

Introduction

Traps are checked and baited by Abel Tasman Birdsong Trust volunteers twice per month. The results for trap checking are recorded and entered into the DOC designed "Animal Pests – Trapping" internet based application. The trapping application is a Geographical Information System (GIS) that allows systematic recording of trapping results, data analysis and reporting of rats and mustelids (stoats or weasels) caught by volunteers.

July to August 2017 Trapping Results

A total of 66 mustelids and 1,138 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 224 mustelids and 3,294 rats caught since October 2010.

Trapping results for the **two** months of July to August 2017 (table 1) show 99 rats and 2 mustelids were caught. This compares with 148 rats caught and 7 mustelids caught in the previous **three** months April, May and June.

Line	Mustelids	Rats	Average Percent Rats Per Month Per Total Trap boxes	No of Trap Boxes on Line
А	0	59	23	127
В	0	10	13	39
С	0	6	13	23
H31/1 to H31/12	0	0	0	12
H1 to H62	1	11	9	62
Marahau	1	3	14	11
Stilwell	0	8	18	22
Tinline	0	2	13	8
Lines Combined	2	99	16	304

Table 1: Mustelids and rats trapped for July to August 2017

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

Other Observations

A dozen young alive and well weta were found in a trap on the Stillwell line.

Trap Maintenance

Trap maintenance was done during August. Maintenance included checking trap location markers, wire mesh attachment, ensuring level ground for the trap box, cutting steps for access, replacement of any rusting traps with new stainless steel traps, and importantly checking the sensitivity of the trapping mechanism using a defined weight – 80 to 100g.

Trap maintenance was guided by the rats caught or not during the previous year. For example trap A2 had never caught a rat or stoat in the last two years so the trap mechanism was replace and the box was repositioned.

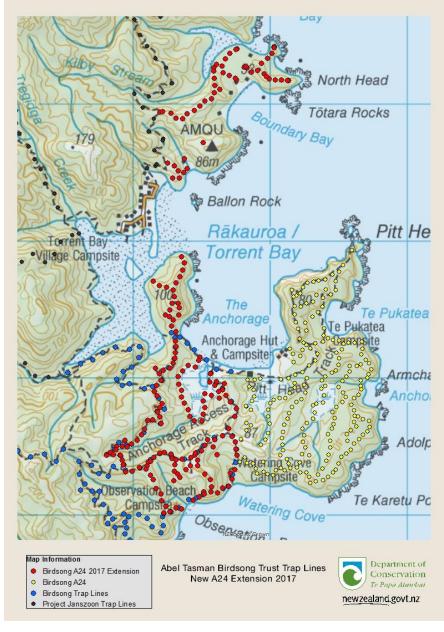
Pitt Head and Torrent Bay A24 Trapping

The installation of A24 traps at Anchorage from Watering cove to Observation beach and North to the Torrent bay lagoon has been completed, making an additional 148 automatic A24 traps dealing to the local rats.

Survey work for trap positions through Torrent village and out to Glasgow's beach then North through Boundary bay and Frenchmen's is well advanced (although frequently delayed by rain) and this will bring another 70 or so A24's into action to cover the space between Project Janszoon's Falls river poison block and the sea. Ruth Beuke will manage this project.

The A24 traps in the Pitt head to Watering cove area showed little sign of activity in the period except for a curious problem in a couple of areas where mice had eaten through the plastic lids on the traps in an attempt to get at the peanut butter bait. Bait is now changed to chocolate and lids replaced with new ones. August tracking tunnels showed no activity inside the trap cordon. A line of double trap run-through style trap boxes will be placed through the middle of A24 trapped area to check if any mustelids can be caught that are not being caught by the A24 traps.





Possum Monitoring

Wax tag surveys are being done to check for possums in the area. Wax tags were nailed to a tree near each rat trap and the tree marked with flour and icing sugar blaze to attract possums. The wax tags were put out for three nights before recovery and analysis by DOC staff.

To date wax tag surveys have been completed between A1 to A82 and Holyoake line. Preliminary results show **4** possum chew marks between A1 and A82 and **25** possum chew marks for the Holyoake line. Many wax tags were chewed by rats suggesting significant rat populations near traps that do not catch many rats indicating the possible need for trap box repositioning e.g. A22, or trying different bait in addition to Erayz, e.g. peanut butter.

New Volunteers

Four new volunteers have been trained up and are currently part of the H line team. A family of volunteers, the Leenhouwers, have been trained up and are part of the A line team.

Josh Leenhouwers, ably assisted by Josh and Tamsin's daughter Noa cleaning and re-baiting an A line trap.



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

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

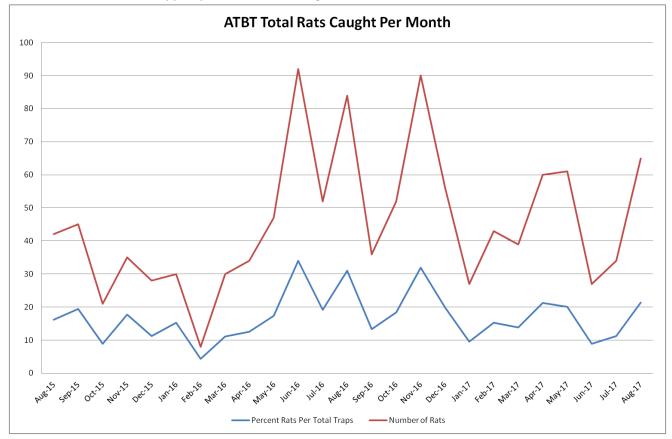


Chart 1: ATBT total rats trapped per month from August 2015.

