Plant Health Care Report

Scouting Report of The Morton Arboretum

June 13, 2025 **Issue 2025.6**

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?

Tree lilacs (*Syringa reticulata* and *Syringa pekinensis*) (fig. 1) are flowering.

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

Insects/other pests

- Viburnum leaf beetle update
- Galls, part 2
- Bagworm
- Spittlebug

Diseases

- Guignardia on ivy
- Powdery mildew on ninebark

Weeds

- Poison hemlock

Figure 1 Japanese tree lilac (Photo: S. Yiesla)

Soil temperatures around Illinois (from Illinois State Water Survey)

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

Max. Soil temps For 6/12/2025*	St. Charles reporting station (north)	Champaign reporting station (central)	Carbondale reporting station (south)
2-inch, bare soil	74.4	90.8	83.3
4-inch, bare soil	71.5	83.5	80.7
4-inch, under sod	72.6	78.6	78
8-inch, under sod	69.9	73.4	75.6

* 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	3.34	4.44	3.66
May	1.86	3.73	4.16
June	1.98 (thru 6/12)	5.29 (whole month)	4.18 (whole month)
July			
Aug			
Sept			
Year to date	14.04 (thru 6/12)	21.12 (thru June)	18.3 (thru June)

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

The historical average (1937-2024) for this date at The Morton Arboretum is 584 $GDD_{50.}$ The table below shows a comparison of GDD in different years. We are comparing the GDD_{50} 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'.

Location	GDD as of 6/12/2025	GDD as of 6/13/2024	GDD as of 6/13/2019	GDD as of 6/12/2014
Carbondale, IL*	1282	1494	1164	1120
Champaign, IL*	946	1114	903	919
Chicago Botanic Garden**	768	729	434	488.8 (6/11)
Glencoe*	255	470	271	No report
Chicago O'Hare*	670	970	608	709
Kankakee, IL*	710	954	707	762
Lisle, IL*	702	977	639	No report
The Morton Arboretum	No report	772.5	521.5	571
Quincy, IL*	997	1205	927	960
Rockford, IL*	647	857	550	599
Springfield, IL*	984	1200	938	953
Waukegan, IL* (60087)	471	764	437	560
Waukegan, IL* (60085)	541	843	490	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
500-700	Euonymus scale	Crawlers emerging	Feeding on sap
500-600	Viburnum crown borer	Caterpillars hatching and entering bark	Tunnel under bark
700-800	Bagworm	Caterpillars emerging	Chewing foliage
900-1200	Japanese beetle	adults	Chewing foliage; mating and laying eggs

Viburnum leaf beetle update (serious)

The viburnum leaf beetle larvae are now likely to be underground pupating. At this point, we can do nothing to manage them. The adults should emerge in early July. The beetles are small (1/3 inch) and brown to golden brown (fig. 2). They are not easily noticed, but their feeding is. They will pick up where the larvae left off.

Figure 2 Viburnum leaf beetle

Management: Adults can be treated with a variety of insecticides. Insecticidal soap is **not** effective on the adults. They have hard bodies and insecticidal soap works primarily on soft bodied insects. Do not spray for the adults until they are present. Insecticides are not preventative.

Galls, Part 2

More galls are being reported around the area. Here are few that we have seen already. Most galls are harmless, but we report on them so you recognize them when you see them.

Figure 3 Maple bladder gall

Maple bladder gall is a common problem on red maple (*Acer rubrum*), silver maple (*Acer saccharinum*) and the hybrid between the two, Freeman's maple (*Acer* x *freemannii*). We see this gall almost every year. It starts out as a small green bead and then changes to red (fig. 3) and later in the season almost black. We are seeing it in the red stage already. They are caused by eriophyid mites that overwinter in bark crevices and around callous growth of wounds, scars, and pruned branches.

We have reports of spindle galls on linden (*Tilia*) and some other trees and shrubs. Spindle galls occur on a variety of plant species. The galls are long and thin and protrude out of the upper surfaces of leaves (fig. 4). They are also caused by eriophyid mite species.

Figure 4 Spindle gall on linden

Oaks are showing off a number of gall species this season. One of our scouts just brought in a sample of jumping oak gall in the early stage of development. It does not yet look quite like our photo, but it will be there very soon. Jumping oak gall was very prevalent last year, sometimes covering entire leaves and even deforming them a bit. We will have to see how large the population is this year. Jumping oak gall is caused by the gall wasp *Neuroterus saltatorius*. They start out looking like small beads on the back of oak leaves (fig. 5). The galls eventually will pop off and fall to the ground. The activity of the larvae inside will cause the galls to jump around. This is free entertainment from the insect world. A small brown spot remains on the leaf where the gall was once attached. Since no evidence of the gall remains, people assume that the tree has a fungus.

