Plant Health Care Report

Scouting Report of The Morton Arboretum

July 11, 2025

For comments regarding PHCR, or to subscribe to email alerts regarding posting of new issues, contact me at syiesla@mortonarb.org.

Our report includes up-to-date disease and insect pest reports for northeastern Illinois. For disease and insect problems, contact the Plant Clinic via email at plantclinic@mortonarb.org or by phone 630-719-2424 (Monday through Friday, noon to 4 pm)

Quick View What indicator plant is in bloom at the Arboretum?

Elderberry (Sambucus canadensis) (fig. 1) is in flower.

Accumulated Growing Degree Days (Base 50) at The Morton Arboretum: (unavailable at this time)

Insects/other pests

- Spotted lanternfly
- Fall webworm
- Milkweed beetle and milkweed bug
- VLB update •

Diseases

- Brown rot of stone fruit •
- Slime mold and stink horns •

Weeds

• Helleborine

Miscellaneous

- Physiological yellowing of tuliptree
- Yellow leaves on other trees and shrubs



Figure 1 Elderberry (Photo: John Hagstrom)



The



Soil temperatures around Illinois (from Illinois State Water Survey)

This information will be provided all season. For data from other reporting stations, go to <u>https://warm.isws.illinois.edu/warm/soil/</u> (you will need to set up an account to access data.)

Max. Soil temps	St. Charles	Champaign	Carbondale
For 7/10/2025*	reporting station	reporting station	reporting station
	(north)	(central)	(south)
2-inch, bare soil	94.7	103.9	83.1
4-inch, bare soil	86.6	94.8	84.2
4-inch, under sod	83.2	87.7	84.7
8-inch, under sod	76.8	81.6	82.3

* This is the maximum soil temperature recorded the day prior to publication of PHCR.

Seasonal precipitation

Seasonal precipitation (rain and melted snow) in inches.			
	2025	2024	Historical average (1937-
			2024)
Jan	.97	3.42	1.96
Feb	1.3	.56	1.8
Mar	4.59	3.68	2.55
April	3.32 (this value has	4.44	3.66
	been corrected)		
May	1.86	3.73	4.16
June	4.78	5.29	4.18
July	1.51 (thru 7/10)	4.79 (whole month)	3.96 (whole month)
Aug			
Sept			
21Year to	18.33 (thru 7/10)	25.91 (thru July)	22.26 (thru July)
date			

Degree Days (current and compared to past years) and rainfall

The historical average (1937-2024) for this date at The Morton Arboretum is 1206 GDD₅₀. The table below shows a comparison of GDD in different years. We are comparing the GDD₅₀ reported in this issue with the GDD reported in the first issue of last year, 2019 and 2014. These years were selected since publication dates of the first issue were within a day or two of each other. Glencoe, and Waukegan (60085) were not used in 2019 and 2014, so there is 'no report' from those stations. Lisle was not used in 2014, so there is 'no report'.

			1	1
Location	GDD as of	GDD as of	GDD as of	GDD as of
	7/10/2025	7/11/2024	7/11/2019	7/10/2014
Carbondale, IL*	2114	2291	1938	1874
Champaign, IL*	1738	1843	1607	1611
Chicago Botanic Garden**	1540 (7/8)	1407	No report	1026 (7/9)
Glencoe*	859	1055	730	No report
Chicago O'Hare*	1461	1701	1257	1382
Kankakee, IL*	1472	1644	1370	1412
Lisle, IL*	1508	1721	1301	No report
The Morton Arboretum	No report	1467.5	1152	1183
Quincy, IL*	1771	1963	1659	1679
Rockford, IL*	1378	1537	1172	1185
Springfield, IL*	1773	1956	1652	1650
Waukegan, IL* (60087)	1175	1420	991	1167
Waukegan, IL* (60085)	1277	1528	1068	No report

*We obtain most of our degree day information from the GDD Tracker from Michigan State University web site. For additional locations and daily degree days, go to https://gddtracker.msu.edu/

**Thank you to Elizabeth Cullison, Chicago Botanic Garden, for supplying us with this information.

How serious is it?

