

# Pest Press

ISSUE #1

IPM IN SCHOOLS

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## RATS AND MICE IN SCHOOLS

**R**odents are common pests in and around structures used by humans. Rats and mice will damage and contaminate stored foods, nibble on structural materials including electrical wiring, and may carry pests and diseases which can be transmitted to humans. Fleas, mites, tapeworms, and ticks are among the pests which can be carried by rodents. In addition, rodent activity can spread serious illnesses such as Lyme disease, plague, leptospirosis, or salmonellosis, as well as Hantavirus Pulmonary Syndrome, which is transmitted by deer mice.

### KNOW YOUR ENEMY

There are four common rodents which can be problem pests in the Pacific Northwest: Roof rats, Norway rats, house mice (photo above left), and deer mice. Mice and rats are more active at night, so often the only sign of rodents you will see are their droppings (photo below left). Rats range in overall length from around 13 to 18 inches. However, while roof rats are relatively slender and light (about 12 ounces), Norway rats are both stockier and heavier (up to 21 ounces). Norway rats are widely distributed, but the roof rat may be more abundant near coastal areas.

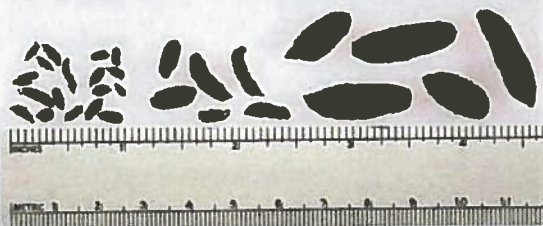
The house mouse is a frequent indoor pest throughout the region, while the deer mouse is mainly a problem in rural areas. House mice average 5 to 7 inches long; deer mice are slightly larger. Deer mice are distinguished from house mice by their white bellies and proportionally large eyes and ears. Young rats may also be confused with mice, but have large heads and feet compared to their body, while mice have comparatively small heads and feet.



House mouse (photo by G. Shuklin).

### WHAT IS IPM?

Integrated Pest Management (IPM) is a strategy for pest control which utilizes various tools to achieve long-term pest prevention and control. Control is achieved with minimal impact on human and environmental health. IPM techniques include prevention strategies, monitoring, assessment, treatment using less-toxic means, and evaluation.



Droppings of house mouse (left), roof rat, and Norway rat (right). Used with permission, University of California Statewide IPM Program (photo by W. Gelling).

## WHAT CAN YOU DO?

A few simple steps will do a lot to help prevent mouse and rat infestations.

1. Report signs of rodents in and around school buildings, including sightings of rats or mice, their droppings, damage to stored foods, or chewed materials. Many schools using IPM practices will have log books available for you to record dates, times, and locations of sightings.
2. Keep all (non-refrigerated) food in lounges, kitchen areas, and classrooms sealed in jars, lidded tins, or heavy plastic containers. Boxes and plastic bags will not discourage rodents. This includes pet foods, foods used for arts and crafts, and food stored in classrooms or lockers.
3. Clean up food spills and debris promptly. Splatters and crumbs around microwaves, refrigerators, sinks, drains, etc., are attractive to pests. Store food waste and food-contaminated trash in rodent-proof dumpsters or trash cans with tight-fitting lids or spring-closing doors, especially at night. Empty and clean containers regularly.
4. Report structural problems (for example, gaps around water pipes or electrical wiring, leaking faucets, cracks or gaps around windows or doors) which may attract rodents or allow entry.
5. Reduce clutter to remove potential hiding and nesting sites.

## PREVENTION AND CONTROL

Prevention is the single-most important measure for effective rodent control. By reducing the availability of food and water and making building access difficult, you can help make your school less desirable to rodents.

1. Excellent food and trash sanitation discourages pest insects as well as rodents.
2. Rats like free water sources such as leaking faucets, bird baths and ponds. These should be eliminated where possible.
3. Repair, caulk or screen any openings into buildings larger than 1/4 inch. This includes upper stories (roof rats are excellent climbers) and broken pipes, drains, or sewers (Norway rats are strong swimmers).
4. Dense vegetation and ground cover should be thinned or removed. Trim overhanging branches that are close to roofs or walls.

If good sanitation and preventive measures are not enough to keep out rats and mice, more aggressive controls may be needed. Physical control (trapping) is the next step, with chemical controls (usually baits) as the last resort. Your school may have a professional pest control company provide this service. Physical and chemical control of rats and mice in school buildings may include various types of traps and bait stations, all of which should be enclosed for safety and emptied daily. Students and staff should be warned to avoid contact with traps, bait, and living or dead rodents.

### FOR MORE INFORMATION:

WSU Extension Offices  
in your county

Carrie Foss  
Urban IPM Coordinator  
WSU Puyallup  
cfoss@wsu.edu  
253-445-4577

### ON THE WEB:

*UPEST*  
[http://www.ecy.wa.gov/programs/swfa/pest/index.html](http://www.ecy.wa.gov/programs/swfa/upest/index.html)

*IPM in Schools (University of Florida)*  
<http://schoolipm.ifas.ufl.edu/>

*IPM for Rats & Mice in Schools*  
<http://www.epa.gov/pesticides/ipm/schoolipm/chap-12.pdf>

*Univ. of California Statewide IPM Program*  
<http://www.ipm.ucdavis.edu/index.html>

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