

Controlling Pest Animal Invaders

**EVERYONE'S
RESPONSIBILITY**



Pest Animal Invaders

In the Tasman-Nelson Regional Pest Management Plan

These pest animals are; compromising the biodiversity of our region and potentially threatening, forestry, horticulture and agriculture.

AUSTRALIAN MAGPIE – *Cracticus tibicen*

Victoria and Tasmania, Australia

Eradication Pest Animal in Golden Bay



Released – Introduced into the Maitai Valley by the Nelson Acclimatization Society in 1865. In early settlement magpies were kept as cage birds and were often shown at A&P Shows.

Characteristics – A characteristic “Orddle, Warddle, Arddle” call. There are two phases of magpie white backed and black backed. In our region white backed predominate and black backed are rare.

Management issues – Magpies are very territorial and their aggressive nature inhibits our native birds. This aggressive behaviour can include attacks on cyclists and children during their nesting season, of August to September.

Control methods – **Catch cages:** Live catch cages can be borrowed from Tasman District Council. Contact your Biosecurity Officer through your local TDC office.

BRUSHTAIL POSSUM – *Trichosurus vulpecula*

Tasmania, Australia

Site-Led Pest Animal, Waimea Estuary



Released – The Nelson Acclimatization Society released large black fur possums, at Wakapuaka, Nelson in November 1891. These possums were obtained from Southland.

Characteristics – Are nocturnal and sleep in dry den sites during the day light. They are very dexterous and can traverse aerial cables. Marsupial.

Management issues – Possums are carriers of Bovine TB and can infect cattle and deer with this disease. They selectively feed on certain native plants changing forest composition and causing the extinction of rare plants. They also predate native bird eggs and their nestlings.

Control methods – **Kill traps:** Kill traps are available on loan from Tasman District Council. Contact your Biosecurity Officer through your local TDC office.

Poison: Anti-coagulant poison pellets, dispensed from bait stations are recommended for killing possums. (See back page for pesticide brands)

FERAL CAT – *Felis catus*

Europe

Site-Led Pest Animal, Waimea Estuary



Released – Introduced at same time as European arrival, as most ships had cats on board, to control rats on their ships.

Characteristics – Feral cats are exceptionally agile and are highly attuned predators. They have acute hearing and night vision.

Management issues – Feral cats feed on native birds, reptiles and insects. Although feral cats can carry Bovine TB, the incidence is generally very low, in cats.

Control methods – **Catch cages:** Live capture cages can be borrowed from Tasman District Council. Contact your Biosecurity Officer through your local TDC office.

FERAL EUROPEAN RABBIT – *Oryctolagus cuniculus*

Europe

Eradication Pest Animal in Golden Bay



Released – First imported at earliest settlement, rabbits were breeding on Rabbit Island/Nelson, as early as 1849.

Characteristics – Are more active at night. Ideal conditions for them are low grazed or mown pasture. Rabbits defecate in piles in the same location. These piles, known as buck heaps, are where rabbits reliably frequent. Rabbits can produce up to approximately 36 off spring in prime conditions and peak numbers generally occur in November to December. They dig burrows.

Management issues – Rabbits will dig scrapes in grasslands and can nibble and ring bark, both horticultural or amenity plants.

Control methods – **Poison:** Anti-coagulant poison Pindone pellets, are recommended to poison rabbits (*See back page for pesticide brands*).

Catch cages: Live catch cages are available on loan from Tasman District Council. Contact your Biosecurity Officer through your local TDC office.

RHD: Rabbit haemorrhagic disease virus, was originally illegally released in 1997. Since then it has been responsible for the occasional rabbit population decrease, in the Tasman District.

FERRET – *Mustela furo*

Europe

Site-Led Pest Animal, Waimea Estuary



Released – Originally introduced from Great Britain, individual ferrets were kept in Nelson as pets as early as 1870 and were used in the sport of rabbiting. Run holders over run by rabbits, made further liberations in mid 1880s. In August 1883, there were mass liberations in the Awatere, Marlborough.

Characteristics – Ferrets are the largest of the three mustelids and are poor climbers. They do not inhabit native forest.

Management issues – Ferrets are carriers of Bovine TB and can infect cattle and deer with this disease. Generally, their prey are rodents but they will eat birds and reptiles. They will kill domestic poultry.

