



# Integrated Pest Management (IPM) For North Carolina Schools

Kenny Miller, Ed.D  
Assistant Superintendent Facilities & Planning

Raymond Sapp  
Licensed & Certified IPM Coordinator



# What is Integrated Pest Management?

- “IPM” is a **common sense** approach to dealing with pest problems. IS THERE A NEED?
- Routine use of pesticides is **NOT** a part of IPM



# WHY IPM IN SCHOOLS?

GAO

United States General Accounting Office

Report to the Ranking Minority Member,  
Committee on Governmental Affairs,  
U.S. Senate

November 1999

## PESTICIDES

### Use, Effects, and Alternatives to Pesticides in Schools



- Health issues - from both pests and pesticides





# WHY IPM IN SCHOOLS?

**School Children Health Act of 2006** requires all North Carolina public schools to:

- Notify parents and school staff annually of any scheduled pesticide applications
- Provide advanced notice of any unscheduled or non-exempt pesticide application (at least 72 hours prior to application) to any parents & staff who have requested such notice.
- Implement an IPM program by **October 2011**

Photo: [www.ent.uga.edu](http://www.ent.uga.edu)

# School Children's Health Act

## What Is Covered?

- Both indoor and outdoor applications
- Most typical pesticides\*  
(Exempts disinfectants & some other types of products)



# SCHOOL IPM PROGRAM BASICS

- IPM Policy
  - Minimize the potential health, environmental and economic risks from pests or from the use of chemical pest control methods.
- IPM Coordinator
  - Implement the IPM program
  - Educational resource
  - Contact for pest control services



