

Animal Pests of the Auckland Region

pestfacts



Auckland Regional Pest Management Strategy

The Auckland region has a number of introduced animal, bird, and insect species that are considered pests. Their impacts include browsing or grazing that can significantly alter the composition of the region's natural areas or reduce available pasture; direct competition with our native bird species for territory, food, roost sites, etc; predation of our native fauna; transfer of diseases like Bovine Tb, and nuisance in recreational areas. Many of these animal pests have been in NZ for a considerable period of time and their impacts are now well documented, e.g. possums, feral deer and stoats. Eighteen species or groups of species are declared pests in the Regional Pest Management Strategy (RPMS) formulated by the ARC under the Biosecurity Act 1993. The Strategy provides a framework for pest animal control in the region.

Pest animal control programmes in the Auckland region are carried out in a prioritised manner, with a focus on areas of significant environmental or conservation value. Much control work is targeted at preventing ecological damage by possums, feral goats and pigs. ARC also supports community or care groups who wish to undertake Community Initiatives Programmes to control nominated animal pests collaboratively. The objectives are to provide advice and information on control methods, and promote voluntary control led by community groups.

All animals declared as pests in the Strategy cannot be bred, sold, given away or exhibited.

The release, liberation or conveyance of any of the feral animals listed below is also prohibited under Section 11 of the Wild Animal Control Act 1977.

- Deer (including wapiti and moose)
- Chamois
- Thar
- Wallaby (all species)
- Possums
- Goats
- Pigs

For more information on individual animal pests call ARC on (09) 366 2000 or 0800 80 60 40 (outside the free calling area).

Brush tailed possum *Trichosurus vulpecula*

A nocturnal marsupial native to Australia, with thick woolly fur, bushy tails, a pointed snout, and long narrow ears tapering towards the tip. First introduced in the 1830s to create a fur trade. Numerous liberations (up until the 1940s) ensured that possums successfully established throughout NZ.



Possums live in a wide range of habitats including native and exotic forests, grassland, orchards, shelter belts, sandunes, and urban/city areas, and are one of the most damaging pests in NZ. Have a serious impact on native forests and shrubland, selecting a wide range of palatable plant species and over time altering the vegetation composition. Compete with native bird species for food, and raid their nests for chicks and eggs. Also the main vector for Bovine Tb spread.

ARC encourages landowners/occupiers and Community/Care groups to take responsibility for controlling possums on their land, and can advise on appropriate techniques. ARC's own possum control operations primarily focus on areas of significant environmental and conservation value (e.g. large tracts of forest, coastal forest, peninsulas, regional parkland) and their buffer areas.

Feral cat *Felis catus*

Have been in NZ since the arrival of the earliest European explorers in the late 1770s, often placed on ships to control rats. Not recorded as feral here until the mid-1800s. Now widely distributed throughout the three main islands of NZ, and on some off-shore islands. Live in a range of habitats including sand dunes, pasture, scrub, exotic and native forest. Have significant impacts on native birds, lizards and invertebrates.



ARC will provide information and advice on feral cat control and carry out site-led control of them as a component of integrated site-led pest management programmes in high value areas.

NB. Feral cats are defined as cats that have none of their needs provided by humans, and their population size fluctuates independently of humans. They generally do not live around centres of human habitation. The feral cat population is self-sustaining and requires no input from the domestic cat population.

Feral goat *Capra hircus*

First liberated in NZ by Captain Cook in the 1770s. For over 200 years they have been continually liberated, being utilised for weed control and fibre. Now widespread but not common within the region, but in higher numbers in exotic and indigenous forest areas, poor pasture and scrubland. Goats are one of the most destructive animals in forests. As opportunistic browsers they destroy vegetation in the understorey (up to 2m above ground), preventing regeneration.



ARC carries out feral goat control in areas with significant ecological and conservation values (e.g. the Hunua Ranges and buffer zone) and prevents their establishment in other areas.

