Gardening Matters

Master Gardener
Cornell Cooperative Extension

Yates County Master Gardener Newsletter

Summer 2022, Issue 2

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Executive Director's Note

If a person cannot love a plant after he has pruned it, then he has either done a poor job or is devoid of emotion.

Liberty Hyde Bailey

Welcome summer! The vegetable garden is in, the annuals are at home in the flower box. Spring perennials have bloomed, providing encouragement and hope and color through freezing rains, high winds and chilly days.

As we move into the summer warmth of Upstate New York, we face a new world of gardening challenges. We are in an unchartered era of extreme rain events, and long dry spells. This requires a greater forethought and diligence in the husbandry of our gardens and green spaces. We have to rely less on planting zone growing guides, as the environs change. Instead of the standard question (are we a Zone 5 or 6?), we need to be diligent observers and note takers and draw our own conclusions.

We live in a region where one yard is at the top of a hill [lots of rain run-off and more winds] and your friend is in a valley (lots of retention ponds and also tropical microclimates). In the frame of mind of Extension pioneer Liberty Hyde Bailey, we must love and nurture the indigenous soil and environment of our respective gardens. If I cannot grow iris in my shady yard, I will embrace my hens/chicks, hostas and hellbores! I am exploring raspberry canes in a shady corner, against a fence! Lots of rain in your area? Select thirsty plans like greens, cucumbers, zucchinis and squash. Ensure you continue to provide mulch [straw, grasses, etc.] to hold the water like a sponge. Think about developing a rain barrel system to catch roof water run-off. Make sure to have a plan for a potential dry spell: a new watering can, a longer hose, or good sprinkler system on a timer!

Spend time in your garden- take pictures and enjoy the summer transitions. Get out your sun hat (or rain hat) and enjoy your weeding, pruning and dream of summer and fall harvests!

Arlene A. Wilson

Executive Director & Master Gardener
Cornell Cooperative Extension of Yates County

CCE-Yates County has daily office coverage, with 50% working in-person, and 50% working remotely. This includes work within the community (agriculture, gardening, natural resources, youth, and families) using social distancing protocols.

Should you need to reach any of our staff members, visit http://yates.cce.cornell.edu/staff. You can also send us a message via our Facebook page, or call the office at 315-536-5123.

Garden Chat:

Catching up w/ the Yates County Master Gardeners!

What do you do to support pollinators in your garden?

Jan

I am able to keep the boundary of our property wild so it is chock full of native wild flowers that the pollinators love. In my garden I provide early spring and late fall plants, trees and shrubs to keep them happy during the leaning times.

Susan

I've made a little attempt at "no mow" - a 20 by 20 area in yard - it will be fun to see what grows in the grasses - so far buttercups and daisies

Beverly

I look for a variety of flowers as well as milkweed. We leave a large portion of our lake front bank "wild". We are pesticide free as well.

Caroline

I wait to clean up my garden until temperatures are consistently above 50 degrees in the day. Many butterflies and solitary bees overwinter in garden debris and plant stems. By waiting a little extra time, I can ensure that they have been able to wake up and go about their business. Bonus: spring clean up is much more pleasant when the temperatures are in the 50's!

Dixon

I don't mow my meadow (~5 acres, maybe) all season, providing habitat for pollinators as well as meadow-nesting birds like bobolink. I also do not use any non-organic pesticides or herbicides anywhere on my property (with the exception of the occasional use of wasp spray when it really can't be avoided, like when they try to build a nest under the eaves of the chicken coop).

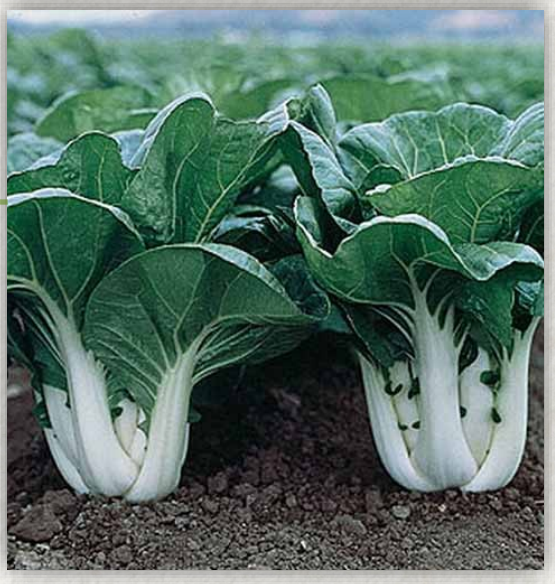
What to do in...

