

## PEST FACT SHEET

### **Norway Rat** *Rattus norvegicus*

#### **Size**

Norway rat adult's head+body length is about 18-25 cm and tail length is 15-21 cm.

#### **Characteristics**

Heavy body; coarse, shaggy fur; blunt muzzle, small eyes, small ears with dense short hairs; scaly, 2-colored tail, which is darker on top, and is shorter than the length of its head+body. Adult droppings are up to 3/4 in (20mm) long, capsule shaped with blunt ends.

#### **Color**

Norway rats are brown with scattered black hairs, gray to yellow-white on underside



#### **Habitat**

Outdoor burrows of Norway rats are in the soil along railroad embankments, river banks, rubbish piles, and under concrete. Burrows have hidden emergency exits.

#### **Food Habit**

Norway rats eat anything, but they prefer meat, fish, cereal, and dry dog food. They require a water source other than their food. They eat a lot at one time, returning to the same place, but quickly become shy of undesirable food or bait. They will travel to find food or water, gnawing through almost anything, even plastic or lead pipes.

#### **Biology**

Norway rats are social. Many burrows may be in the same area. These rats mature in 2-5 months and live as an adult for 6-12 months, longer in captivity. Pregnancy lasts 3 weeks. Newborns get hair after 1 week, open their eyes in 2 weeks, and are weaned at 3-4 weeks. A female has 3-6 litters per year, 7-8 young per litter, with an average of 20 young weaned per year. They have keen hearing, smell, taste, and touch, with their long whiskers, but poor vision, and are also color blind. They can run, climb, jump, and swim. They are nocturnal, and explore a lot, but they are cautious and shy away from newly introduced objects

#### **Damage**

Norway rats gnaw objects, eat stored food, and transmit disease by droppings and urine, bites, and the fleas and mites in their fur.

## **Invasion**

An opening larger than 1/2 in (12mm) permits entry of Norway rats into structures

## **Detection**

1. Gnaw marks.
2. Droppings.
3. 4-toed front footprint in front of longer 5-toed hind print.
4. Dark greasy markings from fur rubbing against surfaces.
5. Shallow burrows under plants.
6. Greasy runways along walls and bare soil runways outdoors.
7. Nibbled food.

## **Management**

1. Use traps or bait stations along runways and against vertical surfaces. Wire glue boards to rafters and pipes.
2. Norway rats are cautious: pre-baiting with nontoxic bait may be needed.
3. They're gluttonous: use sufficient bait for at least 1, 2 or more meals with appropriately labeled baits.
4. Norway rats like meat: use high-protein baits, or liquid baits if water source can be reduced or eliminated. Burrows may be gassed.
5. Read entire label of pesticide registered for these species, strictly follow label directions, restrictions and precautions.

## PEST FACT SHEET

### **Roof Rat** *Rattus rattus*

#### **Size**

Roof rat adult head+body length is (16-20 cm) & tail length is (19-25 cm).

#### **Characteristics**

Soft, smooth fur; pointed muzzle; large eyes; large, almost naked ears which can be pulled over the eyes. Scaly, dark tail is longer than combined head+body length. Adult droppings are up to 1/2 in (12.5 mm) long, and are spindle shaped with pointed ends.



#### **Color**

Brown with black mixed in, to gray, to black on top with white; gray or black underside

#### **Habitat**

Outdoors: roof rats nest in high places such as trees, but sometimes in burrows under plants. Indoors: they nest in high places in ceilings, but sometimes in basements, sewers, or under buildings.

#### **Diet**

Roof rats eat almost anything, but they prefer fruit, vegetables, and cereal products. They get their water often from their food. They eat a lot at one time, and will return to that place time after time. If they do not like a food or bait they quickly become shy of it.

#### **Biology**

Roof rats mature in 2-5 months, and are adults for 9-12 months. Pregnancy takes 3 weeks. Newborns get hair after 1 week, open eyes after about 2 weeks, are weaned at 3-4 weeks. Female has 4-6 litters per year, with 6-8 young per litter. They have keen hearing, smell, taste and touch (long whiskers), but bad vision, and are color blind. They are good at running, climbing, jumping, even swimming. They are nocturnal and explore a lot, but are cautious and shy away from new objects.

#### **Damage**

Roof rats gnaw, eat stored food, and transmit disease by droppings and urine, bites, and the fleas and mites in their fur.

### **Invasion**

An opening larger than 1/2 in (12 mm) allows entry of roof rats into buildings

### **Detection**

1. Gnaw marks.
2. Droppings.
3. 4-toed front footprint in front of longer 5-toed hind print.
4. Dark greasy markings from fur rubbing against surfaces.
5. Shallow burrows under plants.
6. Greasy runways along walls and bare soil runways outdoors.
7. Nibbled food.

### **Management**

1. Concentrate more where most droppings are found.
2. Place traps and bait stations along runways, against vertical surfaces.
3. Wire glue boards to rafters and pipes.
4. Rats are cautious. Pre-baiting with nontoxic bait may be needed.
5. Rats are gluttonous. Use sufficient bait for 1, 2 or more meals baits. For roof rats use high-carbohydrate baits, liquid baits if water source can be eliminated. Burrows can be gassed.