Problems that can definitely compromise the health of the plant will be marked "serious". Problems that have the potential to be serious and which may warrant chemical control measures will be marked "potentially serious". Problems that are seldom serious enough for pesticide treatment will be marked "minor". "Aggressive" will be used for weeds that spread quickly and become a problem and "dangerous" for weeds that might pose a risk to humans.

Pest Updates: Insects

Examples of insects that may emerge soon in northern Illinois (based on growing degree days)			
GDD (base 50)	insect	Life stage present at this GDD	Type of damage
Possibly 1200-	Viburnum leaf	Adults emerging	Chewing on leaves
1300 (now!)	beetles		
1200-1800	Fall webworm	Caterpillars feeding, but webbing	Chewing on leaves
		not seen yet	
1950	Magnolia scale	Crawlers begin to emerge	Feeding on sap

Spotted lanternfly (potentially serious to serious)

Spotted lanternfly (SLF) (*Lycorma delicatula*) has been a pest in Pennsylvania since 2014. Since that time, it has spread to other eastern states like New York, Maryland, New Jersey and Virginia. In the last year or two, there have been isolated reports of this pest in Ohio, Indiana, and Michigan. In late 2023, isolated populations of the insect were identified in the Chicago region. Discovery of isolated populations does not mean the insect is established in Northern Illinois, but it does mean we should be watchful. The <u>USA National Phenology Network</u> forecasts that (if the insect is present locally), adults could be present in the Chicago region sometime in the next three weeks.



Figure 2 Illustration by Cornell CALS

SLF overwinters as egg masses (fig. 2). The female insect lays these non-descript looking egg masses on host plants, but also on hard surfaces, like bricks, wood pallets, and vehicles. The

nymphs hatch out in spring and early summer. Newly hatched nymphs are white, but soon become black with white spots. Late stage instar nymphs will be red with white spots. The nymphs mature into adults beginning in mid-summer. The adult is not a true fly, but rather a planthopper. It is about one inch long. When at rest, the pinkish-gray wings are folded over the insect's back. The wings are marked by small black spots. In flight, the bright red hindwings can be seen. They are also marked with small black spots. The adults begin to lay egg masses in September and may continue to do so until a freeze.

The host range for SLF is large, more than 70 species. Preferred hosts include Tree of heaven, grapes, black walnut, hops and tuliptree. Other hosts include maple, willow, birch, and sycamore. This is a sap-feeding insect and it can feed very heavily on a host plant and weaken it. This has been a major issue for grape producers. Like other sap-feeders, this insect will produce honeydew, which is a sticky substance. Spotted lanternfly differs from other sap-feeders in that it can produce <u>extremely large amounts</u> of honeydew. This can become a nuisance for any activity being conducted under infested trees. Sooty mold, a dark colored fungal problem, grows readily on the honeydew. The honeydew also attracts other insects like bees and wasps.

If you suspect spotted lanternfly in your area, take a photo and send a detailed email to: <u>lanternfly@illinois.edu</u> including when, where, and specifics of the location.

Good websites: <u>https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/spotted-lanternfly/</u> https://ilpestsurvey.inhs.illinois.edu/pest-information/most-unwanted/ https://agr.illinois.gov/insects/pests/spotted-lanternfly.html https://cals.cornell.edu/new-york-state-integrated-pest-management/outreacheducation/whats-bugging-you/spotted-lanternfly

Fall webworm (minor)

It's about time to be seeing fall webworm (Hyphantria cunea). We don't have any reports of this pest yet, but they are often overlooked when they are small. So, it is time to be looking. Despite the name, this insect shows up more in mid to late summer. Caterpillars start to come out around GDD 1200, but the webbing typically is not produced until closer to GDD 1800, so the caterpillars may be eating for a few days before the telltale webbing shows up.