Hedgehog *Erinaceus europaeus occidentalis*

Originally brought from Britain in the late 1800s, as natural predators of garden pests like slugs and snails. Now numerous in northern, lowland NZ, occupying a range of habitats. Mainly insectivorous, but their varied diet includes plants, mice, birds, lizards, frogs and the chicks and eggs of ground nesting birds. They may also compete with kiwi for food and nesting sites.



ARC will provide information and advice on hedgehog control and may carry out site-led control of them as a component of integrated site-led pest management programmes in high value habitats. Preventing hedgehogs from establishing on off-shore islands where they are currently absent is also a priority.

Feral pig *Sus scrofa*

Amongst the first feral animals to become established in NZ, with populations around most settlements by 1840. Currently occurring in large areas of native and exotic forest (e.g. Hunua



ranges) in the region. Feral pigs are very destructive in native bush areas, rooting up the ground, eating the fruits, seeds, roots, stems or leaf-bases of native plants; plus native insects, snails, earthworms, frogs, lizards, and ground nesting birds and their eggs. Feral pigs can also adversely affect primary production, causing damage to fences, pastures and livestock and are carriers of Bovine TB and leptospirosis.

The ARC will control feral pigs in the Waitakere and Hunua Ranges and other high conservation value areas and eradicate them from Waiheke Island.

Rabbit *Oryctolagus cuniculus*

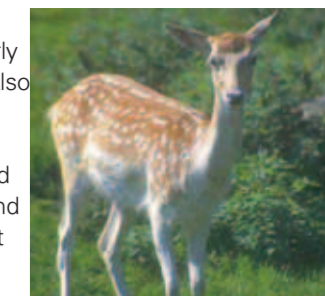
Small herbivorous mammals living mainly in burrows, breeding very successfully with up to four litters of 3-10 young produced per year. Can tolerate a wide range of climatic conditions, preferring areas with lower rainfall, especially dunelands, sunny coastal slopes and limestone hills. Cause significant damage to pastures, with ten rabbits eating as much as one sheep. They also impact on native dune ecosystems.



ARC will provide information and advice on the control of rabbits, and where specific values are compromised, enter into partnerships with communities to control them. ARC also controls rabbits in regional parkland.

Feral Deer

Imported to NZ from Europe, USA and Asia in late 18th – early 19th century for game parks. Also regularly released into the wild for recreational hunting. More recently deer have been farmed in the region. Deer browsing and bark stripping have a significant impact on natural areas. Feral animals can also act as vectors for Bovine Tb.



Fallow deer



Red deer

ARC will carry out feral deer control in areas of high conservation value, where the priority for their control exceeds the priority for the control of other pests. Deer are defined as 'wild animals' under the Wild Animal Control (WAC) Act, administered by DoC. ARC supports the DoC Wild Deer Control Programme for the Auckland region. DoC has control over the farming of deer in the region and has established three exclusion zones under the WAC Act.

Fallow deer *Dama dama*

Small feral herds present on the Awhitu and South Kaipara Peninsulas, in Woodhill forest, and in the Clevedon ward of Manukau City.

Sika deer *Cervus nippon*

Believed to be absent in the region.

Red deer *Cervus elaphus scoticus*

Present in low numbers in the Rodney and Franklin Districts, and Manukau City.

Wapiti deer *Cervus elaphus nelsoni*

Believed to be absent in the region.

Mustelids

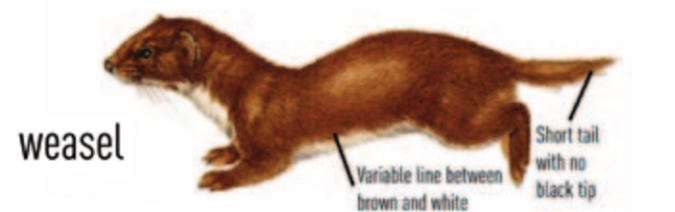
Ferrets, stoats and weasels belong to the family of animals known as mustelids. All have a long body, short legs, pointed faces and five toes on each foot. They are carnivorous mammals, originally introduced to control rabbits. Mustelids have been linked to the decline and extinction of a number of native bird species. They predate chicks, eggs and in some

cases the adults of native bird species, native lizards, frogs and insects.

