Green Thumb Prints

Newsletter of the Hancock County
Master Gardener Volunteers

Gardening is our Passion . . . Education is our Purpose

December 2018

Next Meeting: Thursday, December 13, 2018 Christmas Potluck at 6:00 p.m. Please bring a dish to share.

Table of Contents

Coordinator's Corner	pg.	2
Hancock County Master Gardeners Meeting Minutes	pg.	3
Master Gardeners Do It Again!	pg.	4
Calendar of Events	pg.	. 5
Techniques for Drying Herbs	pg.	14
Mealybugs	pg.	17
Amaryllis	pg.	19
A Low Salt Diet		

Coordinator's Corner

This will be my last message to you as your MGV Volunteer Coordinator. The new year will bring us new leadership and, hopefully, many new MGV interns to energize and provide many years of active leadership.

In March 2013 when I first became Volunteer Coordinator after serving 11 years as your president, I wrote the following comments in my first "Coordinator's Corner",

"What an honor it is to be able to serve as the volunteer coordinator of the Hancock County Master Gardener Volunteers. I am proud to be a part of this organization and enjoy being a volunteer educator for OSU Extension. My goal is to help each of you to have this same love for horticulture and for sharing your expertise with others"

It has been my love of horticulture and learning and teaching about it that has been my biggest joy as a Master Gardener Volunteer. I want to thank each of you who have made this organization so much fun and so rewarding. I especially want to thank Marilynn Beltz for working with me as either the Coordinator or the President for the past seven years. Her leadership and energy have provided us with our booths at the Home Show and the Fair over these years, as well as her leadership at the Wreath Classes, Let's Go Gardening, Christmas Potluck, Recognition Banquet, and many other areas.

I want to thank Rose Morrison for agreeing to take the leadership role as President, and both Marilynn and I pledge our support to her in the years ahead. Ed Lentz will tell us who the new Volunteer Coordinator will be at the December Christmas Potluck and we all need to give this person the same respect and support that you have given to me over these years. Our best years are ahead!

I look forward to continuing my role as a State "Ask-A-Master Gardener" participant and to continue helping with the questions that come into the OSUE office.

Best Wishes to all for a peaceful and memorable Christmas Season.

Bill

HANCOCK COUNTY MASTER GARDENER VOLUNTEERS

MEETING MINUTES

November 2018

Marilynn Beltz called the meeting to order at 7:00 p.m. following a brown bag presentation by Doris Salis on New Zealand Flora. Twenty-four Master Gardeners were in attendance.

Marilyn introduced our Vice President Noreen Walters who oversaw the election of a President and Treasurer. Rose Morrison was elected President and Ann Woolum was elected Treasurer. Their term begins on January 1, 2019 and run for two years.

Bill Jones presented intern Betsy DeFransesco with her MGV certificate.

Secretary's Report: Minutes from the October 11, 2018 MGV meeting were accepted.

<u>Treasurer's Report:</u> Ann Woolum reviewed income and expenses for the month. Her report was accepted by the membership. <u>2019 Volunteer Work Areas:</u> Marilynn reviewed committee areas for 2019. Noreen Walters stepped away from the chair position for our Library Programs. She will continue to lead the organization of our Mother's Day LGG program. Karla Dennis volunteered to Chair our Library Programs.

<u>Newsletter</u>: Linda Casey mentioned that if any members have an interest area they would like to see mentioned in our newsletter please let her know. She will research the area and try to find appropriate articles related to the topic.

Membership: Lynn Farwig reminded everyone to have their 2018 volunteer hours to her by the end of the year.

<u>Community Garden:</u> Linda Leiendecker stated that thus far this season 5031 pounds of produce had been harvested. The produce was donated to local groups in need.

<u>Mugs of Joy:</u> Linda Laux stated that the Brookdale Nursing Home had been selected for the 2018 Mugs of Joy program. The event will occur on December 6, 2018. If you are interested in helping please contact Linda.

Holiday Wreath Classes: Marilyn stated that there was a signup sheet on the back table for volunteers to participate in the classes. She also stated that green cutting would occur on Monday, November 19 with a backup day on Saturday, November 24 if needed. Christmas Potluck: Our December meeting will be our Christmas potluck dinner. The MGV program will furnish the main dish with volunteers bringing a dish to share.

