

Plant Health Care Report

Scouting Report of The Morton Arboretum



THE
CHAMPION
of TREES

June 26, 2026

Issue 2026.7

For comments regarding PHCR, or to subscribe to email alerts regarding posting of new issues, contact Sharon Yiesla 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).

There will be no PHCR next week due to the holiday.

Quick View

What indicator plant is in bloom at the Arboretum?

Elderberry (*Sambucus canadensis*) is in flower (fig. 1). Elderberry serves as an indicator plant for cottony maple scale (crawlers hatching out) and Japanese beetle (adults beginning to emerge)

Accumulated Growing Degree Days (Base 50) at The Morton Arboretum: 994.5 (as of June 24)

Insects/other pests

- Viburnum leaf beetle update
- Japanese beetles and white grubs
- Leaf miners
- Cottony maple scale and cottony maple leaf scale
- Mealybug destroyer
- Tussock moth caterpillars

Diseases

- Guignardia on *Aesculus*
- Pear rust

Weeds

- Giant hogweed or cow parsnip

Miscellaneous

- Fallen twigs



Figure 1 Elderberry (photo: John Hagstrom)

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 6/25/2026	St. Charles reporting station (north)	Champaign reporting station (central)	Carbondale reporting station (south)
2-inch, bare soil	75.2	87.2	95.7
4-inch, bare soil	74.3	82.7	89.2
4-inch, under sod	74	80.6	84.4
8-inch, under sod	71.8	75.5	81.9

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

Seasonal precipitation

Seasonal precipitation (rain and melted snow) in inches.			
	2026	2025	Historical average (1937-2025)
Jan	2.33	.97	1.95
Feb	.14	1.3	1.79
Mar	5.22	4.59	2.57
April	5.32	3.32	3.66
May	1.78	1.86	4.14
June	8.05 (thru 6/24)	4.77 (full month)	4.19 (full month)
July			
Aug			
Sept			
Year to date	22.84 (thru 6/24)	16.81 (thru June)	18.29 (thru June)

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

The historical average (1937-2025) for this date at The Morton Arboretum is 855 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, 2020 and 2014. These years were selected since publication dates of the first issue were within a day or two of each other. Lisle, Glencoe, and Waukegan (60085) were not used in 2015, so there is 'no report' from those stations.

Location	GDD as of 6/25/2026	GDD as of 6/26/2025	GDD as of 6/25/2020	GDD as of 6/25/2015
Carbondale, IL*	1875	1702	1344	1559
Champaign, IL*	1392	1343	1070	1320
Chicago Botanic Garden**	No report	No report	829	735
Glencoe*	585	533	547	No report
Chicago O'Hare*	1107	1060	924	1031
Kankakee, IL*	1184	1091	976	1098
Lisle, IL*	1141	1099	958	No report
The Morton Arboretum	994.5 (6/24)	913	909	870.5
Quincy, IL*	1539	1385	1141	1387
Rockford, IL*	1069	1019	880	875
Springfield, IL*	1532	1381	1133	1381
Waukegan, IL* (60087)	891	824	753	798
Waukegan, IL* (60085)	968	910	799	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
900-1200	Japanese beetle	adults	Chewing foliage; mating and laying eggs
Possibly 1200-1300	Viburnum leaf beetles	Adults emerging	Chewing on leaves
1200-1800	Fall webworm	Caterpillars feeding, but webbing not seen yet	Chewing on leaves

Viburnum leaf beetle update

A few days ago, we received a confirmed report of viburnum leaf beetle adults (fig. 2) out and feeding. Insecticides can be used in summer when the beetles are out. Insecticidal soap, that was used for larvae, is not effective against the adult beetles.



Figure 2 Viburnum leaf beetle

Remember, that from October through April, twig tips with eggs in them can be pruned out and destroyed. **This is the most effective way** to reduce populations and minimize damage and is highly recommended. If the larvae can't hatch, they can't eat. Trim out only the last few inches of each twig where egg-laying sites are visible. You do not need to cut the whole stem.

