

## Pests of the Month



### Mice



### Cockroaches

**Mice** The house mouse is the most common rodent infesting schools today. You can find them wherever people are present since they prefer a life of living in human shelters and stealing human food.

The deer mouse is a less invasive species than the house mouse. However, it "is the most widely distributed and abundant mammal in North America. It currently is the primary reservoir of Hantavirus". Normally the deer mouse invades outbuildings and is distinguished from the house mouse by the "sharp contrast in color between the back and belly, the white feet and the furry tail" (Corrigan, 2001).

Mice may infest schools year round but are more likely to show up during cold weather months seeking the warmth and food of human structures rather than living outside.

Once mice have gained entrance, they can do serious damage by contaminating food and gnawing at materials. Also, the house mouse may carry disease which can be transmitted to people and domestic animals.

Evidence of mice (other than sighting the animal itself) includes damage to food containers, nesting materials, and the small, tapered fecal pellets left in areas where the mouse feeds or is harbored – **CLUTTERED AREAS!** Every school has their fair share of "clutter bugs", no not insects but teachers and members of staff who "have too much STUFF" to allow good sanitation standards to be maintained.

Keep mice out of schools and homes by:

- 1) Repairing or caulking all openings that allow entrance.
- 2) Removing indoor and outdoor debris that could harbor mice such as woodpiles, clutter, and mulch piles.
- 3) Clearing high weeds – since weeds and seeds serve as food and shelter for mice during warm weather.
- 4) Cleaning up food scraps and storing foods to prevent easy access to food. All pet foods and bird seed stored in the school should be stored off the floor and in mouse-proof containers.

CONTROL: We recommend mechanical traps to control light to moderate infestations of mice. Snakes are our friends and limit mouse populations.

### **Cockroaches**

There are thousands of species of cockroaches in the world. However, only a very few are problems in schools. These include the German, American, Oriental, Brownbanded, Smokybrown, and Turkestan.

Cockroaches or "water bugs" as some people call them can cause many problems. Certain cockroaches carry germs that cause human diseases such as diarrhea, dysentery, food poisoning, and salmonella. The transmission of these diseases can be caused by the roaches' habit of

#### INSIDE THIS ISSUE

- 1 Mice
- 1 Cockroaches
- 2 INSECTeresting Facts on Cockroaches
- 2 What's Happening in Madison Schools

Few bugs are bad! More than 95% of all insect species are beneficial to humans.



wandering through organic wastes and then traveling over countertops, cooking utensils, food, plates, and silverware.

Another major problem caused by roaches is **Allergies**. A roach allergen causes the allergic response and can be ingested with contaminated food or inhaled when dried fecal particles and fragments of ground up bodies of dead roaches are mixed together with dust. Severe bronchial problems in sensitive individuals and children may be triggered by these roach allergens. This problem is a serious one and should not be taken lightly.

Prevention is the best way to address cockroach problems. Tactics include preventing entry, using good sanitation practices, sealing cracks and crevices, storing food in air-tight containers, and tightly covering trash bins.

If following a strict policy of cleaning isn't enough to avoid attracting roaches, you may have a problem with hitchhiking roaches. Roaches can hide in cardboard boxes, a sack of potatoes and basically anything they can ride to gain entry into a building. Adult roaches have the ability to squeeze into places the thickness of a quarter.

It is critical that pest vulnerable areas (PVAs) such as kitchens, pantries, teacher lounges, custodial closets, booster concession areas, biology and home economics classroom be monitored for the potential infestation of roaches using monitoring traps.

Only once infestations are identified and located should pesticides (normally baits) be applied by the schools' IPM expert.

### **Madison IPM in Schools Project**

IPM stands for Integrated Pest Management. It is an approach used by pest management experts who want high levels of pest control and low levels of chemical pesticides in the environment. The Madison School District has decided to implement an IPM program in district schools to improve management practices, reduce costs and most importantly reduce the associated risks to our children.

I am a University of Arizona entomologist, I am usually just called the "bug woman" and I am honored to be a part of your project. During my visits to participating schools I have been very impressed by the willingness of your faculty, staff and community members to do whatever is possible to provide a safe learning environment for your school community.

Madison schools are some of the friendliest schools I visit and the community pride and dedication to education is a wonderful experience for a visiting educator to be a part of.

The model program we implement (The Monroe IPM Model, Marc Lame, IU) is based on education and community cooperation. It is successful in the school environment because cultural and mechanical strategies can be incorporated into the existing school community's activities.

The approach has been implemented for more than eight years, and has demonstrated a 90% reduction in pesticide use, and pests/complaints--without significantly increasing staff workload or expense (normally decreased) in six states and the Navajo Indian Reservation. Please feel free to view our IPM school website, <http://www.mccsc.edu/~mccscipm/>, or discuss this program with any of the school facilities administrators listed on this site.

The school site we are monitoring most closely is Madison Richard C. Simis. But we hope that all the schools will enjoy the project and celebrate obvious success by the end of 2004.

One of the first steps taken is to stop routine chemical pesticide sprays on the school sites and replace this approach with IPM alternatives. School sites will be involved in in-service training so school community members can use the same effective strategies in their own homes.

If I can provide you with any further information please contact me (520) 568-2273, [dhgouge@ag.arizona.edu](mailto:dhgouge@ag.arizona.edu)

### ***Dawn (bug woman).***



### **Information taken from:**

Pest Press – Marc Lame, Indiana University  
"Rodent Control: A Practical Guide for Pest Management Professionals" – Dr. Bobby Corrigan  
University of Florida Entomology and Nematology Department's School IPM website (<http://ifas.ufl.edu>)

### **INSECTeresting Facts on Cockroaches**

- A cockroach can live up to a week without its head.
- Cockroaches can run 3 miles in one hour.
- Female cockroaches mate once and are pregnant for the rest of their lives.
- Cockroaches have at least 18 knees.
- Cockroaches can go a month with no food, but only a week without water.
- Cockroaches can swim and hold their breath for 40 minutes.
- There are over 5,000 species of cockroaches worldwide.

**For Further Info. Contact: Jennifer or Dawn, University of Arizona (520) 568-2273, [dhgouge@ag.arizona.edu](mailto:dhgouge@ag.arizona.edu)**

