Home, Yard, and Garden Pest Newsletter

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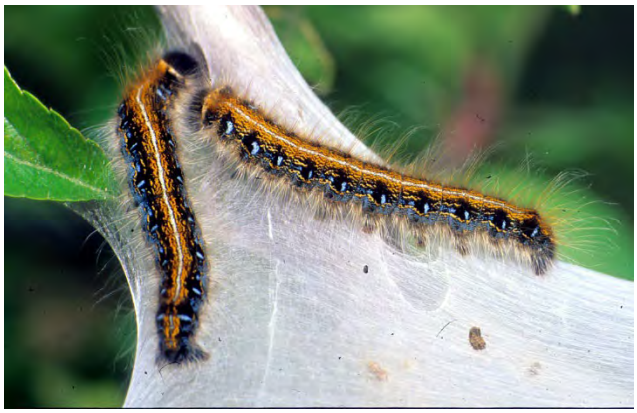
Eastern Tent Caterpillar

Eastern tent caterpillars (*Maclacosoma americanum*) are native North American pests that can be heavy defoliators. They feed predominately on members of the rose family including crabapple, apple, cherry species, hawthorn, peach, plum species and many others. When feeding, the caterpillars chew from the margin of the leaf inward, leaving the midvein of the leaf behind.



Eastern tent caterpillars (Maclacosoma americanum), Phil Nixon.

Eastern tent caterpillars overwinter as eggs on host trees and young caterpillars hatch at bud break. Caterpillars are dark with a yellow-gold stripe down their back and blue spots along their sides. The caterpillars have short velvety hair covering their bodies with some sparse longer hairs along their bodies and can grow to be 2 inches long.

The caterpillars create silk tents at the crotches of branches and venture out of the tents to feed on foliage. As the caterpillars grow, they will expand their tents. The tent provides protection from predators, parasites and pathogens. The tent also has a greenhouse effect, creating a warm, humid environment that is beneficial for caterpillar growth and activity.

eastern tent caterpillar tent, Phil Nixon.

Eastern tent caterpillars can be differentiated from other tent building caterpillars like fall webworm by the location of their tents on the trees. Eastern tent caterpillars construct their tents at crotches or Y-intersections on trees early in the season, while fall webworms build their tents at the tips of branches later in the season.

Eastern tent caterpillar populations vary from year to year, so we may find low population for multiple years and one year with a heavy population. When populations are heavy, feeding can lead to significant defoliation. Removal of tents or application of Bt treatments can limit further defoliation.

Cultural and Mechanical Controls

Removing tents by winding them around a stick and squashing the caterpillars is an effective means of reducing caterpillar populations quickly. By removing tents at night or on cloudy days, more caterpillars will be inside the tent when it is removed and more caterpillars can be controlled at once. When the tents are damaged or removed, the surviving caterpillars will be exposed to disease, parasites and predators.

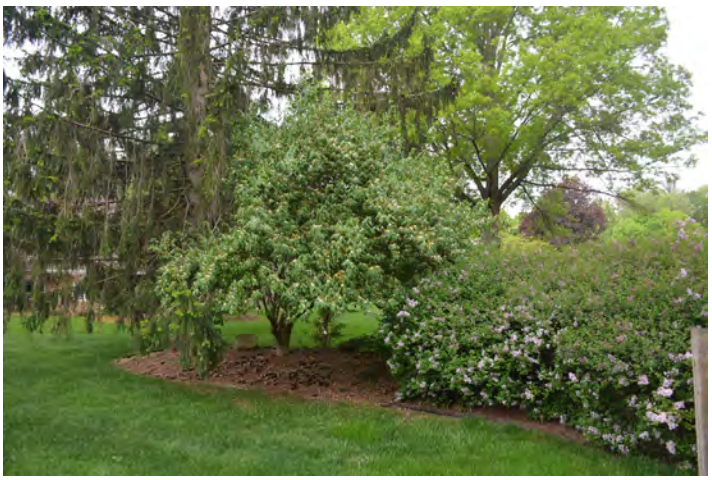
Inspecting branches and removing of egg masses from previously infested trees in the fall can help reduce caterpillar populations the following year.

Biological Applications

Bacillus thuringiensis kurstaki (Bt) treatments like Dipel or Thuricide are bacterial treatments that can be used to control caterpillars. Bt treatments are most effective when caterpillars are young. The caterpillars must consume the Bt treatment for it to be effective so applications to foliage are most effective.

