Newsletter of the North Coast Hosta Society
Volume 2 Issue 1
Spring 2018

2018 Calendar

April 28—6:00 PM
Dayton Nursery & Garden Center
3459 Cleveland-Massillon Rd., Norton, OH
Finger Food
Tom Dayton Speaker

May 31—Thursday 6:30 PM Bonfire hot dogs, Emerald Forest Nursery
June 16—June in Cahoon Bay Village Plant Sale
June 20-23—AHS National Convention - Philadelphia
June 30 - Garden Tours and Picnic - TBA
July 13-14—Hosta Tailgate in Columbus
July ??? Hope to have a hosta auction
August 11 - 11:00 Hosta Swap - home of Marilyn and Carl Schmid in Wooster
August 18 or 25 - Craft Project - home of David and Beth Bowe in Chagrin Falls
October 7 - An Afternoon of Hostas and An Array of Desserts - Joint Meeting with Midland. Loyal Order of Moose, Peninsula, OH Speaker Bob Solberg - 1-3 PM
October 20 - Annual Meeting - **OUR 20TH ANNIVERSARY** The Club House at Pine Lakes

Inside this Issue

President's letter

Hello Everyone,

Happy spring! Oops, not quite yet, says Mother Nature!

Many of us will have plants in containers that were stored in sheds, porches or garages that are starting to leaf out. These must be protected until there is no danger of frost, which can be as late as the end of May for us. They must receive enough light during the day, but back inside for shelter if the temperatures dip below freezing, so keep checking the forecast. Keep them evenly moist.

We recently had a second board meeting because we have so many events this year and the Tailgate next year, we need to keep current with all the information that goes into planning. All agreed that we are in great need of an additional fundraiser. We would like to keep doing things such as our free catered annual meeting in October, craft projects, providing hamburgers, hot dogs and refreshments at picnics, to name a few things.

We decided to try to have an auction on July 21st, 2018. We are asking the members to put on your thinking caps to try to find us a venue (free of charge would be preferable). Perhaps your church, place of work, a park near you, yourself, a neighbor, friend, or relative, who has a large property with plenty of parking. If you know of a place such as this, please let a board member know ASAP.

President's letter Continued…

Our next event is Sat. April 28. --See CALENDAR FOR DETAILS - -When you pull into the Garden Center driveway, we will be in the "Owl Barn" to the left. It has a red roof with succulents planted on its front porch overhang.

Owner, Tom Dayton, is a very knowledgeable, interesting speaker. I have been to a few of his presentations and have always learned a lot and am very impressed with how comfortable he is with speaking to a crowd and answering any question. I don't recall him ever having to say, "I don't know".

On May 31st, we will be doing something new at Tom Rabung's Emerald Forest Nursery. We are having a campfire with a weenie roast. It will start at 6:30 pm, but come earlier to shop! I have a feeling that this will be the most popular event of the year… don't miss out!

I look forward to spending some fun times with all of you this summer.

-Barb Rauckhorst, President

SPECIAL - SPECIAL

The club has several *H.* 'Half and Half" that Tom Rabung, of Emerald Forest, has potted up for us that will be available for purchase at the meeting on April 28 for $10.

Tom Rabung was named North Coast Hosta Society Member of the Year. Certificate, presented by President, Barb Rauckhorst, at the February meeting, was awarded for all of the things he has done for the club through his nursery, Emerald Forest, as well as personally through active participation in many club activities. AND being all all-round Good Guy!

World Cup 2018 Hosta Of The Year

Deeply cupped gold leaves reach up to the sky. Corrugated, cupped leaves have nice white backsides that stand out due to the upright habit. Mark Zilis chose this seedling out of Doug Beilstein's seedling patch after winning an auction with the right to choose 20 seedlings - Mark chose wisely!

