Plant Health Care Report

Scouting Report of The Morton Arboretum

May 30, 2025 **Issue 2025.5**

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?

Black locust (*Robinia pseudoacacia*) (fig. 1) is in full flower.

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

Insects/other pests

- Wooly apple aphids on elm
- Wooly aphids
- Sawflies
- Rose slug sawfly
- Rose plume moth caterpillar
- Euonymus webworm

Diseases

- Apple scab
- Anthracnose on shade trees

Weeds

- Cleavers
- Butterweed and golden ragwort

Native Corner

- Selecting native plants

Figure 1 Black locust (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 5/29/2025*	St. Charles reporting station (north)	Champaign reporting station (central)	Carbondale reporting station (south)
2-inch, bare soil	78.8	74	76
4-inch, bare soil	71.1	70.2	74
4-inch, under sod	68.2	70	71.2
8-inch, under sod	63.1	66.5	69.1

* 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 (thru 5/29)	3.73 (whole month)	4.16 (whole month)
June			
July			
Aug			
Sept			
Year to date	12.06 (thru 5/29)	15.8 (thru May)	14.13 (thru May)

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

The historical average (1937-2024) for this date at The Morton Arboretum is 338 $GDD_{50.}$ 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 5/29/2025	GDD as of 5/30/2024	GDD as of 5/30/2019	GDD as of 5/29/2014
Carbondale, IL*	965	1188	872	783
Champaign, IL*	677	831	602	614
Chicago Botanic Garden**	No report	512	231 (5/29)	303.5 (5/28)
Glencoe*	114	279	134	No report
Chicago O'Hare*	439	694	376	433
Kankakee, IL*	478	678	440	483
Lisle, IL*	465	701	398	No report
The Morton Arboretum	No report	524	302	340.5
Quincy, IL*	738	893	631	648
Rockford, IL*	418	596	317	351
Springfield, IL*	722	906	642	644
Waukegan, IL* (60087)	273	514	252	328
Waukegan, IL* (60085)	329	582	288	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
400-500	Pine needle scale	Crawlers emerging	Feeding on sap
450	Boxwood leafminer	Adults emerging	Laying eggs
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

Woolly apple aphids on elm (minor)

Yes, on elms, not apples. Our scouts found woolly apple aphids (*Eriosoma lanigerum*) on an elm. Woolly aphids differ from regular aphids in that they are covered with a little fluff, giving them a woolly look.

Figure 2 Woolly apple aphids on elm

The woolly apple aphid has an interesting story behind it. Back before Dutch elm disease (DED) took down so many of our elms, the woolly apple aphid would use elm trees as an alternate host. On the elm trees, this pest was able to reproduce sexually, while on other hosts (like apple), reproduction was completed asexually, with no males involved (see this link for more info on life cycles). Now with more DED resistant cultivars around, our population of elms is up and perhaps the insect is finding that useful.

On elms, the aphid feeding results in leaves that are curled and distorted. You have to unroll the leaves to find the aphids hiding inside (fig. 2). Like other aphids, they produce honeydew. Eventually, a winged form is produced, and this migrates to the other hosts (including apple and hawthorn).

Management: Control on the elm may not be needed since the population will move on to the other hosts. Because the insects are protected in the curled leaves, insecticide sprays may not come in contact with the insects. There are some predators and parasitoids that can help manage this pest.

Woolly aphids (minor)

Aphids have been showing up on plants, and now, their fuzzy cousins, the woolly aphids, are out and about. In the last article, we talked about the woolly apple aphid on elms. Our scouts have also found woolly birch aphids. There are also woolly beech aphids, but we don't yet have a report on them being out. Both these insects look a lot like regular aphids, except they dress themselves up with a little bit of white fluff. Like regular aphids, they are sap feeders and produce honeydew.

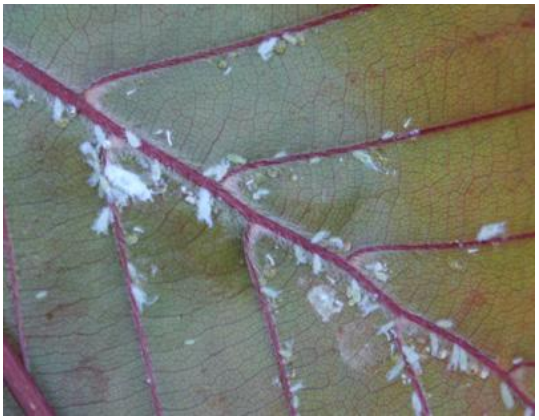

Figure 3 Woolly beech aphid

The woolly beech aphid (*Phyllaphis fagi*) (fig. 3) feeds only on beech trees (*Fagus* spp). It seldom does any real damage to beech trees. It can become a nuisance when populations are high, due to the mess of the honeydew it produces.