ARC will provide information and advice on mustelid control and carry out site-led control of them as a component of integrated site-led pest management programmes.

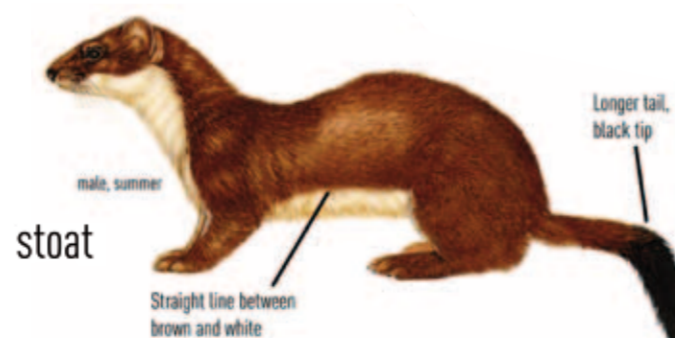
Weasel *Mustela nivalis vulgaris*

At 20cm long, weasels are the **smallest** and least-often encountered of the three mustelid species in NZ. They are brown with a white underbelly. Males are always much larger than females. Weasels prefer more disturbed habitats, like agricultural land, scrub, cutover forest and the margins between.



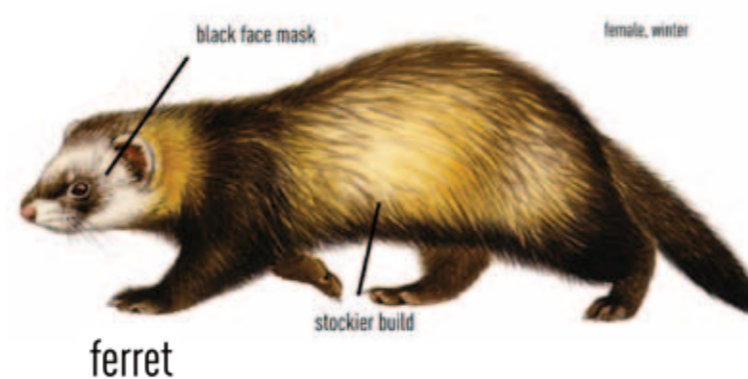
Stoat *Mustela ermina*

Similar in colour to weasels, but are larger (200 – 350 grams in weight and 25 – 30cm long) and have a characteristic **black 'bottle brush' tip on their tail**. Males are always larger than females. Their body fur is short, chestnut brown on the head and back, and white or cream on the underside. Stoats live in any habitat they can find prey, including native and exotic forest, scrub, duneland and farm pastures.



Ferret *Mustela furo*

The **largest** of the three mustelid species in NZ (400 – 1500 grams and 32 – 45cm long). Their coats vary from white, through light brown to black. Their faces are creamy to greyish-white with a **characteristic black 'mask'**. They live mainly in pastoral habitats, scrub, forest margins, dunelands and tussock grasslands.



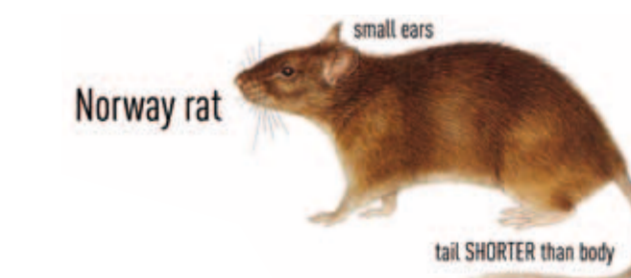
Rodents

There are four species of rodents declared as pests within the Auckland region. All are mainly nocturnal, and have significant impacts on native flora and fauna, in particular native birds, lizards, and invertebrates. They also eat large quantities of native seeds, from the ground or trees (in the case of ship rats and kiore). This has serious implications for native regeneration in natural areas.

ARC will provide information and advice on rodent control and carry out site-led control as a component of integrated site-led pest management programmes. Support will be given for the eradication of rodents from islands in private ownership, where there are ecological values at risk, a high chance of success, and with commitment from all parties.

