

Number 1 – April 24, 2018

First Issue for 2018

Welcome to the 2018 edition of the Home, Yard, and Garden Pest Newsletter. This newsletter is written to keep professional landscapers, arborists, golf course superintendents, lawn care personnel, and garden center operators up-to-date on the commercial management of diseases, weeds, insects, and other pests. We will report on the pests we are seeing and anticipating throughout Illinois. To assist us in these efforts, we ask for your help in reporting pest situations as you see them through the year. Please send reports to the newsletter coordinator, Travis Cleveland, at tcleveland@illinois.edu.

We plan to publish 17 issues during the coming growing season. The first two issues will be two weeks apart as spring pest problems gear up. Through May and June, we will provide weekly issues, with issues every two weeks during July, August, and September. We will finish with an issue in mid-October that will include an index to the 2018 issues.

Our main authors are plant pathologists Travis Cleveland (tcleveland@illinois.edu), Suzanne Bissonnette, and Diane Plewa (dplewa@illinois.edu), weed scientist Michelle Wiesbrook (buesinge@illinois.edu), IPM specialist Maria Turner (mrestrep@illinois.edu), and entomologists Kelly Estes and Sarah

Hughson (hughson2@illinois.edu). We also plan to include content and observations from extension educators from around the state. (*Travis Cleveland*)

Modified Growing Degree Days (Base 50°F, March 1 through April 22)

Station Location	Actual Total	Historical Average (11 year)	One-Week Projection	Two-Week Projection
Freeport	22	107	59	115
St. Charles	34	109	68	119
DeKalb	24	124	64	124
Monmouth	52	151	97	161
Peoria	62	170	111	179
Champaign	82	170	130	199
Springfield	99	195	154	229
Perry	104	197	155	224
Brownstown	119	231	180	260
Belleville	127	249	189	272
Rend Lake	146	273	214	304
Carbondale	147	265	211	295
Dixon Springs	189	292	259	349

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*)

Annual Bluegrass (*Poa annua*)

Annual Bluegrass, also known as *Poa annua*, is a cool-season annual or weak perennial that spreads by seed and by rooting at the lower nodes on creeping stems. It is primarily a problem weed in golf turf, but can be found in home lawns. Golfers have often unknowingly brought the seed home via their shoes, as seed can get stuck in debris on shoes, equipment, etc.

Annual bluegrass *could* make a nice turf grass. It tolerates low mowing heights, wet, compacted soils and shade. Unfortunately, this plant cannot handle temperature extremes or moisture stress. It will die off suddenly and leave bare spots behind. Fertilization, mowing heights less than 2 inches, and frequent irrigation will encourage or at least favor this weed.

This tight clump-forming grass can grow prostrate or erect to 15 in. Leaves are light (apple) green and hairless. Typically, leaves are ½ to ¾ in. long and up to 1/5 in. wide. They can be puckered or wrinkled and they have a characteristic boat-shaped tip where the end of the leaf looks like a canoe. The ligule is membranous, up to 1/6 in., and slightly pointed. There are no auricles. The collar is smooth and narrow while the sheath is smooth and slightly compressed. Leaves are folded in the bud and the stems are flattened. Roots are shallow and fibrous.

The flowers are greenish-white, open, pyramidal panicles that are 1 to 3½ in. long. Annual bluegrass is a prolific seed producer. Reference books say that it can produce flowers and seeds at only ¼ inch in height. However, I have heard

that it is more like 1/8 inch. Regardless, that is pretty short! This smart plant wastes no time in producing seeds. Annual bluegrass is quite noticeable in the late spring when flowers appear. Germination can occur anytime temperatures are above 50 F with the mild weather of fall and spring most favoring germination.

Kentucky bluegrass is related and looks similar to this weed. However, it has darker green leaves and is rhizomatous.

Annual bluegrass is a tough weed to control in turfgrass due to its similar biology. One golf course professional told me once that annual bluegrass is the cockroach of golf turf. Controls vary depending on where this plant is growing. Read labels carefully as the use of some will depend on turf species while others will depend on the type of area.

Annual bluegrass seed emergence can be prevented using preemergence herbicides including benefin, oxadiazon, pendimethalin, and prodiamine applied in late summer. These herbicides are safe on all cool-season turfgrasses except creeping bentgrass, which is rarely used on home lawns. Bensulide is generally safe on bentgrass and also should be applied in late summer. Other herbicide choices include dithiopyr, and sulfentrazone + prodiamine. An additional application in the following spring can provide continuous annual bluegrass control and will also serve to control typical annual grasses such as crabgrass, foxtails, and barnyardgrass. One thing to keep in mind is that a late summer application of a preemergence herbicide will exclude the possibility of a fall seeding of desirable turf species. Unfortunately, while annual bluegrass is an an-

nual, as the name implies, it can also behave as a perennial. Once established in your lawn, it tends to behave more like a perennial requiring a postemergence herbicide to eradicate it. Preemergence herbicides will prevent additional weed infestation, but to get rid of annual bluegrass it will generally require a postemergence herbicide, unless you're fortunate enough to get one of those really hot, dry summers that will cause the annual bluegrass in your lawn to die.