Image: Iowa State University



# Triangle of Pest Resources

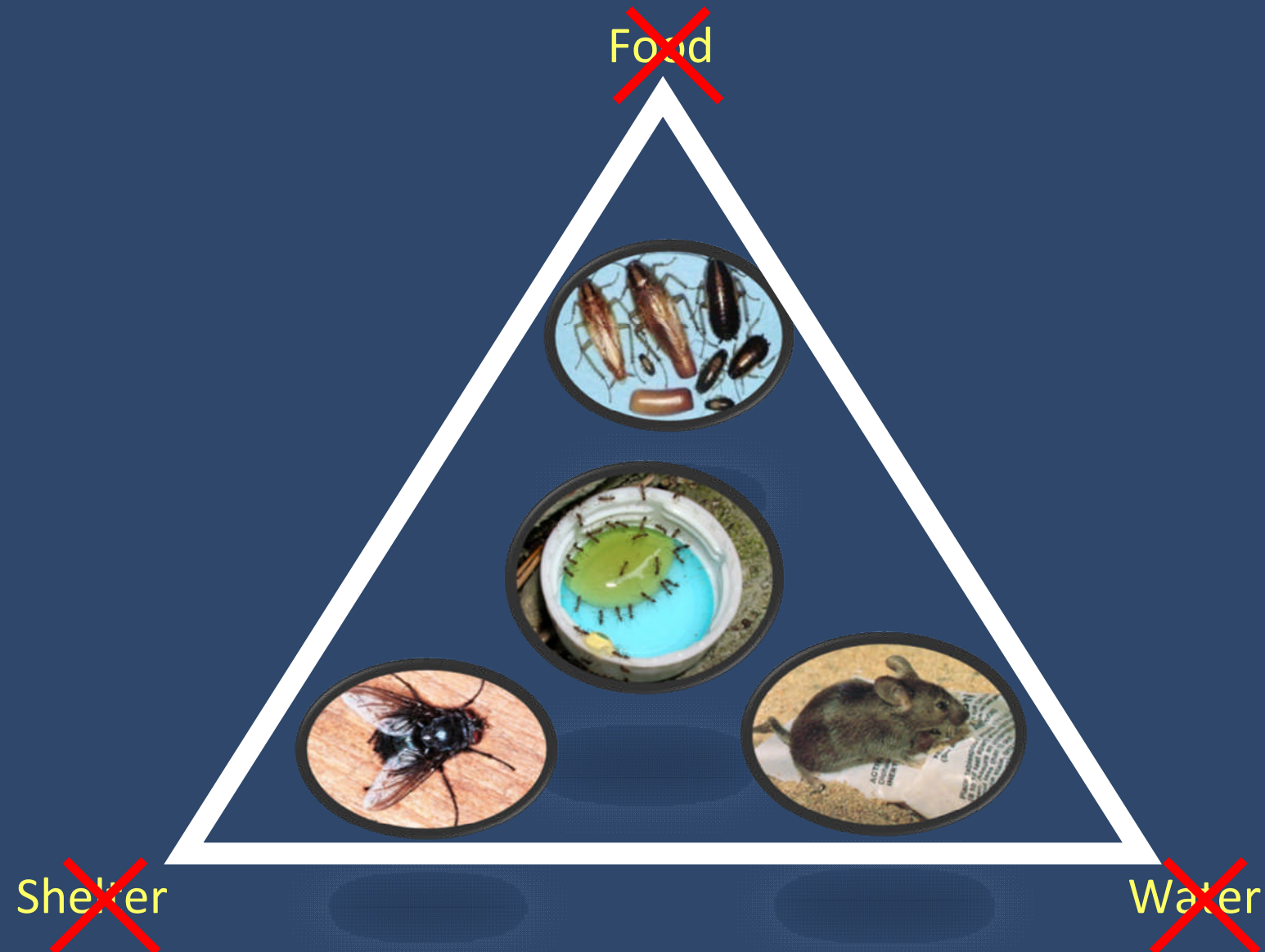
Food



Shelter

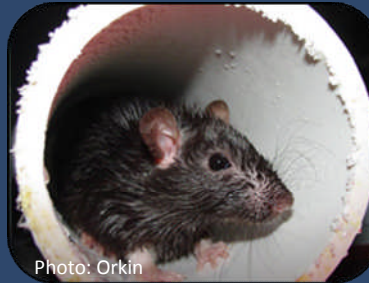
Water

# Integrated Pest Management (IPM)





# Pest Identification



- IPM Coordinator
- Pest Control Contractor
- County Cooperative Extension Center

