IPM Strategies & Techniques: Mice

Rodents, especially mice, are a frequent problem in school buildings. Rodents damage buildings, food, clothing, and documents through gnawing, urination, defecation, and nesting. They have been implicated in the spread of several diseases, are known asthma triggers, and can cause fires by damaging electrical equipment and wires (United States Environmental Protection Agency, 2012).

Inspecting for rodents includes finding signs (e.g., droppings, gnawing, rub marks, burrows in insulation) and identifying harborage sites and sources of food and water. Non-toxic food blocks are a tool that may be used to check for rodent activity. When inspecting for rodents, proper pest identification is always important in IPM. Identification is important because biology and behavior, and thus inspection and treatment, varies among these species.

Identifying and reducing harborage, food, and water is crucial to preventing and eliminating rodents. The Illinois Pest Control Association (2013) suggested sanitation practices at schools include:

- Storing bulk foods in mouse-proof containers or rooms. In storerooms, stack packaged foods in orderly rows on pallets so that they can be inspected easily.

- Keeping stored materials away from walls and off the floor. A 12-18 inch yellow or white painted band next to the wall in storage areas permits easier detection of mouse droppings.

Excluding mice is also important in both preventing and solving infestations. Openings larger than a quarter of an inch will allow a mouse to gain entry into a school (for rats, openings larger than a half of an inch). Pay attention to
both openings on the exterior of buildings (initial access) and openings within buildings. When conducting rodent exclusion, school facility officials should consider using metal products (e.g., metal flashings, steel wool, wire mesh) to discourage rodent entry into or within buildings.

A range of tools are available for removing rodents. The least risky approach is generally mechanical trapping. Sticky traps (rodent glueboards) will also effectively capture mice. However, they are generally considered much less humane than properly set mechanical traps. Rodenticides may be warranted when nonchemical measures prove ineffective. Pesticide applicators should be (and may be legally required to) certified to apply rodenticides by the state pesticide-regulating agency. Rodenticides should always be placed in tamper-resistant bait stations and should only be applied in areas to which children do not have access.

Several diseases are potentially associated with rodent infestations, especially mice. Risk of infection is usually highest when handling animals (dead or alive) and cleaning up infested sites. Be aware of and utilize appropriate personal protective equipment and practices. The Center for Disease Control offers an in-depth overview of practices to employ when cleaning up after rodents.

For more information, click the web links below to access IPM strategies and techniques for varying species of mice:

- School IPM Action Plan for Rodents (Texas A&M AgriLife Extension)
- IPM of House Mouse in Schools (Oregon State University, Extension Service)

References:
