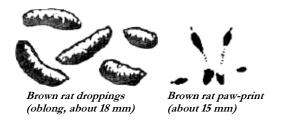
Rats and mice have always posed a threat to human health. Not only do they spread disease but they also cause serious damage to human food and animal feed as well as to buildings, insulation material and electricity cabling.

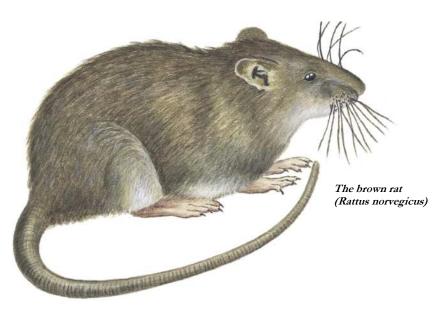
Rats and mice - unwanted house guests!

RATS AND MICE ARE AGILE MAMMALS. A mouse can get through a small, 6-7 mm hole (about the diameter of a normal-sized pen) and a rat can get through a 20 mm hole. They can also jump several decimetres at a time. They have no problem climbing up the inside of a vertical sewage pipe and can fall several metres without injuring themselves. Rats are also good swimmers and can be underwater for 5 minutes.

IN SWEDEN THERE ARE BASICALLY four different types of rodent that affect us as humans and our housing: the brown rat, the house mouse and the small and large field mouse.

THE BROWN RAT (RATTUS NORVEGICUS) THRIVES in all human environments, and especially in damp environments like cellars and sewers. The brown rat is between 20-30 cm in length not counting its tail, which is about 15-23 cm long. These rats normally have brown backs and grey underbellies, but there are also darker ones. They are primarily nocturnal, often keep together in large family groups and dig and gnaw out extensive tunnel systems. Inside these systems, they build large chambers where they store food and build their nests. A pair of rats can produce between 800 and 1000 offspring a year. Since their young are sexually mature and can have offspring of their own at just 2-4 months old, rats reproduce extraordinarily quickly.







The brown rat can be 20-30 cm in length, not counting its tail.



The field mouse often looks for warmth and food indoors when it is cold outside.



Cereals are a favourite of the omnivorous house mouse.

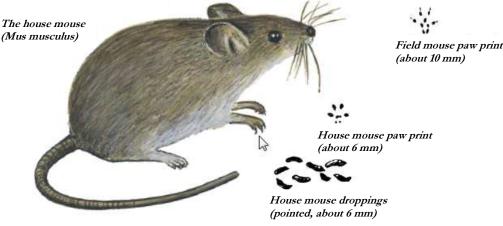
THE HOUSE MOUSE (MUS MUSCULUS) is nearly always found in environments inhabited by humans. They like to keep close to walls, in lofts or under the floors. The house mouse is an omnivore but prefers seeds and cereals. As a fully grown adult, its body is about 8-9 cm in length and its tail is about 9 cm long.

Their backs are a dark greyish brown with a clear tinge of yellow-brown. Underneath, they are greyish white or sometimes a shocking yellow. Their eyes and ears are relatively small. The house mouse can live up to 18 months old and the female gives birth to around 3-4 litters of 4-8 young a year.

THE SMALL AND LARGE FIELD MOUSE The larger field mouse or yellow-necked mouse (Apodemus flavicolis) and the smaller field mouse or wood mouse (Apodemus sylvaticus) mostly live outside but during the cold months of the year come indoors in search of warmth and food. The field mouse gets most of its food from the vegetable kingdom, including nuts, shoots and buds. Once inside buildings, however, it is much less choosy and can happily gnaw away at anything it finds, including soap, candle wax, putty, etc.

The yellow-necked variety's body is 9-13 cm long and its tail is about the same length. It has a yellowish brown spot or strip underneath between its front legs, hence the name. The smaller variety, the wood mouse, grows to about 8-10.5 cm in length and its tail is about 7-9.5 cm.

The backs of both varieties are yellowish-brown, often with a tinge of reddish brown, and their underbellies are white. Both have large, prominent eyes and eyes. A female field mouse can give birth to 3 litters per year with 1-8 young in each one.



What can we do to combat rats and mice?

Rats and mice choose environments where there is plenty - Fit ventilation holes with stainless steel, of food and places to hide. A number of measures can be taken to reduce the risk of rats and mice coming indoors:

- Keeping your home clean and tidy is the key.
- Don't leave food lying around.
- Keep waste bins and containers covered and clean them on a regular basis.
- Ensure cellar windows are not broken.
- Keep compost in a sealed container

- bronze or brass wire meshing with a maximum mesh of 5 mm and a wire thickness of at least $0.7 \, \text{mm}$.
- Ensure that doors close tightly and that there are no holes or major cracks in walls and floors.
- Seal pipe openings with concrete or steel plating.
- Fit drains with grating.



Field mouse droppings (shorter and thicker than that of the house mouse)