30" Tall x 48"
Wide Pale purple flowers in summer Parent - 'Komodo Dragon' x 'Super Bowl'

D Beilstein/M Zilis 2006)

Reprinted from Hosta Happenings–a monthly publication of the Wichita Hosta Society courtesy of the AHS Newsletter Exchange

The Central Ohio Hosta Society
welcomes you to the 8th annual

HOSTA TAILGATE WEEKEND 2018

Schedule of Events

'Gemstone' Photo by B. Veldey

Friday - July 13, 2018

- **Zanesville Open Gardens**
  Friday, noon to 4:30
  See garden listings for locations

- **Dinner & Auction at the Elks Lodge**
  Buffet dinner provided by COHS

Dinner	6:00
Auction	7:30

Elks Lodge
2140 Sonora Dr.
Grove City, OH 43123

Protecting Hostas from Frost Damage

By Clarence Falstad III

Hostas are amazingly resilient hardy perennials, but as many know their foliage can still succumb to occasional poorly timed frosts. The damage can leave them unsightly and vulnerable to disease. Symptoms from late spring or early fall frosts are similar. Most hostas are less susceptible to frosts in fall than in spring, and it is easier to protect against early fall frosts. There are several steps we can take to protect hosta plants from frost.

Unlike some tender annuals, hostas can take up to a few days to show symptoms from frost damage, but evidence may also start appearing the night of the frost. The first sign might be stiff, darken, almost brittle leaves. Indications the following morning can be more extreme. Once thawed you may see limp clumps with very dark, crinkled, frozen-lettuce-like leaves.

Expanded but still tightly rolled foliage is more resistant to frost than foliage that is completely unfurled. The tight buds that emerge early in the spring may still be able to withstand temperatures of much less than 32 F (0 C).

Because of the tolerance of hosta leaves, light frosts may not be noticed for a week or more, but could appear as burned leaf margins, leaf tips, or just the higher portion of unfurled leaves. Frost could affect just the surface of a leaf without penetrating to the lower cells. They may show small yellow droplet-sized spots from water freezing on leaves, or just cold water sitting on foliage. In these minor cases the symptoms will manifest as darkened tissue, eventually becoming lighter yellow followed by brown and dried.

Understanding what occurs to the leaf is helpful in knowing what to do about it. As temperatures drop below freezing, water inside the plant cells begins to crystallize and expand. These water crystals are sharp, and the added pressure can rupture the cell membrane and wall. Once this perimeter barrier becomes perforated cell moisture leaks out and the cell dies from dehydration.

The trick to avoiding damage is to prevent cellular water from freezing. Since water with a higher salt concentration freezes at a lower temperature, it's an advantage to establish plants with sufficient cellular moisture. The plant can move water around from the interior of the cells to the exterior, and in so doing protect the cells from desiccation burning or rupturing.

Nutrition is also critical. Although excess nitrogen creates plants with soft growth that is more susceptible to frost, higher concentrations of potassium and phosphorus have proven to be an advantage in frost and winter tolerance. Potassium is also needed to control cell moisture and build strong cell walls.

Healthy established plants can tolerate temperatures of 28° F (-2 C) for short periods of time. Longer periods of several hours at the same temperature injure leaves.

Steps to prepare plants for frost damage

Prevent damage by selecting less susceptible hostas. Some early emerging hostas varieties are notoriously prone to late spring frost damage, i.e., 'Lancifolia', *H. Montana* 'Aureomarginata' and 'Sagae'. Many gardeners have also noted that plants with lighter colored foliage are more susceptible to frost.

Select protective garden locations. Do not plant in low garden elevations that collect cold air. Areas where the soil may warm up faster and hostas may emerge earlier such as an open, south facing hillside are more likely to be hit by late spring freezes. Locate susceptible early-emerging hostas in micro-environments that do not get direct sun-shine in the early spring. This will prevent the sun from warming the soil, thus slowing emergence and unfurling of foliage until air temperatures can be more easily main-maintained above the freezing point. If direct shade like that of a building is not possible, loose mulch spread liberally around the area will have about the same effect. The mulch can be removed once the leaves are poking through it.

Hostas in above ground containers tend to emerge ear-earlier since the soil in the pot will warm up earlier with air temperatures. Keep plants mulched in early spring whether in pots or directly in the ground. Pots submerged in soil or mulch are less prone to the earlier warming.

Keep the plant well fertilized with phosphorus (the second number in a fertilizer sequence) and especially potassium (the last number). Do not use excessive nitrogen fertilizer later in the season; in most gardening regions fertilizers with the first number higher than 3 after July 15th would be excessive for what is necessary for healthy plants.

Steps to avoid forecasted frost

Lay a cover directly over the plants. Preferably it should not be in contact with the leaves. Leaf tissue directly touching the cover is more prone to frost damage, especially if using plastic. Staking may be required to keep the cover from contacting leaves, or to keep it from crushing young tender spring foliage.