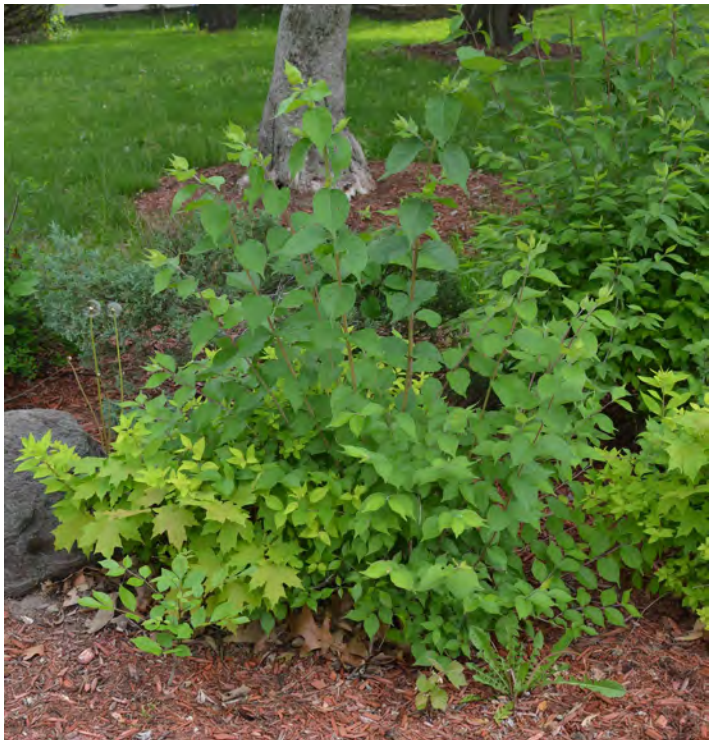
Sarah Hughson

Invasive Bush Honeysuckle in Bloom and Easily Noticed



Bush honeysuckle growing in a landscape bed, Travis Cleveland, University of Illinois.

Exotic bush honeysuckle is in bloom now in central Illinois. While the flowers are fragrant and lovely, this plant is invasive. In fact, it's regulated by the Illinois Exotic Weed Act. While control is not required by law, removing this plant as soon as possible is advised given how easily it can spread and take over. It can be found in most counties and can tolerate a variety of conditions including wetness, dryness, sun, and shade.

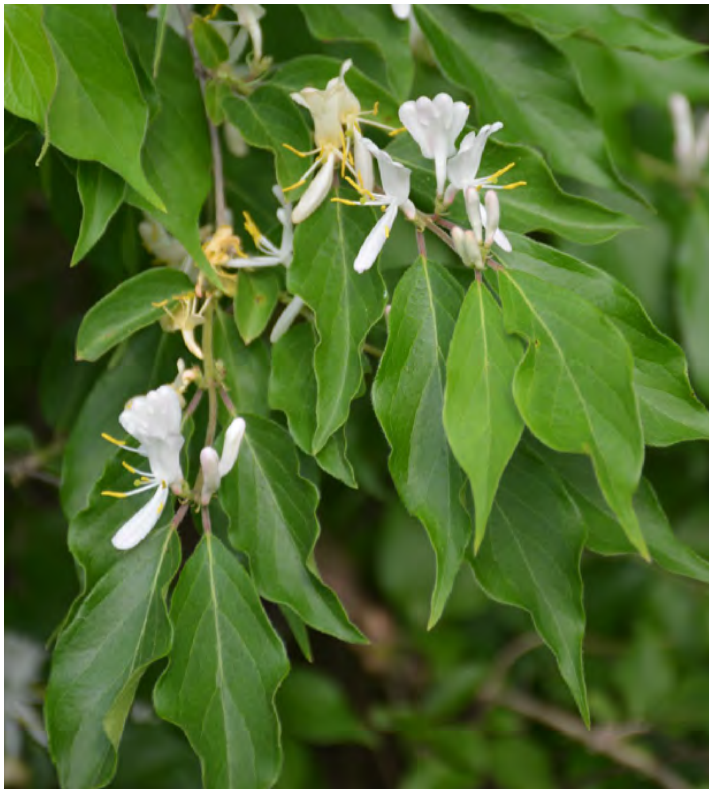


Bush honeysuckle growing in a landscape bed, Travis Cleveland, University of Illinois.