<u>Courier Articles</u>: Laurie Pressel distributed an informative sheet with article topic ideas and tips for becoming a "master writer" of gardening articles.

MGV Training Class: Karl Farwig reported that thus far he had made 38 contacts with 4 paid participants for the February 2019 MGV Training class. The class will meet each Wednesday in February and March. The ideal class size is a minimum of 10 participants and a maximum of 25.

Memorial Gift: Sharon Hammer Baker reported that she had made contact with the Hancock County Public Library related to a memorial gift in memory of MGV Ruth Furiate. The library will be selecting an appropriate book in the near future. The library will send a notice to the family of the gift made by the MGV program. In addition, it will be posted on their website.

Tips & Interesting Things:

Bill shared several points from an article that he had read on why we need spiders. One good point – spiders love flies. Laurie mentioned that she had brought in several gardening items she no longer needed. They were in the back of the room for anyone to take.

<u>Next Meeting:</u> Thursday, December 13, 2018 Christmas Potluck at 6:00 p.m. Please bring a dish to share. The meeting was adjourned at 7:45 p.m.

Respectfully submitted by Cheryl Miller

Hancock County Master Gardeners have done it again!

We have won the mid-sized MGV organization Grow Ohio award for most produce donated to feed the hungry, a \$500.00 award. Many thanks to John and Linda Leiendecker and all who helped to produce and collect the produce that won this award. The City Mission benefitted from our donations.

Twenty-one counties participated in Grow Ohio and reported their produce donations. It was a tough growing year with challenging weather and increased pressure from wildlife. A total of 57,486 pounds were donated to feed the hungry. This provided 47,905 meals.

Thank you for your hard work.

Calendar of Events

December 2018

DATE	EVENT	TIME	COST	LOCATION	BRIEF DESCRIPTION	CONTACT
			<u> </u>			
Sunday, December 2	Wreath Class	2:00-4:00		Hancock County Library	Wreath making class	Marilynn Beltz
Wednesday, December 5	Courier Article - draft due		N/A	The Courier	Article in Dec. 22 newspaper	Laurie Pressel
Thursday, December 6	Wreath Class	6:30 pm		Upper Church	Wreath making class	Marilynn Beltz
Thursday, December 13	Christmas Potluck	6:00 pm	Bring a dish		MGV Christmas Party	Barb Sherman, Marge Miller, Marilynn Beltz
Saturday, January 5	Courier Article - draft due		N/A	The Courier	Article in Jan. 19 newspaper	Laurie Pressel
Thursday, January 10	MGV Meeting	6:00 pm				
Wednesday, January 16	MGV class orientation meeting	4:00 pm	N/A	OSUE Office	Planning class orientation	Karl Farwig
Thursday, January 25	Go / No Go decision				Decision on holding class for new MGVs	Karl Farwig

February 1 - 9	Tandada Foundation special volunteer vacation for OSU Ext MGVs & Friends	9 days	\$1,400 +	Highland Ecuador	Work on various horticultural projects	Denise Johnson johnson.2924@osu. edu 614-292- 6089
Monday, February 4	MGV Classes begin	TBD		OSU Office	Training to become MGV	Any MGV
Tuesday, February 5	Courier Article - draft due		N/A	The Courier	Article in February 23 newspaper	Ann Woolum
Wednesday, February 6	First MGV class			OSUE Office	Tentative 1st class for new MGVs	Karl Farwig
Thursday, February 14	Brown Bag Presentation	6:00 pm	N/A	OSUE Office	TBD	Volunteer Needed
Thursday, February 14	Refreshments for MGV Meeting		N/A	OSUE Office	Provide Refreshments	Volunteers Needed
Thursday, February 14	MGV Monthly Meeting	7:00 pm	N/A	OSUE Office	Monthly Meeting	Rose Morrison
Saturday, February 23	Gardening at your doorstep	10:00 - 2:00	\$45 / \$55	Medina MGVs	Discovering smaller gardens	go.osu.edu/mgvregi ster 330-725- 4911