The purpose of this covering is to prevent the loss of radiation cooling, or the heat in the ground from going up and

Protecting Hostas from Frost Damage continued

may require extra staking, especially for softer hosta leaves in the spring. Wooden stakes, lawn chairs or inverted, extra-large, plastic pots selectively placed over favorite hostas for additional protection make effective structures for sup-porting insulation. In the fall, taller scapes, or even very tall bent over scapes can help support covers.

Reemay® cloth is a very light and effective commercial frost cover. One of its advantages is that it allows enough light transmission to be left on hosta plants for a few weeks with no apparent detrimental effects. This spun-bonded material is also thin enough so not to hold water, and because it is a polymer it will not hold moisture and become moldy. Normally a single cover layer can provide 2 to 7 degrees of protection. Covers of plastic tarps or sheeting are not as efficient as newspaper, which is not as good at insulating as woven material such as bed sheets. Cardboard boxes make excellent frost armor, but metal cans are not advised. Plastic pots used in container-growing plants can also be used. Those pots with drainage holes may need to be plugged with newspaper for additional protection.

Two layers, such as a large plastic pot with an additional top layer of burlap, may guard against even lower temperatures. If plants are not too tall a few handfuls of dried tree leaves can provide yet more protection when covering the foliage.

Water is also effective in many ways. Keeping your garden well watered early the morning before a frost may actually allow for greater radiation warming from the sun (if your hosta beds get direct sun). A dry garden will hold less heat than a wet garden. Irrigating during low-temperature hours can also help. The warmth in the water can warm the foliage and surrounding air. Although evapo-ration of water takes energy and will cool the surrounding area, water releases a tremendous amount of heat as it freezes. Since hostas can tolerate (especially mature fall foliage) some temperatures below freezing, the heat given off during the freezing process can provide additional warmth as well. If you are not able to water your garden continuously during forecasts of frost, even short intermittent periods of a few minutes irrigation during the most critical period will help by keeping water on the foliage.

If your hostas are damaged by early fall frosts it is usually not critical, and you may just be able to do a normal fall clean up. If the frost is quite early however, it may affect next year's growth. John Kulpa (Detroit, MI) discovered that mowing off foliage early to get a jump on his fall cleaning caused his plants to be smaller than they had ever been the following season. The danger here is that the plants would normally be sending the nutrients and starches from the leaves back into the crown for winter storage. If leaves are damaged, frozen or removed too early it may prevent the plant from stowing its needed reserves.

Plants injured by late spring frosts are more devastating but seldom are life-threatening for the clump. Most older plants have secondary eyes or secondary flushes that can develop if the entire first flush is destroyed. However, plants will not be as large as they would if the first flush was undamaged. The larger concern is not the actual frost damage but some secondary bacterial or fungal infection that may begin in the damaged tissue and not be arrested before the entire clump is killed.

To protect against secondary diseases the foliage should be cleaned down to healthy tissue if the injury is extensive. Some hosta growers cut the damaged leaves off at the ground or even run over them with a lawn mower. When cutting even damaged tissue be careful not to spread other diseases or hosta viruses. The foliage can be picked off by hand, but tends to be rather slimy. Leaving extensively damaged frozen leaves on clumps to dry can restrict the new flush of leaves from emerging causing trapped or distorted growth. If the injury is limited to the tips of the leaves or small spots and the foliage has not fallen down on the ground, you may allow the foliage to dry up on its own and just monitor the plant for other diseases.

We are still learning about frost or cold tolerance differences among hosta cultivars. Plants pre-conditioned to cold are frequently better adapted to survive early fall frosts with less injury. Spring tolerance can be the result of how emerged growth is. However, in general, hostas with lighter colored foliage and those white or yellow portions tend to be more susceptible to frost. Even so, we can still take several actions to ensure a healthy and happy hosta garden.

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Root and Leaf Nematodes

This article is reprinted from the American Hosta Society website under Education/Pests/Nematodes

Many different problems can result in very similar symptoms in plants. For example, sun scorch, fungal disease, bacterial disease, nutrient deficiency may all result in interveinal chlorosis and later necrosis. It is very important to take additional steps to determine the primary cause. Secondary fungi could move into almost any damaged tissue so confirmation steps are critical for an effective pest and disease management strategy.

