

Plant Health Care Report

Scouting Report of The Morton Arboretum



THE
CHAMPION
of TREES

Aug 28, 2026

Issue 2026.12

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).

This is our last issue for the season. Thanks for reading. See you next April.

Quick View

What indicator plant is in bloom at the Arboretum?

Chicory (*Cichorium intybus*) is in flower (fig. 1).

Accumulated Growing Degree Days (Base 50) at The Morton Arboretum: 2495 (as of Aug 27)

Insects/other pests

- Magnolia scale reminder
- Viburnum leaf beetle reminder
- Bagworm reminder
- Gall update
- Home Invaders
- Brown marmorated stink bug

Miscellaneous

- Seasonal needle drop
- Next season is now
- What happens when we water?



Figure 1 Chicory (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 8/27/2026	St. Charles reporting station (north)	Champaign reporting station (central)	Carbondale reporting station (south)
2-inch, bare soil	81.4	89.2	88.4
4-inch, bare soil	79.2	88.8	83.2
4-inch, under sod	74.9	82.9	79.3
8-inch, under sod	73.1	79.1	78.3

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

Seasonal precipitation

Seasonal precipitation (rain and melted snow) in inches.			
	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	4.77	4.19
July	8.31	6.11	3.98
Aug	8.3 (as of 8/27)	6.01 (whole month)	3.78 (whole month)
Year to date	39.45 (thru 8/27)	28.93 (thru Aug)	26.04 (thru Aug)

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

The historical average (1937-2025) for this date at The Morton Arboretum is 2322 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 8/27/2026	GDD as of 8/29/2025	GDD as of 8/29/2020	GDD as of 8/27/2015
Carbondale, IL*	3681	No issue on this date	No issue on this date	3236
Champaign, IL*	2965	No issue on this date	No issue on this date	2787
Chicago Botanic Garden**	No report	No issue on this date	No issue on this date	2012
Glencoe*	1978	No issue on this date	No issue on this date	No report
Chicago O'Hare*	2666	No issue on this date	No issue on this date	2482
Kankakee, IL*	2702	No issue on this date	No issue on this date	2454
Lisle, IL*	2711	No issue on this date	No issue on this date	No report
The Morton Arboretum	2495	No issue on this date	No issue on this date	2170
Quincy, IL*	3241	No issue on this date	No issue on this date	2919
Rockford, IL*	2535	No issue on this date	No issue on this date	2140
Springfield, IL*	3194	No issue on this date	No issue on this date	2893
Waukegan, IL* (60087)	2339	No issue on this date	No issue on this date	2107
Waukegan, IL* (60085)	2446	No issue on this date	No issue on this date	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

Magnolia scale reminder

Now is the time to be looking for and treating magnolia scale crawlers (fig. 2). They should be out and active at this time. They are going to be moving around and growing for the next couple of months (maybe longer, depending on how the weather goes). That gives us time to kill them before winter. After winter, any of the crawlers that did not killed by us, or the winter, will become active again and will still be moving around in spring, giving us another chance to kill the ones we missed in fall. This is where we can win the battle!! Remember that the babies born now will be the adults you see next summer. If we can kill them now, there will be few to no adults next summer.



Figure 2 Magnolia scale crawlers

Because the crawlers are exposed in late summer and fall, we can spray them with insecticidal soap, with a horticultural oil or with an insecticide. Insecticidal soap and horticultural oil both must come in direct contact with the crawlers to kill them. Horticultural oil is also sold as summer oil and multi-season oil.

Viburnum leaf beetle reminder

Starting now, we have the next several months to knock down the population of viburnum leaf beetle for next year. Viburnum leaf beetle egg-laying sites are already showing up on twigs. The eggs will hatch into larvae next spring. Viburnum leaf beetles lay their eggs in the tips of viburnum twigs (usually on the underside of the twig). If we clip those twig tips off in fall and winter and destroy them, we can minimize populations for next spring. The egg-laying damage usually occurs in rows. The eggs are laid in holes chewed by the adult. The holes are then covered by a cap of chewed bark (fig. 3).



Figure 3 Viburnum leaf beetle egg-laying sites

These caps are fairly easy to see as they are a different color than the stem, but they will be SMALL since they are out at the very tips of the stems. We don't have to cut viburnum stems way back, only the few inches at the end of the stem need to be removed. We do need to look at ALL the stem ends not just the ones at the top of the shrub. That stem growing horizontally

low on the shrub has a twig tip also. Check it. The more eggs we destroy now, the less damage we have in spring.