Figure 3 Fall webworm caterpillars

This caterpillar is known to feed on more than 100 species of deciduous trees. Preferred hosts include hickory, ash, birch, black walnut, crabapple, elm, maple, oak, and pecan. The

caterpillars (fig. 3) are pale green to yellow and covered with long hairs. There are two races,

black-headed and red-headed. The black-headed webworms are supposed to appear about a month earlier than the red-headed race. Full-grown caterpillars reach about one inch in length.

Fall webworms overwinter in the pupal stage in the ground, under loose bark, and in leaf litter. <u>Adult</u> <u>moths</u> appear from early to mid-summer, and females deposit eggs in masses on the underside of host leaves. In about one week, eggs hatch into caterpillars that begin to feed and then to spin a



Figure 4 Web of fall webworm

messy web (fig. 4) over the foliage on which they feed. The webs increase in size as caterpillars continue to feed. In about six weeks caterpillars will drop to the ground and pupate. Damage is cosmetic since this pest eats leaves late in the season after the leaves have finished their job of making food for the plant.

Some people confuse fall webworm and eastern tent caterpillar. How can you tell the difference? Eastern tent caterpillars are spring caterpillars and form thick, neat tents in the angles of branches. Fall webworm caterpillars are active much later in the season and make a messy web at the ends of the branches. Eastern tent caterpillars go outside the tent to feed and return to the tent at night. Fall webworm caterpillars feed in the nest and expand the nest to enclose more leaves to feed on.

Management: Insecticides are not warranted. The unsightly webs can be pruned out of small trees. Since these caterpillars stay in the web while feeding, pruning the webs at any time of day will eliminate the caterpillars. Webworms also have many natural enemies including birds, predaceous bugs, and parasitic wasps.

Good website: <u>https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/fall-webworm/</u>

Milkweed beetle and milkweed bug (minor)

Milkweed has become a popular plant to grow in home gardens as well as native areas. Many people are hoping to attract monarch butterflies. Sometimes uninvited guests show up too. A few of these are out there already. I am talking about milkweed bugs and milkweed beetles.

Red milkweed <u>beetles</u> (*Tetraopes tetrophthalmus*) are 1/2 to 3/4 inchlong and rosy red with black spots and long black antennae (fig. 5). Adults feed on milkweed leaves; while in the larval stage, this insect bores into and feeds on milkweed stems and roots.

Milkweed <u>bugs</u> also attack milkweed. There are two species of milkweed bug, the large milkweed bug (*Oncopeltus fasciatus*) and the small milkweed bug (*Lygaeus kalmia*). These two insects look very much alike, both sporting bright orange-red and black colors (fig. 6). Young bugs (nymphs) also have these colors, but lack fully developed wings. Both the adults and the nymphs will feed on the milkweed

seeds, and it is not uncommon to see groups of them huddled together on the milkweed fruits. These insects are often mistaken for boxelder bugs which are similar in

color.

Management: None usually needed as relatively little damage is done.

Good websites: <u>http://bugguide.net/node/view/504</u> <u>http://bugguide.net/node/view/460</u> https://bugguide.net/node/view/2966

Viburnum leaf beetle update (serious)

Figure 5 Red milkweed beetle (adult)



Figure 6 Milkweed bud adults

We expect viburnum leaf beetle adults to emerge soon (if they are not out already). The beetles are small (1/3 inch) and brown to golden brown (fig. 7). They are not easily noticed, but their feeding is. They will pick up where the larvae left off.

Management: Insecticidal soap worked on the larvae, but it is <u>not</u> effective on the adults. They have hard bodies and insecticidal soap works primarily on soft bodied insects. Adults can be treated with a variety of insecticides. Do not spray for the adults until they are present. Insecticides are not preventative; the insects need to be present for the product to work.



