What You Can Do To Prevent and Control

RATS

AN INDEPENDENT SPECIAL DISTRICT WORKING FOR YOU!

MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

Dear Resident:

Your cooperation is requested to help control rats within the District. This pamphlet entitled: "What You Can Do To Prevent and Control Rats" explains 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. The District is asking you to remove the conditions on your property that allow rat harborage. 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 re-infestation. At the same time, we are inspecting the neighborhood to find other properties with rat harborage.

If you live in an enhanced service area of the District, a Certified Vector Control Technician from this District can inspect your house and yard and make specific control recommendations, free of charge, if you request the service. However, you may elect to appropriately control the rats by your own means or hire a licensed pest control operator.

What else can you do? An effective way to get rid of rats in your back yard 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 Mosquito and Vector Management District may arrange for a speaker at your neighborhood meeting and provide flyers or brochures.

Thank you for your cooperation

The Mosquito & Vector Management District

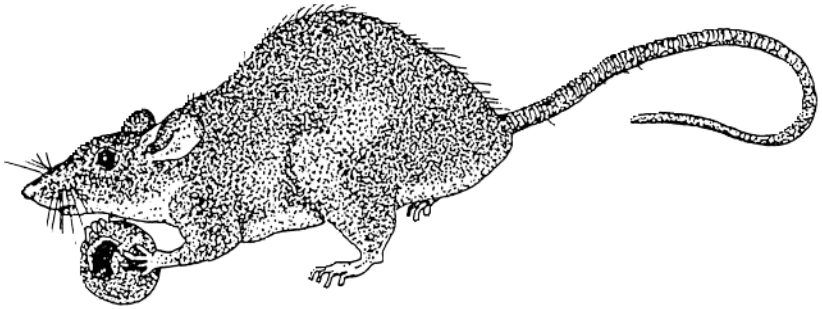
District Office: 2450 Lillie Ave.
Mailing Address: P.O. Box 1389
Summerland, CA 93067

E-Mail: mvmdistrict@mvmdistrict.org

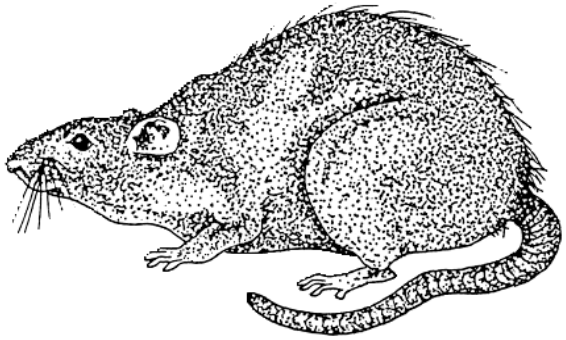
Telephone: (805) 969-5050

For more information on vectors and vector-borne diseases visit our Public Information Website:

www.mvmdistrict.org



ROOF RAT



NORWAY RAT

Illustrations by Dennis D. Loughner

GENERAL INFORMATION

The Roof Rat (*Rattus rattus*) is the major problem species in Santa Barbara County. This rat is slender and agile, and the tail is longer than the combined head and body length. 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 Santa Barbara County, 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, bait, meat scraps, garbage, 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. While there have not been any recent outbreaks of plague in Santa Barbara County, the potential of such outbreaks could increase if rat populations are allowed to rise.

Murine Typhus may exist in certain areas of Santa Barbara County and, like plague, can be transmitted by rat fleas. Rats can also transmit Leptospirosis and Salmonella.

The Mosquito and Vector Management District conducts periodic surveys for disease occurrence in rats and other small mammals throughout the District.

WHAT IS A VECTOR?

A vector is any insect or other arthropod, rodent, or other animal of public health significance capable of causing human discomfort, injury, illness, or capable of harboring or transmitting human disease.

For more information on vectors, call the District or check out the District's public information website:

www.mvmdistrict.org

ROOF RAT FACTS

The following is true of Roof Rats:

- Forage daily in a territory of about 100 to 300 feet across.
- Avoid new objects in their environment for several days.
- Are excellent climbers and can jump at least 18 inches.
- Lifespan is typically one year.
- Can be sexually mature and mate at 3 months of age.
- Females average 3 to 7 litters per year.
- Litters are usually 5 to 8 pups.
- After giving birth, females may come into heat again within 24 to 48 hours. They can be simultaneously pregnant with a new litter and lactating to feed existing young.

