



## Whangarei Heads Landcare Forum Predator Trapping Report 2009/10 Season

The WHLF have carried out predator trapping for kiwi recovery over the Whangarei Heads area since 2002. This report covers the period October 2009 to September 2010 with some additional comments on the 2010/2011 season.

It is noteworthy that the summer of 2009/2010 was the driest on record in Northland.

### 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: 206 double sets of Mark 6 Fenn traps in mainly plastic tunnels; 20 single Doc 200 sets and 7 double Doc 20 sets in boxes.

Cat traps: 30 SA Cat traps; 10 cages are used to target cats.



	October 2009						<b>Total</b>
	Kauri Mt	Eastern Manaia	Western Manaia	Taurikura	The Nook	Kerr Rd	
Fenns	53	39	42	26	37	9	<b>206</b>
SA's	12	11	3	0	3	1	<b>30</b>
Cages	8	2	0	0	0	0	<b>10</b>
Doc200s	3	13	8	1	1	1	<b>27</b>

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 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 Whangarei Heads Landcare Forum 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*	12*	2*	8*			
<b>Total</b>	<b>7</b>	<b>228</b>	<b>174</b>	<b>182</b>	<b>634</b>	<b>2792</b>	<b>1005+</b>

\* Interim results for 2010/2011 season till Feb 2011

## 2.1 Comments on 2009/2010 programme by species.

### Ferrets

No ferrets were caught in the 2009/2010 season and with no ferrets being caught in the WHLF area since 2005 we had hoped that ferrets were no longer a problem.

However in October 2010 (the start of the 2010/2011 season) a ferret was caught at the northern end of Mt Manaia. 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 killing ferrets, particularly at points of reinvasion. 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.

### Stoats

17 stoats were caught in the 2008/2009 season, the lowest number for the 8 years of WHLF trapping operation and well down from the peak of 55 in the first season. Catch rates peaked in December at 7 stoats. The stoat kills were more concentrated at the northern end of trapping area due to reinvasion from inland areas. The Department of Conservation traps on the peninsula tip of Bream Head accounted for 1 stoat over the same period.

See section 6.0 of this report for discussion on the possibility that stoats are becoming trap shy within long running trapping systems.

**Table 3. Monthly capture stoats**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Kauri Mt	0	0	7	0	0	1	0	1	1	0	0	0	10
E. Manaia	0	0	0	1	0	1	0	0	0	0	0	0	2
W. Manaia	1	1	0	0	0	0	0	0	0	0	0	0	2
Taurikura	0	0	0	0	0	0	0	0	0	0	0	0	0
The Nook	1	0	0	0	2	0	0	0	0	0	0	0	3
Kerr Rd	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>

### Weasels

Weasel captures were 20, similar to last season's catch but well below the first season catch of 46.

**Table 4. Monthly capture weasels**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Kauri Mt	1	0	1	0	1	0	0	0	1	0	0	0	4
E. Manaia	1	0	0	1	0	0	0	0	0	0	1	0	3
W. Manaia	0	0	0	1	1	1	0	0	0	0	0	1	4
Taurikura	3	1	0	1	0	0	1	1	1	0	0	0	8
The Nook	0	0	0	0	0	0	0	1	0	0	0	0	1
Kerr Rd	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>20</b>

### Cats

Cat captures were 20 this season, up from last year's 12 but still well down from the peak of 38 for the 2004/2005 season.

**Table 5. Monthly capture cats**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Kauri Mt	1	0	0	1	1	0	0	0	0	0	0	0	3
E. Manaia	0	0	1	0	1	0	0	0	0	0	0	0	2
W. Manaia	0	0	0	0	0	0	0	0	0	0	0	0	0
Taurikura	1	2	0	0	0	0	0	0	0	2	0	0	5
The Nook	1	2	0	1	1	0	0	0	5	0	0	0	10
Kerr Rd	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>20</b>

## **Rats**

Recorded rat catches in the predator traps totaled 321.

25 Norway rats were identified out of the total (approximately 8%) although many of the trappers do not distinguish between rat species on their records.

The rat catch has remained relatively stable for the past 8 seasons ranging from a low of 304 in 2006/2007 to a high of 403 in 2004 /2005.

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 87 is similar to past years.

## **3.0 Bait**

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

Chicken eggs were also used over the winter months this season with no success on most target species apart from weasels.

Dehydrated rabbit was trialed over the autumn period with no predator catches.

## **4.0 Community operated traps**

The standard and frequency of setting of traps by community trappers continues to vary considerably. Many of these trappers are experienced and enthusiastic trappers, while some others trap sporadically as time is available. The continued perseverance and dedication of these trappers is important to the effectiveness of the project.

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 Owhia Road Landcare group that several WHLF trappers attended.

Details of ongoing captures were communicated through the local newsletter, email and WHLF meetings.

## **5.0 Funding**

The Whangarei Heads Landcare Forum kiwi recovery project is very grateful for funding from central Government's Biodiversity Condition Fund, Northland Regional Council, ASB Community Trust, Lotteries and Bank of New Zealand Save the Kiwi Trust.

Of particular note is the funding from the Northland Regional Council for a project manager for the WHLF pest management program. As part of that project management role a Community Pest

Management Area (CPCA) plan for mustelids was produced that gained \$10,000 of NRC funding for replacement Mark VI Fenn traps. These replacement traps were needed as many of the existing traps were at the end of the useful life.

## **6.0 The Program's Future**

The 2009/2010 season's capture rates for mustelids continue to be well down from our first season and hopefully reflect a seriously 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 may 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 bait from the area completely.

DOC are currently running trials using secondary poisoning as a possible tool to eliminate any trap shy stoats from the area. Preliminary results from this work indicate using 1080 to kill any trap shy predators does reduce kiwi chick losses for that season.

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 has hopefully reduced the number of any trap shy predators in the area.

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. It is now worth considering 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. Funding will have to be sought if Landcare groups decide to carry out a controlled brodifacoum pulse.

Another toxin (PAPP) for the direct poisoning of predators is being field trialed in Northland by Connovation and the NRC. 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.

An independent trap audit was carried out on the WHLF traps in February 2010 by Glenn Coulston and his report is attached. The report concluded:

"I believe the trapping programme is being highly effective due to its good design and through Todd's skill levels and thorough attention to detail."

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.

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