Figure 7 Adult viburnum leaf beetle

In fall, look for egg-laying sites. The actual eggs are not visible. The eggs are laid in small holes on the <u>ends</u> of twigs, and then the holes are capped. The caps stand out against the bark of the twig, making them easy to see (fig. 8). Cut out the twig



Figure 8 Egg-laying sites

tips that have the eggs in them, and get them out of the garden completely. This will greatly reduce the number of insects you have next year. If you have a number of shrubs, remember that you have all fall and winter to remove these twigs. Getting them in the egg stage greatly reduces the need to spray next year. We can't stress enough the importance of this technique. This is the most effective management approach and the least toxic to beneficial insects.

Pest Updates: Diseases

Brown rot of stone fruit (serious)

The Plant Clinic at The Morton Arboretum has received a couple of reports of brown rot on cherries. Brown rot is caused by the fungus *Monilinia fructicola* which can infect peaches, plums, cherries, apricots, and other *Prunus* species. The disease is sometimes seen as blossom blight – the browning and sudden collapse of blossoms. The infection can spread into shoots and twigs during the next several weeks resulting in shoot and twig blight (fig. 9). Cankers,



Figure 9 Shoot blight caused by brown rot

which may be accompanied by a gummy ooze at their margins, form on twigs, often causing

twig dieback. Infections of fruit start as brown spots that rapidly infect the entire fruit, completely covering it with spores and giving it a fuzzy look (fig. 10). We are seeing some of this already. Infected fruits decay and shrivel; some will stay attached to the tree throughout winter while others will fall to the ground. These 'mummies' are covered with 'fuzz' which actually a layer of fungal spores. They are a source of infection for next spring.

Management: Sanitation is crucial to control of brown rot. Prune out active infections immediately during dry weather. Don't forget to disinfect pruning tools. Rake

and clean up debris under the tree during the summer to remove fallen leaves and fruit. Prune to promote good air circulation through the tree canopy. Wild or neglected stone fruit trees (e.g., wild plum and cherry) in the area are likely to have the disease and be sources of inoculum that should be removed. Late in the year remove rotted fruit 'mummies' that are persistent, and prune out cankers and infected twigs. If damage is severe, fungicides need to be applied when blossoms first open in early spring.

Good websites: http://ohioline.osu.edu/hyg-fact/3000/pdf/HYG 3009 08.pdf



Figure 10 Fruit 'mummy' covered with fungal spores

Slime molds and stinkhorns (minor)

This year we have had off and on periods of rain. With bouts of rain usually comes the question "What is that stuff on my mulch?" Rainfall (and watering our gardens a lot) leads to a variety of strange looking growths in the garden.



trying to decompose the mulch. Slime mold, when fresh, comes in nice colors like yellow and pink, and it looks like a puddle, the kind of puddle that makes you wonder if your dog needs to

go to the veterinarian. As it dries, some of the color goes away, and the puddle becomes a dry crust (fig. 11). When it has dried, slip the blade of your shovel under it and lift it away to the garbage.

Another candidate in the "what is that" category is the stinkhorn. Stinkhorns are a type of mushroom, but they merit a mention because they really capture our attention. They come in an interesting array of colors and, guess what, they stink. If the smell does not get your attention, the crowd of

flies around them will. A common type is reddish-orange (fig. 12) and sort of looks like carrots growing upside down in the mulch. But they do come in many weird colors and even vulgar shapes (fig. 13). One thing that intrigues people is that the stinkhorn grows out of a structure that looks like an egg. Just as with slime mold, we can slip our shovel blade in and lift them away to the garbage.

Pest Updates: Weeds

Helleborine (aggressive)

When is an orchid a bad thing? When it is helleborine (*Epipactis helleborine*), a non-native orchid. The Plant Clinic at The Morton Arboretum has received emails again this season regarding this orchid turned weed. Why is it a weed? It spreads underground very aggressively via fleshy rhizomes. Large patches can develop quickly. Wisconsin lists this as a restricted



Figure 11 Slime mold



Figure 12 Stink horn



Figure 13 Stink horn

invasive plant. Helleborine grows up to three feet tall and has a thick stem with dark green leaves that clasp the stem (fig. 14). The leaves are lance-shaped and up to six inches long. The flowers do look like orchids and vary in color, with a mix of green, pink and purple. Numerous flowers are produced on a spike.