July:

* Put away your planting tools! The hot temperatures make plant establishment tricky. Wait until mid-to-late August to peruse for more plants.
* Prune climbing roses **AFTER** they've finished flowering.

August:

* Early August is a great time to seed fall-producing vegetables. In my personal experience, I've also found that greens seeded in August have fewer weed and insect issues than spring plantings. Great vegetable options for your fall garden include peas, lettuce, Bok choy, mustard, kale, Swiss chard, and scallions.
* Divide and replant iris in August. Make sure to remove any soft or damaged rhizomes.
* If your garden is looking a little careworn, try a little late-season mulching to bring the zing back to your beds. Mulching helps neaten up a garden and highlights the late-season beauty of your border.



September:

* Trowels and planting shovels out! September is a fabulous time to plant perennials, trees, and shrubs.
* Order bulbs for fall planting.
* Begin to move your houseplants inside as the weather cools. As you do so, make sure to check them over for insect pests such as aphids and scale, treating as needed.

Want to be featured in *Gardening Matters*?

If you have any seasonal tips or photos you would like to share, please submit them to:

Master Gardeners/CCE Yates County
417 Liberty Street, Suite 1024
Penn Yan NY 14527

Yates County Master Gardener's Corner

Cheryl Flynn (Master Gardener Volunteer Coordinator)

Spring 2022 Programming Recap

Gardening Matters Day was on Saturday, April 9th in the County Building Auditorium. We had 19 people attend the function and they asked so many questions. It was a great success. Programming was presented by the Yates County Master Gardener Volunteers, our Agricultural Educator, and our Executive Director. The topics were Growing Peanuts in New York State, Companion Planting, Gardening in Climate Change, Growing Apples for Hard Cider, and Everything You Wanted to Know About Pollinators.

This year's **Native Plant Sale** was on Saturday, May 21st at the Penn Yan Public Library Gazebo. It was a beautiful day for our native plant sale and a great location. We had many varieties of native plants, that could be planted in many locations in a garden. The event was well attended and enjoyed by all.

Penn Yan Community Garden Update:

We are growing peppers, garlic, potatoes, and parsnips to donate to Milly's Pantry this year and we have added another four beds for children to enjoy that were donated by the Penn Yan Elks Lodge. Our 2022 Vegetable Variety Garden trial is featuring vegetables with connections to cultures from Central America, South America, the Caribbean, and Indigenous Peoples of New York. We will have a total of 22 beds to be maintained and harvested this year.

If you would like to be part of our gardening family, you can purchase a garden bed for $25.00. This includes: soil, water, and use of gardening tools at the Penn Yan Community Garden For more information, please contact Cheryl Flynn at cj348@cornell.edu.

Pictured (from top to bottom): "Gardening Matters" Day. Master Gardener Annual Plant Sale, and the Penn Yan Community Garden

Soil pH Testing Services

Are you starting a new bed or troubleshooting an older one? Now is a great time to do a soil test. CCE Yates offers free garden pH testing through the Master Gardener program.

Contact us at (315) 536-5123 for more information.

The Squash Bee: Official Yates County Pollinator of 2022!

This May, by popular vote and legislative proclamation, *Peponapis pruinosa,* commonly known as the squash bee, was declared the official Yates County Pollinator of 2022. Squash bees are uniquely tied to human expansion and agriculture. As farmers domesticated squash and began migrating with it farther north, the range of the squash bee has expanded to encompass the extended growing range. Squash bees can now be found as far north as Southern Canada, a pretty amazing feat for a bee. Squash bees are the only known solitary pollinator whose range has been expanded by human agriculture. Farmers today also gain great benefits from squash bees as they are such efficient pollinators of pumpkin. With careful management, some farmers can entirely rely on squash bees to pollinate their pumpkin crops rather than spend money to bring in honeybee hives or bumblebees to guarantee good yields.