To diagnose foliar nematodes, first, realize that you can see them. The best way to confirm their presence is to break or cut open the leaves showing symptoms (necrosis and/ or chlorosis between the veins). Put some water on a piece of clear glass or a clear glass dinner plate (or Petri dish). Let the cut edges of the leaves stay in contact with the water for 10- 30 minutes. Then back light it (hold the glass over a lamp so the light shines through the water and leaves). You will see the very tiny nematode snaking and swimming out of the leaf tissue. If you have a dissecting scope, focus on the bottom of the water because the nematodes will "settle out". Foliar nematodes are a serious problem and require much more extreme measures than a foliar fungal disease. For this reason it is very important to CONFIRM their presence in your hosta by actually seeing the creatures. A good pair of reading glasses or a magnifying lens will help if you can't quite make them out with the light alone.

These worms live and over-winter in the plant and not in the soil. They are short lived outside the plant tissues. Yes, they are spread from plant to plant by rain and irrigation, thus over head watering spreads them faster and farther than drip irrigation. They have been found to be present in every area of the country and probably world where hostas are grown and are not killed by winter's cold unless the plant is killed. Hostas are not their only host as they are found on many shade perennials, ferns, bulbs and even some woody plants.

If you have a large collection of hostas you probably have some infected plants. In the garden, the symptomatic brown area of dead tissue between the leaf veins occurs after the worms have reached the leaf surface and have probably been carried by water to the hosta next door. The brown color is actually a secondary fungus infection. Symptoms begin to appear in mid to late June in the Southeast US (about 3 months after emergence) in August in the Midwest and maybe as late as September in Michigan and Minnesota. If you stress your hostas in the summer, you will stress the worms and their population will be reduced and symptoms may not appear. If your hostas are all fed and watered throughout the summer and are actively producing new foliage then the nematode population will also increase at a high rate all summer.

If you find nematode damage in the garden...

1. Remove all plants, hostas and others, which show symptoms from the garden. We put them in black plastic bags and take them to the dump. Also, remove their next door neighbors up to a 6 foot radius away since they are probably infected especially if they were touching the infected plant. There is no need to treat the soil since the worms are in the plants not in the environment!!! In two to three years your garden could be virtually nematode free.

2. If this is too extreme, you can "cook" the hosta clump or a piece of the plant. This will kill the nematode eggs in the plant. To cook, use only dormant hostas, I do this in February, about a month before emergence. You can do this in the kitchen sink with tap water and a good thermometer. The proper cooking time is somewhere between 120 °F for 20-25 minutes to 130 °F for 10 minutes. Try doing different pieces of the same hosta at several bracketed temps and times. The lethal temps and times for hostas are very close to these "recommended" ones, thus you will kill all the roots on the hostas and maybe the whole plant. So pot them up and re-grow the roots and put the plant in the ground in August.

Continued next page..

3. If you do not want to throw infected hostas away or heat treat them then you can choose to live with them. (Pesticides are not really an option. They kill worms but not eggs thus they must be used continuously over a long period of time to exhaust the eggs in the plant. A few may be effective but are not currently labeled for homeowner use.) If you choose to have an infected garden then please do not bring any of your plants to auctions and do not give them away with out cautioning, "These hostas may have nematodes."

Pictures were previously on the Hosta Library. Photographer unknown.

One final word: There is a difference in acceptable nematode tolerance between the home gardener and the nurseryman. Hosta nurseries should guarantee their hostas to be "pest free". That means no hostas that "may have nematodes" should be sold. Most hosta nurseries work very hard at this.

Combatting Foliar Nematodes: Suggested Protocol Using NEMAKILL®

Warren I. Pollock
Glen Mills, Pennsylvania

The American Hosta Society Foliar Nematode Research Project is now completed. Two articles on the studies and findings were published this year in *The Hosta Journal*(*THJ*). Cindy Deutekom and Rob Mortko, the current and previous AHS Vice President Genus Hosta, respectively, who have been directly associated with the studies, authored a progress report in the Spring 2016 issue (47[1]:10-11). And Prof. P.S. Grewal and Dr. R. An, the principal researchers at the University of Tennessee in Knoxville (now at Univ. of Texas Rio Grande Valley), authored a final project report in the Fall 2016 issue (47 [2]).