Tuesday, March 5	Courier Article		N/A	The Courier	Article in March 23 newspaper "Beneficial Insects"	Bob Campbell
Wednesday, March 13	Fostoria Garden Club (Carol Kinn/ Judi Clymer)	Noon	N/A	Kaubisch Library, Fostoria	Spring Garden Makeovers	Tim Brugeman tentative pending another speaker
Thursday, March 14	Brown Bag Presentation	6:00 pm	N/A	OSUE Office	TBD	Volunteer Needed
Thursday, March 14	Refreshments for MGV Meeting		N/A	OSUE Office	Provide Refreshments	Volunteers Needed
Thursday, March 14	MGV Monthly Meeting	7:00 pm	N/A	OSUE Office	Monthly Meeting	Rose Morrison
Wednesday, March 27	Van Buren Lions Club Linda Brinkman (419-299-3710)	6:00 pm	N/A	Kathy's Corner, Arcadia	Spring Garden Makeovers	Tim Brugeman tentative pending another speaker
Friday, April 5	Courier Article		N/A	The Courier	Article in April 20 newspaper	Karla Dennis
Thursday, April 11	Brown Bag Presentation	6:00 pm	N/A	OSUE Office	TBD	Volunteer Needed

Thursday, April 11	Refreshments for MGV Meeting		N/A	OSUE Office	Provide Refreshments	Volunteers Needed
Thursday, April 11	MGV Monthly Meeting	7:00 pm	N/A	OSUE Office	Monthly Meeting	Rose Morrison
Thursday, April 25	2019 Garden Centers Bus Tour	Entire Day	\$30	Pick up at Walmart	Visit Wolf's Bloom & Berries, 4 greenhouses, classes, presentations	Clip e-mail coupon or contact by calling 419-352- 3755
Sunday, May 5	Courier Article			The Courier	Article in May 25 newspaper	Doris Salis
Thursday, May 9	Brown Bag Presentation	6:00 pm	N/A	OSUE Office	TBD	Volunteer Needed
Thursday, May 9	Refreshments for MGV Meeting		N/A	OSUE Office	Provide Refreshments	Volunteers Needed
Thursday, May 9	MGV Monthly Meeting	7:00 pm	N/A	OSUE Office	Monthly Meeting	Rose Morrison
Wednesday, June 5	Courier Article			The Courier	Article in June 22 newspaper	Betsy DeFrancesco
Thursday, June 13	Brown Bag Presentation	6:00 pm	N/A	OSUE Office	TBD	Volunteer Needed

Thursday, June 13	Refreshments for MGV Meeting		N/A	OSUE Office	Provide Refreshments	Volunteers Needed
Thursday, June 13	MGV Monthly Meeting	7:00 pm	N/A	OSUE Office	Monthly Meeting	Rose Morrison
Friday, July 5	Courier Article			The Courier	Article in July 27 newspaper	Linda Casey
Monday, August 5	Courier Article			The Courier	Article in August 24 newspaper	Karla Davis
Thursday, September 5	Courier Article			The Courier	Article in September 28 newspaper	Cheryl Miller

Monday, Nov. 5	Courier Article - draft due	N/A	N/A	The Courier	Article in Nov. 24 newspaper	Tim Brugeman
Thursday, Nov. 8	Brown Bag Presentation	6:00 pm	N/A	OSUE Office	Flora of New Zealand	Doris Salis
Thursday, Nov. 8	Refreshments for MGV Meeting		N/A	OSUE Office	Karla Dennis, Randy Greeno & Lauri Pressel will provide refreshments	Karla, Lauri, Randy
Thursday, Nov. 8	MGV Monthly Meeting	6:00 pm	N/A	OSUE Office	Monthly Meeting and election of officers	Bill Jones / Marilynn Beltz