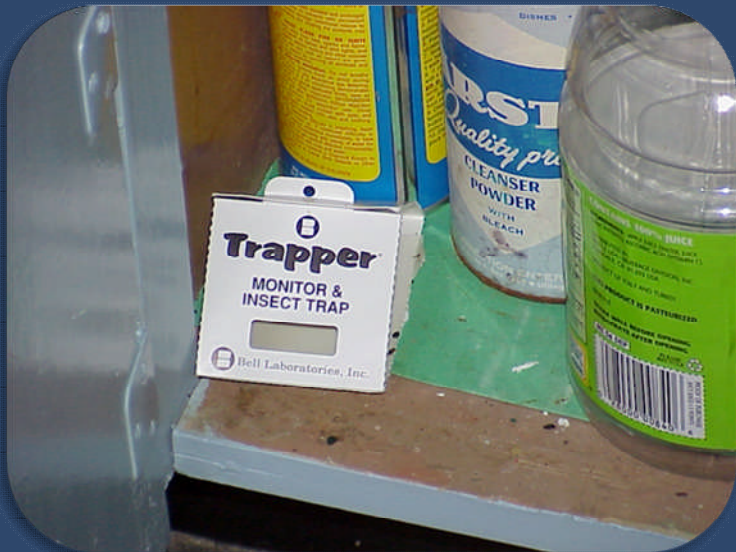


<http://www.ces.ncsu.edu/counties>

# Inspection & Monitoring



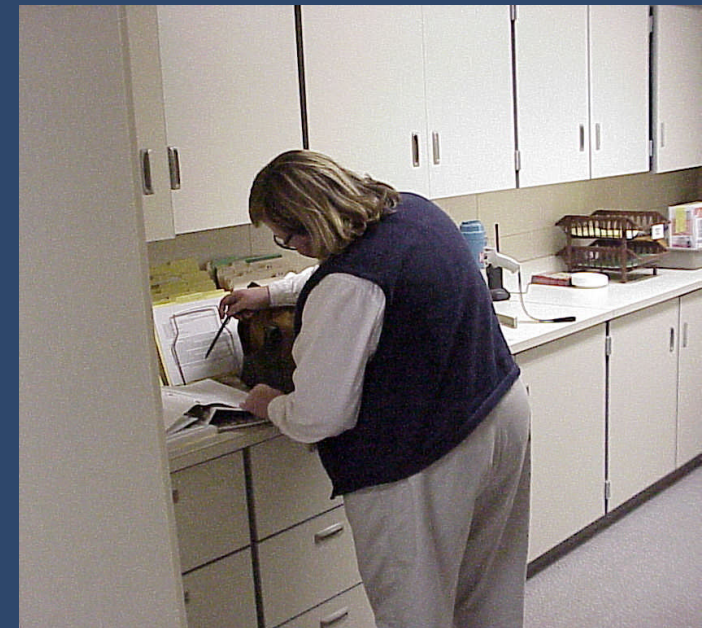
Inspection



Sticky traps for monitoring



# Record-Keeping: Pest Problem Log

[illegible]

- Pest sightings
- Sanitation & maintenance problems
- Treatment & repair records



## Sanitation: Remove pests' food & water



# Sanitation: What YOU Can Do

- Eat in designated areas only
- Store all food products, including pet food, in sealed containers



Store items in pest-proof bags or containers



Do not store open food items in desks, lockers or cubbyholes

# Sanitation: What YOU Can Do

- KEEP IT CLEAN
- Report sanitation and trash problems



Report sanitation problems



Area under refrigerator needs to be cleaned



Empty trash cans in classroom



# Sanitation: What YOU Can Do

- Report leaks, clogged sinks, or standing water



Clogged drainage ditch at school entrance



Misdirected roof drain

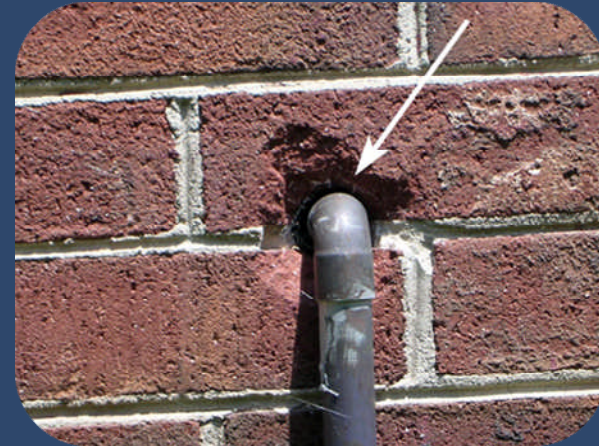


Water leak above ceiling

# Exclusion: Keep Pests Out



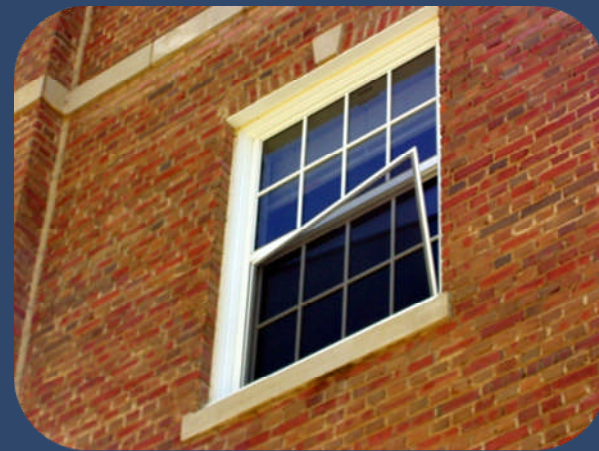
Missing door sweeps



Gaps between pipes and walls



Door not closing properly



Loose/missing window screens

# Habitat modification: Reduce pests' shelter





# Habitat Modification: What YOU Can Do

- Throw out or remove what you aren't using
- Keep classrooms clean, organized and clutter free



# Habitat Modification: What YOU Can Do

- Keep storage areas clean and organized:
  - Store items off the floor on shelves
  - Store magazines, newspapers, etc. in clear plastic containers