For most gardeners, probably the most important findings of the studies are the following:

- Foliar nematodes (*Aphelenchoides fragariae*), microscopic worm-like animals, overwinter as juveniles and adults in the soil, dry leaves and on dormant buds (crowns) of a hosta. They do not overwinter in the crown or roots, nor do they overwinter as eggs.

  As the soil warms in spring, under humid/wet conditions, overwintering nematodes move upward in thin films of water on the outer surfaces of petioles and leaves, eventually invading leaves. Once inside leaves, they feed on tissue, resulting in first yellow, then brown and finally black lesions (scars) between veins. They can exit the leaf at ruptured scar tissue and spread to other plants nearby by rain/overhead watering.
- Treatment of dormant hosta buds while the plant is in the ground with either boiling water or NEMAKILL® solution in the spring can significantly reduce foliar nematode infection in the leaves in the subsequent and fall seasons.

  Hot water has been a recommended treatment for many years. Several *THJ* articles in the past discussed submerging an entire infected hosta clump—roots, crown and leaves—in 120°F water for 15-20 minutes. Unless done exactly and with extreme care, the live plant can be badly damaged, even killed.

NEMAKILL

NEMAKILL is an organic liquid containing 32% cinnamon oil, 8% clove oil, 15% thyme oil and 45% inert ingredients such as fatty acid salts, i.e., horticultural soaps, and water. It is manufactured by ExcelAg, Miami, Florida (www.excelag.com). The distributor for the smallest size container, 1-quart, is The CISCO Companies in Indianapolis.

www.ciscoseeds.com/grow7
1-800-888-2986 X310: Kathie Lawrence

NEMAKILL is a contact nematicide. It is not a systemic nematicide. That is, NEMAKILL is not absorbed by the plant and therefore does not kill nematodes inside the leaves. So, if you apply NEMAKILL to hosta leaves already containing foliar nematodes, these nematodes will not be killed because the nematicide is not in contact with them. Effective treatment with NEMAKILL occurs when the hosta is dormant and nematodes on the dormant buds are exposed to the nematicide.

Continued next page...

NEMAKILL APPLICATION CONTINUED…

For treatment of hostas, a dilute solution of NEMAKILL is applied. Instructions on the container are: 1 tablespoon (0.5 fluid ounce) per 1 gallon water. However, this makes a solution less than 5% (v/v)—which is the concentration Grewal and An used in their studies. To make a 5% solution, mix 4 teaspoons of NEMAKILL per 1 gallon water.

The 2016 *THJ* articles do not describe a comprehensive protocol for applying NEMAKILL. Based on discussions with DVHS president Dave Teager, a member of the project's scientific committee, and DVHS member Eve Thyrum, who is test treating a severely infected hosta, the following is suggested. Note the procedure requires repeated applications during the year and treatment for several consecutive years.

APPLICATION PROTOCOL

1. **LATE SUMMER.** If foliage has unsightly nematode scaring, remove and carefully dispose of all infected leaves as well as surrounding mulch. **Do not** use for compost; discard as trash. Thoroughly clean hands and tools with hot water and soap.

   Then DRENCH CROWN and SOIL around it with NEMAKILL solution.

2. **FALL.** Thoroughly clear the ground of all dried-up foliage, plant debris and any mulch. **Do not** use for compost; discard as trash. Keep the ground clean throughout winter and early spring.

   After clean-up**,** DRENCH DORMANT CROWN and SOIL around it with NEMAKILL solution.

3. **NEXT YEAR**. Depending on the weather, in late WINTER or very early SPRING, **before buds emerge from the crown**, DRENCH DORMANT CROWN and SOIL around it with NEMAKILL solution. Also, thoroughly soak any pips.

4. **TWO WEEKS LATER.** Depending on the weather, DRENCH CROWN and SOIL again with NEMAKILL solution. Also, thoroughly soak pips and any petioles and leaves.

5. **TWO WEEKS AFTERWARD.** DRENCH CROWN and SOIL again with NEMAKILL solution. Also, thoroughly dose pips, petioles and leaves.

6. **LATE SUMMER and FALL.** Repeat steps 1 and 2.

7. **NEXT YEAR.** Starting in late WINTER or very early SPRING: Repeat steps.

8. **FOLLOWING YEAR.** Repeat steps.

HANDLING NEMAKILL

The manufacturer's instructions recommend applying NEMAKILL early in the morning or in late afternoon.

