

# Oklahoma School IPM

# Monitoring Pests



Pest monitoring is the foundation of Integrated Pest Management (IPM). Monitoring must be a conscious effort by everyone in the school.

## Why Monitor?

Monitoring allows staff to become more familiar with the school and anticipate pest problems. Information collected helps determine the best treatment for the situation. Also, structural issues are noticed for repair.



Monitoring determines if, where, when, and the treatment needed.

## Think like a Pest

IPM requires people to "think like a pest."
Pests really only need three things: food, water, and shelter. When looking for pests, think of what they eat and where they live. Pests are small and need little food or water to survive.

#### Pests like:

- dark, quiet, undisturbed places
- the same food we do (e.g., chips, cereal, candy, soft drinks, juice, hotdogs, bacon, cheese)
- garbage storage areas
- moisture, (e.g., leaky plumbing)
- easy access from one place to another (e.g., areas around water pipes, spaces around doors and windows, drop ceilings)
- damaged Formica and flooring (moisture and food are trapped)

## Look Where?

No area is safe from pests. An open door or window invites a pest. They travel in purses, backpacks, and gym bags.

#### Favorite pest areas:

kitchen teacher lounge storage areas drop ceilings locker rooms dark closets cabinets

Dirty kitchen equipment attracts pests. Heavy, bulky furniture creates hiding spots since it is rarely moved or cleaned.

### Attractive hiding spots:

microwaves	refrigerators
stoves and ovens	mixers
pots, pans, dishes	coffee makers
popcorn machines	recycle boxes
vending machines	storage boxes
soft drink dispensers	file cabinets

Pests love messes. Clean rooms and equipment each time they are used to discourage pests.

## Look for What?

Pests leave signs where they travel, feed, and live. Recognizing pest signs help identify the pest. Report all information for the pest management professional who is trained to identify pests.

Droppings are unique for every pest. Egg cases are found in protected places.

Chew marks or nesting material indicate mice or rats. Rodent fur collects oil and dust. Grease marks along walls indicate rodents.

Spiders are predators and present where food is available. Examine insect remains in and around webbing.

Pests attack weak plants. Plant stresses include too much or little water, light, nutrients, and extreme temperatures.

Check plants when watering and other

maintenance occurs. New growth attracts aphids. Spider mites attack plants during hot, dry weather. Yellow plants indicate nutrient deficiencies and weaken plants.

## Monitoring Tools

Sticky traps, also called glue traps, are the most common traps used to monitor pest activity. Place traps where pests travel and out of student and adult reach. Ask the pest management professional for proper trap placement.



Record pest information on log sheets and accessible to everyone in school.

### Look for Pests When?

Timing is essential. The IPM committee should conduct school building and grounds inspections once a year. These inspections identify pest problem areas. Individual committee members and the IPM coordinator can conduct regular inspections in these areas throughout the year.

The IPM coordinator or appointed staff can check traps. Daily check traps for rodents. Weekly check traps for insect pests. Follow the pest management professional contract for termite control. Do not disturb termite traps without permission.

Monitor traps before and after treatments. Record all information, especially the amount and maturity stage of the pest. This information determines treatment effectiveness.

#### Who Monitors?

Teachers and students are great monitors for classrooms, bathrooms, and hallways. Food service personnel can monitor traps in kitchens and cafeteria areas. The IPM coordinator should check other traps. The pest management professional or coordinator should remove rodents according the pest control contract. Other animals (skunks, armadillos, etc.) and endangered species may require removal by permission or special licensing by Oklahoma Department of Agriculture, Food, and Forestry.

# **Inspection Supplies**

Well prepared IPM coordinators have monitoring supplies on hand. Take notes of suspicious areas. Record the size and amount of pests seen.

#### Tools for School Inspections

Monitoring forms: take notes

Maps: mark where you see pests and where monitoring

traps are placed

Flashlight: look in dark places

**Sticky traps:** monitor the species and number of pests

in the area

Hand lens: view insects on plants

**Plastic bags or bottles:** keep samples for identification **Screwdriver:** check building damage, dig weeds, or

remove pest damage

Ladder: reach high places like drop ceilings

Camera: take pictures before and after treatments or

repairs







Dr. Tom Royer, Oklahoma School IPM, Oklahoma State University, Department of Entomology & Plant Pathology, 127 NRC, Stillwater, OK 74078, 405.744.9406, tom.royer@okstate.edu