Friday,	GMO	5 00	420	CFAES Greene	GMO's, Hybrids, &	go.osu.edu/greeneg
Nov. 9	Training	5:00 pm	\$20	County	Heirlooms	mo
Wednesday, Nov. 14	Fostoria Garden Club	Noon	N/A	Kaubisch Library, Fostoria	Fall & Spring Seasonal Color	Tim Brugeman
Sunday, Nov. 25	Wreath Class	2:00 - 4:00		Hancock County Library	Wreath making class	Marilynn Beltz
Monday, Nov. 26	Wreath Class	6:30 pm		Hancock County Library	Wreath making class	Marilynn Beltz
Tuesday, Nov. 27	Pollinator Short Course	10:00-2:30	435	OSU Wooster Campus Fisher Auditorium	Pollination, bee biology, native bee ID, bumble bees, habitat	Register online 614-292-6089
Tuesday, Nov. 27	Wreath Class	6:30 pm		Hancock County Library	Wreath making class	Marilynn Beltz
Wednesday, Nov. 28	Wreath Class	6:30 pm		Hancock County Library	Wreath making class	Marilynn Beltz
Sunday, Dec. 2	Wreath Class	2:00-4:00		Hancock County Library	Wreath making class	Marilynn Beltz
Wednesday, Dec. 5	Courier Article - draft due		N/A	The Courier	Article in Dec. 22 newspaper	Laurie Pressel
Thursday,	Wreath Class	6:30 pm		Upper Church	Wreath making class	Marilynn Beltz

Dec. 6						
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Thursday, Jan. 10	No meeting					
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Wednesday, March 13	Fostoria Garden Club (Carol Kinn)	Noon	N/A	Kaubisch Library, Fostoria	Spring Garden Makeovers	Need Volunteer Contact Tim Brugeman
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Thursday, June 13	Refreshments for MGV Meeting		N/A	OSUE Office	Provide Refreshments	Volunteers Needed

	Thursday, June 13	MGV Monthly Meeting	7:00 pm	N/A	OSUE Office	Monthly Meeting	
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Techniques for Drying Herbs

October 9, 2018 - Author: Christine Venema, Michigan State University Extension

Drying herbs for later use is safe and easy, but different herbs require different methods of food preservation



Many people plant gardens not just for the fun, but also to grow and preserve their own food. For those lucky enough to plant them, a regular gift from the garden is dried herbs. Drying is, in fact, the oldest method of food preservation. Drying also happens to be one of the easiest and safest methods of preserving food for later use.

There are four techniques for drying: using a food dehydrator, air-drying, oven drying and microwave drying. Michigan, with its high humidity, normally requires that herbs be dried using a mechanical means.

To dry herbs you need to expose the flowers, leaves or seeds to warm, dry air. Sun drying is not recommended for herbs because the sun causes the herbs to lose color and flavor.

Harvesting herbs should be done early in the day just after the morning dew has dried but before the mid-day sun. For the herbs, select leaves from plants that are not in flower. The best flavor comes from plants that are in bud stage but have not flowered yet. Do not allow the leaves to lie in the sun after picking because they will wilt and lose flavor. Rinse the herbs thoroughly in cool water and gently shake the herbs to remove the excess water. Do not use bruised, soiled or imperfect leaves and stems because they will have less than desirable flavor.

Food Dehydrator

The best technique for drying herbs is a food dehydrator. It is the fastest and easiest way to produce high-quality dried herbs. Pre-heat the food dehydrator thermostat between 95 degrees Fahrenheit and 115 degrees Fahrenheit.

Once the herbs have been rinsed and the excess moisture removed, place herbs in a single layer on the dehydrator trays. Drying time may vary from one to four hours so they will need to be checked regularly. The herbs are dry when the leaves crumble easily and the stems break when bent.

Air-Drying

While <u>Michigan State University Extension</u> does not normally suggest air-drying, it can be done on a hot, dry (low humidity) day or in a room that is hot and dry with an air current.

Sturdy herbs like parsley, rosemary, sage, summer savory and thyme are the easiest to dry using the air-drying technique. Simply tie the herbs into small bundles and hang them up to dry. Herbs can be air dried outside, but for better color and flavor, indoor drying is best.

Tender leaf herbs such as basil, lemon balm, mints, oregano and tarragon will mold due to their high moisture content if not dried quickly. Try hanging these herbs and herbs with seeds in paper bags with holes in them. Punch or tear holes in the sides of the paper

bag and put together a small bunch of herbs inside the bag. Do not put together a large bunch because the herbs will mold due to lack of air circulation. Close the top of the bag with a rubber band and hang the bag where there will be plenty of air circulation. As the leaves and seeds dry, they will fall to the bottom of the bag.