The dormant crown and surrounding soil must be thoroughly soaked with NEMAKILL solution. This means saturating the ground to perhaps one-inch depth. This may require 1/3 gallon or more of NEMAKILL solution for each hosta.

If the plant is in a container, pour NEMAKILL solution on soil until it runs out the drainage hole. Repeat after 10-15 minutes. Or submerge the container in a vessel containing NEMAKILL solution for one minute.

The label on the container says NEMAKILL is "slightly toxic." Frankly, I don't know what this means. I recommend NEMAKILL be considered a potentially harmful chemical. Proper safety goggles—better yet full face shield—and thick nitrile/rubber gloves—preferably with long sleeves—should be used. Avoid contact with skin, eyes and clothing. Contaminated clothing should be washed before reuse. Unless wearing special boots, avoid stepping or standing on soil or pavement wet with NEMAKILL.

EFFECTS OF NEMAKILL

It is important to note what Grewal and An claimed: NEMAKILL can significantly reduce nematode infection. They do not claim that NEMAKILL can 100% eliminate foliar nematodes in hostas growing in the ground or in containers.

In other words, though nematode infection in a hosta can be significantly reduced with NEMAKILL treatment, remaining nematodes in the plant may still result in leaf scaring. Nematodes reproduce extremely rapidly. Several treatments of the dormant crown may be needed to significantly reduce the infection so there is no noticeable leaf damage that year. Even so, there still may be nematodes that overwinter. So in the next year and year after, without treatment there may be leaf scaring again. That is why the protocol requires treatment for several years.

If your hosta foliage criterion is aesthetics, that is, no visible foliage damage, this probably is attainable, but likely requires repeated NEMAKILL treatments. But, if your criterion is a nematode-free hosta (or perhaps even "nearly" nematode free)—and the plant previously was heavily infected and leaf scared, the bar may be too high for a contact nematicide.

Cindy Deutekom (cindydeutekom@gmail.com) is collecting NEMAKILL experiences. Please supply her with details of what you did when and what you observed when. She has a list of questions that need answering; please contact her for details. I suspect a report will be issued when a sufficient number of field experiences are documented. Examination of the information might indicate fewer drenches are needed.

Comments on this article and the suggested protocol are welcome. My email address is giboshiwip@aol.com.

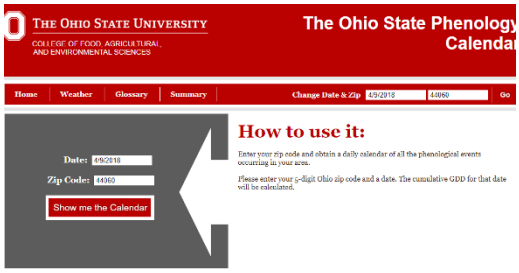
Phenology and Growing Degree Days

By Robin Mann, Miami Valley Hosta Society, 2017 April *News Scapes* *Reprinted with permission.*

If you've ever said, "we're having an early spring and everything is blooming two weeks earlier than normal," you were discussing Phenology.

According to Merriam-Webster, Phenology is defined as "a branch of science dealing with the relations between climate and periodic biological phenomena (such as bird migration or plant flowering)." If you live in Ohio, you are fortunate to have a relatively new tool that quantifies the days warm enough to begin the growing cycle for common insects, weeds, and woody ornamental plants.

The calculation is called "Growing Degree Days (GDD)" and it accumulates GDD units for calendar year days that are above 50 degrees. I'll spare you the math involved in arriving at the unit total, because The Ohio State University provides an **on-line calculator at oardc.ohio-state.edu/gdd.** In the on-line tool, put in your zip code and the calendar day in which you are interested.



The tool then provides you with the GDD total for that day. Then click on "View Full Calendar." Items above the black line have already bloomed/emerged. Items below the black line are coming soon.

Besides being able to scientifically prove your assertion that things are blooming two weeks earlier, the understanding of GDD is important to gardeners for numerous reasons. Recommendations for pest or weed treatment timelines are starting to be made in terms of GDD and what is currently flowering at the moment rather than a particular calendar day. Also, understanding the rate of seasonal warm-up for agriculture and home vegetable gardening is incredibly useful.

By Robin Mann, inspired by a lecture given by Denise Ellsworth, The Ohio State University

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Below are the GDD statistics for April 9 over the last seven years. While the Miami Valley article has 2017 values, you can see 2018 is not "blooming earlier"!!

