School IPM Focus - Moisture Damage

We are half-way into the 2013 hurricane season. In this issue we will highlight some important aspects of ensuring that your building envelope is protected from moisture intrusion that is common when we get heavy rain. To review, the building envelope encompasses the elements of a building that enclose air conditioned areas. In the context of a school, this would specifically refer to any entry points of the building such as windows, doors, ventilation points and places where the plumbing and electrical pipes go through the walls or the floor. Keeping a well-maintained building envelope is an essential part of any IPM program.

Understanding Moisture Intrusion

The most common sources of moisture intrusion are water leaks and air leaks. Both can lead to significant building damage in a short period of time and can impact human health.

Water Leaks
- Water leaks commonly develop in roofs, around window frames, doorways, and building foundations
- Rain is not the only source of moisture into a building envelope. Sprinklers and poor drainage are equally as significant in producing high risk areas for moisture intrusion

Air Leaks
- Air contains water vapor. When air is cooled the water vapor condenses into liquid, producing condensation
- Air infiltration around poorly sealed AC lines or entry points allows humid air to enter the building, leading to condensation and potential water damage over time

Monitoring for Moisture Intrusion

Leaks in a building envelope can make conditions more favorable for mold and mildew growth, corrosion of metal objects, wood rot, and can make conditions more favorable for insect development. Monitoring for moisture is a vital step in preventing and correcting water related issues. In the event a water emergency is detected, a rapid response plan should be discussed and practiced.
Fig 1. Evidence of moisture intrusion visible through ceiling tiles. Photo: Mike Bentley

**Roof, Window, and Door Inspection Tips**

- Inspect rooftop penetrations inside and out regularly, including HVAC systems, stack vents, and skylights
- When inspecting from below look for daylight around rooftop penetrations
- Look for water staining (Fig 1)
- Ensure windows and doors seal properly
- Look for signs of “fogged” glass to indicate seal failure
- Inspect interior windows and walls for signs of condensation or moisture damage

**Monthly Inspection List**

- Inspect entry points inside and out for signs of water damage
- Check all plumbing systems
- Inspect quality/function of drainage systems
- Replace any leaking fittings or drains immediately
- Correct any irrigation systems that spray building or foundation
- Clear roof drain outlets of any debris
- Direct downspouts away from building and foundation
- Investigate any sources of standing water

**Rapid Water Emergency Response Plan**

- Shut down water supply lines feeding affected area
- Shut down affected electric and gas supply lines
- Have emergency repair tools in easily accessible area
- Have all emergency telephone numbers (Fire/Police, Emergency Personnel, Plumbing, HVAC) on clear display

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**Get your CEUs today! Special School IPM Online Offerings**

If you only need a couple of hours, try our online offerings:

**The ABCs of IPM** is available in **English** and **Spanish**. The ABCs of IPM video set is a comprehensive training program for school employees and anyone interested in the basics of IPM in schools.
**Good Neighbor Practices**

This module will introduce you to the way we measure pesticide drift. Pesticide drift can happen when chemicals applied on one area move to another area. This movement can be the chemical as it is volatizing or can be on dust particles that are being blown to another area. Once you learn about drift we will talk about people’s perceptions of drift and how you can work to increase your communication with your neighbors and minimize the change of drift around schools. When you are finished watching the tutorial you will be given a 10 question quiz on the material. If you score an 80 on the quiz you will be able to print an FDACS CEU form that you can use the next time you renew your pesticide applicator license. If you do not score an 80 we would encourage you to review the module again and retake the quiz (for no additional charge).

**Upcoming Training Opportunities**

We are in the final offerings of PMU for the year. Sign up early before classes are full! *We highly recommend that anyone doing IPM in schools attend at least the GHP Foundations course to maintain your certification and understand how pest management can be done effectively.*

Classes are limited to 20 participants, including Masters and Expert levels. Master level classes are only offered once a year. Expert level classes are offered every other year. If you plan on taking the State Certified Operator examination through PMU, please submit your applications by:

- Sept 16 for the Oct 18 PMU State Exam for GHP
  (Write “PMU OCT GHP” on the top line of the state application)
- Oct 13 for the Nov 15 PMU State Exam for Termite and WDO
  (Write “PMU NOV WDO” on the top line of the state application)

**Summary of hands-on courses:**

Click on highlighted course titles for more information or to register.

- Sept 25-27, GHP Foundations (last one for 2013)
- Oct 2-4, Foundations of Tree and Shrub Pest Management
- Nov 6-8, Foundations of Turfgrass Pest Management

*Must advance through Foundations to qualify for these courses:*

- Oct 16-18; GHP Masters
- Oct 18; 1 pm; GHP state exam (must also meet state requirement, write
“PMU” on application
Nov 13-15; Termite Masters
Nov 15; Termite and WDO exam (must also meet state requirement; write “PMU” on application)
Dec 18-20, Master of Turfgrass Pest Management

Must advance through Foundations and Masters for qualify for this course
Dec 4-6; GHP Expert

SEPTEMBER OFFERINGS
Foundations of General Household Pest Management 101
Pest control matters. Cockroach allergen mitigation can be achieved with IPM. Class duration: 2.5 days.

- Study domestic and peridomestic cockroach species and how to control them as well as rodent, small fly, filth fly, fire ant and nuisance ant management.
- Review the labels of commonly used GHP products, practice pest inspections at PMU’s house and develop treatment strategies focused on IPM.
- Do a vehicle inspection and spill drill with Paul Mitola from DACS.

Date: Sept 25-27, 2013; W-F
Registration Deadline: Sept 20, 2013; Friday
Place: UF/IFAS Apopka MREC
Time: 8 AM-5 PM (W, TH); 8 AM-12 PM (F)
Cost: $350

Register here

News!
We hope you will submit news items and would be happy to help you write a story if you have an idea but don’t have the time to write up the information. We like to share news and video when it happens using our social media outlets - Twitter, Facebook and YouTube. When you send news we will post it on one or more of these sites and again in the monthly newsletter. Feel free to send news or announcements as soon as they happen and we will post them. We hope this will get you more visibility. Please send news items to Michael Bentley.

Visit our website for back issues of Florida School IPM News. You can scan the QR code on the right with your smart phone or tablet to get there faster. You will need a QR code reader!