Management: Individual plants may be dug up, but you must be careful to get all of the underground structures or the plant will re-sprout. Chemical management is possible, but can be challenging. <u>Michigan State</u> offers some guidance in this area.

Good website:

https://www.minnesotawildflowers.info/flower/helleborine

Figure 14 Helleborine (Photo: Rob Routledge, Sault College, bugwood.org)

Miscellaneous

Physiological yellowing of tulip tree

Physiological yellowing of tulip tree (*Liriodendron tulipifera*) is a problem related to the dry weather. We often see this problem start up in July. We getting quite a few reports this year due to the recent extreme heat. Tulip tree is sensitive to dryness. It is a tree with a large, fleshy root systems and it does not like dry soils. With physiological yellowing you will see completely yellow leaves scattered throughout the crown of the tree. They will soon fall off the tree. Some leaves may also show small black (necrotic) spots (fig. 15). These look similar to a fungal leaf spot disease, but they are not.

Management: This type of leaf yellowing does not have

any real long-term effect on the health of the tree. It does, however, indicate that the tree needs water. Water tulip tree thoroughly to alleviate drought stress.

Yellow leaves on other trees and shrubs

Speaking of watering, are you? The Plant Clinic has received numerous emails with plants that are wilted or dropping leaves. The question is often "What is wrong with my plant". In response, we often ask "Has the plant been watered?". Northern Illinois has just been through two very hot, very dry weeks and it is taking a toll on the plants. Often, the stress of this type of weather is underestimated. Soil can dry out very quickly in extreme heat. So, if your plants look a little sad, stop minute and think about water. It is not the only reason for plants to look



Figure 15 Necrotic spots on yellow tulip tree

leaf

ок 10

bad, but it is always one to consider. For more on watering see the <u>special watering issue</u> we published in 2023.



Bartlett Tree Experts, Presenting Sponsor of the Plant Clinic.

The Plant Health Care Report is prepared by Sharon Yiesla, M.S., Plant Knowledge Specialist and edited by Fredric Miller, Ph.D., Research Entomologist at The Morton Arboretum; and Juluia Lamb, Arboretum Volunteer. The information presented is believed to be accurate, but the authors provide no guarantee and will not be held liable for consequences of actions taken based on the information.

Thank you...I would like to thank all the staff and volunteers that report disease and pest problems when they find them. Your hard work is appreciated. Our volunteer scouts for 2025 are Deb Link, Maureen Livingston, Loraine Miranda, Molly Neustadt and Moira Silverman.

Literature/website recommendations: Indicator plants are chosen because of work done by Donald A. Orton, which is published in the book Coincide, The Orton System of Pest and Disease Management.

Additional information on growing degree days can be found at: <u>http://www.ipm.msu.edu/agriculture/christmas_trees/gdd_of_landscape_insects</u> <u>http://extension.unh.edu/resources/files/Resource000986_Rep2328.pdf</u>

This report is available as a PDF at The Morton Arboretum website at <u>https://mortonarb.org/about-arboretum/plant-health-care-report/</u>

For pest and disease questions, please contact the Plant Clinic. You can contact the Plant Clinic via email at <u>plantclinic@mortonarb.org</u>. Emails will be answered during business hours Monday through Friday. You can call the Plant Clinic (630-719-2424) or visit in person, Monday thru Friday noon to 4 pm. Inquiries or comments about the PHCR should be directed to Sharon Yiesla at <u>syiesla@mortonarb.org</u>. Copyright © 2025 The Morton Arboretum

2025 Plant Health Care Report Index



THE CHAMPION of TREES

Following is an index of the various subjects in this year's report. The number after each subject is the report number. For example, using the chart below, Ficaria verna.... 1 means that it was discussed in the PHCR 2025.01 or the newsletter dated April 4, 2025. The index is updated with the publication of each full issue and is included at the end of each full issue.

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