SW1 to SW22	22	11 run through double set and 11 ZIP double set
Nov 2017	PH1 to PH32	32	Pitt Head stoat line to complement the A24 traps
Total		125	

Question 2: Where were rats caught in January and February 2018?

The map below where rats were caught (green triangles) over the two months January and February 2018.

Figure 4: Rats trapped January and February 2018



The map shows in the last two months rats have been caught mainly along the Coastal Track between Tinline and Cyathea Cove, and between Cyathea Cove and the Anchorage access track. A few rats were also caught Holyoake line.

Interestingly two rats were caught on the Pitt Head stoat line in the middle of the original Pitt Head A24 trap area. Also two rats were caught on the track between Watering Cove and Anchorage which is within the A24 network extension. See Appendix: Map of A24 network.

Possum Control

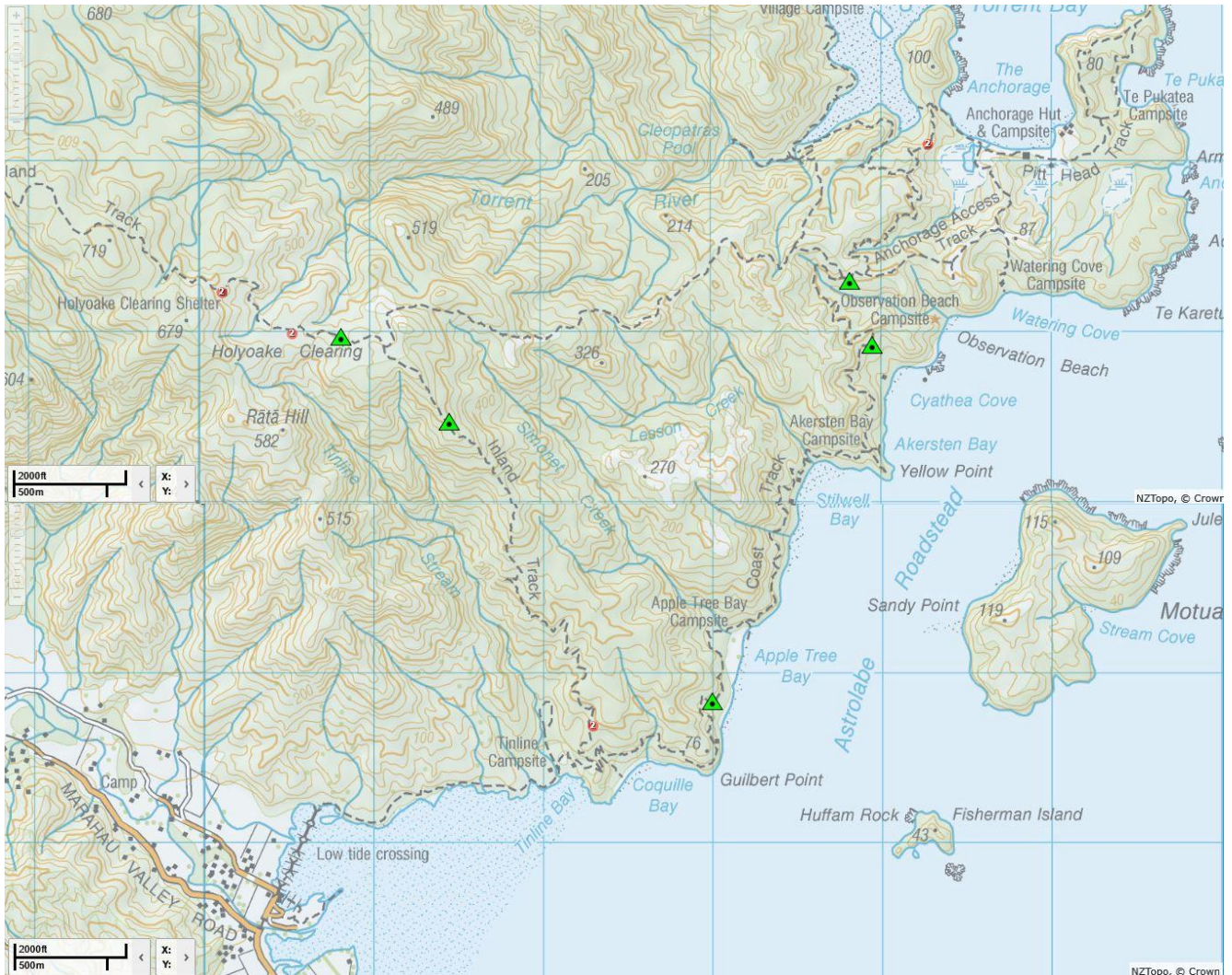
Based on possum 'hot spot' locations from the Wax Tag survey results, sentinel possum traps were selectively removed from between A26 and A80 and relocated into selected sites on Holyoake line, upper A line, B line and C line.