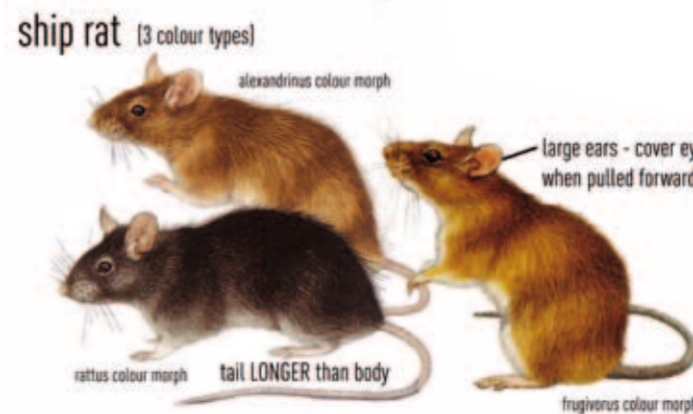
Norway rat *Rattus norvegicus*

Largest rats in NZ, first introduced in the late 1700s. Their bodies are stout, with a **heavy tail (shorter than body)** and relatively **small ears**. They swim readily and are usually associated with lakes, rivers, streams, wharves, sewers, and industrial sites.



Ship rat *Rattus rattus*

Smaller than Norway rats, with a sleek slender body and dark grey **tail that is longer than the body and head in adults and large ears that cover the eyes when pulled forward**. Have probably been in the country since the early 1800s. Now the most widespread rat species, occurring in almost every suitable habitat.



NB: there are three colour morphs, 'frugivorus' is the most common in the Auckland region.

Kiore *Rattus exulans*

The smallest of the rat species, and the first to arrive in NZ, brought by the first Polynesian settlers. Now only present on offshore islands in the region.

NB Representatives of Ngati Wai regard kiore as a taonga. ARC recommends consultation with Ngati Wai before any rat control is undertaken that may impact on kiore. Kiore are present on several outer islands in the Hauraki Gulf.



Wallabies

There are three species of wallaby present in the Auckland region, all of which occur on Kawau Island. Six species were originally introduced there in the 1870s by Sir George Grey. They have had a significant impact on the vegetation of Kawau, in some areas completely halting the regeneration of palatable native species and leaving the understorey bare.

The last brush-tailed rock wallabies were repatriated to South Australia in 2006.

ARC, in conjunction with the Pohutukawa Trust, supports the eradication of wallabies from Kawau Island over the life of the Strategy. ARC will also respond to wallaby sightings outside of Kawau Island.



Dama wallaby *Macropus eugenii*

Parma wallaby *Macropus parma*



Swamp wallaby *Wallabia bicolor*

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Birds

Magpie *Gymnorhina* spp.

Two species were introduced from Australia in the 1860s to control insects, but soon proved to be aggressive colonists. Both species are black and white, with a distinctive call. Widespread throughout the Region, preferring grassland farming areas with tall shelterbelts. Also live on forest margins and in urban areas. Extremely territorial and show aggressive behaviour towards humans, especially children, during the nesting season. Also restrict native bird movement between forest patches, and compete with and displace native bird species.

ARC will provide information on magpie control, and provide traps on a hire basis.



Myna *Acridotheres tristis*

Originally from India, introduced from Australian naturalised birds in the 1870s. Now found throughout the North Island, and are common throughout the Auckland Region. Approximately 24 cm long, brown with black feathers on the forehead and crown with a distinctive yellow eye patch. Preferred habitats include parks, gardens, orchards, farmland and forest margins. Territorial birds that show aggression to other birds in their territory. Evict other birds from their nests, and eat eggs, chicks, invertebrates and lizards.

ARC will provide information and advice on control of myna, and provide traps on a hire basis.



Rook *Corvus frugilegus*

Established in a number of areas of NZ, where they cause serious damage to farms and market gardens by eating and destroying newly sown crops. Can also tear up large areas of pasture in their search for grass grub and other invertebrates. Congregate in large flocks or “rookeries” which may contain hundreds to thousands of birds.