Keep in mind that there are about 200 species of honeysuckle and many of which are well behaved ornamentals. In the 1800s, bush honeysuckle was grown as an ornamental in the Eastern U.S. But now it can be found way beyond the original plantings-- in forests edges, thickets, floodplains, roadsides, pastures and the like. Often it can still be found in urban backyards, frequently popping up and surprising gardeners. Invasive bush honeysuckles are often allowed to grow because landowners either don't know the ecological problems associated with allowing them to grow or they simply can't keep up with the arduous task of removing them.

While there are quite a few species of exotic bush honeysuckles, some of the more common ones in Illinois are *Lonicera maackii* (Amur honeysuckle), *L. morrowii* (Morrow's honeysuckle) and *L. tatarica* (Tartarian honeysuckle). They are native to Eurasia and grow as upright, deciduous shrubs (generally 6 to 15 ft.) that flower in the spring. Of course, there are native spe-

cies too which can be easily confused. This is likely part of the problem as to why we see so much of it.



Bush honeysuckle flowers, Travis Cleveland, University of Illinois.

Bush honeysuckle plants commonly choke out native plants in forests. Some studies suggest they are allelopathic even. They have a competitive advantage in that they leaf out very early in the spring and then hold their leaves late into the fall. They can form a dense layer totally shading out native plants below it, ultimately reducing food and cover for wildlife. An abundance of berries are produced that serve as a source of seed for birds. However, as a result, the seeds are distributed widely. With bush honeysukle, vegetative sprouting can also

Although, birds feed on the berries, please don't think that exotic bush honeysuckle is good for birds. Research has shown that the fruit is less nutritious than that of native shrubs. In fact, I've heard these be referred to as "Skittles" for birds – a tasty snack but not the best primary food choice perhaps. Also, bird nests found in these plants result in less brood survival due to higher predation levels with nests being more visible by predators.

If you are unsure if you have a native or exotic honeysuckle in your landscape, check the stem. For exotics, the older stems are often hollow while most of our native bush honeysuckles have solid stems. In addition, berries and flower characteristics can also be used to differentiate among species. Another telling sign is the quickness of its spread. Exotic bush honeysuckle can overtake your landscape in only a year. Because exotic bush honeysuckles have leaves early and late in the season, they are particularly easy to spot during these times.

Bush honeysuckle leaves are egg-shaped and 1 to 2.5 inches long. Leaf tips can be rounded or distinctly pointed. But a key thing to look for is the arrangement. The leaves, flowers, and fruit are in pairs along the stem. The flowers vary from white, to yellow, to pink, to red depending upon the species. These develop into yellow, orange or red berries that contain several seeds.

Another Lonicera species that may be confused with bush honeysuckle is Japanese honeysuckle (*L. japonica*) which grows aggressively as a woody vine. Flowers are yellow and white in pairs, but the fruit is black. This plant is also invasive and should be removed.

Bush honeysuckle seedlings may be hand removed but it's advised that precautions are taken to not disturb the soil any more than necessary. This can lead to further seed germination. Because the root systems are often shallow, young plants can be pulled when soil is moist. A grubbing tool (even a simple shovel) can make this task easier. Plants can be cut back to the ground level. However, plan to cut them repeatedly as plants that are only cut once can form even denser stands.

Systemic herbicides such as glyphosate or triclopyr can be used as well. Depending on the product, applications can be made to the leaves, the bark or the cut stump. Please consider potential damage to surrounding sensitive plants when making control decisions. Remember to carefully read and follow all label directions. For specific information refer to: Management of Invasive Plants and Pests of Illinois.

Consider replacing this plant with a native honeysuckle such as *Diervilla lonicera* instead.

