

**What You Can
Do To Prevent
and**

Control

RATS



GENERAL INFORMATION

ROOF RAT FACTS

ENVIRONMENTAL MANAGEMENT

BUILDING MAINTENANCE

TRAPPING AND CHEMICAL CONTROL



Roof Rat



Norway Rat

GENERAL INFORMATION

The roof rat (*Rattus rattus*) is the major problem species in Riverside County. This rat is slender and agile, and the tail is longer than the head and body. The animal will enter buildings if given the opportunity, and can use utility lines and fences as runways. The roof rat prefers to feed on many of the fruits, nuts, ivy, and pet food often found in residential backyards.

The Norway rat (*Rattus norvegicus*), less common in Riverside County than the roof rat, is generally found near the coastline, where small, isolated populations may inhabit the riprap rocks of jetty structures. The Norway rat is slightly larger than the roof rat, with a heavier, bulky body. The eyes and ears are small and the tail is shorter than the combined head and body length. This species tends to stay close to the ground, residing in underground burrows, and will feed on discarded fish, fish bait, garbage, meat scraps, and cereal grains.

DISEASE

Rats and their fleas are capable of transmitting a variety of human diseases. Bubonic plague is the most serious of these maladies and while there have not been any recent outbreaks of plague in Riverside County, the potential of such outbreak could increase if rat populations are allowed to rise.

REPRODUCTIVE POTENTIAL

The dangers from a few rodents and the need for environmental improvement to reduce the carrying capacity of the habitat is evident when one considers the enormous reproductive potential of rats. As frequently as every four weeks rats can bear 6 to 8 young. During their average life span of one year or less, rats may wean about 20 young each. Breeding peaks in rats often occur in the spring and fall. Rats reach sexual maturity two to three months after birth.

GENERAL INFORMATION

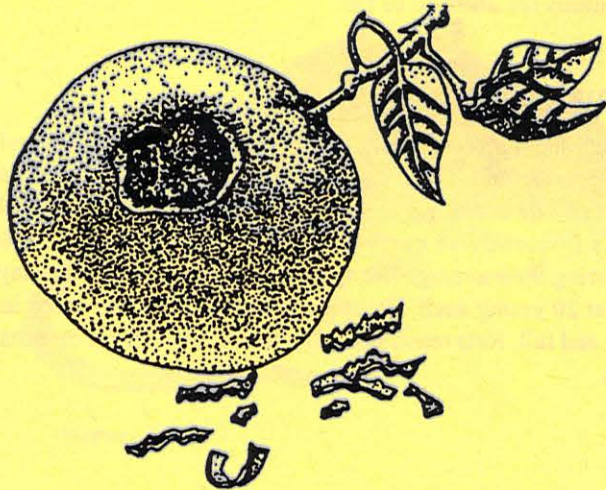
ROOF RAT HABITAT

Roof rats may establish nests in these areas:

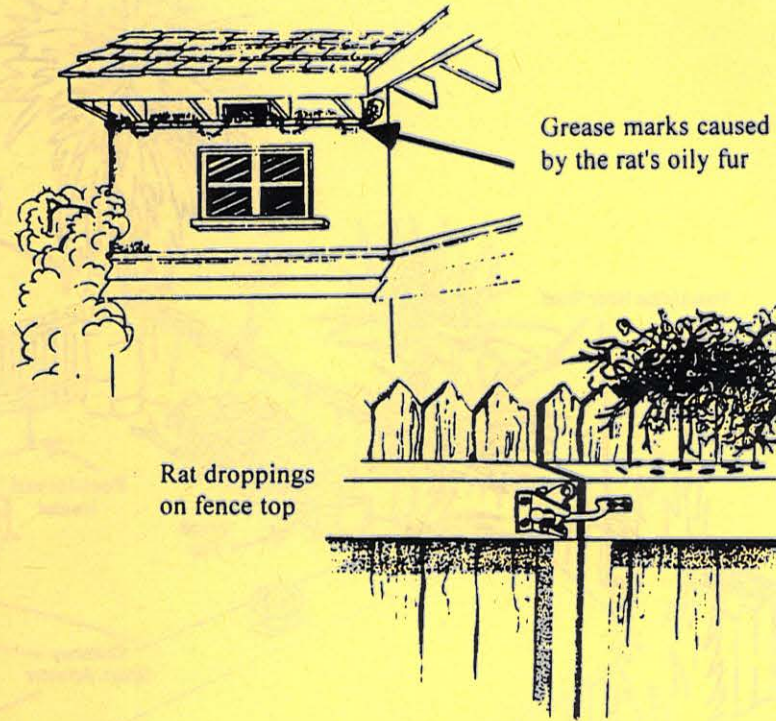
- Italian Cypress
- Algerian ivy
- bougainvillea
- oleander
- palm trees
- yucca
- other heavy shrubbery
- wood and lumber piles
- storage boxes