Squash bees, like their name suggests, are squash specialists. There are 13 species of squash bees in North America, however, only *Peponapis pruinosa* are found in our region. They are the most effective pollinator of plants in the genus Cucurbita, which includes zucchini, summer squash, winter squash and pumpkins. At first glance, squash bees resemble a small, extremely hairy honeybee. The dense hairs on their thorax collect large amounts of pollen.

Squash blossoms are deep, with large pollen granules. There are also separate male and female flowers. These characteristics mean that squash are entirely dependent upon insect or hand pollination. If the flower isn't pollinated, the fruit will shrivel up and fall off. Pumpkins require at least 16 visits from a pollinator for enough pollen to be transferred to successfully produce single fruit.

Squash blossoms open extremely early in the day and wilt by early afternoon giving each female flower a very short window for pollination. Squash bees have evolved specialized, enlarged eyes which allow the bees to begin foraging well before sunrise, hours before other pollinators are waking up for the day. As the squash blossoms begin to close, male squash bees and unmated females will rest within the wilted flower until the next morning. Mated females dig and maintain underground nests near the base of squash plants, some going as deep as 2 feet down into the soil. Although each female maintains and provisions her own nest, they will nest in groups. After digging her nest, the female squash bee will feed on nectar and then . The squash bees overwinter as larvae underground and emerge in the spring to being the whole cycle over again.

Because of their ground nesting habits, farms which practice no-till may have triple the number of squash bees than farms that utilized traditional tillage methods. Even in tilled pumpkin fields, squash bees are a fairly common sight. For home gardeners that grow pumpkin or squash, keep in mind the squash bee before you till in the fall or spring. Moving to no-till gardening methods protects many native pollinators that may be nesting in your garden.

Sources:

* Cane J (no date) *Squash Bees*, USDA ARS. https://www.fs.fed.us/wildflowers/pollinators/pollinator-of-the-month/squash_bees.shtml
* Cane J. (2018) *Squash Pollinators of the Americas Survey (SPAS*), USDA. https://www.ars.usda.gov/pacific-west-area/logan-ut/pollinating-insect-biology-management-systematics-research/docs/squash-pollination/
* Brochu KK, Fleischer SJ, López-Uribe MM (2021). Biology and pollination services of the squash bee, *Eucera* (*Peponapis*) *pruinosa*. Penn State Extension (Booklet) https://lopezuribelab.com/squash-bee-biology.
* López-Uribe MM, Cane JH, Minckley RL, Danforth BN (2016) Crop domestication facilitated rapid geographical expansion of a specialist pollinator, the squash bee *Peponapis pruinosa.* Margarita M. López-Uribe**,** James H. Cane**,** Robert L. Minckley and Bryan N. Danforth.Proceedings of the Royal Society B Biological Sciences.
* Garvey KK (2012) *Thanks Be to the Squash Bee* University of California Agricultural and Natural Resources https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=8762

No-Mow-May: Learning From Failure

Caroline Boutard-Hunt (Agricultural Educator)

I am just going to come right out and say it: I failed at No-Mow-May. I went into the month with all sorts of good intentions. I lovingly planned the article I would write discussing the process and the beautiful insects I saw. However, much like trying to plan out what sort of parent you'll be prior to actually parenting your child, I found the actual process was very much different from my intentions.

Our grass shot up like a bolt that first week in May and we were about 6 days in when my older child began bargaining for me to cut the lawn. His points were fair- it was difficult to run in as quickly and he thought it looked untidy. I noted out that he preferred going without a haircut, why not give the lawn the same grace period we gave him between shearing sessions? Unimpressed but not willing to talk himself into a trip to the barber, he wandered away.