For more information about exotic bush honeysuckles, please visit:

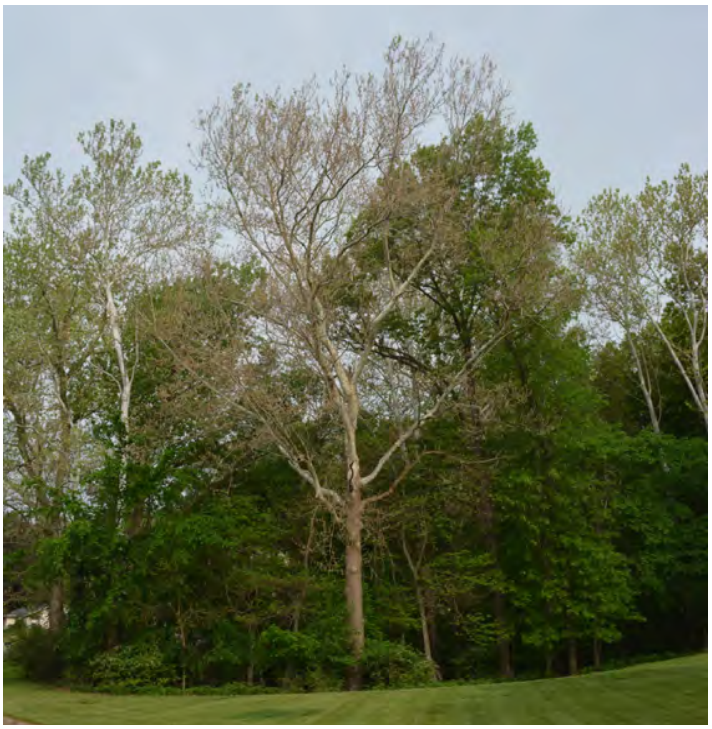
Illinois Laws Regulating Noxious, Exotic Weeds – University of Illinois Extension

Invasive Plant Species – University of Illinois Extension

Bush Honeysuckle – IDNR

Michelle Wiesbrook

Sycamore Anthracnose



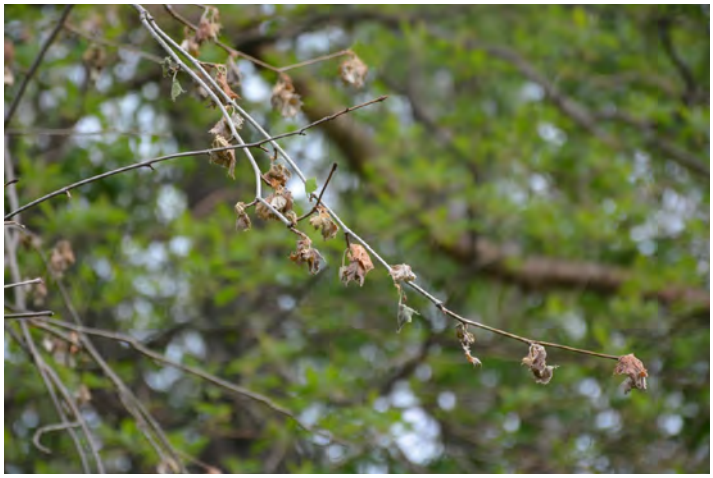
Sycamore Anthracnose symptoms, May 12, 2023, Travis Cleveland, University of Illinois.

Most of the sycamore trees in east central Illinois have sparse foliage compared to other shade tree species. This is due to anthracnose, a fungal disease that occurs almost every spring. Disease severity is dependent on the weather and is favored by cool and wet conditions.

Sycamore anthracnose appears in three phases distinguished by the plant parts that are affected.

Bud and Twig Blight

Bud and twig blight occurs while the host tree is dormant. During this phase, small cankers kill individual buds or the tips of one-year-old shoots. Mild weather during host dormancy allows the cankers and stem lesions to continue expanding. Severe outbreaks



Sycamore anthracnose shoot blight symptoms, Travis Cleveland, University of Illinois.

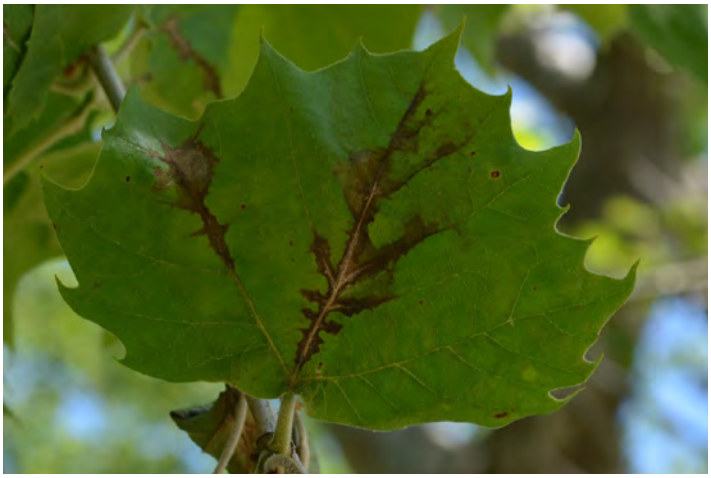
have been reported to kill more than 95% of a tree's buds.