# Habitat Modification: What YOU Can Do



Report any cracks or holes in walls, loose baseboards or molding, or openings around pipes



# Habitat Modification: What YOU Can Do



Report shrubs, vines, or tree branches touching the building

# Habitat Modification: What YOU Can Do

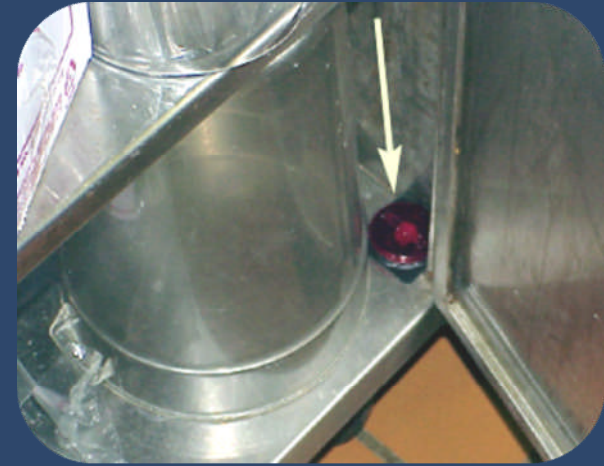


Do not store surplus furniture and equipment near the building exterior



# Pesticides Used in IPM - Baits

- Exempt from notification:
  - Bait stations
  - Gels
  - Granular products



Bait stations



Gel bait



Granular bait



# Pesticides Used in IPM - Sprays

- Exempt from 72-hour notification:
  - Crack & Crevice
  - EPA Toxicity Category IV (do not require “Caution” on label)



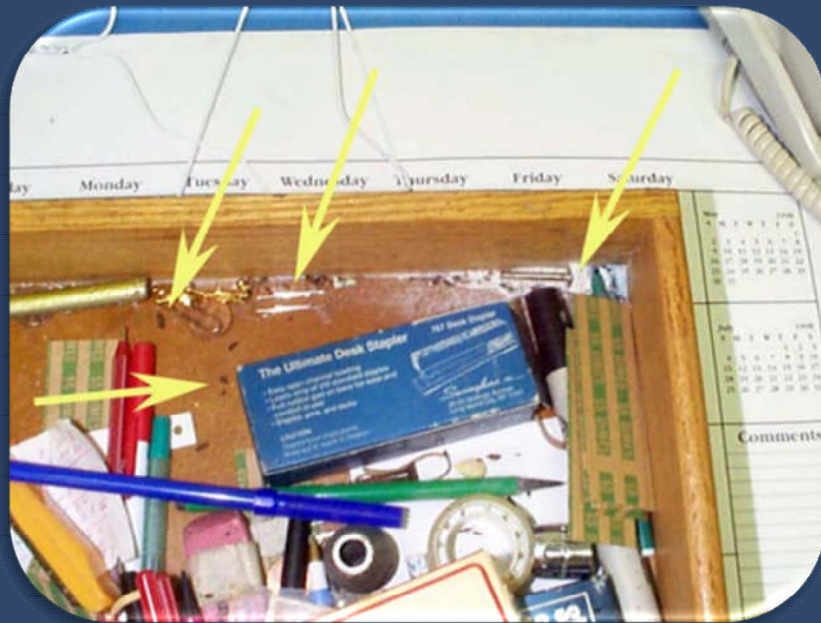
Crack & Crevice Treatment



Category IV Products

# One more thing: NEVER apply pesticides

- Never store or apply pesticides in classrooms or anywhere else in the school



# What to expect with IPM

- More time spent inspecting and monitoring and less on applying pesticides
- Fewer pest problems
- Use of less toxic pesticides
- Reduction in the overall use pesticides





# Resources and References

- School System's IPM Coordinator:  
Raymond Sapp, Sr. – Facilities and Planning  
Division , Iredell Statesville Schools
- School system website: ISS Environmental  
Website will be on line end of October 2011
- NC State University, School IPM program  
<http://schoolipm.ncsu.edu>