Japanese beetles and white grubs (Potentially serious)

That special time of year has arrived. It's Japanese beetle (*Popillia japonica*) time. We have not had any confirmed reports of them yet, but they should be here any day. Japanese beetles are up to ½- inch long, and have oval, metallic green bodies with coppery brown wing covers (fig. 3). They have five white spots along each side and two additional white spots behind their wing covers. Upon examination under a hand lens, the spots are actually tufts of hair.



Figure 3 Japanese beetle

Adult beetles feed on about 300 different species of ornamental plants with about 50 species being preferred. Highly preferred hosts include rose, crabapple, cherry, grape, and linden. In recent years, we have also found them feeding on basil and canna. The adults feed on leaf tissue between veins, resulting in skeletonized leaves (fig. 4). Severely infested plants may be almost completely defoliated. Early infestations of Japanese beetle may be missed since the insects often start feeding in the tops of trees.

Japanese beetles overwinter as larvae (grubs) about four to eight inches beneath the soil surface. In spring, as the soil temperatures warm to about 55° F, the grubs move upward through the soil to pupate. Adults normally emerge from late June through July. Within a few days after emergence, the adults mate and the females burrow into the soil to lay eggs. Nearly all eggs are laid by mid-August. In sufficiently warm and moist soil, eggs will hatch in about ten days. Lawns that are being watered regularly could become a prime target for egg-laying, since it will be easier for the female to dig in moist soil. (Dr. Fredric Miller tells me that with the high rainfall this year, egg laying by the Japanese beetle and southern masked chafer could potentially be widespread. A dry spell in July or August could impact the survival rate of grubs hatching at that time). Grubs feed on plant roots until cold weather forces them to greater depths in the soil for the winter. There is one generation of this beetle per year.

Japanese beetles are harmful as adults, but also in the larval or grub stage. Even if you do not see Japanese beetles in your yard, your lawn could still have grubs. Other species of beetles also have grubs as their larval stage. How do you know if your lawn needs grub control? Grubs eat grass roots, and this will lead to brown areas in the lawn. Unfortunately, other causes, like drought and fungal diseases, can lead to a brown lawn. If your lawn has grubs, you will be able to pull the lawn up like a carpet since the roots are gone.



Figure 4 Japanese beetle damage

Is grub control a good idea for everyone? Not necessarily. If your lawn has never had grubs before and you are not irrigating, it would be best to skip the grub control. Usually, control is not warranted unless 10-12 grubs are present per square foot of lawn.

Management: Adult Japanese beetles can be handpicked. It is easiest to catch them by placing a soapy-water filled container directly under the leaf that they are chewing on and then shaking the leaf. The soapy water ensures that the beetles die while you're collecting them. The beetles generally drop straight down into the collecting container. Sometimes Japanese beetle pheromone traps are used to trap them. We don't recommend these, as they will attract even more beetles to your property (more than the trap can collect). Insecticides can be used in the case of valuable plants, but even insecticides do not guarantee control. A soil drench of systemic insecticide in spring is sometimes recommended for control of Japanese beetles. **It should be noted that imidacloprid, chlothianidin and dinotefuran labels indicate that these products can no longer be used on lindens (*Tilia* species). That means it is illegal**

to use it on those trees. Some other systemic products have the same labeling. Be sure to check the label of any systemic product concerning its use on lindens.

Managing the Japanese beetle grubs that will hatch out around late July/early August may help to reduce populations of adult beetles for next year. Eggs and first instar larvae require moisture to survive; therefore, the easiest way to reduce grub populations is to limit lawn irrigation during the egg-laying period when beetle populations peak (mid-July through early August). Japanese beetles also avoid laying eggs in shade, which is another great reason to plant more trees and shrubs. Insecticide applications are effective in controlling young grubs.