Shoot Blight

Shoot blight occurs after new leaves have emerged. Sunken, girdling cankers form below the twig tips, causing the death of young shoots. Symptoms associated with this phase are often mistaken for frost injury. Damage is most prevalent when the average mean daily temperature during the two weeks following leaf emergence is below 55°F. Cooler temperatures likely prolong twig susceptibility. When the average temperatures are above 60°F during the same period, little or no shoot blight takes place.

Leaf Blight

The leaf blight phase occurs as a direct infection of new leaves. Symptoms appear as small to large, irregular, brown lesions that form along the veins to the leaf edges. This phase often results in premature leaf drop. Wet conditions and temperatures between 60°F and 75°F favor leaf blight.



Leaf Blight, Travis Cleveland, University of Illinois.

Sycamore trees with serious anthracnose infections commonly recover by mid-July, as the second flush of growth matures. Thus, fungicides are not often warranted. However, fungicide injections may be a preventative option for clientele seeking to maintain the appearance of high-value trees. If you are looking to plant a sycamore, consider one of the resistant plane trees. Sycamores are highly susceptible, while London plane trees vary in their resistance. Be sure you are buying a resistant hybrid.

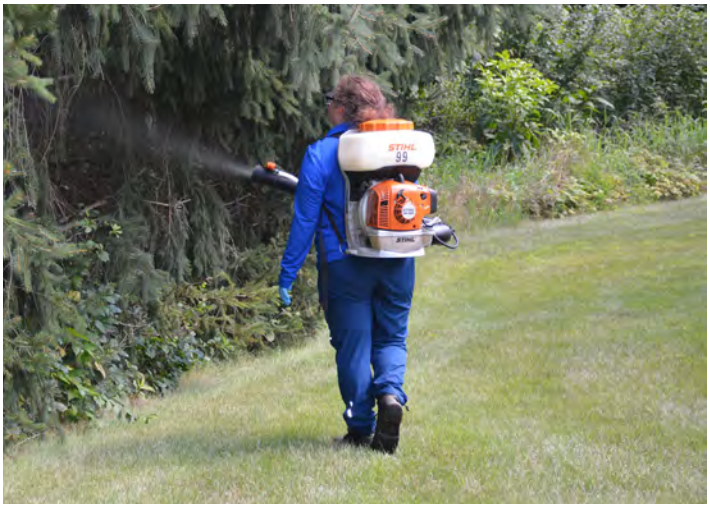
(Travis Cleveland)

New Requirement for Residential Barrier Mosquito Treatments in Illinois

A new Illinois law, effective January 1, 2023, aims to protect Illinois residents and pollinators from pesticide residues related to residential mosquito control treatments. Barrier treatments target and control nuisance adult mosquitos by leaving a residual insecticide coating on surfaces where mosquitos rest. Illinois Public Act 102-0916 amended the Illinois Pesticide Act to include additional restrictions and requirements for residential barrier mosquitocide applications.

Required Training

Commercial applicators and operators are now required to complete an Illinois Department of Agriculture approved barrier mosquitocide training program. The University of Illinois Pesticide Safety Education Program recently updated their mosquito applicator training course to include additional topics required by the new law. You can purchase access to the University of Illinois' course via the Pesticide Safety Education Program's website: https://extension.illinois.edu/psep/training-and-testing. Alternatively, you can participate in an in-person training clinic. Register at the same website. Only two clinics will be offered this spring, so don't delay. This mandated training must be completed every three years.



Barrier mosquito treatment to evergreen foliage. Travis Cleveland. Univeristy of Illinois.