As the lawn topped about 10 inches, my husband started to look a little stressed about the state of the lawn. For the record, he doesn't generally mow the lawn at anything under 4 inches so he's not committed to our yard resembling a golf course. I finally gave in and mowed about 15 days into May. However, I compromised by mowing as high up as possible, mowing quickly and leaving a large section behind our greenhouse un-mowed. Although I technically mowed, it was similar to how I technically cut my son's hair during the pandemic- you could tell something had been done to it, but it wasn't necessarily an improvement.

Several days after I "mowed", we received a call from an old college friend. This friend was traveling to Ithaca from her home in Maine and wanted to stop by for a quick visit. This friend has also been the director of several botanic gardens since leaving college. I blithely reassured my husband that she would understand "No Mow May". Well, she did her best to appreciate why our yard looked the way it did. It definitely didn't look like the field of flowers I was hoping for, nor somewhere appealing to have a picnic. Our neighbors' neatly mowed patches highlighted the chaos of our yard. The day after her visit, my husband went out and cut it to 4 ½ inches. I didn't object. We had failed in our No-Mow-May experiment and there was no point in prolonging it. I haven't given up completely on modifying our mowing habits to increase pollinator habitat and I have some ideas on how to do a modified version next year.

Most of our pollinator life seemed to be focused on the edges of our garden and in our borders where we had plentiful spring blossoms. My plan for next year is to reserve portions of our lawn for No-Mow-May near the edges of the garden instead of trying to skip mowing the whole yard. We already don't use pesticides on our lawn and mow high and I will be interested to see if we develop new wildflowers over several years of not mowing the same patches of lawn through the spring. Since our lawn grows so fast in May, another option would be to move No-Mow-May to April and commit to not mowing until May 10th. Most years we end up mowing at the end of April so delaying until partway through May might help some of the earlier emerging pollinators. Another idea is to just gradually reduce our lawn size every year, planting more ground covers and plants that provide a wide variety of ecosystem services. I'm already excited for trying a different approach to mowing next summer and I will be sure to share my results, both success and failures, in the future.

Have a gardening question?

Contact us at 315-536-5123, or stop by the CCE-Yates County office and fill out one of our Master Gardener questionnaires!

What To Do With All Those Tomatoes!

Beverly Barnwell (Master Gardener Volunteer)