Bagworm reminder

Fall and winter are also a time to get rid of bagworm. Right now, the bagworms are maturing in their bags (fig. 4) and will soon be ready to mate. The eggs that are produced will remain in the mother's bag all winter, ripe for the picking. Handpicking bags from now 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. Every time you pick off a bag that contained the female you will eliminate hundreds of eggs. That has real impact.



Figure 4 Bagworm bag

Gall update

Since last week's issue where I highlighted one of my favorite galls, the oak lobed gall, several of you have emailed to let me know that it IS out there. A member of the horticulture staff here at the Arboretum let me know that we have a number of them on some of our oaks and she confirms that they are not harming the trees in any way. Thanks for letting me know. Keep scouting!

Home invaders (minor)

When the weather finally turns cold, some pests will become home invaders. Boxelder bugs (*Boisea trivittata*) are usually the number one complaint (although the brown marmorated stink bug, see article below, is vying for the title). These insects feed on sap of seeds, flowers, and leaves of boxelders (*Acer negundo*). Their feeding causes little damage to the tree. Boxelder bugs (fig. 5) are considered a nuisance when large numbers of them appear in homes, especially in fall and spring. Nymphs are bright red when they first hatch, developing black wing pads over time. Adults are about ½ inch long, have three red or orange lines in back of their heads, and have black wings with red lines, and a red abdomen. Boxelder bugs overwinter as adults in protected sites. Since they consider your house to be a protected site, if you have cracks in your foundation or around your windows, they will enter your house through those cracks in fall. They do no harm indoors, but are annoying.



Figure 5 Boxelder bugs, nymph (above) and adult (below)

While boxelder bugs show up like clockwork every year, some home invaders are occasional guests. These include the multi-colored Asian lady beetle, the leaf-footed beetle and squash bugs. The multi-colored Asian lady beetles (*Harmonia axyridis*) are beneficial insects that eat pests like aphids. In fall, they can become an annoyance when they enter the home, sometimes in large numbers. They are not only annoying, they can bite! They can be yellow, red or orange in color and may have no spots or as many as 19. The front of the body is cream-colored with a black 'M' (perhaps a monogram for 'multi-colored'?). Go to <http://bugguide.net/index.php?q=search&keys=Harmonia&search=Search> for photos.

Leaf-footed bugs and squash bugs often enter homes one at a time and so are easy to manage. Go to <http://bugguide.net/node/view/16073/bgimage> and <https://bugguide.net/node/view/67889>

Management: Do not use insecticides inside the home. Caulk around doors and windows to minimize entry by the insects. Keep screens in good repair. Insects that do enter the home can be removed with a vacuum or manually. Do not crush boxelder bugs or ladybugs as they can leave a stain. The leaf-footed bug is related to stink bugs and will make a stink when handled. Squash bugs can make a stink and a stain when crushed.

Good website: <https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/boxelder-bugs/>

Brown marmorated stink bug (minor indoors, potentially serious outdoors)

Speaking of home invaders: brown marmorated stink bugs or BMSB (*Halyomorpha halys*) are showing up more often now in the Chicago area. These insects overwinter in houses and become active again in spring. BMSB will feed on a variety of hosts including many fruit, vegetable and field crops, reducing yield on those crops. They have become a serious pest on crops in some states. There are other insects that resemble the BMSB, so check the websites listed below to see more pictures of this insect. The insect is similar in shape to other stink bugs (a somewhat 'shield-shaped' body), but the edge of the body has alternating black and white bands (fig. 6). The antennae will have light-colored bands on them. Overall, the body has a mottled appearance. When the weather cools off, adults will look to overwinter in homes, much like boxelder bugs.



Figure 6 Brown marmorated stink bug adult

Management: Managing this pest in the home is similar to managing boxelder bugs in the home. Caulk cracks and keep screens in good repair. Physically remove the insects in the home with a vacuum cleaner. These are stink bugs, and they do create a stink when threatened

so removal by hand could be tricky. After removal by vacuum, the vacuum cleaner may have a smell for a while. The insects can also be knocked into a bucket of soapy water and drowned.