Oven Drying

Oven drying is an excellent way to dry bay leaf, mint or sage. This technique allows the leaves to be dried individually. To oven dry, remove the best leaves from the stems and place them on a paper towel to allow the towel to absorb the moisture. Do not allow the leaves to touch. Cover them with another layer of paper towel and add another layer of leaves. Using this technique, only five layers at one time should be tried. The oven should be very cool. A gas pilot light furnishes enough heat for overnight drying. The leaves will be flat and retain their color.

Microwave Drying

Microwave drying can be used when only a small amount of herbs is to be dried. Follow the instruction that come with the microwave.

When the leaves are crisp and crumbly between the fingers the herbs are ready for storage. Dried leaves may be left whole or coarsely crumbled for storage. Store the herbs in airtight containers and place the containers in a cool, dry, dark area to protect the color and fragrance of the herbs.

Herbs are yet another gift from the garden to enjoy. Happy herb drying!

This article was published by Michigan State University Extension.

Mealybugs: A Common Pest of Indoor Plants

November 28, 2017 - Author: Bob Bricault, Michigan State University Extension



Multiple life stages of mealybugs. Photo by John A. Weidhass, Virginia Polytechnic Institute and State University, Bugwood.org.

Plants moved indoors for the winter can be a source of insect pests such as mealybugs, so make sure to carefully inspect them.

Prized orchids, citrus trees, jade plants and many other house plants are moved outside each summer where they benefit from better light conditions and decorate outdoor spaces. Once moved back indoors, plants can fall victim to outdoor pests that were brought into the house with them. Some pests become a challenge to manage indoors and often spread to other indoor plants. One of the hardest to

control is the mealybug. It appears as a white, fuzzy substance found on leaves, tender shoots and in the crevices of branches. Like other house plant pests, many find their way indoors on plants they fed on during summer.

You may say, "What is the big deal? If this insect is such a problem, why did it not harm my plant outdoors?" Mealybugs may have not yet built up their numbers to where damage would be noticeable. Outdoors predators and parasites may help keep mealybug populations low. Indoors, without predators and parasites, pest populations can quickly develop and damage plants that we have grown for years.

The adult mealybug is about 0.1875 inch long and covered with a white waxy covering. This insect damages plants by inserting a feeding tube into plant tissue to feed on the sugary sap. Large numbers of mealybugs weaken the plant and may even kill it. A shiny, sticky sap called honeydew is commonly found on branches and leaves where the insect feeds. This shiny, sugary waste from the insect is also a clue that there are sucking insects on the plant.

Ridding your plants of mealybugs is not an easy task. They thrive in crevices between branches in the interior of the plant where it is hard to spray them. Another issue is that one female can lay up to 600 eggs, quickly expanding their population. Once mealybugs are found on a plant, it needs to be isolated from other plants to prevent the infestation from spreading.

The amount of insects on the plant determines your next step. In some cases, the population may be too high and the better choice may be to discard the plant. With smaller infestations, use a cotton swab dipped in alcohol on individual insects, but care must be taken to dab it on the insect and not the plant to prevent damage to plant tissue.

If you choose to spray with an insecticide, make sure it is labeled for indoor use. There are a number of pesticides that can be used to treat for mealybugs. Read labels carefully to see if there are lists of plants that can be harmed by specific products. A good article from the University of Minnesota Extension on pesticides for indoor plants can be found at "Houseplant insect control."

Inspect plants carefully when bringing them back indoors. Continue to monitor them through winter to prevent spread of unwanted pests in your indoor garden. If you do find a pest like a mealybug, isolate the plant right away and determine treatment options,

potential for taking clean cuttings to propagate the plant, or whether to replace the plant. This will insure a healthy indoor garden and plants that last generations.

This article was published by Michigan State University Extension.

Amaryllis provide a dramatic show (and fun to grow!)



Ah. Amaryllis - a favorite plant to give, get and grow around the holiday season! A member of the Lily family, its enormous colorful flowers give us a sense of the tropics during these cold winter days. Amaryllis are fun for anyone to grow - I've given them to

everyone from 4 to 90 year-olds, bosses and colleagues, family and neighbors. They are inexpensive, beautiful and dramatic additions to any home.

Whether the first bulb or the fiftieth, there is high anticipation for the plant owner when the large, bright green bud emerges from

a beefy amaryllis bulb!