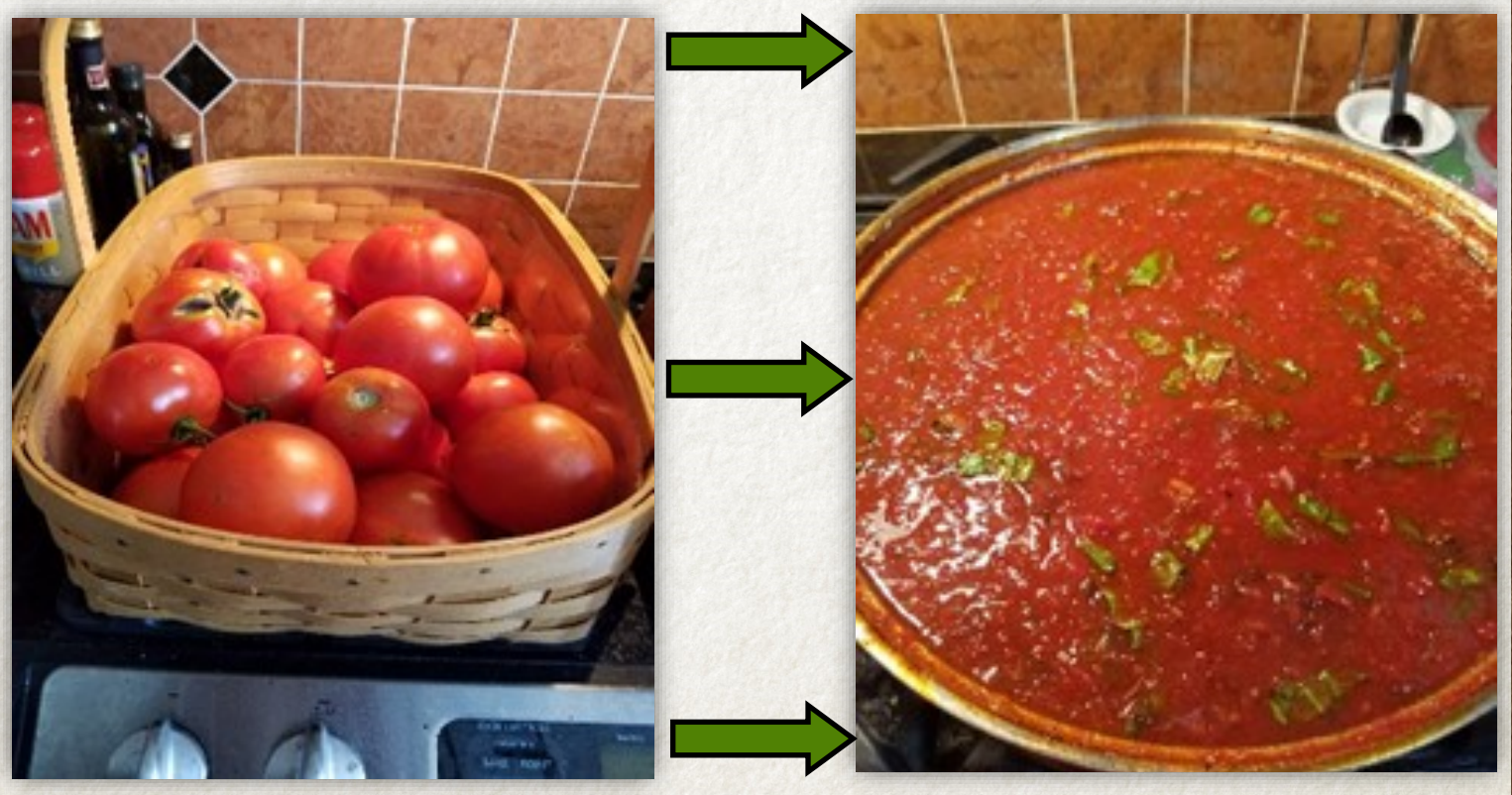
I have grown tomatoes for a long time. In fact, I would help my dad with his garden growing up in Lockport, NY. In my mind, if you are going to have a vegetable garden, tomatoes are a MUST. As an adult, I started growing them in containers on my deck in Branchburg, NJ more than 20 years ago and expanded into our local community garden there within a few years. Today you will see my plants in the Penn Yan Community Garden.

When June becomes July, the feeling is the same each year; When will I see my first ripe tomato? Of course, that first one is always so sweet, and one become many by late July into August – now what? Over the years, I have found ways to keep some of my garden bounty into the colder months. This article will focus only on tomatoes.

First, I donate, and share from my crop (friends and family), but my husband and I cannot possibly eat those remaining. Let me say that I do not can anything, I freeze. There is nothing wrong with canning, just not my preference. For clarity, I grow two types of tomatoes, cherry tomatoes, and everything else. The non-cherry tomatoes are large varieties that have worked well for me over the years.

So, starting with the larger tomatoes, I make a Marinara sauce and freeze in portion containers that work for the two of us on a per meal basis. If you have more people for dinner, grab another container or two. The recipe is simple. Wash and peel your tomatoes and cut into quarters. Add in batches to a food processor fitted with the steel blade and pulse 5 to 6 times to keep a bit chunky. Chop and sauté in a large pan or pot, 1 medium white or yellow onion until translucent. Add 4 to 6 cloves of garlic and a teaspoon of red pepper flakes and sauté for 1 to 2 minutes, add 2 teaspoons of salt, a tablespoon of oregano, stir. Add 2/3 cup of a red wine you would drink and allow to reduce to 1/3. Begin adding the pulsed tomatoes and allow to reduce to the consistency you like for sauce stirring occasionally.

This could take 2 – 3 hours. Taste for seasoning and add ¾ cup of fresh basil (torn). Stir and put the lid on and leave to cool. Ladle into your desired containers and freeze. When it is time to have a container, feel free to add anything you want, meatballs, sausage, mushrooms, whatever you are in the mood for.