Good websites with photos for identification:

<https://extension.oregonstate.edu/catalog/em-9054-identifying-brown-marmorated-stink-bug>
<http://www.stopbmsb.org/stink-bug-basics/look-alike-insects/>

Miscellaneous

Seasonal needle drop

A phenomenon of fall is heading our way soon: seasonal needle drop (also known as normal needle drop). In autumn, many evergreens will drop older needles. This is a normal process. Needles on an evergreen live for a limited number of years. At the end of their lives, these needles will turn yellow or brown and eventually fall off. On some evergreens, such as white pine or arborvitae, this process can be very dramatic, making the evergreen look like it is dying. To determine if your tree has a disease or is going through normal needle drop, check the location of the yellow or brown needles. Trees



Figure 7 Seasonal needle drop on white pine

going through normal needle drop will have a fairly uniform brown or yellow appearance in the interior of the tree since this is where the oldest needles are located (fig. 7). After a few weeks these needles will fall off, leaving the tree looking normal and healthy. Trees with a disease may have brown needles in various areas of the tree, depending on the disease, but the appearance will not be as uniform as that of needle drop. Diseased needles may eventually fall off, but the tree won't look healthy.

Good website: <https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/seasonal-needle-drop/>

Next season is now

Normally at this time of year we are gearing down from one growing season and planning for the next. We may need to rethink that concept. The current growing season is impacted by the ones that preceded it and will have impact on the one coming up. Plants are living and growing in a continuum. Winter is not a holiday between growing seasons. In some years, our growing seasons are getting longer. Autumn is often warmer and going on for a much longer time than in the past. Timing on practices like watering and pruning need to adapt to these changes. We

can't really garden by the calendar anymore. So many horticultural practices revolved around 'the first frost'. Now, in some years, we have a frost and then the weather gets warm and beautiful for six more weeks. That 'first frost' has lost its place as a guidepost. Take some time to look at Plant Health Care as a more holistic process. We need to think about updating some of our practices.

What happens when we water?

The obvious answer to that question is that we keep our plants alive. But we need to dive deeper here. We don't just want our plants to survive, we want them to thrive. Water is essential to all life forms, and the plants need water just like everybody else. They need it to live and to grow (make new plant parts) and to reproduce (flower and produce seeds). When we turn on the garden hose or lawn sprinkler, we tend to have one eye on the water meter. This is wise, but instead of denying our plants water, we should make sure that every drop is used well by watering properly. See our [updated webpage](#) on watering for proper watering guidelines.

I am not a researcher and this is not intended to be a scientific paper on plant physiology, but we are going to dig one layer deeper than most of us generally do. So, what does water do for our plants? Obviously, on a hot, dry day, watering the plant gives it water to take up so it does not wilt. But water is important to plants in so many other ways.

Water plays an essential role in photosynthesis, the process by which plants make their own food. This is not the 'food' we give plants when we fertilize (nitrogen, phosphorus and potassium). Through photosynthesis, plants make carbohydrates that they burn for energy so they can complete various biological processes. Water helps the plant produce chlorophyll, the green pigment that is necessary for photosynthesis. Plants need to make new chlorophyll every day. If water is in short supply, chlorophyll is not formed and leaves turn yellow. Water is also involved in the photosynthetic process itself. Remember that formula for photosynthesis that the science teacher showed you in biology class? Don't stop reading, I won't show it to you here. Instead, I will tell you what it means: carbon dioxide molecules and water molecules, in the presence of light energy captured by chlorophyll are converted into sugar (carbohydrates) and oxygen molecules. So, no water, no carbs, no food (and also less oxygen for us to breathe).

Water also plays an important role in growth, partly because of its role in photosynthesis, but also because it is needed to help with the development and expansion of new plant parts. Trees form their leaf buds for next year in the current summer. If there is a lack of water during summer, bud formation will be affected, so that fewer buds may be formed and those that are formed may be smaller than normal. So, watering your tree in the summer not only keeps in

from wilting, it also helps with bud production for next spring. Watering is an investment in the future growth of that tree.

In a dry season, roots are at risk for damage. Roots that have been cut during construction have been damaged. A tree that is dug from a nursery field and planted in a new location has suffered root damage. In all of these cases, the tree will need to produce new roots. Usually, the first question people ask in these situations is “Should I fertilize?” The answer is “No”. Water is the essential ingredient for root growth. We should tend to that need first and foremost. Water is needed so the remaining roots can keep supplying water to the tree, but it is also needed for the tree to develop new roots and expand its root system. The carbohydrates made through photosynthesis (remember that takes water too!) help with new root growth. We can consider if fertilizer is appropriate at a later date.

