

# Identification of Rats and Mice in New Zealand

MANY people are confused about the different kinds of rats in this country and have difficulty in recognising them. This is partly because there are many popular names, often quite misleading, for the same animal and partly because rats vary a great deal in colour, so that two animals which at first glance look different may belong to the same species.

THERE is some practical value in being able to recognise the various rat species, because they have different habits and are not equally susceptible to the same poisons. To get rid of an infestation of rats the species present must be known so that the best methods to use against it can be decided.

There are three species of rats—the kiore, the Norway rat, and the ship rat—and the house mouse in New Zealand.

## Kiore (*Rattus exulans*)

This rat, popularly known here as the Maori rat, Polynesian rat, or native rat, is found in south-east Asia, the East Indies, the Philippines, New Guinea, and on most of the Pacific Islands, but not in Australia. It was carried from one island to another round the Pacific probably as a stow-away in the canoes of the Polynesians and according to Maori tradition it was brought to New Zealand in one of the canoes of the Great Fleet, which arrived about 600 years ago. However, it is more likely that it had already come with the Moriori some hundreds of years earlier, as it was with them on the Chatham Islands before the Maoris arrived there.

The kiore was widely spread throughout New Zealand in pre-



Fig. 1—Localities where the kiore has been found since 1949.

European times and the Maoris, who considered it an important food, had special traps for catching it. Soon after the first Europeans arrived it disappeared from most of the North Island. The two other rat species established themselves at about the same time, and it was generally supposed that they drove the kiore out. It lasted longer in the South Island and periodically became very numerous, particularly in the Nelson and Blenheim districts. These sudden increases in numbers probably coincided with the years when the beech trees were producing masses of seed. However, the last of these outbreaks came in 1889 and there have been very few records of the kiore since then.

Today this rat is found on some of the off-lying islands, particularly in the north, where neither of the other two species is present, but it is also on Kapiti Island with the Norway rat and probably also the ship rat, and in some isolated localities in Fiordland and Stewart Island. The map shows the places where it has been found in the last 10 years. The kiore is so locally distributed that it is generally of no economic importance, though on some of the Pacific islands it is abundant and damages native crops. In New Zealand it usually feeds on berries, seeds, and occasionally insects.

## Appearance and Habits

The kiore is the smallest of the three rat species and rarely weighs more than 4 oz. The length of the head and body of a full-grown animal is about 6 in. and the tail

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is about the same length, though it may be slightly shorter or longer than the head and body. The ears are relatively large and thin. It has a greyish brown back and is pale grey underneath. Many people believe that the small blue-grey rat sometimes found in the bush is the kiore, whereas this is really the young of the black form of the ship rat.

The kiore lives chiefly on the ground, nesting in hollow logs and

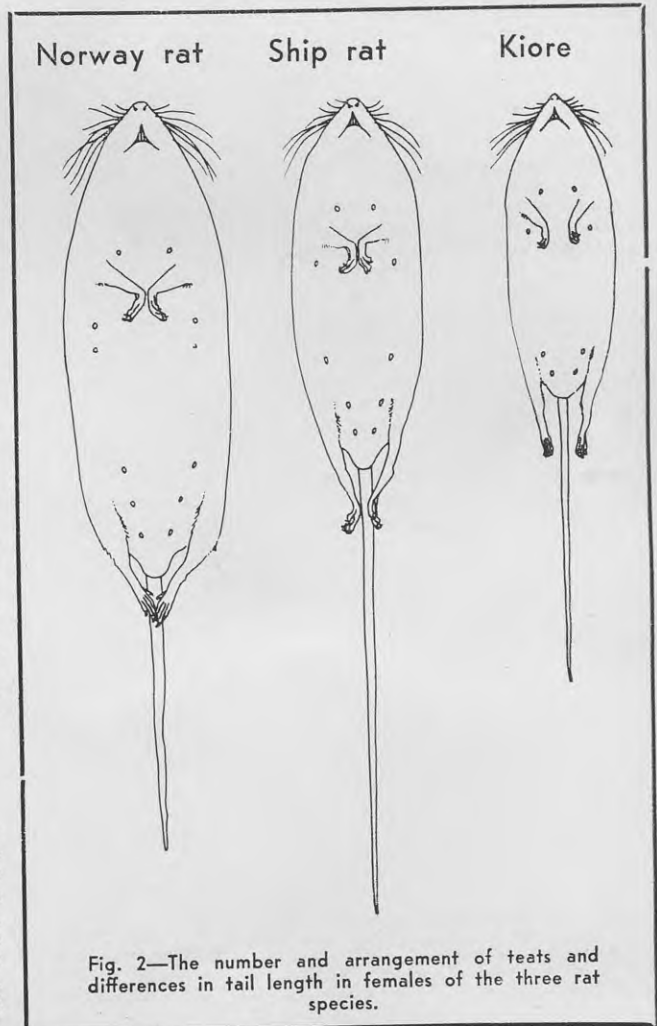


Fig. 2—The number and arrangement of teats and differences in tail length in females of the three rat species.