



Bug-Wise

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Bug-proof Your House for Winter: As cool weather approaches many insects will be looking for a place to spend the winter. Most insects overwinter outdoors: as pupae or larvae in the soil, in a cocoon or chrysalis on a tree branch, as adults in leaf litter or under bark of dead trees, and in other natural, protected sites. But some insects view our homes as potential overwintering sites. Chief among these are **imported Asian lady beetles** and **paper wasps**, but there are other insects, such as stink bugs, cockroaches, earwigs, spiders, and some beetles that also enter homes as “occasional invaders.”

We have dozens of different species of lady beetles in the state, and most are beneficial because they feed on aphids, whiteflies, scale insects, and other pests. The imported Asian lady beetle is a good predator of these harmful insects, but in the fall this otherwise beneficial insect becomes a serious pest for some homeowners.

In their native lands, Asian lady beetles overwinter in cracks and crevices in rocky outcrops. Here in Mississippi, buildings are the best substitute they can find. They are attracted to the building, especially buildings with a sunny, western exposure, and then crawl into cracks and crevices. This results in lady beetles either entering the living quarters directly, or accumulating in wall voids and attics.

Once inside a void or attic the lady beetles will cluster together during cold periods, but during warm periods and in the spring when it is time to go back outside, they will move about, often making their way into the living quarters. If you think this only sounds like a minor nuisance, count yourself lucky. Some homes are invaded by thousands of lady beetles. In these numbers they become real pests and dealing with them takes a lot of time and energy. Once lady beetles get inside your home, vacuuming them up and discarding them is the best treatment option—insecticides are not very useful here. In heavily infested homes, vacuuming lady beetles can become an onerous, winter-long chore.

Paper wasps overwinter as mated females. In nature they overwinter in hollow trees, under the bark of dead trees, and in similar sites, but they will also enter improperly sealed attics, wall voids, barns, and storage buildings. As with lady beetles, some homeowners can end up with large clusters of overwintering wasps in the attic, and these can make their way into living quarters. Some attics harbor hundreds of overwintering wasps. Although these overwintering wasps are not especially aggressive—because they are not protecting a nest, they can sting and will do so if provoked or accidentally pressed against the skin. Wasp stings are distressing to anyone and can cause serious health threats to people who are especially sensitive. Problems are often greatest in the spring when wasps begin to leave their overwintering sites because some wasps “get lost” and end up inside the living area of the building. Once this begins to happen, a fly swatter and a little patience are about the best tools for dealing with the problem. This spring exodus only lasts a few weeks.

Proactive Exclusion: The best way to keep lady beetles, paper wasps, and other pests from moving into your home this winter is to make sure your home is bug-tight before the insects get inside. You will have to act soon because, depending on fall weather conditions, lady beetles and paper wasps usually begin looking for overwintering sites by mid-October, and sometimes earlier. Sealing the exterior of the house after the insects have already gotten into the attic and/or wall voids can actually be counter-productive because insects will be unable to exit the following spring and more will end up making their way into the living quarters.

Every house is unique. Some take very little effort to bug-proof and can be done as a ‘do-it-yourself project’ with a tube of silicone caulking and a can of foam sealant. Other houses are more challenging and require extensive work by skilled carpenters. But the benefits go beyond just keeping insects out of the house. Properly sealed

homes are also more energy efficient, and that saves money. Just don't over do it; be sure to maintain adequate ventilation for health and safety.

How small a crack do you need to seal? Lady beetles can get through cracks larger than 1/16 inch. Sealing cracks this size and larger will keep out lady beetles, as well as larger insects such as paper wasps. The following list points out some of the key areas to focus on.

Gable Vents: Buildings with gable roofs usually have large vents into the attic at the gable ends. These are usually covered with window screening to prevent insects, as well as larger animals, like rats and squirrels, from getting into the attic. Note, this screen is usually located behind the louver slats. Torn or missing screening in the gable vents is often a key cause of major attic invasions of lady beetles, paper wasps, and other critters. This is one area you definitely want to check.

Soffit Vents: Most buildings have numerous small vents installed in the soffit on the undersides of the eaves. Check these soffit vents to be sure they have intact insect screening and that there are no bug-sized cracks around the edges.

Ridge Vents: Many buildings have ridge vents along the roof peak. Check these for insect-sized cracks.

Crawl Space Vents: Lady beetles and paper wasps do not usually overwinter in crawl spaces, but it is still a good idea to check that these are intact and properly screened with rodent-proof hardware cloth and insect screen. Excluding large animals, such as cats, dogs, and possums from the crawl space will help reduce potential for flea infestations. But it is also important to be sure the crawl space is adequately ventilated, especially during the warm months, to reduce potential for wood rot fungi.

Chimneys: Around chimneys, water leaks are usually a greater concern than insect leaks. Water leaks are enough of a problem by themselves, but they can also eventually result in insect problems, especially with termites or carpenter ants. Check the flashing to be sure it is intact and properly sealed and check that cracks where the chimney and exterior siding meet are water and insect-proof. This is also a good time to check that the interior of the chimney is free of bird nests and other obstructions, and is otherwise clean and safe for winter use.

Windows: Check all window screens to be sure they fit tightly and are not torn. Also check for cracks or crevices around windows and window casings.

Doors: Check all exterior doors and use weather stripping, spring steel strips, door sweeps and thresholds, and appropriate sealants and caulking to keep insects from being able to get under or around the door.

Utility Entry Points: Check around plumbing and utility entry points and around dryer duct exits, air conditioners, and similar sites and seal these if necessary. Copper wool or steel wool is often useful for sealing such places, but various other types of sealants may also work, depending on the situation. Be sure to take appropriate precautions when working around electrical wiring.

Structural Cracks and Crevices: Check for cracks and crevices around eaves, corners, places where siding overlaps, and other such sites. Keep in mind that lady beetles can enter cracks larger than 1/16 inch. Pay particular attention to cracks, crevices or holes in areas where insects are naturally funneled as they crawl up an exterior wall, such as where outside walls meet the undersides of eaves.

For more information on dealing with imported Asian lady beetles and other occasional invaders, see pages 31-34 of Extension Publication 2443, Control Household Insect Pests. You can access this publication by going to www.msucare.com, clicking on 'Publications', and searching for the title.

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