Roof rats prefer to feed on the following:

- oranges
- avocados
- other ripe fruits
- walnuts
- natal plums
- pet food left out at night
- snails
- grass seed
- bird seed



Orange damaged by roof rat gnawing.



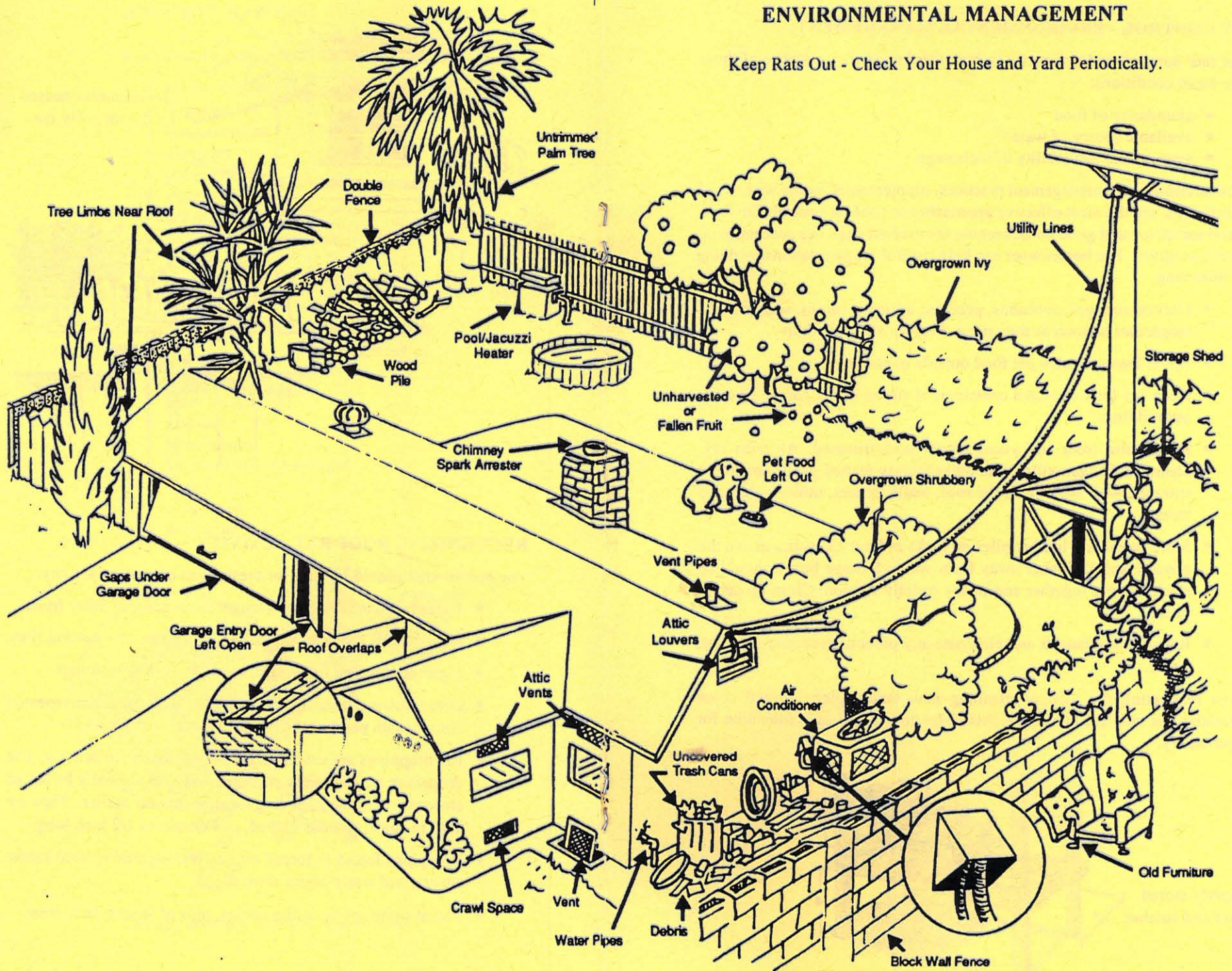
RECOGNIZING ROOF RAT ACTIVITY

The homeowner should be alert for these signs of roof rat activity:

- Damaged, partially eaten oranges, avocados, or other fruits.
- Broken snail shells under bushes, on fences, near nesting sites.
- Signs of gnawing on plastic, wood, or rubber materials.
- Greasy rub marks caused by the rat's oily fur coming in repeated contact with painted surfaces or wooden beams.
- Rat droppings are usually signs of significant rat activity. The droppings are randomly scattered and will normally be found close to a rat runway, feeding location, or near shelter.. They are dark in color, spindle shaped, and are about 1/2 inch long.
- Droppings found in forced air heaters, swimming pool heater covers, and water heater closets.
- Visual sightings on utility cables, tops of fences, or in trees.

ENVIRONMENTAL MANAGEMENT

Keep Rats Out - Check Your House and Yard Periodically.



ENVIRONMENTAL MANAGEMENT

RAT CONTROL - ENVIRONMENTAL MANAGEMENT

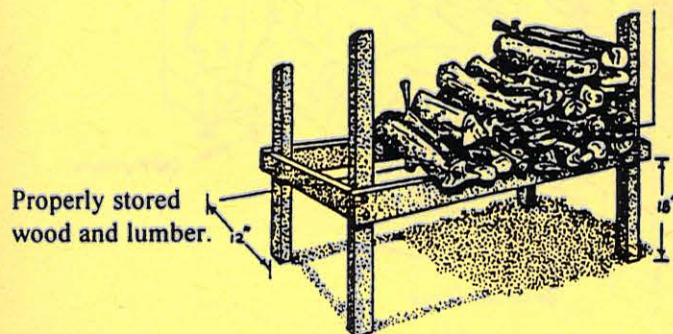
Roof rats' survival and prosperity is dependent upon the existence of these three basic conditions:

- abundance of food
- available source of water
- amount and availability of harborage

Good environmental management practices, supplemented by the wise use of rodenticides, are the most effective approaches to roof rat control. Environmental sanitation and good housekeeping are the first steps in a successful rat control program. The homeowner can help control rat populations by doing the following:

- Harvest oranges, avocados, peaches, apricots, plums, walnuts, and tangerines as soon as they ripen. Pick up all fallen fruit.
- Never leave uneaten pet food outside overnight.
- Keep pet food in sealed containers if stored in the garage or other outbuildings.
- Keep palm trees and yucca plants well trimmed. Algerian ivy, oleander, bougainvillea, and other thickly matted plants should be trimmed well away from the roof, walls, fences, utility poles, and trees.
- Store wood and lumber piles on racks at least 18 inches above the ground and 12 inches away from walls. Storage boxes should be stacked close together and in any orderly fashion. Clean up debris piles.
- Repair leaky faucets and eliminate any other unnecessary standing water.

When renovating the yard or planning new landscaping, ground cover unsuitable for roof rat harborage should be considered as a substitute for Algerian ivy.



BUILDING MAINTENANCE

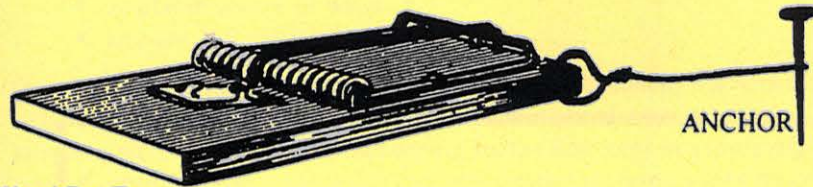
The roof rat can enter even small exterior openings of a home. Important steps a homeowner can take are inspecting and repairing:

- basement windows and ventilation ports.
- attic vents and louvers.
- vent pipes and shafts

Openings such as these should be screened with 1/4 inch galvanized hardware cloth and inspected at least yearly for state of repair. Gaps around pipes and electrical conduit should be sealed, and cracks around doors and windows should be weatherproofed. Tree limbs should be kept well away from the roof and walls of the house.

TRAPPING

Rat traps may be used in the yard and inside buildings with good results. Wood snap traps are inexpensive, give positive results, and eliminate the possibility of a poisoned rat dying in an inaccessible area, creating serious odor problems.