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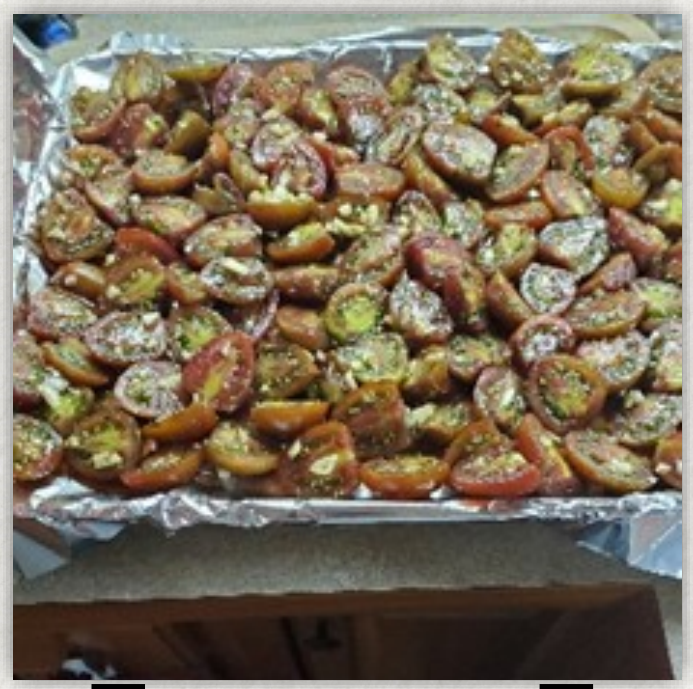
What To Do With All Those Tomatoes!



Cherry tomatoes I do a bit differently because who wants to stand there and peel them, and frankly, I love this option. So, the base of the recipe comes from “The Mediterranean Dish” and I have it in the link below along with a link on cutting cherry tomatoes more efficiently.

* **Quick Oven-Roasted Tomatoes Recipe | The Mediterranean Dish (https://bit.ly/3a2nltr)**

* **Easy Way To Cut Cherry Tomatoes, Grapes, Olives & Cherries (https://bit.ly/3xZOxq5)**

For complete transparency for the recipe, I consider it a guide and use all the tomatoes I have at a given time and I do slice them in half. You can add onion, mushrooms, or any herb. And choose a different cheese if you wish. Note that I do not use the sumac listed. And if you want to use basil, please add immediately after roasting as it will char in the oven.

Once the tomatoes are cool, portion them into bags or containers and freeze.
This has a very different taste to marinara sauce and is great on pasta or as a topping for bruschetta. Now on a cold evening after the warmth of the summer has passed, you can have the taste of the harvest. Add anything you wish to change it up a bit. If you look closely at the last 2 pictures below, I added olives.

I hope you enjoy these options for holding on to the taste of your summer tomatoes in the colder months!

Help Children Create a Gardening Space of Their Own

Karen Welch (Master Gardener Volunteer)

Helping and encouraging a child create their own garden can be rewarding for both parent and child. Not only is it fun, it helps to develop physical skills such as fine motor skills, balance and strength. Children involved in gardening develop healthier eating habits. The planning of a garden can lead to many learning opportunities for a child such as plant life cycles, measuring, weather patterns and insects. Children are naturally curious and, of course, love playing in the dirt! It's real hands on learning. I asked my 10 year-old granddaughter why she likes to have her little garden. Surprisingly, she replied that she enjoys the responsibility of taking care of her flowers (she prefers growing flowers). She has learned a great deal about the importance of regularly watering, pulling weeds, mulching, providing fertile soil, not planting them too close, and picking plants that live in her environment. It is easy to see her pride in what she is doing.

Help your child or even grandchild find a space for their garden in your yard that is agreeable to you both. Encouraging and incorporating your young one's input into the creation of their garden gives them a sense of ownership and they will be more likely to be engaged in the process. Helping to create the space is as much fun for a child as experiencing it after it is created. The important thing is to let the child own the space and bear some of the responsibility of the success or lack of success of the garden. Listen to them about what they want their garden to be.