The chart shows rat numbers caught are on the rise compared to low numbers caught during June. 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.

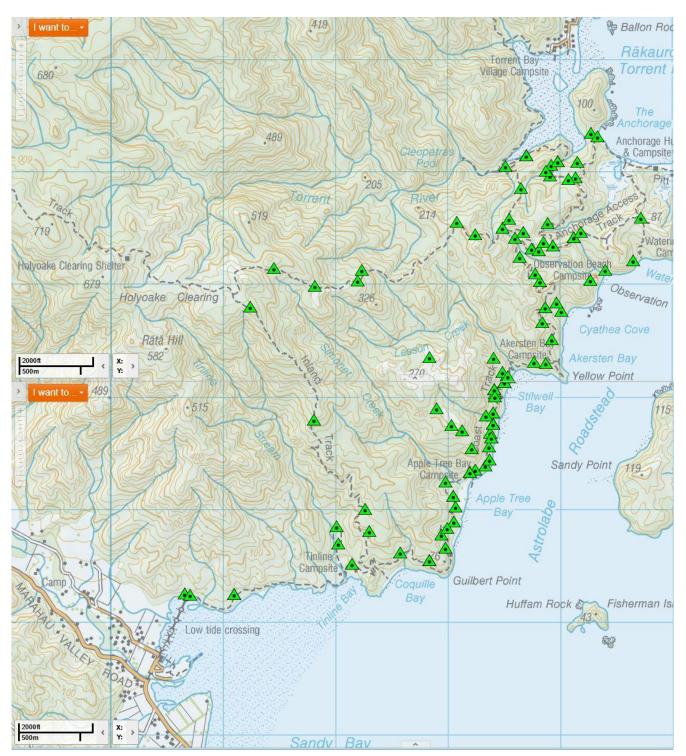
Date	Location	Number of Boxes	Trap type
December 2015	H12 to H62	51	51 double set
March 2016	H31/1 to	12	12 double set
	H31/12		
October 2016	B32 to B39	8	8 single set
May 2017	SW1 to SW22	22	11 run through double set and 11
			ZIP double set
Total		93	

Trap additions since August 2015

Question 2: Where were rats caught?

The map below where rats were caught (green triangles) over the two months July and August.

Map 1: Rats trapped July to August 2017



The map shows in the last two months rats have been caught mainly along the coast between Apple Tree Bay and Cyathea Cove, and between Cyathea Cove and Anchorage. It will be interesting to see the impact of the A24 trap extension.

Note Pitt Head has A24 traps and will be catching rats without a "body count".

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

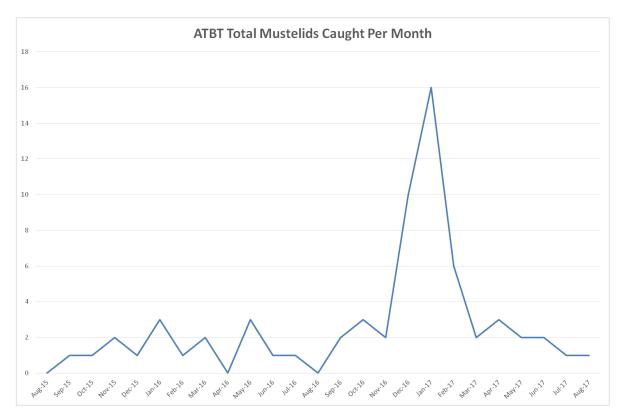


Chart 2: ATBT total mustelids trapped per month from August 2015.

Mustelid numbers are back down to usual numbers of 1 to 2 being caught per month after a spike in numbers caught from December 2016 to February 2017.

Question 2: Where were mustelids caught?

The map below shows where the two mustelids were caught (green triangle) over the two months July and August.



Map 2: Mustelids trapped July to August 2017

There is more to trap checking than rats and stoats

Beryce, with Don's assistance, took these wonderful photos of native orchids most common on the bank between A30 and A34. The close up pictures are of Corybus "whiskers" and Cyrtostylis reniformis show how beautiful they are – the flowers are less than 5 mm across!



Wild pigs are about

The rain and soft ground has meant wild pig rooting has been making a mess on the Tinline Nature Walk and on the coastal track near Coquille Bay. DOC staff were quick to repair the track after the damage was reported by an ATBT trapping team. All part of a day's work for ATBT volunteers.



Acknowledgements

Trap checking volunteers over the last 3 months: Anthea and Brian Harvey, Mike and Lorraine Endres, Pat and Dave Lewis, Peter Sharples, Josh and Tamsin Leenhouwers, Elise Jenkins, Beryce Vincenzi, Don Pittham, John and Deb Hughes, Tom Horn, Sarah Brewer, Lou Peat, Andrew and Elaine Harding, Eric Mc Pherson, Georgina Upson, Dave Wilson, William Sheat, Koa Saxby, Alistair Sheat. New volunteers: Kirsten Schmidt, Andrew Eastwood, Christie Douglas, Austen Dean. Ruth Beuke, Allan Barker 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 maps and trapping app advice).

Appendix: Abel Tasman Birdsong Trust Trap Lines

The picture below shows trap lines that are checked and maintained by ATBT volunteers. The red lines are the A24 trap line extensions.