Control methods – **Kill traps:** Kill traps can be borrowed from Tasman District Council. Contact your Biosecurity Officer through your local TDC office.

INDIAN MYNA – *Acridotheres tritris*

India

Exclusion Pest Animal



Released – Introduced to both islands from Melbourne, Australia in 1871, to combat invertebrate pests. Christchurch liberations did not breed.

Characteristics – Voice is a loud noisy “Chickork-Chickork-Chickork”. The same family as the starling. Located North of 40°S. Prefers warmer climate, hence has not succeeded in the South.

Management issues – They destroy other bird eggs and their nestlings.

Report sightings

If seen please contact a Biosecurity Officer, Ph 03 543 8400.

INDIAN RING-NECKED PARAKEET – *Psittacula krameri*

India and neighbouring countries including North Africa.

Eradication Pest Animal



Introduced – Introduced as cage birds.

Characteristics – Are larger than our native parakeets and have a rose coloured band that extends around the nape of the neck. Red beak.

Management issues – In the North Island, caged birds have been released into the wild. An environmental and horticultural pest.

Report sightings

If seen please contact a Biosecurity Officer, Ph 03 543 8400.

NORWAY OR BROWN RAT – *Rattus norvegicus*

Europe

Site-Led Pest Animal, Waimea Estuary



Released – The first European rodents to become established in New Zealand, arriving on the earliest explorers' sailing ships.

Characteristics – The Norway rat is the larger of the two European rats weighing up to 500 gm. It has a short body with a thick tail, which is slightly shorter than the body. Just before autumn rats come inside buildings and dwellings to shelter during winter.

Management issues – Rats feed on native birds, reptiles, insects, seed and crops.

Control methods – **Kill traps:** Kill traps can be purchased. (See back page for trap brands). **Poison:** Anticoagulant baits are probably the most effective way to control rodents. (See back page for pesticide brands).

SHIPS RAT – *Rattus rattus*

Europe

Site-Led Pest Animal, Waimea Estuary



Released – Introduced as stowaways on early European explorer's ships.

Characteristics – The ship rat weighs up to 170 gm. The scaly tail is longer than the combined length of the head and body. They have larger ears than the Norway rat. Just before autumn rats come inside buildings and dwellings to shelter during winter.

Management issues – Rats feed on native birds, reptiles, insects, seeds and crops.

Control methods – **Kill traps:** Kill traps can be purchased. (See back page for trap brands). **Poison:** Anticoagulant baits are probably the most effective way to control rodents. (See back page for pesticide brands).

ROOK – *Corvus frugilegus*

Britain

Eradication Pest Animal



Released – Introduced into Nelson City by the Nelson Acclimatization Society in June 1866. These birds did not breed and eventually died out.

Characteristics – A characteristic “KAAH” crowing call. Accumulate in Rookeries high up in mature trees. Can be confused visually with black oystercatchers and their call can be confused with grey cranes. They nest during October.

Management issues – Flocks descend on pre-emergent crops and feed on germinating seeds.

Report sightings

There are no known Rookeries in our region, however rooks are rare and occasional visitors to our region from the lower North Island. Do not attempt to shoot Rooks, as this will disperse them. If seen please contact a Biosecurity Officer, Ph 03 543 8400.

STOAT – *Mustela ermine*

Britain

Site-Led Pest Animal, Waimea Estuary



Released – Originally introduced from Britain in mid 1880s by run holders over run by rabbits. In August 1885, they were liberated in the Wairau Valley, Marlborough, our closest neighbour. Five years later, they began appearing in Nelson.

Characteristics – Stoats are capable of climbing trees. They are able swimmers and will threaten wildlife on off shore Islands. They have a long bushy tail with a black tip.

Management issues – These predators have been responsible for the extinction of many native birds and reptiles.

Control methods – **Kill traps:** Kill traps can be borrowed from Tasman District Council. Contact your Biosecurity Officer through your local TDC office.

WALLABIES – *Macropus Species*

Tasmania, Australia

Exclusion Pest Animals



Released – In 1870, a Captain Thomson brought several Bennett's wallabies from Tasmania to Christchurch. In 1874 two females and a male were liberated on the Hunter Hills near Waimate Canterbury. In 1912 smaller Dama wallabies were released in the Rotorua District.