If you plan to manage the grub stage with insecticides, know that the timing of application depends on the product selected. There are now many insecticides available to treat grubs, and they have different application times. Traditional grub control insecticides are applied to the lawn when young grubs are active (August and September). Other products may be applied in mid-summer or even late spring, but are still targeted at new grubs. The bottom line is to read the product label carefully and use it at the appropriate time. The information given here is very general. The product label will give specific information.

Biological insecticides that contain *Bacillus thuringiensis var. galleriae* are targeted toward beetles and their grubs. Other grub control insecticides are broad spectrum and may kill other insects besides beetles.

We receive a lot of questions about the use of the biological control milky spore disease. This is a bacterium that is specifically toxic to the grub stage of the Japanese beetle and is applied to the soil. This is a slow method at best in the warmer southern states (may take 3-5 years to build up in soil enough to be effective) and is often not very effective at all in colder, northern states. Also, if you have grubs that come from another type of beetle, it won't work on them at all. The product is specific to the grubs of Japanese beetles. This product is really not recommended for our area.

Beneficial nematodes can be watered into turf, again in late July, where they infest and kill grubs. Products containing *Heterorhabditis bacteriophora* nematodes are recommended by the University of Illinois. Beneficial nematodes are not always available in stores; they are available through mail order/internet sources.

Good websites:

<https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/japanese-beetles/>

https://www.canr.msu.edu/news/how_to_choose_and_when_to_apply_grub_control_products_for_your_lawn

Leaf miners (minor)

Leaf miners are insects that tunnel (or mine) the inside of leaves, with the top and bottom layer of leaf tissue remaining intact. Leaf miners are the young of a variety of different species of insects, including sawflies, moths and beetles. Earlier this year we saw boxwood leaf miners. Now elm leaf miner (*Fenusa ulmi*) has been found on elms.

Elm leaf miner is a species of sawfly. The adults emerge in spring to lay eggs in elm leaf tissues. A week later, the eggs hatch, and young larvae begin to make mines in the leaves. The sawfly larvae will feed on the leaf tissue between the upper and lower epidermis of the leaves.

The mines start as elongated brown spots between veins in the leaf and may eventually spread to a large part of the leaf (fig. 5). Later, the insects will eat a hole through the leaf epidermis, fall to the ground, and excavate a hole in the soil to overwinter. Severe damage can result in defoliation, but since there is only one generation per year, trees often have time to make another set of leaves. To test a leaf for miners, hold the leaf up to the light. If the insect is still in the leaf, you can see it. You will also be able to see frass (insect feces) which looks like pencil shavings within the mined area. They spend most of their life cycle burrowed about an inch in the ground.

Management: Because leaf miner damage is often cosmetic, insecticides may not be warranted. By the time damage is noticed, it may be too late to treat successfully.

Good websites: <https://bygl.osu.edu/index.php/node/1965>

https://www.canr.msu.edu/news/common_spring_leafminers

Cottony maple scale and cottony maple leaf scale (minor and messy)

Yes, you read the title correctly, two species of scale attacking our maples. We are finding dark scale covering attached to white bits of 'cotton'.

These are female adult cottony maple scales (*Pulvinaria innumerabilis*) and cottony maple leaf scale (*Pulvinaria acericola*). The scales themselves are 1/4 inch long, flat, oval, brown and have white, cottony egg masses (ovisacs) protruding from the rear. The "cotton" is actually waxy threads and the ovisac may contain hundreds of eggs.



Figure 5 Elm leaf miner damage



Figure 6 Cottony maple scale female with egg sac

So, who is who? Cottony maple scale usually is found only on stems, while the cottony maple lead scale, true to its name is usually found mostly on the undersides of leaves. The egg sac of cottony maple scale is large and more rounded like a kernel of popcorn (fig 6). The egg sac of cottony maple leaf scale is more narrow, and elongated, making the scale resemble a little fuzzy caterpillar (fig. 7).



Figure 7 cottony maple leaf scale female with egg sac

Their preferred hosts are red and silver maple, but they also attack sugar maples and boxelder (which are a species of maple). From time to time, they may be found on a few non-maple hosts. These scale insects create honeydew (liquid excrement) which drops onto anything under the tree. People think the tree is dropping sap. It isn't. The insects are. Sooty mold may colonize the honeydew, turning surfaces black.

The two species have similar life cycles. The eggs will hatch soon (GDD for cottony maple leaf scale is 1216; for cottony maple scale is 900-1200) into crawlers that migrate to the underside of leaves to feed. Mated females will migrate to twigs to overwinter.

Management: The two scale species have a lot of natural enemies (see next article). Sometimes if you wait, they will knock the population down. If you can't wait, hire a [certified arborist](#) to treat the tree with a systemic insecticide to manage this pest.

Good website: <https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/cottony-maple-scale/>
<https://bygl.osu.edu/node/1806>

Mealybug destroyer (beneficial insect)

When is a mealybug not a mealybug? When it is the mealybug destroyer. This insect looks like a mealybug, which is a pest, but it is actually the larvae of a species of a ladybug ([Cryptolaemus montrouzieri](#)). We have had a few reports of these happily feeding on the cottony maple leaf scaled mentioned in the previous article.

If you think your plant has mealybugs, take a closer look before you try to kill them. Mealybugs are sedentary. They sit quietly on the plant feeding on the sap. The mealybug destroyer is mobile. It is a predator and has to go in search of its prey. They will eat scale insects and

mealybugs. If you give them time, they can get a pest population under control. Think about skipping the insecticide and letting them enjoy their lunch.

Good website: <https://www.bugguide.net/node/view/7910>

Tussock moth caterpillar (usually minor)

White-marked tussock moth caterpillars (*Orgyia leucostigma*) have been reported in the area. The caterpillars are quite distinctive. When fully grown, they are about an inch to an inch and a half long and have long, pale yellow hairs, reddish orange heads, and long tufts of hair near the front of their body (fig. 8). It is best to avoid touching them, because some people have allergic reactions to the hairs.



Figure 8 caterpillar of the white-marked tussock moth

Tussock moth larvae feed on leaves, first skeletonizing them and eventually eating the entire leaf. In late summer, caterpillars form gray, hairy cocoons on twigs and branches. The adult male moth is gray. The female is dirty

white and cannot fly because she is wingless. The female often lays her eggs on the cocoon from which she emerged. The moth overwinters as an egg. Hosts include apple, birch, crabapple, elm, fir, hickory, horsechestnut, linden, maple, oak, pecan, poplar, rose, and walnut.

Management: In most years, damage by tussock moth larvae is mostly an aesthetic problem in landscape. In years with heavy populations there will be more damage. They can cause major problems in forests. The caterpillars can be handpicked (carefully and wearing gloves to avoid allergic reaction). *Bacillus thuringiensis var. kurstaki* (Btk) can be sprayed on young larvae.

Pest Updates: Diseases

***Guignardia* on buckeye (minor)**

Guignardia leaf blotch (*Guignardia aesculi*) is showing up on buckeye and horsechestnut (*Aesculus* species). The disease causes reddish brown to brown lesions with a yellow border that blends into the normal green leaf tissue (fig. 9). The blotches will enlarge, coalesce, and may cover the entire leaf by the end of summer. Premature defoliation may follow on the most susceptible hosts. This disease eventually decreases a tree's ability to photosynthesize, but generally the disease doesn't become severe until the tree's annual growth has slowed or is

complete. Therefore, it does not do much harm to trees in the landscape, but it does make them unsightly.

Management: Removing fallen leaves may help to destroy the overwintering inoculum. Pruning trees to improve air flow may also help, since the spores are spread and germinate under moist to wet conditions. It is too late for any fungicide treatments.



Figure 9 *Guignardia* symptoms on buckeye

Good website: <https://extension.umaine.edu/ipm/ipddl/publications/5094e/>

Pear rust (minor on ornamental trees, potentially serious on edible pears)

Yes, there is another cedar-rust disease out there and we are seeing it more and more. Pear rust has been reported in Illinois sporadically in the last few years. We have had several reports this year regarding pear rust. So, it might be time to learn more about it.