The woolly birch aphid (*Hamamelistes spinosus)*, however, has two hosts, birch (*Betula* spp.) and witch-hazel (*Hamamelis* spp.). The insect overwinters on the bark of a birch tree. When spring comes, the female will give birth to live young on the undersides of new leaves. The feeding of the woolly birch aphid causes the leaf to take on a corrugated look at first (fig. 4). Later, the feeding will lead to curling of the leaves, with most of the insects tucked into the lower side of the leaf protected by the curling of the leaf.

In late June, the aphids will go to their other host, witch-hazel. They will lay eggs on the twigs, and these eggs will overwinter on the witch-hazel. The eggs will hatch, and the feeding caused by this generation of aphids will lead to the formation of a spiny gall on the stem. The female produces a number of aphids in the gall, and then she leaves the gall to fly to the birch.

Figure 4 Woolly birch aphid tucked in on underside of leaf

Management: Both of these woolly aphids are fairly minor pests. They can often be washed off the plant with a strong stream of water from the garden hose. Insecticides would not be needed, unless a very high population of insects develops.

Good websites: https://content.ces.ncsu.edu/spiny-witchhazel-gall-aphhid
https://bygl.osu.edu/index.php/node/2143

Sawflies (minor to potentially serious)

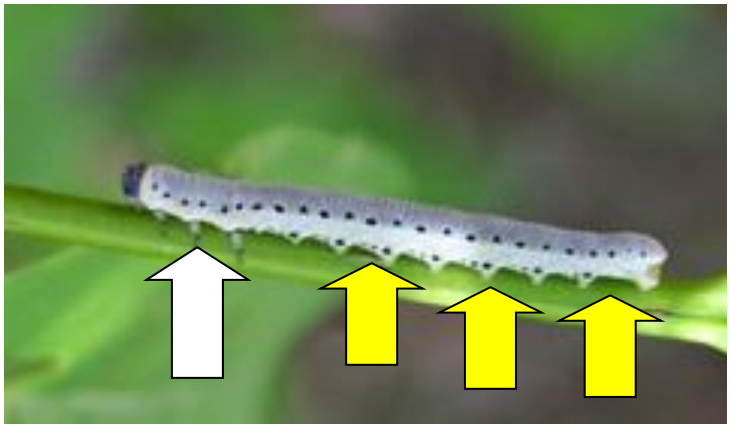

Figure 5 Sawfly larvae showing true legs (white arrow) and prolegs (yellow arrows)

We are getting reports of a variety of different sawflies out and about. European pine sawfly has been out working on pines earlier in the season. We are getting multiple reports of a species of sawfly feeding heavily on hazelnuts plants (*Corylus* spp.) A couple of years ago, we saw a wide range of sawfly species on a wide range of plants. This may be another busy year for sawflies. So, who are they?

Sawflies are a large group of insects, literally hundreds of species. These insects can be confusing. As adults, they often have a fly-like or wasp-like appearance and may go unnoticed. As larvae, they look like caterpillars but are not true caterpillars (this means that *Bacillus thuringiensis* var. *kurstaki* will NOT kill them). Sawfly larvae and caterpillars do differ from one another. While each will have three pairs of tiny legs near the head end of the body, they differ in the number of prolegs at the far end (fig. 5). Prolegs are outgrowths in the abdomen that the insect uses like legs. Caterpillars have five or fewer pairs, while sawfly larvae have six or more pairs. So, to be sure who you have, you'll need to get close and count those prolegs. Caterpillars have hooks, called crochets, on the bottom of their prolegs, so they can hold on tight. Sawfly larvae lack these hooks and can easily be dislodged from their host, so hitting them with a stream of water from the garden hose often gets rid of them. Sawfly larvae vary in color by species. Some are very colorful, while others are not. Some may be identified by spots, spines or other marks.

Sawfly larvae eat foliage, and the severity of their damage depends on the host, the size of the population and general health of the plant. High populations of sawfly can do a lot of damage and will add some stress to the host's life, but generally won't kill the host. Repeated defoliation year after year can lead to decline. Deciduous hosts can often tolerate more damage than evergreen hosts. Healthy plants can tolerate more defoliation than weak plants.

Management: Because sawfly larvae don't have hooks on the prolegs, they can't hold on tight. That makes them easy to wash off with the garden hose or to pick by hand. Although sawflies look like a caterpillars, they are not, so *Bacillus thuringiensis* var. *kurstaki* (Btk) will NOT control this pest.