Rooks are extremely wary birds. Unsuccessful control attempts can cause them to disperse and set up more rookeries that may be many kilometres from the original site. Also, poorly laid poisons can make these intelligent birds wary and poison shy.

The ARC will carry out eradication of any rook infestation found within the Auckland region.



Sulphur-crested cockatoo *Cacatua galerita*

Large white parrots with a sulphur-yellow crest. Native to Australia, they occur in several sites in the Auckland region, and have naturalised after escape or release. Destructive feeders eating a wide range of seeds, fruit and insects and compete directly with several native bird species. Breed in hollow limbs and trunks of old podocarp trees and may compete with native bird species such as kākā and kereru for breeding places or food. Declared a pest in the Auckland region wherever it is not held within secure containment.

The ARC will carry out selective control of wild sulphur-crested cockatoo populations, where they are threatening ecologically sensitive areas.



Insects

There are four species of wasp in the Auckland region declared as pests. They are all social species, i.e. they work together, building intricate nests. Common and German wasps build extensive underground or protected nests, while paper wasps build smaller exposed cone-shaped nests above ground attached to trees, fences or buildings. Wasp numbers peak February – April, when they cause most problems. Their stings cause allergic reactions in some people, and disrupt



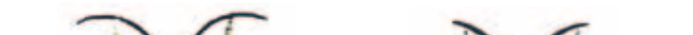
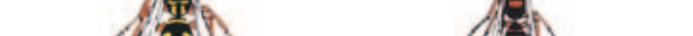
Asian paper wasp *Polistes chinensis*

The most recent arrival, first found near Auckland in 1979. Now common in the Auckland region, and is continuing to extend its range. Yellow and black, but smaller than the German or common wasps. Its legs hang down when flying.



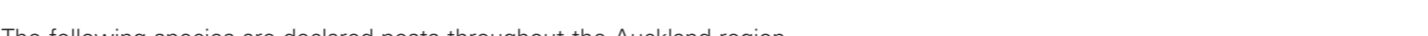
Common wasp *Vespula vulgaris*

Established in NZ in the mid-1970s and has quickly become widespread. Yellow and black, with fused black dots and rings on its back. The nest is brown.



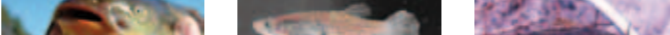
Pest Fish

There are few freshwater ecosystems within the Auckland region that do not have established exotic freshwater fauna populations; many have more than 5 species present. Some exotic freshwater fauna have been in the Auckland region for over a century (such as the brown bullhead catfish), others are more recent arrivals (gudgeon and orfe).



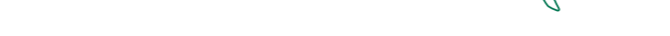
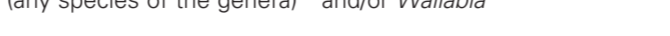
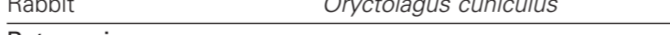
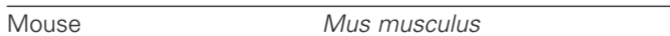
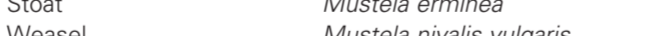
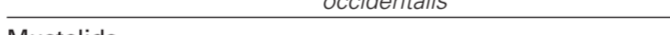
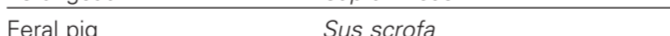
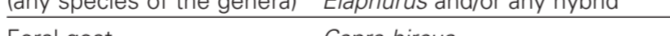
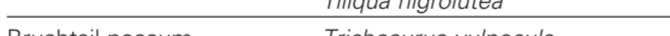
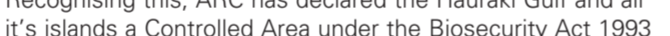
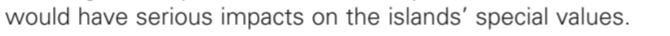
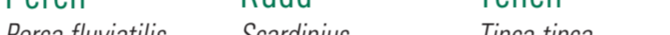
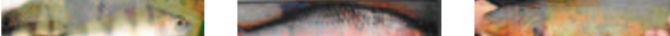
The following species are declared pests throughout the Auckland region.