Roof Rats may establish nests in these areas:

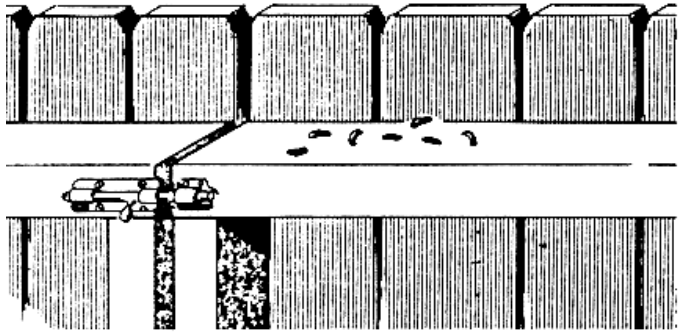
- Italian Cypress
- Algerian Ivy
- Bougainvillea
- Oleander
- Palm trees
- Yucca
- other heavy shrubbery
- wood and lumber piles
- storage boxes

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

Oranges (left) and Avocados damaged by Roof Rat gnawing.

Grease marks caused by the rat's oily fur.



Rat droppings on fence top.

RECOGNIZING ROOF RAT ACTIVITY

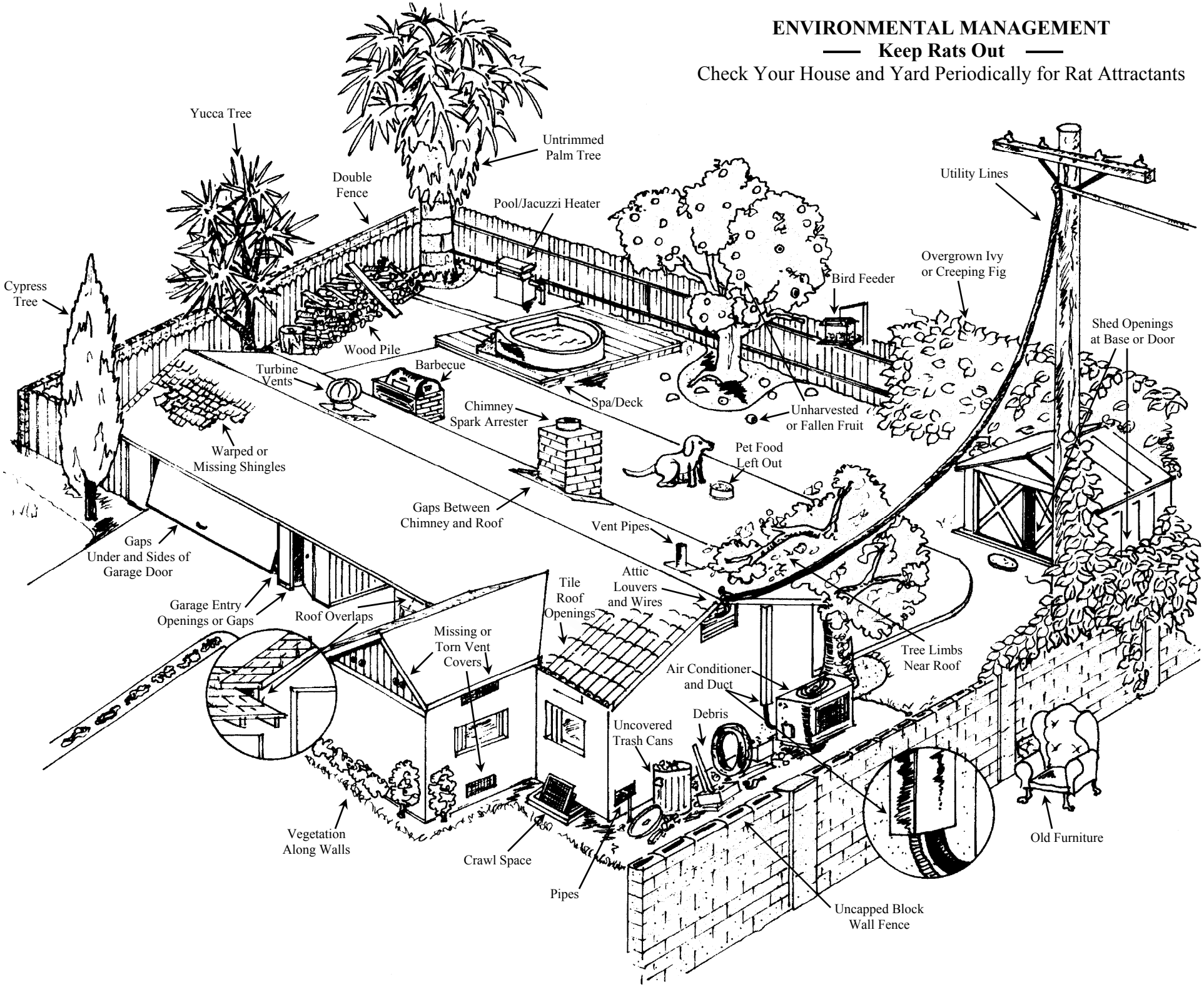
The homeowner should be alert for these signs of Roof Rat activity:

- 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 for Rat Attractants



RAT CONTROL — ENVIRONMENTAL MANAGEMENT

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

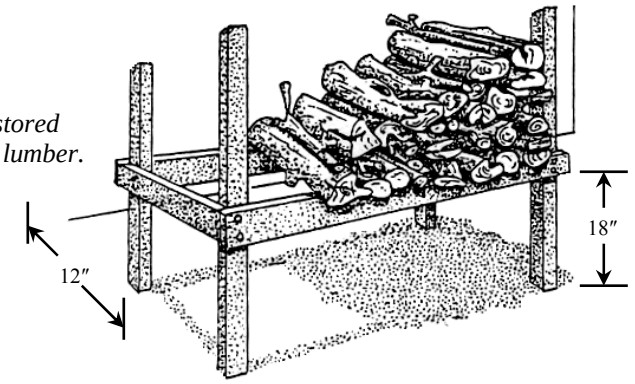
- Abundance of food
- Available source of water
- Amount and availability of harborage

Good environmental management practices, supplemented by the wise use of rodenticides and traps, 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, tangerines, avocados, peaches, apricots, plums, and walnuts as soon as they ripen. Pick up all fallen fruit.
- Never leave uneaten pet food outside overnight.
- Keep pet food in sealed containers (i.e. a metal trash can with a tight fitting lid) 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 an 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. A list of such ground covers is available from the District upon request.

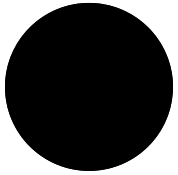
Properly stored wood and lumber.



BUILDING MAINTENANCE

Roof Rats 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
- gaps between roof and chimney
- vent pipes and shafts
- tile roofs along the eaves or missing and warped shingles



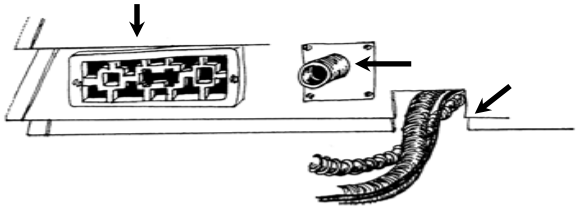
Actual size hole a rat can enter.

All access openings should be screened with ¼ 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 eaves, roof, and walls of the house.

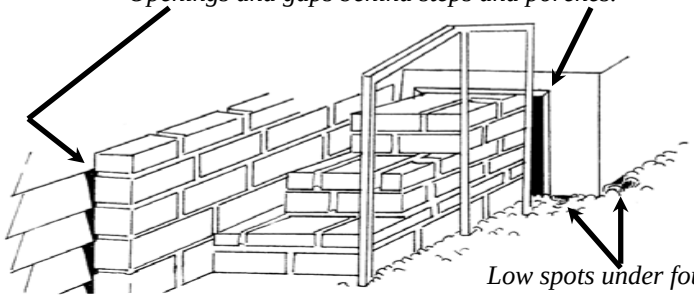
CONDITIONS ASSOCIATED WITH MOBILE HOMES

Roof Rats can squeeze through very small openings. Below are examples of common ways Roof Rats can enter mobile homes. The measures described for Building Maintenance should be used to remedy these problems.