Characteristics – Kangaroo like. Nocturnal, marsupials.

Management issues – Bennett's wallaby are the most likely to be obtained and or released in our district as they are established in the mid to lower South Island. Wallabies are a threat to pastoral farming and native shrub communities. **Note:** Image left is a Bennett's wallaby.

Report sightings

If seen please contact a Biosecurity Officer, Ph 03 543 8400.

WEASEL – *Mustela nivalis vulgaris*

Britain

Site-Led Pest Animal, Waimea Estuary



Released – Introduced from Britain in mid 1880s by run holders over run by rabbits. In August 1885 they were liberated in Wairau Valley, Marlborough, our closest neighbour. Five years later, they began appearing in Nelson. In 1901 weasels were seen in Motupipi, Golden Bay.

Characteristics – Weasels are the smallest of the three mustelids and are capable of climbing trees. They are able swimmers and will threaten wildlife on off shore Islands. They have a short hairy tail, lacking any black tip.

Management issues – These predators have been responsible for the extinction of many native birds and reptiles.

Control methods – **Kill traps:** Kill traps can be borrowed from Tasman District Council. Contact your Biosecurity Officer through your local TDC office.

Other Pest Animal Invaders

BROWN HARE – *Lepus europaeus occidentalis*

Britain



Released – Originally imported from Melbourne and Tasmania and released in small groups, by the Nelson Acclimatization Society, from 1868 to 1873. Initial successful releases were at Wakapuaka, Stoke and the Waimea Plains. In our region, they established so successfully, that all seasonal hunting protection was soon removed.

Characteristics – Hares will not eat poison baits. Larger than rabbits and brown colour, with black tips on their ears. They are mainly solitary by nature, except during the breeding season. They are mainly nocturnal.

Management issues – Hares browse young trees planted in grassland. Damage includes bark chewing and a characteristic 45 degree cut angle of stem leaders.

Control methods – **Shoot:** Probably the best way to control them, as they will not eat poison baits.

EUROPEAN HEDGEHOG – *Erinaceus europaeus occidentalis*

Europe



Origin – Originally imported to Christchurch from Britain in 1869, for nostalgia and control of insect pests in gardens. They were introduced to Nelson, from Christchurch. In 1906 a solitary hedgehog was donated to the Nelson Queen's Gardens Aviary. Further hedgehogs were similarly, donated in 1914, from the Wood area of Nelson. In 1917 hedgehogs were reported as being particularly plentiful around Nelson.

Characteristics – Are nocturnal and hibernate June to August.

Management issues – Hedgehogs feed on; insects, reptiles, ground nesting birds', nest contents.

Control Methods – **Kill traps:** Hedgehogs are able to flatten their prickles and push through trap tunnel, which exclude ground birds. In some cases, the width of the access tunnels may need to be increased. Kill traps can be purchased. (*See back page for trap brands*).

FERAL GOAT – *Capra hircus*

Europe



Released – Introduced as farm goats. By 1850 large numbers had escaped into the Maitai Valley of Nelson.

Characteristics – Goats are very agile and will inhabit steep terrain and clamber onto steep difficult objects.

Management issues – Goats graze native understorey as high as they can reach, by standing on their back legs. They effectively remove the understorey zone of forests.

Control Methods – **Catch pens:** Catch pens can be built, to live capture goats.

Shoot: Probably the best method, if appropriately safe. **Dogging:** Specialist goat control businesses can be contacted. For further detail, contact your local Biosecurity Officer through your local TDC office.

FERAL PIG – *Sus scrofa*

Europe



Released – Introduced to the Marlborough Sounds by Capitan Cook in his two voyages of 1773 and 1777.

Characteristics – Pigs have poor eyesight but have acute senses of hearing and smell.

Management issues – Pigs can do a lot of damage by rooting up pasture and the understorey of native forests. They are also carriers of Bovine TB.

Control methods – **Catch pens:** Catch pens can be built, to live capture pigs.

Dogging: Throughout our region, there are recreational hunters with pig dog packs. Occupiers, who are having pig damage on their land can, individually contact such hunters.

