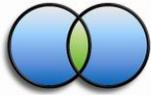


GUIDELINES ON RODENT IDENTIFICATION

1. PURPOSE	2
2. CHARACTERISTICS	2

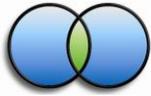


1. PURPOSE

- These Guidelines are to be used by Project Managers conducting rodent eradication projects based on the PII Resource Kit for Rodent and Cat Eradication.
- The Guidelines describe the key physical characteristics of the rodent species common in the Pacific and explain how to identify the species.

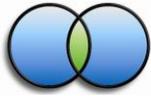
2. CHARACTERISTICS

CHARACTERISTICS	HOUSE MOUSE <i>Mus musculus</i>	PACIFIC RAT <i>Rattus exulans</i>	SHIP RAT <i>Rattus rattus</i>	NORWAY RAT <i>Rattus norvegicus</i>
Normal adult weight	Smallest of all species. Up to 25 g but can grow larger when rat competition removed	Up to 130 g (see note 3)	Up to 225 g	Up to 450 g
Max. head-body length (HBL)	115 mm	180 mm	225 mm	275 mm
Tail length	Slightly shorter or longer than HBL. Uniformly grey brown	Slightly shorter or longer than HBL. Thin and uniformly dark	Much longer than HBL. Uniformly coloured	Clearly shorter than HBL. Thick with pale underside
Ears	12.0-15.0 mm	15.5-20.5 mm, cover eyes when pulled forward. Fine hairs do not extend beyond edge of ear	19.0-26.0 mm, cover eyes when pulled forward. Fine hairs do not extend beyond edge of ear	14.0-22.0 mm, do not cover eyes when pulled forward. Obvious hairs extend beyond edge of ear



Adult hind foot	15.0-21.0 mm, small and thin	24.5-31.0 mm	28.0-38.0 mm	30.0-41.5 mm
Colour of upper side of hind foot	Uniformly grey	Outer edge dark near ankle, rest of foot and toes pale.	Uniform colouring over whole foot, usually dark	Always completely pale
Fur on back	Dull grey-brown	Brown	Brown or black (see note 4)	Brown
Fur on belly	Uniformly grey	White-tipped grey giving irregular colour	Uniform monotone of grey, white or creamy-white (see note 4)	Similar to kiore
Length of droppings	3.9-7.6 mm	6.4-9.0 mm	6.8-13.8 mm	13.4-19.1 mm
Number of nipples	10-12	8	10-12, usually 10	12
Habits	Mainly ground-dwelling though capable climber; nests in small holes.	Agile climber; not known to burrow but digs small holes; nests mainly on ground; feeds on ground and in trees; infrequent swimmer.	Very agile and frequent climber; rarely burrows; nests mainly in trees and shrubs; infrequent swimmer	Burrows extensively; climbs much less frequently than other rats; strong swimmer; nests underground; very wary

(From: D.M. Cunningham and P.J. Moors, GUIDE TO THE IDENTIFICATION AND COLLECTION OF NEW ZEALAND RODENTS, 2nd Edition, 1993. New Zealand Department of Conservation.)



- Additional identification notes
 - If identification is in doubt, always keep and preserve at least the head for later detailed examination. Body are also useful.
 - Juvenile rats are sometimes difficult to identify and distinguish from mice, but the species can usually be separated on the basis of tail length, fur colour, and hind foot and ear characteristics. If in doubt, keep the whole specimen either frozen or in 75% alcohol with the gut cavity opened.
 - The normal maximum weight and head-body length are given for each species. However, larger kiore may occasionally be encountered; maximum values are about 190g and 170 mm.
 - There are three colour forms or morphs (not subspecies) of *Rattus rattus*: (a) "Rattus" uniformly black back (sometimes has a bluish look); uniformly grey belly,
 - (b) "Alexandrinus" brown back with long black guard hairs; uniformly grey belly and (c) "Fruqivorous" brown back with long black guard hairs; uniformly white or creamy-white belly.