'Fantasica' amaryllis



'Picotee' amarayllis



'Striped Amadeus' amaryllis



'Red Pearl' armayllis

Amaryllis may be purchased as bare or planted bulbs, and are prized for their exotic trumpet-shaped flowers born on 1 to 2 foot leafless stalks or scapes. They add dramatic color to homes and gardens, and make wonderful gifts to gardeners from beginners to experts.

Native to Peru and South Africa, the genus *Amaryllis* comes from the Greek word *amarysso*, which means "to sparkle." Bulbs were brought to Europe in the 1700s and have been known to bloom for up to 75 years. Today, most amaryllis are hybrids but are still classified in the genus *Hippeastrum*.

Amaryllis flowers range from 4 to 10 inches in size, and can be either single or double in form.

While the most popular colors are red and white, flowers may also be pink, salmon, apricot, rose or deep burgundy. Some varieties are bicolor such as purple and green, or picotee (having petals with a different edge color).

Selecting, planting and caring for bulbs

Amaryllis bulbs come in various sizes. Whether purchasing a bare bulb to plant or bulbs planted in a pot, the size and condition of bulbs will influence amaryllis performance.

- Select the largest bulbs available for the desired plant variety as they will produce more stalks and blooms the first year. The larger the bulb, the more flowers it will have.
- Bulbs should be firm and dry with no signs of mold, decay or injury.
- It is common to see new growth (leaves, buds) emerging from bare or planted bulbs.
- Choose bulbs with bright green new growth and without spots or visible damage.
- Some bulbs may have an offshoot growing from its base. This will eventually grow into a new bulb and can be removed and planted separately.

Planting

Amaryllis grow best in narrow containers. Containers may be made of plastic, metal, ceramic or terracotta.

- Bulbs should be firm and dry with no signs of mold, decay or injury.
- Select a container that has one or more holes in the bottom and drains easily.
- Good drainage will minimize the chance of bulb or root rot (rotting from excess moisture).
- The diameter of the pot should be about 1 inch wider than the widest part of the bulb and twice as tall as the bulb to allow space for good root development.
- Fill the pot about half full with sterile, new potting soil high in organic matter such as peat moss.
- Set the bulb in the pot so the roots rest on the potting soil.
- The bulb should sit up above the edge of the container.
- Add more soil, tapping it down around the bulb, until one-third to one-half of the bulb remains visible.
- Firm the potting medium around the bulb.
- Set the pot in a sink where it can drain freely and water until the potting soil is thoroughly moist. Allow to drain completely.
- Set the pot on a saucer and place in a sunny window.





Caring for bulbs



Houseplant fertilizer

• Water the plant when the top 2 inches of soil feels dry, allowing the container to drain freely each time.

- Do not let the plant to sit in water as wet soil can promote bulb and root rot and attract pests.
- Fertilize amaryllis each time you water at half the recommended strength when new growth is visible (including on newly purchased bulbs).
- To promote blooming, use a houseplant fertilizer with a high phosphorus content.
 - o Fertilizer packaging always provides an analysis shown in three numbers such as 10-20-15.
 - \circ These numbers represent the percentage of each of three important macronutrients for plant growth: N (nitrogen) P (phosphorous) K (potassium).
 - o In this example, the fertilizer contains 10 percent nitrogen, 20 percent phosphorous, and 15 percent potassium.
- Move the plant out of direct sunlight when the flower buds have begun to open.

After-flowering care



The secret to keeping amaryllis thriving for years is to keep the plants actively growing AFTER they have finished blooming.

- After the flowers have faded, cut them off to prevent seed formation. Seed formation will deplete important energy reserves in the bulb and reduce blooming.
- Do not remove the flower stalk until it has turned yellow.
- A green stem will continue to promote photosynthesis, which creates energy that is stored in the bulb for future leaf growth and flowers.
- If the bulb does not produce a flowering stalk the next blooming period, it is likely that has not stored enough nutrients during the post-blooming period.
- Keeping the plant healthy and growing will promote blooming.
- After your plant has finished blooming, place it in the sunniest possible location indoors. It will continue to grow long, smooth leaves. These leaves will promote photosynthesis.
- Continue to water and fertilize the plant regularly with an all-purpose houseplant plant fertilizer.

Move plants outdoors



Amaryllis plants in pots in different stages of growth

Keeping the plant healthy and growing throughout the summer will promote blooming later in the season.

