



Whangarei Heads Landcare Forum Predator Trapping Report 2010/11 Season



The WHLF have carried out predator trapping for kiwi recovery at the Whangarei Heads since 2002. This report covers the period October 2010 to September 2011 with some additional comments on the 2011-12 season.

1.0 Trap Coverage

The trapping network has largely been in place since 2002 with additions and fine tuning of trap locations continuing since then.

Mustelid traps: 171 double sets of Mark 6 Fenn traps in mainly plastic tunnels; 49 Doc 200 sets and 24 Doc 250 sets in boxes.

Cat traps: 35 SA Cat traps; 10 cages are used to target cats.

	Kauri Mt	Eastern Manaia	Western Manaia	Taurikura	The Nook	Kerr Rd	Total
Fenns	48	33	20	19	40	11	171
SA's	13	13	3	1	4	1	35
Cages	6	2	0	0	2	2	10
Doc200s	4	13	15	14	2	1	49
Doc250s	6	6	1	2	7	2	24

In addition to these traps the Department of Conservation Whangarei Area Office also operates traps at the Nook, Taurikura Ridge, South Manaia Walkway, and Mount Aubrey – trap catches of stoats, weasels and cats from these traps are included in this report.

These traps are in addition to the Department of Conservation/ Bream Head Conservation Trust trapping programme that the trappers carry out at the Bream Head Reserve and in the buffer area to the north of the Whangarei Heads peninsular. Trap catches from those traps are not included in tallies here.

2.0 Predators trapped

Table 2. Summary of captures by WHLF Kiwi Recovery programme.

Total captures (October to September each year)							
	Ferret	Stoat	Weasel	Cat	Hedgehog	Rat	Possum
2002/2003	1	55	46	18	65	391	NA
2003/2004	4	22	21	22	52	319	24
2004/2005	1	30	17	38	95	403	285
2005/2006	0	26	13	29	82	357	191+
2006/2007	0	26	8	17	68	304	147
2007/2008	0	19	22	18	84	346	75+
2008/2009	0	21	25	12	112	351	144+
2009/2010	0	17	20	20	87	321	139+
2010/2011	1	24	27	15	86	338	109+
2011/2012*	0	13	3	8			
Total	7	253	202	197	731	3130	1114+

* Interim results for 2011/2012 season till Feb 2012

2.1 Comments on 2010/2011 programme by species.

Ferrets

In October 2010 a ferret was caught at the northern end of Mt Manaia, this is the first ferret caught since 2004. As ferrets are capable of killing sub-adult and adult kiwi a single ferret can do significant damage to a kiwi population. This shows the importance of using traps capable of catching ferrets, particularly at points of reinvasion. The ferret was caught in a Mk6 Fenn trap. The Doc 200 traps used in the WHLF network are located back from points of potential ferret reinvasion as Doc 200 traps are not designed to catch ferrets.

This season 30 Doc 250s were incorporated into the network, these traps are specifically designed for ferret control. Unfortunately due to jamming problems with the Doc 250s and the standard box exposing bait at the blind end salted rabbit cannot be used in them due to the risk of creating bait shy animals, so eggs and fresh rabbit are used only.

Stoats

24 stoats were caught in the 2010-11 season, this compares with an average annual catch of 23 stoats over the past 8 years and well down from the peak of 55 in the first season 9 years ago. Catch rates peaked in February at 6 stoats. The stoat kills were more concentrated at the northern end of trapping area probably due to reinvasion from inland areas. The Department of Conservation traps on the peninsula tip of Bream Head accounted for 5 stoats over the same period.

The Department of Conservation carried out a 1080 possum control operation using land based bait-stations at Mt Manaia reserve in the spring of 2010. It is expected that this operation has eliminated any trap shy predators in that area.

See section 6.0 of this report for discussion on trap shy stoats within long running trapping systems and use of secondary poisoning as a control method for these animals.

Table 3. Monthly capture stoats

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Kauri Mt	1	0	2	0	3	1	0	0	0	0	0	1	8
E. Manaia	0	0	1	1	2	0	0	1	0	0	0	0	5
W. Manaia	0	0	0	0	0	0	0	0	0	0	0	0	0
Taurikura	0	0	0	1	0	0	0	1	0	0	1	0	3
The Nook	1	2	1	0	1	0	0	0	0	1	0	2	8
Kerr Rd	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	2	4	2	6	1	0	2	0	1	1	3	24

Weasels

Weasel captures were 27, well up on the average catch tally of 19 of the past 8 seasons but still down from the first season catch of 46. 21 of the 27 weasels were caught between February and May

Table 4. Monthly capture weasels

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Kauri Mt	0	0	0	0	1	3	0	2	0	0	1	0	7
E. Manaia	0	0	0	0	1	0	0	2	0	0	1	0	4
W. Manaia	0	0	0	0	0	1	1	2	0	0	1	0	5
Taurikura	1	0	1	0	1	1	3	0	0	0	0	1	8
The Nook	0	0	0	0	0	1	1	1	0	0	0	0	3
Kerr Rd	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	3	6	5	7	0	0	3	1	27

Cats

Cat captures were 15 this season, the second to lowest tally in the past 9 seasons and well down from the peak of 38 for the 2004-05 season. The majority of the cats were caught in late summer/autumn in the Kauri Mt- Eastern Manaia areas.