Postemergent herbicide options are very limited. Amicarbazone should be applied under cool spring conditions, while bispyribac-sodium (which appears to be going off to the market) should be applied in when weather is warm but not hot, June or late August through early September. Ethofumesate is most effective on annual bluegrass when applied in fall as two sequential applications, however, safety on Kentucky bluegrass is marginal at best.

Again, different products may be labeled for use on different turfgrass species. Also, injury may result. Carefully read and follow all label directions. (*Michelle Wiesbrook and Bruce Branham*)

Protecting Plants and Trees from Frost Damage

Illinois weather has a great ability to change at a moment notice. Because of this, our plants have to acclimate or they will not survive. The last couple of weeks have been no exception. As far as I can see, we have many plants in bloom as well as trying to leaf out. The plant is the most susceptible to frost damage with all this new growth. However, a temperature of 30 degrees overnight

probably will not seriously impact plant health. We usually don't start seeing significant damage until the temperature gets down to 28 degrees or lower. In addition, some of the heat captured during the warm daytime temperatures radiates back, and helps to protect our plants overnight.

I wouldn't recommend trying to cover daffodils, tulips, or other bulbs. Any sheets or mulch we use will probably crush the flower stalks we're trying to protect. Flowering shrubs like azaleas and lilacs should probably be covered with sheets or light blankets during the colder nights. Strawberries should be covered with straw or a sheet to protect the blooms. Be sure to remove the mulch and sheets during the day. Do not use plastic sheets or tarps: they don't have any insulation to them, and any plant parts that touch the plastic will get frost damaged.

When cool weather strikes our trees in the spring they do suffer and can affect each slightly differently. Young succulent growth can be killed causing shoots and leaves to be discolored, twisted, or distorted. The injury symptoms can look very similar to herbicide injury. The affected leaves, buds or flowers eventually drop. A saving grace for trees and shrubs is that they possess secondary and tertiary buds to allow for regrowth. This does cause the plant to dip into their stored reserves and could cause them to be more susceptible to additional injury throughout the growing season.

Taking care of trees, ornamentals and flowers is a matter of understanding how they grow naturally and using that understanding when we take care of them by properly watering, fertilizing,

mulching and pruning. Time will tell if the plant will survive or recover from the frost injury. Be sure to wait before you jump into prune out suspected dead sections. Special care needs to be given to those plants that have sustained injury so that they do not go through additional stress in the growing season making them vulnerable to diseases and insects. So look at your plants this week and prepare them for this crazy weather we are having and hopefully they will continue to look good throughout the year. *(Maria Turner)*

Here They Come... Buffalo Gnats/ Biting Midges

I truly enjoy the transition from winter into spring, as plants are pushing up through the ground, the daffodils, crocuses, and tulips in bloom. The trees bring on the next show of color with redbuds, magnolias and crabapples in full bloom and then the green leaves emerge. The temperatures are finally nice enough that we can break out those short sleeves; we can work in the yard and start preparing for the garden or the landscape improvements for the season. With the copious amount of rain and warm temperatures brings a not so nice little friend back to wreak some havoc on our ability to enjoy the outdoors. Buffalo gnats/ Biting Midges will be back in full force with the rising water and the warm temperatures; we have the perfect storm for a population explosion from these winged biting beasts.

If there is an upside to these buffalo gnats, it is that they are most active under calm, overcast conditions, and tend to bite just after sunrise and just before dusk. However, we have a reprieve in

that they typically are only around for a 3-4 weeks until the temperature warms up and excess waters recede.

The biggest effort on our part is attempting to control these midges when we are outdoors. There are products labeled for mosquitos and biting flies, but not any specially labeled for biting midges/buffalo gnats. Repellents containing DEET (diethyltoluamide) or permethrin provide only limited protection. Be sure to read and follow all the labeled instruction so that they can be the most effective for you and your pets. In lieu of keeping your pets and yourself indoors throughout this short season, it is good idea to schedule outdoor activities to avoid daily peaks of the biting, cover up with loose fitting or light colored clothing, and avoid potential breeding sites.

I love spring and it is probably my favorite season, but I can't deny I could do without the blood thirsty mosquitos and the annoying biting midges/buffalo gnats. If you should have a reaction to a bite, be sure to contact your physician immediately. In the next few weeks, be sure to stay protected whether you choose to stay indoors or arm yourself with repellents. *(Maria Turner)*

Brown Marmorated Stink Bug Update

The brown marmorated stink bug (BMSB) is old news for many Illinois residents by now. While it is quickly becoming the time of year where these insects are found outdoors, we receive many reports over the winter months when they overwinter in homes.