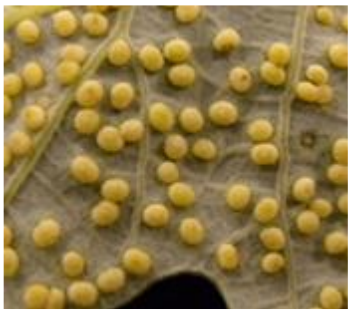

Figure 5 Jumping oak gall

Oaks are also showing off a gall that we don't always see as often, the wool sower gall. This one is eye-catching because it is creamy white (with some small, pink or tan colored areas) and fairly large (often around an inch or so in diameter). It often looks a bit like a cotton ball (fig. 6). This one is caused by another tiny, non-stinging wasp (*Callirhytis seminator*). The gall is really a group of small galls together, each one with a developing wasp inside, like a wasp apartment house.

Figure 6 Wool sower gall

Oaks are also offering us a third entry for the 2025 parade of galls. Oak apple gall, true to its name, is found on oaks. This gall is caused by a cynipid wasp. The galls are globe-shaped (fig. 7) and filled with a spongy mass, and they are found on the leaves. These galls can be an inch or so in diameter when fully developed

Figure 7 Oak apple gall

Bagworm (potentially serious)

We are watching for bagworm (*Thyridopteryx ephemeraeformis*), but so far, have no confirmed reports. This insect may be

emerging right now, but it can be overlooked because, at this point, it would be very, very small. It might look like a tiny ice cream cone that has been dropped (fig. 8). We need to catch them in the early stage of life, if insecticides are to be used. Now is the time to be scouting. This pest is often on evergreen trees and shrubs, but does not feed on them exclusively. They are also known to attack a variety of deciduous trees.

Figure 8 Very young bagworm

Bagworms overwinter as eggs inside the female bag. The bag can contain between 300 and 1,000 eggs. The eggs hatch in early summer, and the young larvae suspend from a silk string and are often "ballooned" by wind to nearby plants. When a suitable host plant is found, larvae begin to form bags over their bodies. The tiny cone-shaped bags are constructed from silk and camouflaged with bits of twigs and foliage from the host plant. Larvae stick their heads and front legs out of the top of the bags to feed and move (fig. 9). The feeding by young larvae results in holes in the foliage of deciduous plants and loss of needles on evergreens. As the larvae grow, they enlarge their bags and feed on the entire leaf, leaving only veins. They move to a sturdy branch, attach the bag (fig. 10) with a strong band of silk, and then pupate. By August the larvae have matured and are 1 to 1-1/2 inches in length, and their completed bags are 1-1/2 to 2-1/2 inches long. About four weeks later, adult males emerge and mate with the sedentary females. The female, which has no eyes, wings, legs, antennae, or functional mouthparts, lays eggs and is then mummified around the egg mass within the bag.

Figure 9 Bagworm larva peeking out of bag

Bagworm populations can build rapidly and quickly defoliate their hosts. Healthy deciduous trees can usually tolerate consecutive years of severe defoliation before they are killed. Evergreen trees, on the other hand, can be killed by just one year of severe defoliation. Bagworm larvae feed on over 120 species of trees and shrubs. Their bags are made of the foliage they're feeding on, so a bagworm feeding on pine will have pine needles in its bag, while a bagworm feeding on an oak tree will have pieces of oak leaves decorating its bag.

Figure 10 Bagworm bag

Management: We are likely to be in the early stage of

development and insecticides may be very effective at this time. Once the larvae stop moving around and attach the bag to the stem, they are safe from insecticides. Handpicking bags from that time until early spring will help control populations for next year. If they can't hatch, they can't feed, so this is more effective than people think. Remove as many of the bags as possible later in the season.

Good websites:
https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/bagworms/#overview

Spittlebugs (minor)

Spittlebug is showing up on several weeds and perennials. They can be identified by the frothy white mass they produce on foliage and twigs. It does look quite a bit like spit (fig. 11). The tiny insect is in the middle of the spit. Spittlebugs suck plant sap but inflict little damage on mature plants. There are a number of species of spittlebugs that feed on a variety of plants.

Figure 11 Spittlebug

Management: Control is rarely necessary, and hosing the plants down forcefully with water is usually sufficient to remove most of the insects. This may need to be repeated a few times.

Good website: https://extension.umn.edu/yard-and-garden-insects/spittlebugs

Pest Updates: Diseases

***Guignardia* on ivy (minor)**

Boston ivy (*Parthenocissus tricuspidata*) is showing up, infected with a leaf spot caused by *Guignardia bidwellii.* The spot is relatively round with a dark margin (fig. 12). The dark fruiting bodies will eventually be found in this leaf spot. This disease also affects Virginia creeper (*Parthenocissus quinquefolia*). While this disease is fairly minor on ornamental plants, it also causes black rot of grapes, which is more serious.

