

# Mustelids: Ferrets, Stoats & Weasels

## Information Sheet

### Species

There are three mustelid species in NZ: stoats, ferrets and weasels. All introduced during the 1880's in an attempt to control rabbits which had reached near plague proportions.

### Damage caused by Mustelids

Mustelids have a devastating effect on native fauna which evolved without predatory mammals so have not developed any natural defences. They are the primary reason for the dramatic decline of birds such as kiwi, blue duck, blackstilt, weka and kakapo to critical levels and threaten numerous others. They also pose a major threat to populations of skinks, lizards and weta.



Stoats are responsible for killing around 60% of all young kiwi. One study of 149 bird's nests showed that over a two-year period stoats robbed over 50% of the nests. Ferrets kill another 20% of young Kiwi and are responsible for many adult Kiwi deaths. Ferrets are also carriers of Bovine TB.

### Stoats

Stoats are the most common mustelid in New Zealand, and will live wherever they can find food from coastal sand dunes, farms and forests to high country. Stoats have a long slender body, which is brown on the back with a creamy belly, including tail they are about 40 cm long, they are agile climbers and can swim 1½ km. Stoats feed on birds, eggs, rats, lizards, insects, rabbits, freshwater crayfish and possums.

### Ferrets

Ferrets are larger than stoats at about 50 cm long including tail; they are creamy around the body and have long black tipped hairs. Ferrets mostly inhabit farmland and forests fringes, but in recent years have been found deep in forested areas. They don't have the same level of climbing or swimming abilities as stoats and prey mainly on ground nesting birds, eggs, rats, invertebrate and rabbits.

### Weasels

Weasels are the smallest mustelid in NZ, with a body including tail about 20 cm long. Similar appearance to a stoat with the same brown back and cream belly, except that the tail is short and thin. They are found in low numbers mostly in farmland and scrub, and feed upon small birds, eggs, mice, lizards and invertebrates.



## Methods of control

Currently the only method of mustelid control is using kill traps. The Fenn Mark 4 or 6 is used extensively and is a reliable and effective trap. There is however concern over their long-term future use, as they may not meet new humane standards. New traps are being developed and trialled in the field. Normally two traps are set inside a tunnel about 700 mm long, they are set near the centre of the tunnel with a piece of rabbit meat or a hen's egg positioned between the traps as a lure. The tunnel acts to exclude non-target species and stoats, being curious, will often run through a tunnel even if there is no lure to attract them.

Eggs were the standard mustelid bait, but several field trials (including our own) have shown that salted rabbit catches about three times as many mustelid as eggs. (See our [www.kiwitrust.org](http://www.kiwitrust.org) for more info on salted rabbit.)

Fresh rabbit is also a good lure but goes off after a few days. Longlife baits with either a rabbit or fish base are also proving to be very attractive to mustelids and are more user friendly than rabbit meat.

Currently no toxins are registered for mustelid control, although a degree of control is obtained from secondary poisoning during possum and rat poisoning operations. Hen eggs injected with either cyanide or 1080 have been used, but they must still be located inside a tunnel and it has been found difficult to target a specific species.

## Tunnels

Tunnels can be home made from materials such as timber or galvanized sheet metal. Moulded plastic tunnels can be purchased to suit the Fenn traps. Tunnels should have an entrance of about 75mm sq. to help exclude non-target species, and be securely pegged to the ground to reduce interference from possums or pigs.

Rats are an attractive food source for stoats. There is growing evidence that by controlling rat numbers you may also help to control stoat numbers. The Otanewainuku Kiwi Trust volunteers carry out stoat and ferret control on a year round basis using double set kill traps (see photo below). Traps are checked and re-baited every 2 weeks in summer and every 4 weeks during winter.

This stoat was caught in a Conibear trap baited with an egg