Good websites: https://www.extension.umn.edu/garden/insects/find/sawflies/
https://bugguide.net/node/view/13142

Rose slug sawfly (minor)

Figure 6 Rose slug sawfly larva and damage

Speaking of sawflies, here is one that is irritating rose gardeners across the region. The rose slug sawfly (*Endelomyia aethiops*) is back again chewing on rose leaves. The larvae are greenish yellow with orange heads (fig. 6) and are about ½ inch long when fully grown. They resemble caterpillars but are not. They are often covered in a little slime that helps protect them from predators. When larvae mature, they lose their slimy coverings. The rose slug sawfly feeds on the upper layers of the leaf, leaving behind the lower epidermal layer and creating a "windowpane" effect. (Other rose pests may make bigger holes, all the way through the leaf.) Around mid-June larvae will drop to the ground to pupate, so this is a short-lived problem.

Management: Minor infestations of rose slug sawfly can be controlled by using a forceful jet of water to dislodge the sawfly larvae or by handpicking. Although this insect looks like a caterpillar, it is not, so *Bacillus thuringiensis* var. *kurstaki* (Btk) will NOT control this pest.

Good website: http://hort.uwex.edu/articles/roseslug-sawfly

Rose plume moth caterpillar (minor)

Figure 7 Rose plume moth caterpillar

The rose slug sawfly mentioned above may have company on your rose plant. Rose plume moth caterpillars (*Cnaemidophorus rhododactyla*) are now at work on roses. This larva is a caterpillar and is approximately ½ inch long. It is light green with a reddish stripe (fig. 7) running from its head to the middle of its body at one point in its life cycle. The adults are present June through August. New larvae are produced in fall and overwinter inside the stems of the rose. They resume feeding in spring.

Plume moth larva has been most commonly found near the tips of rose bushes, damaging the buds and leaves and sometimes creating some webbing. The caterpillar's color blends with the color of new rose growth nearly perfectly, so they may be difficult to find. A lot of frass (insect excrement) is also found in these areas.

Management: Pruning off infested tips may be the best management advice that can be offered at this time. Since this is a caterpillar, *Bacillus thuringiensis kurstaki (Btk)* should be effective, but is best used when the caterpillars are small.

Euonymus webworm (severity is determined by the amount of defoliation)

Euonymus caterpillars (*Yponomeuta cagnagella*), also known as euonymus webworms for the webbing they make, are feeding on euonymus shrubs (*Euonymus* species). Last week, our scout found a good amount of webbing with a number of the caterpillars inside. Euonymus caterpillar can attack various species of euonymus including spindle tree (*E. europaeus*) and burning bush (*E. alatus*). Inspect your plants carefully.

Figure 8 Euonymus webworm caterpillars

These caterpillars are leaf-feeding insects that live in colonies within thin webs at branch ends. The web increases with size as the larvae feed on the leaves and continue to grow. Larvae are pale yellow with black spots (fig. 8), eventually reaching an inch at maturity. The larvae will pupate in cocoons that hang on the branches. The adult moth emerges in June. The moth, known as an ermine moth, is white with black spots.

Management: Small populations can be managed by pruning out webs now and destroying them. *Bacillus thuringiensis* var. *kurstaki* (*Btk*) will control young larvae. This is the value of scouting; find the enemy while he is small. The little guys are always easier to kill. *Btk* is less effective on mature larvae. Thoroughly spray the web and plant with *Btk*, as the insect must eat it in order for it to work.

Good website: http://bugguide.net/node/view/70367

Pest Updates: Diseases

Apple scab (potentially serious)

Apple scab is showing up on crabapples. We are seeing development of the leaf spots. Early lesions look like olive-green leaf spots and will continue to develop into larger, irregular dark spots. Often lesions develop along the mid-veins of the leaves. Infected leaves eventually turn yellow (fig. 9) and drop prematurely on susceptible hosts. This defoliation can stress and weaken the tree, especially if it happens year

Figure 9 Apple scab

after year. The fungus which causes scab (*Venturia inaequalis*) overwinters on fallen leaves and on lesions on twigs. Sunken spots may appear later on fruits, and susceptible crabapples can be completely defoliated in severe disease years. Scab severity is a product of a specific temperature range, duration of moisture on leaves, and host susceptibility. Scab severity is worse in wet springs.

Management: The best way to avoid apple scab is to plant resistant varieties. "Resistant" just means that. In a typical year, a resistant plant won't suffer as much from the disease as a susceptible plant. However, it may exhibit symptoms in "bad" scab years. When shopping for new crabapples, ask your local nursery which scab-resistant varieties they stock. Caring for your trees, such as watering during summer droughts, may moderate effects of defoliation and reduced photosynthesis in affected trees. As the fungus overwinters on fallen leaves and blighted twigs, collecting and destroying them may help reduce the source of inoculum next year. It is too late to treat for this disease now. Spraying for apple scab needs to begin when leaves begin to emerge and should continue at labeled intervals.