- When all danger of frost is past in spring, acclimate the amaryllis plant to the outdoors by first placing it in shade or indirect light.
- Gradually move the container to a location or garden bed where it will receive full sun for at least 6 hours daily.
- Select a sunny location on a deck or patio for your potted amaryllis, or just sink the entire pot into the soil in a sunny garden bed.
- It is not necessary to remove the amaryllis from the pot.
- Continue to fertilize monthly with an all-purpose houseplant or indoor plant fertilizer. This will help build up nutrients in the bulb for flower production the next year.
- Amaryllis plants should be brought indoors before the first frost in the fall.
- They will not survive frost or freezing temperatures.

Control blooming

Unlike some other bulbs, amaryllis do not require a rest or dormant period. They will bloom again if allowed to continue to grow. But bloom time can be controlled by allowing the bulb go dormant (stop growing) for a period of time. During this resting period (dormancy), plants use very little of their energy reserves.

- After bringing the potted amaryllis indoors, store the potted plant in a cool, dry, dark location such as a basement or close t.
- The temperature should be around 50-60 degrees.
- Let the leaves become brown and dry before cutting them off.
- Leave the potted bulb in the dark for 8 to 12 weeks. Do not water during this time.
- Inspect the bulb periodically for mold or mildew. If found, treat with a fungicide or consider throwing away the bulb.
- If new growth appears during this time, remove the potted bulb from the dark location and place in a sunny window. Trim off any dead leaves. Water and fertilize as noted above in **After-flowering care.**
- If after 8 to 12 weeks, no new growth has appeared, remove the potted bulb from the dark and place in a sunny location.
- Water and fertilize as noted above in After-flowering care.
 - o This process will force the plant to bloom providing the bulb has sufficient energy to produce a flower stalk.
 - o Usually one or more flower stalks appear first, but occasionally they are preceded by leaves.
- Flowers usually develop in about 4 to 6 weeks from dormant bulbs.
- Blooming can be timed around specific holidays and events.

Repotting amaryllis

Amaryllis plants bloom best when they grow in a container with little extra space (potbound). They require repotting only every 3 or 4 years. The best time to repot them is after they have gone through a dormant period.



Loosen the roots with a knife around the edge of the pot



Gently lift the amaryllis plant and root ball out of the pot



The plant is now ready for a new, slightly larger pot

Pests and diseases

Although there are several insects, mites and diseases that may attack amaryllis plants under greenhouse conditions, they are not as common on amaryllis grown in homes. Careful inspection when purchasing bulbs accompanied by proper care will prevent most insect infestations as well as diseases.

The **narcissus bulb fly** (*Merodon spp.*) may lay its eggs in the bulbs of amaryllis plants that are placed outdoors for the summer.

The maggot larvae feed in the outer scales of the bulb and eventually work their way into the interior of the bulb. The foliage of infested plants may become wilted, yellow and distorted and the plant will eventually die. The exterior of the bulb may appear normal, but will reveal rotting tissue when pressed.

What to do: Because control is difficult, it is best to destroy any infested bulbs as soon as the narcissus bulb fly is identified. Use of insecticides is generally ineffective.

Poorly drained soil or soil that is constantly wet (overwatered) may also attract **fungus gnats**, a type of fruit fly.

Red blotch (*Stagonospora curtissi*) is a fungus disease that may affect both the appearance and the health of amaryllis plants. However, this disease is not usually fatal to the plant.

Red spots or blotches that develop into elongated cankers with red borders may develop on the base of the flower stalks and emerging leaves. The disease is often difficult to diagnose because superficial small red or pink patches may appear on the outside of healthy bulbs. The fleshy layers of the bulb underneath these patches should be white and free of markings. The leaves may become distorted and the flower stalks may break easily making the plants unsightly.

What to do to avoid red blotch:

- Buy healthy bulbs. Carefully inspect amaryllis bulbs before purchasing and do not purchase damaged bulbs or bulbs with cankers.
- Plant bulbs in a clean container with sterile, new potting soil.
- Wipe pruners and stakes used on infected plants with alcohol.
- Care for plants properly (see **Selecting, planting and caring for bulbs**).
- If the disease persists, the bulbs may be treated with a systemic fungicide.

