COOPERATIVE EXTENSION SERVICE
HOME, YARD & GARDEN PEST NEWSLETTER
College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana - Champaign
Illinois Natural History Survey, Champaign

Number 8 - June 14, 2015

Modified Growing Degree Days (Base 50°F, March 1 through June 9)

Station Location	Actual Total	Historical Average (11 year)	One- Week Projection	Two-Week Projection
Freeport	730	602	867	1022
St. Charles	687	568	805	961
DeKalb	763	655	904	1063
Monmouth	871	716	1014	1173
Peoria	875	758	1023	1187
Champaign	894	782	1047	1218
Springfield	1010	861	1170	1345
Perry	977	803	1125	1287
Brownstown	941	930	1103	1281
Belleville	1198	962	1350	1520
Rend Lake	1193	1038	1363	1547
Carbondale	1120	984	1279	1451
Dixon Springs	1135	1050	1297	1472

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 Illinois IPM Degree-Day Calculator (a project by the Department of Crop Sciences at the University of Illinois and the Illinois Water Survey). (*Kelly Estes*)

Slime Molds in Turf

Temperatures jumped in the last week and rain has fallen or is predicted across most of the state. With warm, wet weather comes the possibility of slime molds, one of the stranger organisms we encounter in the Plant Clinic.

Slime molds aren't technically pathogens, as they don't infect living plant tissue. They often pop up in turf, but they're not directly feeding on the grass. Instead, they feed on decomposing organic matter and microorganisms. Slime molds often form a crust over the surface of turfgrass, reducing the aesthetic appeal of the lawn and potentially weakening the plants, but they rarely cause lasting damage. These crusts are frequently dark gray or black, though they can be other colors. Outbreaks are usually fairly brief, typically lasting a week or so. Slime molds are favored by periods of prolonged leaf wetness; as the environment dries, slime molds produce resting spores and become dormant.

Due to the minimal impact slime molds have on a healthy lawn, management revolves around improving the aesthetics of the turf. Dry spore masses can be removed by mowing, raking, brushing, or sweeping. Spraying water on affected leaves in dry weather can also remove the unsightly growth. Chemical controls are not usually recommended to manage slime molds. If necessary, copper and mancozeb are labeled for use on turf against slime molds. (*Diane Plewa*)

Gypsy Moth

Gypsy moth larvae are becoming fully grown and migrating to pupation sites. They become very noticeable descending tree trunks, crawling across sidewalks, and crawling on fences and buildings seeking cracks and crevices in which to pupate. This is when many people first notice them, especially if the infestation is too low to cause obvious tree defoliation.

Gypsy moth larvae grow to about two inches long. They are hairy with dorsal double rows of blue balls on the front half of the body. These are followed by dorsal double rows of red balls on the second half of the body. Depending on the individual, these balls vary from being obvious as on the caterpillar on the left to obscure as on the larva on the right.

Mature larvae form dark brown pupae beneath silk strands under loose tree bark, under building siding, along eaves, and in other cracks and crevices. The adult moths will emerge in about two weeks. Brown male moths have a one and one-half inch wingspan and a black V mark on each front wing. Whitish female moths have a two inch wingspan, and also a black V mark on each front wing.

Male moths are active fliers, being easily seen flying during the daylight hours. Female moths are too heavy-bodied to fly. They mate with males within a few inches of their pupation sites and then lay up to 1000 eggs which they cover with the buff-colored setae from the underside of their abdomens.

Eggs hatch the following spring shortly after oak bud break. The young larvae climb to the tops of trees, spin out silk that catches on the wind, and balloon to new hosts. Larvae feed on leaf margins to the midvein, causing defoliation when present in large numbers.

Successive heavy defoliation for three or more years can kill oaks and other trees growing along streets and in other sites where trees are under stress. Oak, Chestnut, maple, spruce, crabapple, and approximately 200 tree species are attacked. There is one generation per year.

Young larvae are controlled with *Bacillus thuringiensis* kurstaki, sold as Dipel, Thuricide, and many other trade names. Spinosad, sold as Conserve, and pyrethroid insecticides are also very effective. As larvae get older and larger, they are more difficult to control, making sprays impractical at this time of year.

This is a good time to check for larvae killed by *Entomophaga maimaiga*, a fungus that commonly provides about 60% control of larvae. Killed larvae will be shriveled and straight with their legs stuck out stiffly to the sides as in the photo. They are sometimes covered with whitish fungal hyphae and spores. Collect these and deposit them on the soil at the base of heavily attacked trees where fungus-attacked larvae are not seen. The spores from these killed larvae will infect descending larvae. The resulting moths will lay infected eggs. (*Phil Nixon*)

Sod Webworm

The hot, dry weather we are experiencing is conducive for sod webworms in non-irrigated turf. High temperatures result in shorter generation times, allowing more generations and higher population numbers. Dry soils reduce

the infection rate of naturally-occurring microsporidia that usually help keep larval numbers low. All of this allows more individuals to mature faster resulting in high sod webworm numbers.

Adult sod webworm moths have light tan wings that are held tight against the body, giving the body a tube-like appearance. Their mouthparts have long palps that protrude beyond the front of the head, resulting in they and relatives having the common name, snout moths. The species vary in size from one-half inch to about one inch long, and some species have whitish or brown stripes on their wings. When these moths are disturbed during the day in turf, they fly low to the ground, no higher than your head, in a jerky fashion. They do not fly very far, settling back down onto the turf within about 30 feet of where they were disturbed. The most common species, the larger sod webworm, tends to sit crosswise on the grass blade when at rest. Other species sit lengthwise on the grass blades.

Eggs are dropped into the turf as the adult moths fly across it. The resulting larvae live in a silk-lined tunnel in the thatch during the day, coming out at night to clip off and eat the grass blades. Small balls of green fecal pellets are common around the crowns of infested turf. The larvae are slender with dark brown spots. Their base color may be whitish, gray, tan, or green depending on the species and the larval feeding activity. Fully-grown larvae of the larger sod webworm are about one inch long. Other species are similar in size or smaller.

Damage first appears as indistinct brown patches of turf. Close examination will reveal that most of the grass blades are missing with the thatch causing the brown appearance. The turf will be firmly rooted. As infestations progress, entire lawns can turn brown.

Sod webworm caterpillars in infested lawns typically attract insect-feeding birds such as starlings, brown-headed cowbirds, red-winged blackbirds, and robins. In the photo, brownish patches caused by sod webworm are present around the feeding brown-headed cowbirds and on the slope behind them. Realize that insectivorous birds also feed on other insects in the turf. Their presence indicates that the turf should be scouted for sod webworms.

Unwatered turf in areas with drought is likely to experience high amounts of sod webworm larval damage. If unattended, large turf areas are likely to die. If infestations are noticed early and promptly treated, the intact root system will quickly replace the eaten grass blades, resulting in quick recovery of the turf's appearance.

Sod webworms are easily controlled with many insecticides. Effective, labeled products include bifenthrin (Onyx, Talstar), carbaryl (Sevin), chlorantroniliprole (Acelepryn), clothianidin (Arena), deltamethrin (Delta Gard), indoxacarb (Provaunt), lambda-cyhalothrin (Scimitar), trichlorfon (Dylox), spinosad (Conserve), and Steinernema carpocapsae (Biosafe). The last two are considered to be organic. Allow the spray to dry on the grass blades. (*Phil Nixon*)