Good websites: http://www.mortonarb.org/trees-plants/tree-and-plant-advice/help-diseases/apple-scab

Anthracnose on shade trees (minor in most cases)

We had a rainy spell in March and then rainfall lessened but did not go away completely. Now fungal diseases called anthracnose are starting to show up. Anthracnose is primarily a foliar disease affecting many deciduous trees including ash, elm, oak, and maple. We have had one report of an infection on sugar maple (Acer saccharum). Often, we don't see a lot of defoliation with anthracnose (except for sycamore anthracnose), but we will need to see how the disease develops this year. Defoliation is not fatal, but it will put some additional stress on trees as their "food factories", the leaves, drop off prematurely. The food that trees make for themselves is different from what fertilizers provide, so extra fertilization is not warranted.

Figure 10 Anthracnose on oak

The fungi are able to infect the young, tender leaves, especially during cool and wet spells. The disease is caused by several different fungi. The fungi are host specific, so the maple fungus doesn't infect oak trees, and so on. Symptoms vary with the plant host, weather, and time of year when infection occurs, but this disease often produces brown or black blotches (fig. 10) and curled or twisted leaves (fig. 11). Infection is more severe when prolonged spring rains occur after new growth is produced. Although the symptoms appear in late spring into the

summer, the initial infection took place in the early spring at bud break and before the leaves hardened off. Once the symptoms show up, it is too late for any chemical applications to be effective.

Figure 11 Anthracnose on maple

Management: Cultural methods are usually sufficient to reduce the severity of anthracnose in our region. These include:

• Pruning trees to open up the canopy for better air circulation.

• Maintaining tree vigor with proper watering during times when rain is inadequate.

• In the fall, cleaning up and destroying fallen leaves to reduce the source of inoculum.

Good website: https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/anthracnose-of-shade-trees/

Pest Updates: Weeds

Cleavers (bedstraw) (aggressive)

Samples of bedstraw or cleavers (*Galium aparine*) are coming into the plant clinic (and showing up in my yard too!). This annual weed has tiny white flowers (fig.12) and a slightly sticky surface. It is related to the ground cover sweet woodruff (*Galium odoratum*) but not nearly as welcome. Cleavers is presently flowering and starting to go to seed. Because the plant is slightly sticky and the stem breaks off very readily, it is easy for this plant to get stuck to animals (and gardeners) and this helps to spread the seeds.

Figure 12 Cleavers (photo: Sharon Yiesla)

Management: Since this is an annual weed, chemical control is not warranted. The stem breaks easily, so pulling the plant out of the garden may be the best bet. You won't get the root, but with an annual you don't really need to. This plant needs to be pulled now before the seeds are fully ripe.

Butterweed and golden ragwort

Butterweed is showing up already, so can golden ragwort be far behind? These plants stir up that controversy, can a native plant also be a weed? Butterweed (*Packera glabella*) and golden ragwort (*Packera aurea*) are close relatives and both are native in Illinois. Butterweed is far more common in the southern half of the state than it is in the Chicago region. Yet, we have had numerous reports of it in the past few years. This plant does well in partial to full sun and is reported to prefer a loamy soil, with moist to wet conditions. It is sometimes sold in garden centers. Butterweed (fig. 13) is actually fairly attractive, with yellow daisy-like flowers, that provide nectar for pollinators. It flowers for 6 to 8 weeks. The leaves are interesting too, being deeply and irregularly cut. Those leaves contain alkaloids which prevent rabbits and deer from feeding on them.

Figure 13 Butterweed

Golden ragwort is a cousin to butterweed and has similar yellow flowers that also provide for pollinators. The basal leaves of this plant are oval to almost rounded, with rounded teeth. Leaves higher on the stem are much smaller, narrower and deeply dissected. The leaves also contain the alkaloids.

Are these plants weeds or wildflowers? This is a decision each person has to make. They are native plants, but every native is not desirable (poison ivy is native, too). Weigh the pros (benefits to pollinators) and cons (potential to colonize too much) of each plant. I have linked the name of each plant to a webpage, so you can gain more information to make that decision. I wanted to present these here since they are showing up so much in our area.

Good websites
https://bygl.osu.edu/node/1023

Native corner

Selecting native plants

With the increased interest in native plants, many people are looking for help to select the right ones for their yards. The Morton Arboretum website offers a helpful tool in the form of an online plant selector called Search Trees and Plants. This is a very simple to use tool.

If you want to look at native wildflowers, select the green box that says “Perennials”. That takes all the other plants out of the search. Then click on the white search box that says “more

filters". When the sidebar opens on the right of the screen, click on "Native Locale" and choose one of the geographic locations, like "Chicago area" for example. Go to the bottom of the sidebar and click on "Apply filter". That shows all the flowers native to the Chicago area that are currently on the website. To narrow the field, go back to "More filters" and select another filter that is important to you, like "Size range' or "Light exposure". Each search brings up a list of plants that fit the selected parameters and each plant has its own page of information.

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:
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		