Mary Meyer, Extension horticulturalist and Julie Weisenhorn, Extension educator

A low-salt diet: Critical for our landscapes and waterways



Photo: Julie Weisenhorn, UMN Extension Educator

Snow and ice removal on roads, sidewalks, parking lots and driveways can make getting around Minnesota a lot easier during winter. Improperly maintained, icy surfaces can cause debilitating falls and car accidents, and even create liability issues. But before you pull out your deicing salts to make conditions safer, consider the impact of these chemicals on our plants and our waterways.

How do deicers work?

While regular snow removal reduces the potential for slippery conditions, sometimes ice can build-up and create hazards. Deicing salts are applied onto icy surfaces and reduce the melting point of water to anywhere from 20°F to - 30°F depending on the formulation. This prevents ice from forming.

According to the Minnesota Pollution Control Agency, sodium chloride is the most commonly used product for deicing roads, sidewalks, parking lots, and driveways. Other deicing chemicals include magnesium chloride and calcium chloride, calcium magnesium acetate and urea.

Organic additives like corn molasses, beet juice and even cheese brine have been added to some of these chemicals to improve performance and inhibit corrosion.

Dangers of deicing salt on water quality

While deicers clearly improve safety and getting around in the winter, it's important to maintain hard surfaces properly and use deicers only on critical areas. One teaspoon of salt will pollute 5 gallons of water.

Research demonstrates that runoff from deicing chemicals results in pollution of our groundwater, the source of most Minnesotans' drinking water. Chloride in high amounts affect the oxygen levels and natural mixing of lakes and waterways, and is toxic to fish, aquatic bugs and amphibians.

Excessive use of deicing salts can also degrade concrete, asphalt and natural stone, and corrode metals.



Dangers of deicing salts to plants

Deicing salt harm and ultimately may kill plants. Sodium chloride, the most commonly used deicer in the Twin Cities, causes the most significant plant damage.

Salt can be absorbed by plant roots, causing dehydration, and salt spray can burn turf and foliage especially on evergreens. Sodium causes clay particles in soil to expand, increasing soil compaction, reducing water infiltration and making it hard for roots to grow. Weeds like Canada thistle, however, grow well in compacted soils.

Symptoms of salt damage on plants:

- dried up and brown needles and leaves
- loss of foliage, buds and branches
- premature plant death



Graphic courtesy of the Regional Stormwater Protection Team LakeSuperiorStreams.org

Good solutions to consider

What YOU can do to reduce the need for deicing chemicals:

- <u>Watch this video</u>. Produced by the Mississippi Watershed Management Organization, it offers tools for environmentally friendly snow and ice removal.
- Shovel, scrape and sweep snow often to remove as much snow to prevent ice buildup. Avoid depositing snow onto nearby shrubs as it may contain salts and / or break branches.
- If it's a warm day, let any remaining snow layer on surfaces just melt.
- If needed, apply deicing salts correctly and sparingly to critical areas only.
- o Read the product label and apply the product as directed including at the proper temperature.
- o Do not apply deicers to snow. Remove the snow first.
- o More is **NOT** better! A coffee mug of salt (about 12 oz.) is all that is needed for about 1,000 sq. ft., approximately the area of a 20-ft driveway or 10 sidewalk squares.
- o Spread salt evenly leaving about 3 inches between salt grains. Avoid spilling piles of salt.

• Sweep up any salt grains you see on dry surfaces to prevent it from washing or blowing into plantings and waterways. Save it in a container to reapply later in the season.

Salt-tolerant plants and landscapes

Choose salt-tolerant plants that die back each year for areas along sidewalks, driveways and streets where deicing salts may be used.

Here are some salt tolerant plants:

- Choose lawn seed mixes and sod containing salt-tolerant fine fescues.
- Perennial flowers die back over winter making them good choices along driveways, walks and streets. Replaced each year, annual flowers are also good options.
- Do not plant evergreens along surfaces where deicing salts are used and can kill needles.

This is why it's important to <u>plant trees and shrubs</u> at least 3 feet from driveways and walks where deicing salts are applied. Plant trees and shrubs a minimum of 7 feet from roadways where salt spray may occur from street maintenance.

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IT'S TIME TO...... Rest this month!