



Pests and Pesticides in Child-serving Facilities: An IPM Newsletter

Special Points of Interest

The Building Envelope and Flies

By Pat Barnwell, student assistant, UT Entomology & Plant Pathology

Tightening the building envelope reduces energy loss and moisture intrusion as well as the entry of outdoor pollutants, allergens, and pests. To prevent annoying pests such as filth flies from journeying indoors seal cracks around doors and windows, screen windows, keep door sweeps and weather stripping in good repair and ensure exterior doors are closed when not in use. Filth flies include species such as house, blow, bottle and soldier flies that breed in garbage or decaying matter. These flies can carry disease-causing organisms. Eliminate breeding areas by keeping the dumpster and its surroundings clean. Maggots can crawl several feet from the breeding medium before pupating. If you see larvae crawling in the dumpster area; it's time for a cleaning. Cover trash receptacles and dumpsters to exclude flies and other pests; locate them as far as possible from building entrances to reduce the chance of a quick entry. Thirty feet from the building is ideal for dumpsters.



House fly, *Musca domestica*, Jim Baker, NCSU, Bugwood.org



American cockroach. Clemson University - USDA Cooperative Extension Slide

“One drop of grease or a crumb can feed a cockroach for quite a while.”

A fly buzzing around a room or landing on a plate disturbs the class or spoils the meal. Tighten the building envelope, cover garbage receptacles and keep them clean.



Blow Fly, Family *Calliphoridae*. Photo: Johnny N. Dell, Bugwood.org



Blow Fly Maggots. Photo: UNL Dept. of Entomology

Sources:

Pests That Can Be Prevented by Fixing the Building Envelope: Flies. Florida School IPM News, Vol.5, Number 3. April 8, 2014. <http://schoolipm.ifas.ufl.edu/Florida/FloridaSchoolIPMNewsVolume5number3.pdf>

Hedges, S. Pest Control Technology Field Guide for the Management of Structure. Franzak and Foster, Co., Cleveland, OH

This issue

The Building Envelope and Flies	1
Summer Break Checklist for Pest Vulnerable Areas	2
UT YEAH Contacts	4
Links	4

Summer Break Checklist for Pest Vulnerable Areas

By Pat Barnwell

The beginning of summer break is the ideal time to do an annual inspection. Systematically walk around the school and use a checklist to ensure no important areas or issues are forgotten. See http://schoolipm.utk.edu/documents/logbook_sections/schools/inspection_checklist.pdf for an inspection checklist. While activity in the building is low key, deep clean pest vulnerable areas such as the kitchen, family life classrooms, break rooms and concessions stands where food, water and shelter can provide an ideal situation for a pest population to flourish over the summer.

Often bits of food are trapped behind or under heavy equipment where they may be hard to reach. One drop of grease or a crumb can feed a cockroach for quite a while. Move heavy equipment and steam clean or pressure wash floors to remove food residue. Inspect for signs of pests such as mouse or cockroach droppings while the heavy equipment is dislodged. Check serving lines for any food that may have been forgotten on lower shelves. Don't forget the drains. Drains full of sludge are ideal breeding site for drain flies. Check for standing water under freezers or coolers. Fix any plumbing leaks.



This food package is easily punctured by chewing mouth parts. Pest proof; store food in tightly seal containers. Photo: UT E&PP



Eliminate cardboard and clutter to reduce shelter for pests
Photo: UT EP & P

Store food in tightly sealed containers. Eliminate as much cardboard as possible; cockroaches love the corrugations and the glue. Neatly store items on shelves with at least 1" head space above floors; shelves should be easy to inspect for any spillage.

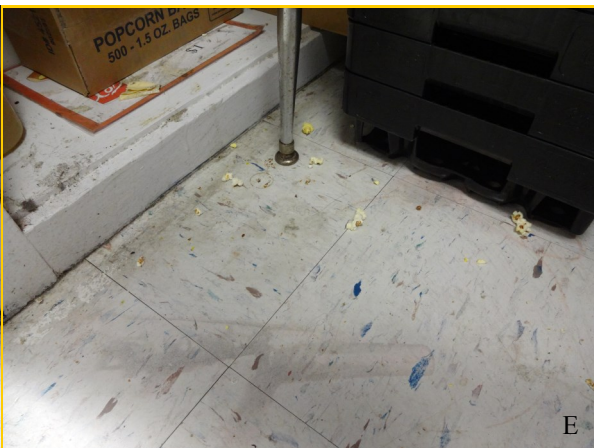
Clean the inside, outside, underneath and behind vending machines.

Once everything is cleaned, place monitors in corners and under equipment and check them periodically. Now pat yourself on the back for doing a thoroughly good job!

Source: Interior Building Inspection: Kitchens. Florida School IPM News Volume 5, Number 4, May 13, 2014.
<http://schoolipm.ifas.ufl.edu/Florida/FloridaSchoolIPMNewsVolume5number4.pdf>



Cardboard (A) and sugary residue (B) behind a vending machine - an invitation for pests. Photo: UT E&PP



Flies can breed in dirty drains (C). Food on floor in a concession stand (E) and food residue under equipment (D,F) can attract mice and other pests.

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For more information about IPM in Tennessee schools and other facilities, or to view past issues of *Pests and Pesticides in Child-serving Facilities*, please visit schoolipm.utk.edu.

NATIONAL IPM INFORMATION

eXtension's Pest Management In and Around Structures: Urban Integrated Pest Management
<http://www.extension.org/Urban%20Integrated%20Pest%20Management>

National School IPM
schoolipm.ifas.ufl.edu/

IPM in Schools Texas
schoolipm.tamu.edu/resources.htm

IPM Institute of North America
www.ipminstitute.org/

School IPM PMSP—all schools IPM by 2015
http://www.ipminstitute.org/school_ipm_2015.htm

National Pest Management Association IPM
www.whatisipm.org/

EPA schools
www.epa.gov/pesticides/ipm/schoolipm/index.html

For further information about the IPM program at your school or in your county, contact your county Extension Agent or the school IPM Coordinator. For county agent contact information, please visit www.agriculture.utk.edu/personnel/districts_counties/default.asp

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This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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