Pear rust, sometimes referred to as pear trellis rust, is caused by the fungus *Gymnosporangium sabinae*, and is related to the other cedar-rust fungi. The deciduous host of this disease is pear, both ornamental and edible species. Eastern red cedar (*Juniperus virginiana*), and some other juniper species, serve as alternate hosts.

The life cycle and symptoms of this disease are similar to those of the other cedar-rust diseases. The disease overwinters on the juniper host. There is no round gall, as there is in cedar-apple rust. Instead, the disease overwinters as mycelium on the stems of the juniper forming a spindle-shaped swelling of the stem. In spring, small, bright orange, jelly-like horns will form on the stems. The spores produced by these horns will infect the deciduous host, pear. On the deciduous host, yellow or orange spots develop on the upper surface of the leaves in late spring. Spore-bearing structures (aecia) will then form on the lower side of the leaves. These differ in appearance from the aecia formed in other cedar-rust disease. They are more three dimensional and are often described as acorn-like in their appearance. The spores produced by these aecia in late summer will serve to infect the juniper host, completing the life cycle. On pears, the infection is most commonly seen on the leaves, but twigs and fruit can occasionally be infected. The juniper host does not sustain any real damage. (For photos of symptoms see this [link](#))

Management: Cultural controls are limited since both hosts are common in landscapes and in the wild. The disease is not serious on the juniper host. No treatment is needed. All pear cultivars are susceptible to pear rust. The fungicides labeled for use on the other cedar-rust diseases may be effective for this related rust. Any fungicide applied to an edible pear must be labeled for that purpose.

Good websites: <https://hyg.ipm.illinois.edu/article.php?id=1169>
[Connecticut Agricultural Experiment Station](#)

Pest Updates: Weeds

Plant Clinic has received a couple of inquiries from concerned citizens about possible sightings of giant hogweed. While this plant has been found in the Chicago region, the plants in question have turned out to be cow parsnip. Why do we care? Giant hogweed has become an invasive plant in some areas and it can cause extremely serious skin damage when a person comes in contact with the sap and is exposed to UV light.

Giant hogweed lives up to its name. It is not just big, but giant (really UNBELIEVEABLY HUGE) reaching heights up to 14 feet. One leaf can be as much as 5 feet across!! Cow parsnip is a big plant, but more like 8 feet tall and leaves about a foot to 16 inches long. If in doubt of a plant's identity, leave it alone. For more information on giant hogweed go to <https://ohioline.osu.edu/factsheet/anr-35>. For more information on plants that are look alikes for giant hogweed go to <https://www.maine.gov/dacf/php/horticulture/hogweedlookalikes.shtml>

Cow parsnip can also produce a rash in some individuals, but not to the extent that giant hogweed can. Best to leave it alone as well. Both these plants belong to the carrot family. While this family has some very friendly members, it also has some that can be very nasty to handle. Use caution.

Good website: <https://www.minnesotawildflowers.info/flower/common-cow-parsnip>

Miscellaneous

Fallen twigs (minor)

Got twigs? Seems like many of us do these days. The Plant Clinic at The Morton Arboretum is getting lots of calls and emails about this. Our friends, the squirrels, may have a role in this. They often chew off more twigs than they can use for nest building. But they are not to blame for all of it this year. We have had a lot of strong winds in the last few weeks and these winds have caused some of the weakened stems to fall.

Is that the end of the story for this year? Possibly not. There are other pests that may pull the same trick later this season. Kermes scale can cause fallen twigs on bur oaks. They will be present as dark bumps at the ends of the fallen twigs. Twig girdlers and twig pruners are both insects that cut off twigs in very precise method and we may see this later in the season on oaks and some other trees. If any of these pests show up, we will feature them in a future issue of the PHCR.



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 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 .

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2026 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 2026.01 or the newsletter dated April 3, 2026. 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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