



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

Preparing for Fall Invaders

Karen M. Vail



Brown marmorated stink bug. Photo: Frank Hale

It's officially fall and time to prevent occasional invaders from spending the winter in your school and subsequently disrupting the learning environment. Occasional invaders typically live outdoors and enter structures to avoid unwelcome environmental changes. So it makes sense to take action to keep the pests on the outside. The list of occasional invaders is quite extensive and includes multicolored

Asian lady beetles, brown marmorated stink bugs, kudzu bugs, boxelder bugs, numerous flies (face fly, blue bottle and cluster flies), mice and clover mites to name a few. Most can be stopped from entering structures by taking a few simple steps:

1. Check around doors to ensure light cannot be seen around the edges which could indicate gaps. Gaps larger than a 1/4 inch will let mice and smaller pests enter. Add a brush door sweep, new threshold or weather stripping. Ensuring brush door sweeps are intact is the single, most important step to stopping mice from entering.
2. Place hardware cloth behind vents in the attic, roof, crawlspace and elsewhere.
3. Penetrations around pipes, wires and conduit should be sealed.
4. Seal gaps around window and door framing.
5. Holes and cracks in foundation walls should also be sealed.
6. Repair leaks before they attract pests to the structure.
7. Keep a bare zone on the ground 18 inches from the foundation base. That's right, mulch is an issue.
8. Remove debris (boards and other clutter) lying on the ground close to buildings.
9. Remind teachers to keep exterior doors closed. Large stones, bricks or similar objects found near exterior doors indicate these are used to prop doors open and should be removed.
10. Don't open windows unless they are screened.

Watch this webinar for a refresher on pest-proofing techniques, <https://connect.extension.iastate.edu/p3ae5r28gta/?launcher=false&fcsContent=true&pbMode=normal>

Bait Now for Fire Ants Before Temperatures Drop!

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Kudzu bugs. Photo: Scott Stewart

Perfect Fire Ant Baiting Weather

Karen M. Vail

For most of Tennessee, high temperatures will be above 70 and below 90 degrees F the next few weeks which allows fire ants to optimally forage and retrieve fire ant bait. Please don't procrastinate, now is the time to bait. As temperatures cool later in the fall, fire ants will move their nests near and under heat sinks, such as sidewalks, buildings, stumps, and landscape timbers. This becomes a problem



Mounds next to and under curbs, sidewalks, concrete pads and others should be treated with baits because the workers will bring the toxicant back to the nest. A drench may miss the colony found underneath these objects.

in schools when the ants from nests located

under the slab start foraging indoors because of the warmer building temperatures. Once the colony is underneath an object, it is difficult to effectively treat with a drench because the queen is often hidden below the heat sink and potentially out of the way of the downward flow of a drench. A bait is typically the best option when the nest is under objects because the workers will bring the bait back to the nest and distribute it to all members. However, because of the cooler fall temperatures less foraging will occur and the baiting will be less effective.

Broadcasting a bait is often more effective than baiting individual mounds because mounds of all sizes are impacted. Foragers will find bait that is broadcasted regardless of the size of their mound. With individual mound treatments, often the smaller mounds are overlooked and not treated.



Fire ant workers retrieving bait.

For details on applying bait and managing fire ants in and around schools, see our publication at <https://extension.tennessee.edu/publications/Documents/PB1788.pdf> and our website, <http://fireants.utk.edu>. For a list of fire ant products labelled for schools, see <http://fireants.utk.edu/documents/2017IFAschoolprods.pdf>



An aggregation of fire ant workers at the base of a school.



Broadcasting baits is a time-efficient and cost-effective method of managing fire ants. In smaller areas bait can be broadcasted with a hand-held spreader rather than with an ATV and electric spreader as seen here.

Getting the Most from Fire Ant Baits

- Baits should be applied between 70 and 85 degrees F when maximum fire ant foraging occurs.
- In summer, apply baits in the evening. During the cooler evening, ants will quickly discover and carry off baits. If applied during the day, in extreme heat, baits quickly lose their effectiveness. Also, ants do not forage much during the day when it is too hot (>90 degrees F).
- To see if the ants are active and if the bait is fresh, place a small amount of bait and food (hot dog or potato chip) in separate locations next to a mound. If the bait is fresh and the ants are active, ants will begin removing it within 30 minutes. This is a good time to treat. If ants do not remove the bait, but feed on the hot dog or potato chip, then the bait is spoiled. If no ant activity is seen, it is not a good time to treat.
- Use only fresh bait, preferably from an unopened container. Once opened, baits should be used as soon as possible. Unopened containers may stay fresh for up to two years.
- Apply baits when no rain or dew is expected for at least five hours. Once the baits become soggy, they are not as attractive to the ants.
- Broadcast the bait, or apply it as directed around, NOT ON, the mound.
- Avoid disturbing the ants right before applying the bait.
- Do not contaminate baits by storing them or applying them with fertilizer, other pesticides or odorous compounds.
- Follow the directions on the label. It is against the law to apply baits in areas not listed on the label.

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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_integrated_pest_management

National School IPM
[schoolipm.ifas.ufl.edu/](http://schoolipm.ifas.ufl.edu)

IPM in Schools Texas
<http://schoolipm.tamu.edu/>

IPM Institute of North America
www.ipminstitute.org/

School IPM PMSP—all schools IPM by 2020 <https://ipminstitute.org/projects/school-ipm-2020/>

National Pest Management Association IPM
www.whatisipm.org/

EPA schools
<http://www2.epa.gov/managing-pests-schools>

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 <https://extension.tennessee.edu/Pages/Office-Locations.aspx>

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer

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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