Water is also important in flowering and reproduction. Water is essential for the development of leaf buds, and it is equally important for the development of flower buds. Water also plays important roles in the development of fruits (fig. 8) and seeds. When a fruit starts to grow, plants start to send lots of carbohydrates to that fruit. Fruit production is a high priority on the list of plant parts that need carbohydrates. If water is lacking and carbohydrate production (photosynthesis) is decreased, fruits and seeds may fail to develop or may develop poorly. Also, fruits that are juicy, need water to make them so. You can’t get a good watermelon without water.



Figure 8 Fruit won't develop well without water.

So, when we water our plants, we are doing so much more than just getting them through a dry spell. We are helping them carry out their day-to-day biological functions and helping them to grow and develop for the future. Watering your tree today is an investment for tomorrow.



[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 Julia Baker, 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 .

Copyright © 2026 The Morton Arboretum

2026 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 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.

2026.1	April 3	2026.7	June 26
2026.2	April 17	2026.8	July 10
2026.3	May 1	2026.9	July 24
2026.4	May 15	2026.10	Aug 7
2026.5	May 29	2026.11	Aug 21
2026.6	June 12	2026.12	Aug 28
Anthraxnose on shade trees	6	Elm flea weevil	3
Aphids, woolly	4	Euonymus webworm	5
Aphids on native plants.....	9	European pine sawfly	2
Apple scab.....	6	Fallen leaves	7
Azalea lace bug	4	Fall webworm	8
Bagworm	5, 12	<i>Ficaria verna</i>	1
Bishop's weed	4	Four-lined plant bug	5
Black knot.....	2	Frost/freezing damage	4
Black Snakeroot	6	Fungicides, timing	1
Blight, the truth about	11	Gall, ambrosia	11
Blossom-end rot.....	11	Gall, ash-midrib.....	5
Boxwood blight or something else	2	Gall, elm sack	4
Boxwood leafminer.....	3, 4	Gall, goldenrod bunch	11
Boxwood mites	3	Gall, goldenrod fly	11
Boxwood psyllid	3	Gall, maple bladder	4
Brown marmorated stink bug.....	12	Gall, oak-apple	5
Bur oak blight.....	8	Gall, oak-lobed.....	11
Butterweed	6	Gall, thistle stem.....	11
Canker	8	Gall, witch-hazel cone.....	4
Cedar-rust disease	3, 5	Garden cleanup and native plants.....	2
Cicadas, annual	8	Garlic mustard	2
Cleavers.....	4	Giant hogweed or cow parsnip.....	7
Crabgrass preventer	1	Golden ragwort.....	6
Creeping bellflower.....	2	Goldenrod is a good guy.....	10
Cytospora canker	3	Ground cover diseases and more.....	3
Eastern tent caterpillar	2	Grubs, white	7, 10
Egg masses and more	1	<i>Guignardia</i> on <i>Aesculus</i>	7

Helleborine.....	8	Stinkhorns.....	6
Herbicide damage	8	Tar spot of maple.....	11
Home invaders	12	Tools you can use	1
Hydrangea leaftier	3	Tussock moth.....	7
Indicator plants, what they tell us	1	Using growing degree days.....	1
Japanese beetles.....	7	Viburnum leaf beetle.....	2, 6, 7, 10, 12
Leaf miners.....	7	Weather, dieback and canker.....	8
Leaf spots	11	Weather, climate and water.....	1
Mealybug destroyer	7	What happens when we water.....	12
Melting out of lawns.....	10	Zimmerman pine moth.....	8
Milkweed beetle	9		
Milkweed bugs.....	9		
Mushrooms and wood rot	10		
Next season is now	12		
No-mow May	3		
Oak wilt...or not?.....	8		
Peach leaf curl.....	4		
Pestalotiopsis on arborvitae	2		
Physiological yellowing	9		
Poison hemlock.....	3		
Pokeweed.....	5		
Powdery mildew on ninebark.....	4		
Remontant flowering.....	9		
Rhizosphaera needlecast	3		
Rose plume moth caterpillar	5		
Rust on buckthorn.....	5		
Rust, pear	7		
Sawflies	5		
Sawfly, oak slug.....	9		
Sawfly, roseslug.....	5		
Scale, cottony maple.....	7		
Scale, cottony maple leaf.....	7		
Scale, euonymus	4		
Scale, magnolia	1, 9, 12		
Scale, oystershell.....	4		
Seasonal needle drop	12		
Selecting Native Plants.....	6		
Septoria leaf spot on dogwood.....	9		
Slime molds.....	6		
Spittlebug	5		
Spongy moth	2		
Spotted lanternfly.....	2, 8, 10		
Stickseed	6		