A garden with a theme can be fun, such as, a pizza garden (growing vegetables that can be used to make a pizza), a butterfly garden (growing plants that attract butterflies), a fairy garden, dinosaur garden or an animal garden. Let the creative juices fly! They can put some of their little toys in the garden that might pertain to their theme. Pinwheels can be used for decorations. A small bench in or near their garden can be used to sit on to rest or read near the garden. Making a scarecrow or decorating stones can be fun activities to keep their interest throughout the summer.

Start small for their first garden so it is manageable. Their garden can be just a small patch in the yard, or even several pots or grow bags. If you have a sandbox that they are not interested in anymore, consider converting it into a small garden. If it is plastic, make sure you drill holes in the bottom for drainage of water. If you have more than one child interested in a garden, consider trying to find them each a spot for an individual garden.

It's easier for a child's small hands to have some child-sized gardening tools. Useful tools include a trowel, watering can, a small wheelbarrow, wooden craft sticks to mark where they plant seeds, and gloves. A Gardening Tool Scavenger Hunt is a fun activity to do with them before they start the garden. Hide the tools and let them find them. If you want them to each have their own tools, mark their name on each before hiding them.

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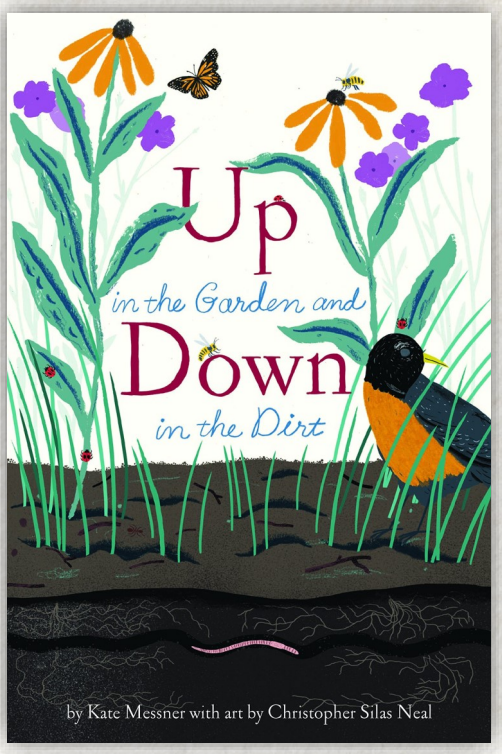
Help Children Create a Gardening Space of Their Own

Some plants are easier than others to grow. Children love to watch seeds come up through the ground. For flowers, sunflowers are fun because they emerge quickly and get so tall. Children can learn how the seeds benefit the birds. Nasturtiums are also easy to grow and come up quickly and their flowers can be added to a salad. Sometimes it is fun to take a child to a garden center and pick out a few flowers that are already started, such as marigolds that are a quick and pretty addition to the garden. Easy and fun vegetables to grow include lettuce, radishes, snow peas, cherry tomatoes, beans, carrots, potatoes, and if you have room, pumpkins. The story, Jack and the Beanstalk, could be read to your child followed by planting pole beans and watching how fast they grow.



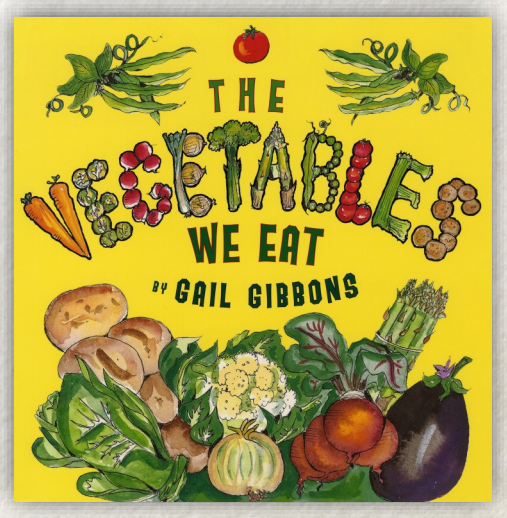
Depending on the age of the child, they will likely need some help now and then. Books can be useful to teach children about the needs of plants such as watering, feeding and weeding. Show off their work and encourage them to give other family members and visitors a tour of their special garden. Take a picture of them in their garden! Children take a lot of pride when their vegetables are brought to the dinner table. Like adults, children like to show off their garden! Most of all, enjoy the time spent with your child and know they are learning important lessons through a home garden.