Decorative vent without fine screen.



Openings and gaps behind steps and porches.



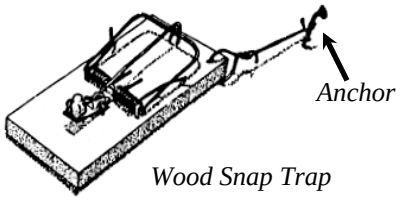
Low spots under foundation.

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.

Several traps may be set at once for maximum effectiveness. The following baits are most attractive to rats:

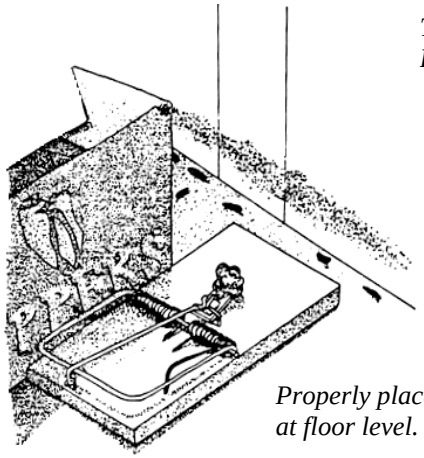
- Peanut butter mixed with oatmeal
- Bacon or beef jerky
- Nutmeats
- Pieces of apple



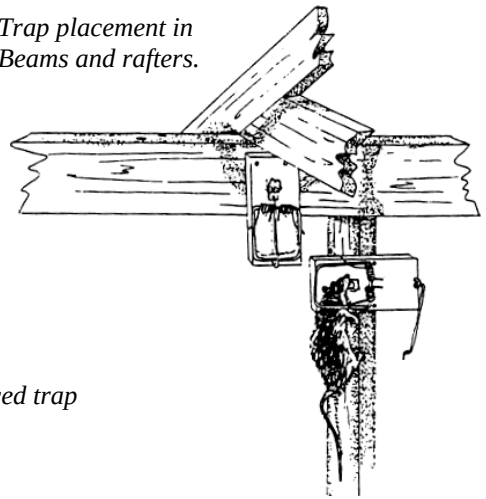
Wood Snap Trap

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.



CHEMICAL CONTROL

Many rodenticides presently available for rat control are anticoagulant formulations that require several consecutive feedings to reach lethal level in the rats' blood. If the homeowner wishes to purchase rodenticides, farm supply stores, nurseries, and hardware stores usually stock them.

FOLLOW ALL LABEL DIRECTIONS AND PRECAUTIONS WHEN USING ANY PESTICIDE!

A Vector Control Technician can advise the homeowner on trap placement, bait choice and effectiveness, and other rat control information upon request.

Controlling rats indoors should be performed through a combination of building maintenance (also called rodent-proofing or exclusion) and trapping. Baiting or chemical control of rats is best done outdoors after buildings are rodent-proofed. Baiting indoors or with rat access into buildings can result in rats dying in inaccessible areas of a building and causing odor or fly breeding problems.

Should the homeowner wish to seek the advice of a licensed pest control operator, the Classified Section of the Telephone Directory may be consulted under the heading "Pest Control."

TRAPPING AND CHEMICAL CONTROL ALONE WILL *NOT* RID YOUR PROPERTY OF RATS. ENVIRONMENTAL MANAGEMENT AND BUILDING MAINTENANCE MUST ALSO BE PRACTICED.

WHAT THE MOSQUITO AND VECTOR MANAGEMENT DISTRICT CAN DO TO HELP.

- Inspect your house and yard free of charge.
- Make specific control recommendations that will make your property less attractive to rats.
- Provide free pamphlets and information about rodents.
- Provide a list of groundcover plants that are less attractive to rats than Algerian Ivy.
- Survey your neighborhood for other properties with rodent problems.
- Arrange for a speaker at community, neighborhood, association, and civic organization meetings.
- Assist schools, businesses, and public agencies.
- Maintains a website with information on rats and rat control as well as other vectors and vector-borne diseases (www.mvmdistrict.org).

CALL THE DISTRICT FOR MORE INFORMATION

(Most Services Provided to District's Enhanced Services Areas Only.)

Cover photograph courtesy of The Atlanta Journal-Constitution.