



IPM NEWS

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Commensal Rodents

Commensal rodents can be a problem when they move into structures, especially since they are a common phobia of some people. They can gnaw upholstery, books, aluminum, pipes, irrigation systems and garbage cans causing a lot of damage and sometimes even starting fires from chewing electrical wires. Rodents have tooth enamel with a hardness index greater than steel!

Rats are usually active at night, but if a rat is hungry, it will search for food during the day. Rodents construct nests out of any available material. The nest is used as a refuge for adults and a protective place for the young. Norway rats tend to nest underground in burrows while roof rats prefer to nest inside or under buildings.

Rats are cautious and usually run along walls. You can locate rat runways by searching for droppings and grease marks (dirty-grey markings that the rat's body leaves along their passageways). There are typically two large migrations of rats per year-spring and fall. The fall migration most often leads rats back into buildings to seek shelter from the cold during winter.

Rats typically become sexually mature within two to four months, depending on the species. Under ideal conditions, rats can live approximately three to five years, but the average life span is about six months with females living longer than males. Rats are capable of breeding every month of the year with reproductive peaks in May and September. Each litter of rats generally contains 6-8 rats. The number of litters produced each year depends on available food and harborage, competition, age and condition of the female and temperature. Female

rats can become impregnated within hours of giving birth to a litter.

Rats are born blind and naked with their ears sealed down. Within a week they will be covered with a fine coat of hair. Their eyes and ears open around 12-14 days. The baby rats depend on the mother for about three weeks before beginning to feed on their own.

House mice, another commensal rodent, breed abundantly. Females can have litters of 6 every 40-50 days. Young are suckled by their mother for about a month. Newborns are pink, hairless and blind. After a couple of weeks the eyes and ears open and the mice are covered with hair. At three weeks young mice begin to feed on solid food.

Indoors mice will breed year round while outside, they will breed spring and fall. Mice have been known to survive about 6 years, but typically live about a year.

Male mice are territorial, setting up an area which they will guard. The area will contain several females and lower ranking males. Any mouse from another territory will be run out of the area.

To locate areas of mouse infestation, look for fecal droppings, the smell of urine, gnaw marks or small holes

Rodent Dropping ID

- ◆ Norway Rat- blunt; about 3/4"
- ◆ Roof Rat- pointed; about 1/2"
- ◆ House Mouse- pointed; about 1/4"
- ◆ fresh samples look wet; soft enough to be squeezed
- ◆ 2-3 day old samples are dry & hard; surface is dull
- ◆ very old samples are often discolored & covered with dirt

Red Imported Fire Ants

Red imported fire ants live in large colonies and build large dome-shaped mounds that can contain more than 200,000 ants. They prefer to build mounds in open, sunny areas such as pastures, ball fields or yards. When weather becomes hot or dry, fire ants tunnel deep into the soil to find cooler temperatures as well as water. After heavy rain, numerous mounds pop up because the ants are trying to move out of the water-saturated soil.

Fire ants will protect the mound in a very aggressive manner. When the mound is disturbed, workers rush out in large numbers, climb quickly up the object in the nest and begin to bite and sting. Once a person is stung, a small blister filled with fluid will form. If the blister is broken open by scratching, it can become infected and lead to more serious problems.

Fire ant workers are attracted to oily or greasy foods. They will forage for food and once a food source is found, they carry it back to the nest to share with the rest of the colony. Fire ants will eat other insects, seeds or even potatoes growing in the ground during dry weather. Dog and cat food are popular items around the house for fire ants to feast upon.

Bait formulated insecticides are a method to

manage fire ants. Bait consists of an active ingredient dissolved in soybean oil. The oil is used to coat defatted corn grit. Bait is shared throughout the colony, eventually reaching the queen causing her to die or be unable to produce viable eggs, which will lead to death of the colony. Baits can take anywhere from 2-8 weeks to see control, so warn customers that it might take some time or use in tandem with a mound treatment method.

There are a variety of chemicals to use as individual mound treatments. When performing a mound treatment, make sure to read and follow the label, since many dusts or granular products need to be watered in to work effectively. When treating a mound, it is best to start on the outside and work in a circular pattern to the center.

Tips for Fire Ants

- ◆ When applying baits, try a hopper blend- mix a quick knock down bait such as hydramethylnon with an IGR/ CSI such as methoprene or pyriproxifen; apply bait at the same rate
 - ◆ this should give a faster knock down as well as a longer residual



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