Table 5. Monthly capture cats

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Kauri Mt	0	0	0	1	2	2	0	0	0	0	0	0	5
E. Manaia	0	0	0	2	2	0	0	1	0	0	0	0	5
W. Manaia	0	0	0	0	0	0	1	1	0	0	0	0	2
Taurikura	0	0	0	0	0	0	0	0	0	0	0	0	0
The Nook	0	0	0	0	0	1	0	0	0	0	0	1	2
Kerr Rd	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	3	4	3	1	2	0	0	0	1	15

Rats

Recorded rat catches in the predator traps totaled 338. 21 Norway rats were identified out of the total (approximately 6%) although many of the trappers do not distinguish between rat species on their records.

The rat catch has remained relatively stable for the past 9 seasons ranging from a low of 304 in 2006-07 to a high of 403 in 2004-05. This indicates that predation by mustelids is not a limiting factor to our rat population.

In addition to these rat catches individual projects within the WHLF project area carry out targeted rat control. These results are not included in this report.

Possoms

Again in addition to the possums caught in the predator traps major possum control projects have been continued by individual Landcare projects within the Whangarei Heads Landcare Forum with significant catch results. The results of these projects are not included in this report.

Also of note was a major possum control operation by the Department of Conservation on Mt Manaia in the spring of 2010. That operation used 1080 toxin and the benefits of the secondary poisoning of stoats etc are discussed later in this report.

Hedgehogs

This season's hedgehog catch of 86 is similar to past years.

3.0 Bait/Lure

Salted rabbit remains the main lure used because of its attractiveness to stoats, lasting properties, ease of distribution and storage in freezers.

Chicken eggs were used over the winter months as they are more suited to the 6 weekly trap checking period used then. However there was no success on target species with eggs apart from weasels. As discussed earlier the Doc 250s are baited with eggs or fresh meat all year round to minimise generation of bait shy animals.

4.0 Community operated traps

There is now a hard core of community trappers who are well skilled and persistent in their trapping efforts. This season new community trapping efforts were initiated in the Lamb road and Parua Bay areas.

Co-ordination of the community trappers by the WHLF trapper was carried out by telephone contacts and site visits to supply bait, carry out trap maintenance, collect records and audit trap setting.

A Landcare "Trappers training day" was hosted by the WHLF in November 2011 with over 50 people attending.

Details of ongoing captures and timely reminders for trap maintenance etc were communicated through the WHLF project manager's monthly report.

5.0 Funding

The Whangarei Heads Landcare Forum kiwi recovery project is very appreciative of funding received from central Government's Biodiversity Condition Fund that has supported the WHLF trapping programme from 2007 to 2011.

In July 2011 the WHLF and the Bream Head Conservation Trust (BHCT) signed a "Community Pest Control Area Management Plan" for kiwi predator control with the Northland Regional Council. This CPCA Plan covers a five year period and it is fantastic to have the NRC's support for this extended period. This funding gives medium term security for the work needed to maintain and increase the huge gains in kiwi recovery achieved in the past decade at the Whangarei Heads.

6.0 The Program's Future

The 2010-11 season's capture rates for mustelids continue to be well down from our first season and reflect a significantly reduced mustelid population in the area.

However Department of Conservation work monitoring kiwi chick survival rates at the Whangarei Kiwi sanctuary has indicated that over time survival rates have dropped despite an ongoing long term trapping programme there. This is thought to be due to the generation of some trap shy stoats and emphasises the importance of the attention to detail needed when setting traps including the removal of any old salted rabbit lure from the area completely.

DOC trials have shown that by using secondary poisoning it is possible to remove the trap shy stoats. We have been very fortunate at the Whangarei Heads that DOC carried out a 1080 possum control operation using land based bait-stations at Mt Manaia reserve in the spring of 2010. That operation will have reduced the number of trap shy predators in the area through secondary poisoning.

In recent years the use of the toxin Brodifacoum (trade name "Pest Off") has been avoided by the Landcare groups that are part of the WHLF because of the risk of secondary poisoning of non target species, such as kiwi. Now in appropriate areas we are using a controlled pulse of Brodifacoum every 4 or 5 years to gain the benefits of secondary poisoning of trap shy stoats and cats while limiting the risk of secondary poisoning to non target species.

Another toxin (PAPP) for the direct poisoning of predators has recently been commercially released by Connovation. If PAPP proves to be effective then its use within the WHLF trapping network needs consideration.

In the meantime trapping remains the main tool for predator control at the Whangarei Heads. Ongoing trap maintenance and fine tuning of trap positions will continue to be carried out along with the logistical and motivational support of community trappers to maintain the trapping regime and low mustelid numbers.

The success of kiwi recovery at the Whangarei Heads not only depends on an effective predator trapping programme but is also reliant on ongoing community engagement to ensure effective dog control occurs. The WHLF "Backyard kiwi" work is crucial to this community engagement.

As a long term monitoring tool for the effectiveness of the kiwi recovery project at the Whangarei Heads annual kiwi call counts are carried out. These call counts have continued to increase in the WHLF area. In 2002 call counts were 2.9 calls/hour, in 2011 they had risen to 6 calls/hour.

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