Thirteen possums were caught in the two months Jan and Dec 2018. **8** of the **13** were caught on the Holyoake line. Two possums were caught on A and B line and 1 possum caught on C line. See figure 5 below

These results show the value of the wax tag survey and redeployment of the sentinel possum traps.

Figure 5: Possums trapped January and February 2018

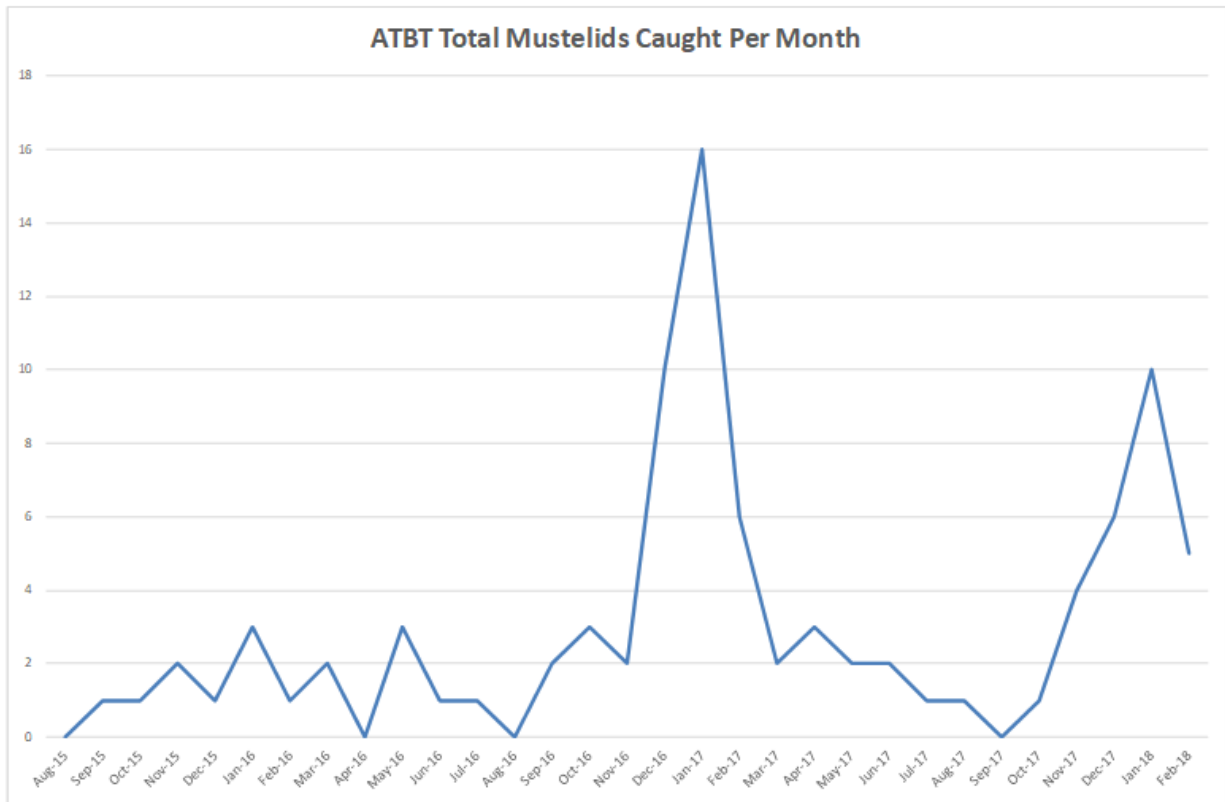
(Green triangles represent single possum captures, red 2 circles represents 2 possums caught in the same trap or adjacent traps over the 2 month period)



The 13 possums caught in January and February by ATBT volunteers is relatively high compared to the 25 caught in the same period by Project Janszoon.