Discovered in Illinois in 2010, BMSB has now been confirmed in 48 counties. We

suspect it is much wider spread than this, but have not had samples or photos submitted from unconfirmed counties. We encourage the reporting of this insect in unconfirmed counties. As numbers increase throughout the state, we also expect to see injury to host plants commonly found in gardens and crops.

As a quick refresher, BMSB is distinct in appearance from other common stink bugs in Illinois. As we get into gardening season, we'll review injury symptoms from BMSB. As we transition from winter to spring (who thought we'd be saying that at the end of April!?!), keep your eyes peeled for this insect as they transition from their overwintering locations to host plants outdoors. (*Kelly Estes*)

2018 Season at the University of Illinois Plant Clinic

Welcome to the 2018 Plant Clinic Season! We are open year round to serve your plant diagnostic needs. To stay connected with us, follow us on Facebook (<https://www.facebook.com/UofIPlantClinic>) and on our blog (<http://web.extension.illinois.edu/blogs/eb387/>).

Plant Clinic services include plant and insect identification, diagnosis of disease, insect, weed, and chemical injury problems (chemical injury on field crops only), nematode assays, and help with nutrient related problems, as well as recommendations involving these diagnoses. Microscopic examinations, laboratory culturing, virus assays, and nematode assays are some of the techniques used at the Plant Clinic. Many samples can be diagnosed within a few days. Should culturing be necessary, isolates

may not be ready to make a final reading for 10-14 days. Nematode processing may also require a few days to a few weeks depending on the procedure. Final reports include identification and diagnoses, along with management recommendations for treatment of the pest or pathogen problem.

Please refer to our website at <http://web.extension.illinois.edu/plantclinic/> for additional details on samples, sample forms, fees, and services offered. If you have questions about what, where, when, or how to sample call us at 217-333-0519. When submitting a sample, please provide as much information as possible on the pattern of injury in the planting, the pattern on individual affected plants, and details describing how symptoms have changed over time to cause you concern. Pictures of the affected plants or areas can also be sent with the sample to give us a better idea of what is occurring in the environment.

Our fees vary depending on the procedure necessary. Please note, our prices increased slightly this year. General diagnosis including culturing is \$18, ELISA and other serological testing is \$25, nematode analysis for SCN or PWN is \$25, specialty nematode testing (such as corn) is \$45, and SCN resistant screens are \$60-120 depending on size. Please contact us if you are uncertain of which test is needed. Checks can be made to the University of Illinois Plant Clinic. Also new this year, credit card payments are now accepted online after a sample is completed.

Sending a sample through the mail:

University of Illinois Plant Clinic
S-417 Turner Hall
1102 S. Goodwin Ave.
Urbana, IL 61801

Other contact information:

Our telephone and voicemail number is 217-333-0519. Our email is plantclinic@illinois.edu. Our Facebook address is <https://www.facebook.com/UofIPlantClinic> and blog is located at <http://web.extension.illinois.edu/blogs/eb387/>

Dropping off a sample:

You can drop off samples at S-417 Turner Hall. Park in the metered lot F 28 on the east side of Turner or at the ACES Library metered lot on the west side of Turner. Come in the South door and take the elevator located in the SE corner of the building to 4th floor. Turn left when exiting the elevator; we are located along the south corridor of the 4th floor. Please use the green drop box located just outside S-417 if we are temporarily out of the office.

We look forward to serving you this year! (*Suzanne Bissonnette, Diane Plewa*)

Additional Resources for Illinois Pest News

As coordinator of the Illinois Cooperative Agricultural Pest Survey Program, I often wear many hats. Many of my pest surveys focus on invasive species like brown marmorated stink bug, thousand cankers disease, bark beetles, crop pests and many, many more. We often survey corn, soybeans, orchards, and vineyards, just to highlight a few places we spend our time. Many pests we survey, have a very wide host range and can be found in urban landscapes and home gardens too. In addition to working with producers around the state, we routinely benefit from the help of master gardeners, master naturalists, and readers such as yourselves. For anyone looking for see pest updates, learn more about invasive species, or find out what's going on in between issues of the Home, Yard, and Garden, you can find the IL Pest Survey on Facebook

(<https://www.facebook.com/ILPestSurvey/>), Twitter

(<https://twitter.com/ILPestSurvey>), and Instagram

(<https://www.instagram.com/ilpestsurvey/>). As we progress through the growing season, posts will become more diversified in invasive species, garden pests, crop pests, and more. (*Kelly Estes*)