Lawn Markers

Commercial applicators and operators must place a lawn marker at a usual point of entry for residential properties treated with barrier mosquitocides. The owner or resident can remove the marker the day following application. The lawn markers are similar to those required for lawn care applications. They must be a 4 inch by 5 inch, vertical or horizontal white sign with letters a minimum of 3/8 inch in a contrasting color. The marker must include one of the following statements:

- LAWN CARE APPLICATION - STAY OFF GRASS UNTIL DRY - FOR MORE INFORMATION CONTACT: *<Name and business telephone number of the applicator for hire>*
- BARRIER MOSQUITOCIDE APPLICATION – STAY OFF TREATED SURFACE UNTIL DRY – FOR MORE INFORMATION CONTACT: *<Name and business telephone number of the applicator for hire>*

Information Provided to Clients and Neighbors

Clients can request to receive a copy of the pesticide label and safety data sheet for the barrier mosquitocide applied to their property. Additionally, any neighbor whose property abuts or is adjacent to a client's property may request to receive prior notification of a barrier mosquitocide application. The client's neighbor must contact the applicator for hire and provide their name, address, and telephone number. The applicator for hire must notify the neighbor in writing, in person, by telephone, or electronic message of the date and approximate time of application.

Other Prohibitions

The new law also makes it illegal:

- for companies to apply barrier mosquitocide application between October 16 and April 14.
- to apply a barrier mosquitocide when wind speeds are greater than or equal to 10 miles per hour
- to install or use any residential automatic pesticide misting system that automatically sprays any pesticide solution at timed intervals to control mosquitos.

The new law exempts applications that use minimum risk pesticide products that do not require registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as well as any barrier mosquitocide treatment made for public health purposes by or on behalf of a mosquito abatement district, public health department, township, municipality, or other unit of local government.

The Illinois Department of Agriculture will be mailing all licensed mosquito applicators information regarding this new law.

Travis Cleveland

Use of Restricted Use Pesticides Banned Near Schools

Preschool kids outdoors. Image courtesy of Storyblocks.

The Illinois Pesticide Act has been amended to ban the application of Restricted Use Pesticides (RUPs) within 500 feet of any school. If the pesticide label is more restrictive, then that should be followed. For specific changes to the Act, please see Public Act 102-0548. While this became effective January 1, 2022, the enforcement rules were recently determined by the Illinois Department of Agriculture.

The administrative rules state the following:

> *Any person who uses a restricted use pesticide on or within 500 feet of school property during normal hours, except for whole structure fumigation, shall be assessed a penalty of $1,000. As used in this section, "normal school hours" means Monday through Friday from 7 a.m. until 4 p.m., excluding days when classes are not in session.*

A restricted use pesticide is a pesticide that, without additional regulatory restrictions, may cause unreasonable adverse effects to the environment or the applicator. An RUP is for retail sale to and use by only certified applicators or persons under their direct su-

pervision and only for those uses covered by the certified applicator's certification. Certified applicators have demonstrated that they have the knowledge to use these pesticides safely and effectively. Reasons for restricting product use include acute toxicity, environmental safely, and residue effects harmful to birds or other animals. Every pesticide is classified by the U.S. Environmental Protection Agency (US EPA) at the time of registration. In classifying a pesticide for either general use or restricted use, the US EPA considers the toxicity of the pesticide, how the pesticide will be used, and its effect on the environment.

The pesticide label identifies RUPs with this statement: "Restricted use pesticide for retail sale to and use only by Certified Applicators or persons under their direct supervisions and only for those uses covered by the Certified Applicator's certification." Certain products are for use by certified applicators only, which will be specified in this box. Read carefully. The restricted-use statement must appear at the top of the front panel. Often this statement includes the specific hazard of the product (groundwater concerns, toxicity to fish, etc.)

Michelle Wiesbrook

Modified Growing Degree Days

Station Location	Actual Total	Historical Average (11 year)	One-Week Projection
Base 50^0 F – March 1 through May 10			
Freeport	307	191	370
St. Charles	323	192	386
DeKalb	319	192	383
Monmouth	421	277	500
Peoria	424	305	501
Champaign	457	332	532
Springfield	481	404	560
Perry	496	379	573
Brownstown	580	389	660
Belleville	573	479	661
Rend Lake	592	530	684
Carbondale	602	505	696
Dixon Springs	596	533	692

Insect development is temperature dependent. We can use degree days to help predict insect emergence and activity. Home, Yard, and Garden readers can use the links below with the degree day accumulations above to determine what insect pests could be active in their area.

GDD of Landscape Pests

GDD of Conifer Pests

Degree day accumulations calculated using the Pest Degree-Day Calculator (a project by the Department of Crop Sciences at the University of Illinois and the Illinois Water Survey).

Kelly Estes

Illinois Extension
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