HOUSE MOUSE – *Mus musculus*

Europe



Released – Self-introduced, stow away on early sailing vessels

Characteristics – Mice are more active at night. They are essentially ground dwelling, but can swim and can climb reasonably, but not as well as ship rats. They are prey for rats. Mean weight is 15 gm. Just before autumn mice come inside buildings and dwellings to shelter during winter

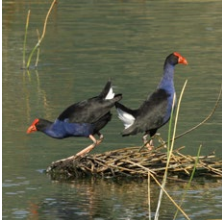
Management issues – Mice feed on native birds, reptiles ,insects, seeds and crops.

Control methods – **Kill traps:** Kill traps can be purchased. (See back page for trap brands). **Poison:** Anticoagulant baits are probably the most effective way to control rodents. (See back page for pesticide brands).

PUKEKO – *Porphyrio melanotus*

New Zealand and Australia

This native wetland bird is often responsible for pulling out new plantings. Pukeko are game birds and can be shot, if a Fish & Game gamebird license is obtained. Out of season if persistent damage occurs, you may obtain a “Permit to Disturb Game Birds”, issued by a Fish & Game Ranger.



Characteristics – Live in wetlands and damp farm pasture. Blue coloured feathers.

Management issues – They will pull out plants, such as vegetable seedlings, horticultural trees and amenity plants. They also predate the young of other waterfowl.

Control methods – **Shoot:** During game bird season or contact Fish & Game.

ROCK PIGEON – *Columbia livia*

Southern Europe, North Africa, East Asia



Released – Introduced from Britain by settlers as pets and for pigeon racing. Pigeons are well renowned for their homing ability and used for transporting messages. Unfortunately, some birds have formed wild breeding colonies.

Characteristics – Particularly like to roost in Phonex palms, buildings or on road bridge superstructure.

Management issues – Pigeons frequent the same roost sites and foul where they roost. They will also frequent stock feed containers that are feeding grain, particularly to horses.

Control methods – **Poison:** Feed Alphachloralose grain to pigeons. This pesticide has a strong narcotic effect and the pigeons become sleepy and unable to fly. You can then readily collect and destroy them. The narcotic action means you can allow non-target birds to recover by placing them in warm conditions. (See back page)

Disclaimer

As a result of information in this fact sheet regarding pesticides and traps, the Tasman District and Nelson City Councils do not accept liability for any damage to any person, property or thing that may arise from use of pesticides or pest animal traps. Mention of product trade names implies neither endorsement of those products nor criticism, of similar products not mentioned.

Caution! Firearms

Before using firearms, you must have a current "Firearms License" issued to you, by the NZ Police. Firearms are to be used in accordance with the legal requirements of the NZ Arms Code.

Animal Welfare Act 1999 – Obligations

All animal types are protected by this act, including pets, livestock and pest animals. The intention of the act is to alleviate animal suffering and to ensure that a set standard of animal welfare conditions are observed. There are specific rules in the Act, which must be complied with; Section 36 Trapping Animals covers trapping and Section 30D Captured Animals covers live capture.

Pesticides notes – Always read label instructions!

Alphachloralose – Brand names: Pestoff Bird Control Paste, Pestoff Treated Wheat.

Brodifacoum – Brand names: Pestoff Possum Bait, Pestoff Rodent Blocks, Final Rodent Block.

Bromadiolone – Brand names: Conrac Rodent Block, Maki Block.

Difethialone – Brand name: First Strike.

Diphacinone – Brand name: Ditrac Rodent block.

Pindone – Brand names: Pindone Rabbit Pellets, Pindone Pellets Possum & Rats.

Pesticides, Traps and Bait Stations – Are available at farm supply businesses and online from the following supplier web sites.

Helpful websites featuring pesticides, bait stations and traps

Animal Control Products – www.pestoff.co.nz

CMI Springs, DoC traps – www.cmisprings.com/predatortraps

Connovation – www.connovation.co.nz

Good Nature – www.goodnature.co.nz

Key Industries – www.keyindustries.co.nz

Pest Control Research Store – www.traps.co.nz

Pest Detective – www.pestdetective.org.nz

Possummaster Industries Ltd – www.possummaster.co.nz

Operational planning

If you would like information on how to space out traps or bait stations, to adequately, cover an area for pest animal control, please contact your local Biosecurity Officer through your local TDC office. Aerial maps of properties can be produced, to assist with this lay out planning.