Figure 12 Guignardia on Virginia creeper

Management: Removing fallen leaves may help to destroy the overwintering inoculum. On Boston ivy and Virginia creeper, removing badly infected leaves may help.

Improving air flow may also help, since the spores are spread and germinate under moist to wet conditions.

Good website: http://hort.uwex.edu/articles/guignardia-leaf-spot

Powdery mildew on ninebark (minor to potentially serious)

Powdery mildew has been found on the leaves of ninebark (*Physocarpus opulifolius*). The straight species of ninebark is relatively resistant to powdery mildew, but some of the cultivars can be very susceptible and can sustain quite a bit of damage. Research has been done on this. Go to this link to see the findings. Hundreds of plant species are susceptible to powdery mildew, but the disease is caused by many different species of fungi which are host specific. This means that the powdery mildew on coralberry will not infect lilacs and so forth.

Figure 13 Powdery mildew on ninebark

Powdery mildew appears as a superficial white to gray coating over leaf surfaces, stems, flowers, or fruits of affected plants. Initially, circular powdery white spots appear. These spots coalesce producing a continuous patch of "mildew." On ninebark, the leaves at the tips of branches often develop a thick coating of white powder (fig. 13), while other parts of the same plant may show very few symptoms. Later in the season, fungal fruiting bodies that look like black pepper under a hand lens will appear. Warm days and cool nights, like we have been having lately, favor this fungal disease. The fungi that cause powdery mildew are deterred by water since spores will not germinate on wet leaves. However, the fungus still needs high humidity to infect the plant. Leaf curling and twisting result, and in severe infestations you may see premature defoliation and deformed flower buds. Although unsightly, powdery mildew is usually not fatal in the landscape.

Management: Infected plant parts should be removed as soon as symptoms appear. Dispose of fallen leaves. Water plants during periods of drought to keep them healthy. Put plants in locations where there is good soil drainage and sufficient sunlight. Provide proper plant spacing for good air circulation. In the future, plant mildew-resistant cultivars and species.

Good website: https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/powdery-mildews/

Pest Updates: Weeds

Poison hemlock (dangerous)

Figure 14 Poison hemlock (Photo: S. Yiesla)

The Plant Clinic has already received several reports of poison hemlock (*Conium maculatum*). This weed has been fairly prominent for the last few years, not only in home gardens, but popping up along the side of the road in many areas. Poison hemlock is a member of the carrot family (which contains both edible and toxic plants, so beware!!). Most members of this family have the same type of umbrella-shaped flower cluster known as an umbel. Because the flower cluster of Queen Anne's lace and the flower cluster of poison hemlock look similar, plants may be incorrectly identified. This can lead to contact with a dangerous plant.

Figure 15 Spotted stem of poison hemlock (photo: S. Yiesla)

Poison hemlock is a large, non-native plant, often six to ten feet tall. The smooth stem is stout, has a ridged appearance, and is marked with purple spots (fig. 15). The stem is hollow. Leaves are large and very ferny in appearance (fig. 16). Poison hemlock is a biennial plant, which means it will form foliage in the first year and flower and set seed in the second year. Plants in their second year will have the typical white flower cluster (umbel) of the carrot family. Queen Anne's lace has one red floret in the center of its flower cluster while poison hemlock does not.

Figure 16 Leaves of poison hemlock (photo: S. Yiesla)

All parts of the plant are toxic and may lead to death if ingested. The plant's sap may be absorbed through cuts in the skin, so long sleeves and gloves will be needed when handling the plant. Sap can also be absorbed if it comes in contact with mucus membranes (eye or nose).

Management: Plants can be cut down or dug out. This should be done before the plants go

to seed and is most easily done when plants are small. Cover your skin during this process. In spring, small, actively growing plants may be treated with a non-selective herbicide.

Good websites: https://mortonarb.org/plant-and-protect/trees-and-plants/poison-hemlock/#overview
http://hyg.ipm.illinois.edu/article.php?id=380
https://www.extension.purdue.edu/extmedia/fnr/fnr-437-w.pdf

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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:
http://www.ipm.msu.edu/agriculture/christmas_trees/gdd_of_landscape_insects
http://extension.unh.edu/resources/files/Resource000986_Rep2328.pdf

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

For pest and disease questions, please contact the Plant Clinic. You can contact the Plant Clinic via email at plantclinic@mortonarb.org . 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 syiesla@mortonarb.org .

2025 Plant Health Care Report Index

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.

2025.1	April 5	2025.4	May 16
2025.2	April 18	2025.5	May 30
2025.3	May 2	2025.6	June13