The ARC will contain and control these species where appropriate.

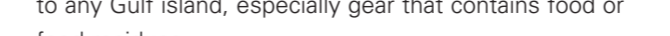
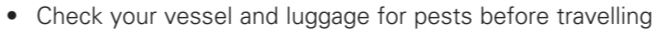
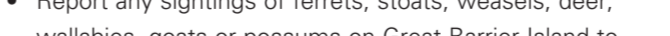
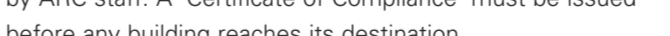
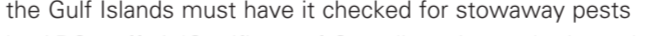
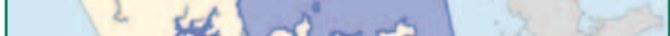
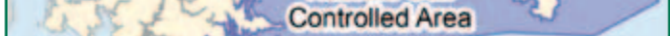
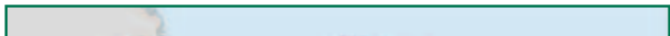
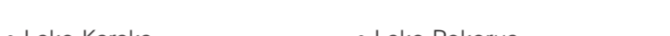
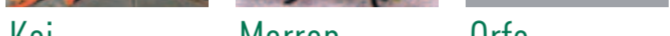


The provisions of the Conservation Act 1987 are applicable in relation to perch, tench and rudd, which are classified as ‘sports fish’ under the Freshwater Fisheries Regulations 1983.

However these three species are declared pests within eleven listed High Conservation Value Waterbodies and their catchments and within the Hauraki Gulf Controlled Area. The ARC aims to prevent establishment in these designated High Conservation Value (please see list opposite).



Exotic freshwater fauna feed on native species and also compete for food. The feeding habits of some exotic freshwater fauna have a serious effect on water quality through disturbance of the waterbed, and in extreme cases may increase the risk of bank erosion.

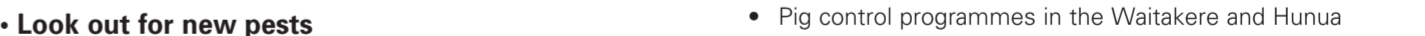
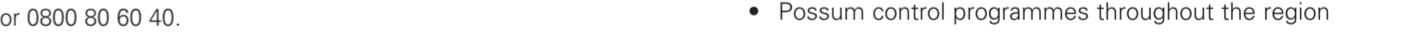
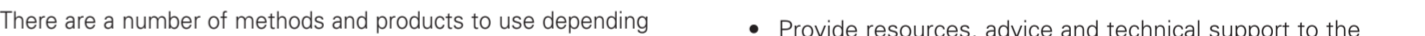
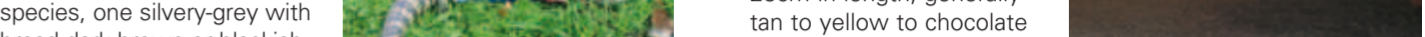
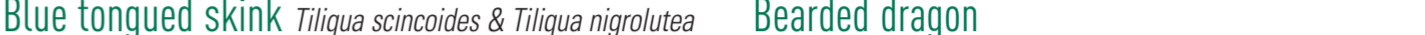


Exotic reptiles

The popularity of exotic reptile species for the pet trade represents significant potential threats to native ecosystems should these reptiles be released or escape.

Potential impacts include:

- Potential impacts include
- ability to carry endoparasites and diseases, posing a risk to native lizards
- predation of eggs and chicks of ground nesting birds and other smaller lizards



- direct and indirect competition with native species for food and other resources

- adverse impacts on aquatic plants, insects and molluscs

Blue-tongued skinks are a declared pest in the region and are no longer able to be sold or distributed, whereas the other species listed below are only a declared pest when they are not held in secure containment.

The ARC provides a recovery service for unwanted pet reptiles and may carry out control where reptiles are found in the wild. Please contact your local Biosecurity Officer to report any sightings in the wild on 366 2000.

