

# INFO SHEET | PESTS 3

## Rats (Ship rat, Norway rat)

*Rattus rattus*, *R. norvegicus*

### THE PROBLEM

Rats are a worldwide agricultural and urban pest, carrying and spreading diseases and parasites. Norway rat stowaways disembarked from European or American ships in the late 1700s, quickly colonizing Aotearoa and its offshore islands. When the ship rat arrived in the late 1800s, it outcompeted the Norway rat and kiore/Pacific rat to become ubiquitous in the landscape, confining Norway rats to wet habitats around the coast, waterways and offshore islands. It is very unlikely that kiore have survived competition with ship rats in the Halo Project area.

Ship rats live close to humans, but do just as well in our forests, where they prey on and reduce the food available for native wildlife. Their diet is varied, climbing through vegetation to access fruit, seeds, birds, eggs, invertebrates (wētā, beetles, spiders, moths) and lizards. A Norway rat's diet is similar, but with a greater proportion of seeds eaten as well as roots and rhizomes.

Rats are difficult to control across large areas, due to high population density and ability to reproduce rapidly.

#### Kiore

Belly fur dark at base.  
Dark hairs on outer ankle.

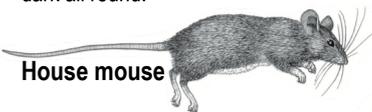


#### Ship rat

Ears large, not hairy.  
Tail longer than body, thin at base,  
dark all round.



#### House mouse



#### Norway rat

Ears small, slightly hairy.  
Tail shorter than body, thick at base,  
pale beneath.



Scale (cm)  
0 5 10 15

Belly fur dark at base.

Illustration by Sabrina Malcolm, from *The Handbook of New Zealand Mammals 3rd Ed*

### BIOLOGY

Norway and ship rats have similar biology: in their short lives (<2 years), they can produce multiple litters through spring and summer, with five pups on average per litter. Their home range is a maximum of 1 ha, with a typical density of 2-9 rats per ha. They have a strong sense of smell, touch, taste and hearing. They are cautious around new objects including traps and bait.

### FOR MORE INFORMATION

[www.doc.govt.nz/nature/pests-and-threats/animal-pests/](http://www.doc.govt.nz/nature/pests-and-threats/animal-pests/)  
[www.orc.govt.nz/managing-our-environment/pest-hub](http://www.orc.govt.nz/managing-our-environment/pest-hub)  
[www.predatorfreenz.org/](http://www.predatorfreenz.org/)



### HABITAT

Ship rats can live anywhere from the coast to the treeline, and are most abundant in diverse lowland native forest, exploiting ground to canopy layers. Ship rats are tree-climbers, whereas Norway rats are predominantly ground-dwellers and burrow-diggers. You're more likely to find Norway rats in your basement and ship rats in your ceiling.

Mostly nocturnal and solitary, ship rats use shelters or build large spherical nests in vegetation, and use bird nests or build platforms for eating under cover. Norway rats are mainly nocturnal but are more likely to be seen during the day than ship rats and they nest in burrows.



Large ship rat (credit: Woodleigh School [creativecommons.org/licenses/by-nc/4.0/](https://creativecommons.org/licenses/by-nc/4.0/))

### CONTROL

Rat control is generally carried out by landowners and conservation groups to protect property and native wildlife. The Halo Project works across West Harbour /Mt Cargill and has multiple high value sites where rodent control is undertaken, including on the inner harbour islands.

Rats have been removed from Orokonui Ecosanctuary, and are effectively controlled on Quarantine Island using DOC200 and Goodnature A24 automatic traps.

In a 180 ha area on Mihiwaka, A24 traps on a 100m x 100m (1/ha) spacing control rats (and mustelids) to protect robin, rifleman, kākā and other native wildlife.

The Halo Project, as a delivery partner of Predator Free Dunedin, controls rats and mustelids using DOC series traps, A24 traps and Victor Professional rat traps.

### CONTACT US

Email: [info@haloproject.org.nz](mailto:info@haloproject.org.nz)