The GDD for Mentor on 4/9/2018 is 64 GD

The GDD on 4/9 in previous years was:

- 2017: 134
- 2016: 132
- 2015: 39
- 2014: 25
- 2013: 60
- 2012: 220

Species Select Filter	Phenological Event	GDD
Silver Maple - *Acer saccharinum*	first bloom	34
Corneliancherry Dogwood - *Cornus mas*	first bloom	40
Silver Maple - *Acer saccharinum*	full bloom	42
Red Maple - *Acer rubrum*	first bloom	44
Speckled Alder - *Alnus incana ssp. rugosa*	first bloom	52
Northern Lights Forsythia - *Forsythia x intermedia*	first bloom	58
Japanese Pieris - *Pieris japonica*	first bloom	60
MENTOR - *Ctrl-F to search the page*	4/9/2018	64
Red Maple - *Acer rubrum*	full bloom	75

GARDEN GOSSIP: BY CINDY HUGHES

REMINDER: For details regarding hotels, cost, tours, events, etc for the Great Lake region Tailgate, 2018, in Grove City, Ohio, here is the link to all of the information:

https://www.ihostohio.org/glhc/tailgate.asp

Election of Officers will be held at the Annual Meeting in October. If you would like to be nominated or would like to nominate someone else, please contact Denise Mullins at: denisemullins@neo.rr.com

Club Co-Op Supplies

As in previous years we are again offering our members Co-Op items. We have the following items available:

Liquid Fence

Fertilizer

Plant Markers

Slug Bait

Garden Gloves in small, medium and large

Handbook on Troughs

Please call Carl Schmid at 330-264-8815 to pre-order these items to be brought to the next meeting. No individual deliveries.

Membership in NCHS gives the following benefits:

* Members Only prices on Club "special purchase hosta"
* Great prices on our "Hoop House" plants.
* Member prices on slug bait, fertilizer, deer repellant, etc.
* Preferential registration and reduced registration fee for Hosta College
* The club provides meat and beverages at all of our "Potluck" picnics and meetings.
* The opportunity to learn and share information about hosta culture.
* Developing friendships with other people who love hostas .

2018 North Coast Hosta Society Membership

Family Membership $10.00 for one year - Calendar year Jan 1 - Dec 31

NAME_____

STREET _____

CITY _____STATE _____ZIP _____

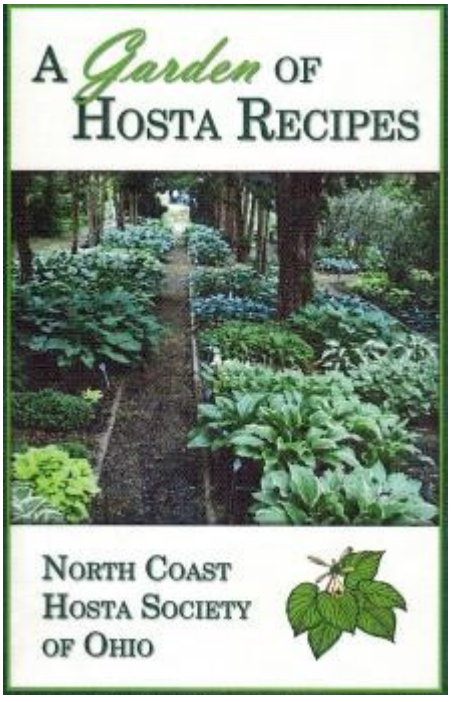
PHONE _____

E-MAIL _____

AMOUNT ENCLOSED_____( )Renewal ( )New ( )1 year ( )2 year

Please list names as you wish on your card:_____

Please send your check made payable to: NORTH COAST HOSTA SOCIETY
Attn: Jim Spuhler
13586 Bridgecreek Circle
Strongsville, OH 44136
NOTE: this form is also available on our website



Invite Other Plant Lovers to Join the North Coast Hosta Society

Check out our Website (northcoasthostasociety.weebly.com) and Facebook page (North Coast Hosta Society).

Sign up for the tailgate committee

OR ANY COMMITTEE …YOU ARE NEEDED

H. 'Frosted Jade'

Photo courtesy of Hall-son Gardens

H. 'Frosty Morn'

Photo courtesy of Plant Delights Nursery

Officers:
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Vice President: Mike Kovach
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