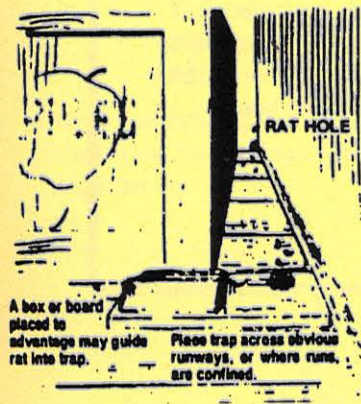
Wood Rat Trap

Several traps may be set at once for maximum effectiveness. Baits which are most attractive to rats are:

- Peanut butter mixed with oatmeal
- Bacon
- Nutmeats
- Pieces of apple

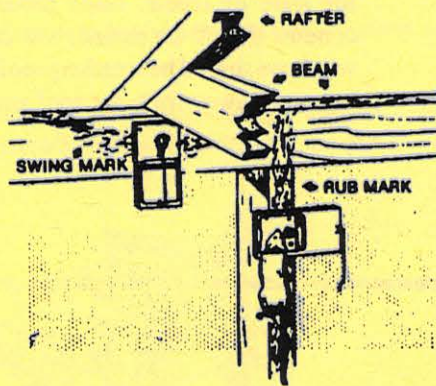
These baits should be kept in fresh condition for best results, and should be securely fastened to the trigger.

Traps should be placed along known rat runways such as fence tops and walls, and securely fastened to beams and rafters in garages where rat activity is evident.



Properly placed trap at floor level.

Trap placement in beams and rafters.



USE OF POISONS

Most rodenticides available to the public are anticoagulant poisons. This means that, over a period of a few days, the rat will slowly bleed to death.

Since the safest rodenticide is still hazardous, be sure to carefully follow the product label instructions. Place the poison bait in areas that are inaccessible to pets, wildlife, and children. If pets or children accidentally sample the poison, then seek medical attention immediately. The action of the poison may be reversed with Vitamin K, antidote.

Most rat poisons require several days of feeding to kill. Place the poison where rats are traveling. Inspect the poison bait daily and add more as needed. Do not allow the bait to run out as long as the rats are feeding. Remember, the rats must eat a few day's worth of poison to kill them.

Additional information on rat poison usage may be obtained from your Vector Control Specialists at the phone numbers listed in this publication.

USE OF GLUE TRAY TRAPS

Glue trays contain a nondrying, nonpoisonous glue that will capture and hold rats in place. These must be used indoors in dust-free areas. Place glue trays in areas where rat activity is noticed.

Glue tray traps are ideal for situations where snap traps or poisons are considered dangerous or undesirable.

PROFESSIONAL PEST CONTROL SERVICE

If you do not want to undertake rat control measures yourself, a licensed pest control company can provide this service.

REMEMBER! ALL CONTROL METHODS MUST BE USED TOGETHER IN ORDER TO BE EFFECTIVE.

FOR FURTHER INFORMATION CALL:

County of Riverside
Department of Environmental Health
Vector Control Program
(951) 766-9454

Dear Resident:

Your cooperation is requested to help control rats in Riverside County. This pamphlet entitled, "What You Can Do To Prevent And Control Rats", explain the elements of rat control and the habits of the roof rat.

Trapping and chemical control alone will not achieve long term, permanent rat control. If the rats can be controlled and conditions that allow them to reproduce are removed, then we have achieved a longer lasting control. After the harborage has been removed, your property should be maintained harborage free, so that the rats will not find the property attractive for reinfestation. The chemical control of rats may be performed by a licensed pest control operator or you may elect to control the rats by your own means.

The County is asking you to remove the conditions on your property that allow rat harborage. The harborage removal and maintenance is recommended after the rats are controlled.

What else can you do? You can host a block party in your neighborhood. An effective way to get rid of rats in your block is to work together with your neighbors. Organize and call the people in your block together. As a group, you can make a commitment to make your neighborhood a place where rats cannot survive. The Riverside County Vector Control Section may arrange a speaker for your block party and provide flyers or brochures.

Thank you for your cooperation.

FOR MORE INFORMATION, CALL OR WRITE

COUNTY OF RIVERSIDE
DEPARTMENT OF ENVIRONMENTAL HEALTH
VECTOR CONTROL PROGRAM
800 S. SANDERSON, SUITE 200
HEMET, CA 92545