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

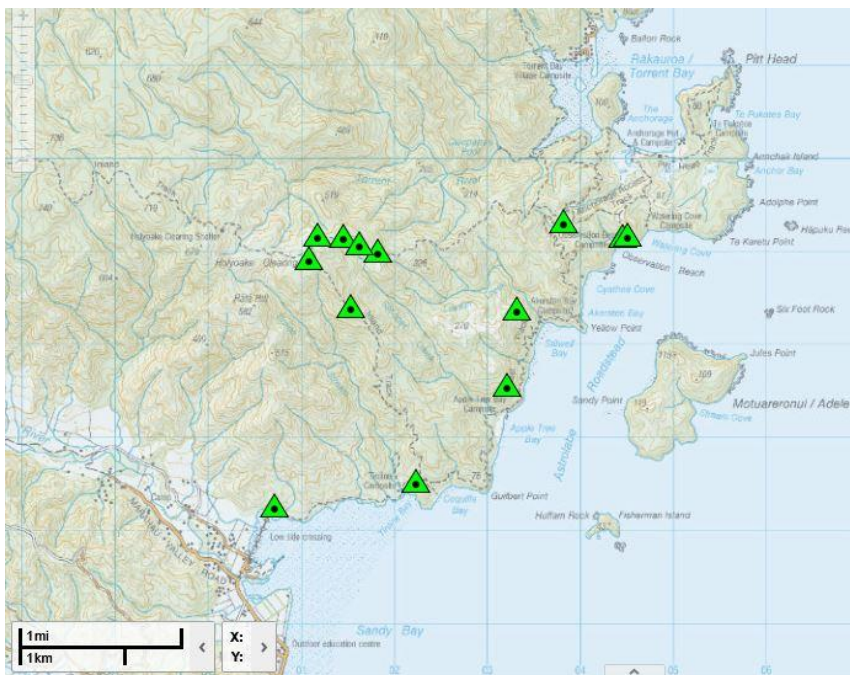
Chart 2: ATBT total mustelids trapped per month from August 2015.



Mustelid numbers caught show a similar pattern compared to 2016, although not as many overall. The peak in mustelids caught is in January the same as 2017.

Question 2: Where were mustelids caught?

Figure 6: Mustelids trapped January and February 2018



There is a cluster of mustelids caught on the upper Holyoake line. Other mustelids caught were spread along the coastal track.

There is more to trap checking than rats and stoats

This is one of 42 fungi that Beryce recently photographed. A great photo showing the small beauty in the Park.



Acknowledgements

Trap checking volunteers: Marieann Keenan and Paul Kennedy (new volunteers), Anthea and Brian Harvey, Mike and Lorraine Endres, Pat and Dave Lewis, Peter Sharples, Josh and Tamsin Leenhouders, Elise Jenkins, Beryce Vincenzi, Don Pittham, Al Rynn, John and Deb Hughes, Tom Horn, Sarah Brewer, Lou Peat, Jared, Andrew and Elaine Harding, Eric Mc Pherson, Georgina Upson, Dave Wilson, Kirsten Schmidt, Andrew Eastwood, Christie Douglas, Austen Dean, William Sheat, Koa Saxby, Alistair Sheat. Ruth Beuke, Allan Barker, John Wells, Bruce Reid, Bruce Whitwell and John Richards A24 Pitt Head and Torrent Bay extension. Abby Butler (Volunteer Coordinator and adviser). Sian Reynolds and Jim Livingstone (DOC partners and advisors including PJ Pest Report, maps and trapping app advice).



- Birdsong A24
- Stoat Traps Lines

Abel Tasman Birdsong Trust
A24 Rat Network



Sian Reynolds, Department of Conservation