Recommended Children's Books About Gardening

* Up in the Garden and Down in the Dirt by Kate Messner & Christopher Siles Neal (age 2-5 years)
* From Seed to Plant by Gail Gibbons (age 4-8 years)
* How a Seed Grows by Helene J Jordon (age 4-8)
* Gardening Lab for Kids by Renata Fossen Brown (age 8-12 years)
* The Vegetables We Eat by Gail Gibbons (age 4-8 years)
* Flip, Float, Fly by JoAnn Early Macken (age 6-9 years)
* The Extraordinary Gardener by Sam Boughton (age 3-5 years)

Sources:

* **A Children's Gardening Space-Montessori at Home** - https://www.howwemontessori.com
* **A Kid's Guide to Gardens: How to Create a Whimsical Children's Garden** - https://www.gardeningknowhow.com
* **Gardening With Children**- https://learn.eartheasy.com/guides/gardening-with-children/
* **Why Gardening is a Great Activity For Kids** - https://www.activeforlife.com



Fundamentals of Growing Dahlias

Michell Buschner (Master Gardener Volunteer)

Photo Credit: almanac.com

When to plant

Your tubers can go directly into the ground in the spring when the ground has warmed and there is little chance of frost. One good guideline is to plant in the same time frame as you would a tomato. If you want blooms as early as possible, you can start the tubers indoors in good light about a month before planting time. You will then have a small plant ready at planting time. Dahlias can be planted as late as mid-June in most parts of the country.

Where to plant

Dahlias require a site with good drainage and partial to full sun. Pots are also increasingly popular way to grow dahlias.

How to plant

Most dahlias need to be staked and you may want to plant a sturdy stake before you plant the dahlia. If you put the stake into the ground after the plant is growing, take care to avoid damaging the tuber or root system. Tomato cages can also be a simple approach to staking.

Put the tuber in a hole several inches deep with the "eye" on the tuber facing up. The eye is the point on the shoulder, or crown, of the tuber from which the plant grows.

If you are planting a number of dahlias in the same location, they should be separated by about 1-2 feet to give each plant room to grow.

Protecting your plants from pests

Small dahlia plants are susceptible to slug damage. It is a good idea to manually remove slugs early each morning or to protect them with a commercial slug killer.

Japanese beetles seem to enjoy eating dahlia blooms just when they are ready for a bouquet. The best methods of control is to manually remove the beetles into a bucket of soapy water.

Other insects can become a problem. If you would like your blooms to be "perfect!", you might want to consider using an insecticidal soap or a commercial pesticide. Follow label directions carefully if you choose to do that.

Organic Approach

Dahlias take well to an organic approach to gardening. They are strong, robust growers with lots of blooms, including very large blooms. They do well in soil with lots of organic content even in the absence of chemical fertilizers. Pest control is not essential and can be reasonably well accomplished without resorting to chemical pesticides.

Deer resistance

Our suburban shrubbery and gardens are increasingly susceptible to damage by deer. The good news for dahlias is that they are low on the deer's list of favorite foods. While dahlias are not "deer proof," they are considered to be so in some parts of the country – probably those areas where deer find enough other plants they prefer to eat!

Watering and fertilizing

Young dahlia plants do not need a lot of water; in fact, excessive water can lead to rotting of the plant. For larger plants, a good rule of thumb is to water if the rainfall is less than one inch in seven days. Pots require more regular watering. The best strategy for fertilizing is to begin with a soil test to determine pH and the specific soil needs. The PH level of your soil should be 6.5-7, slightly acidic. If you have a heavier soil, add in sand, peat moss or aged manure to lighted and loosen the soil texture for better drainage. Lacking that information, the plants will generally benefit from regular treatments with a water soluble or granular fertilizer. Traditional wisdom for dahlias is to treat with a high nitrogen fertilizer through the middle of the season but minimize nitrogen at the end of the season.

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Fundamentals of Growing Dahlias

Maintaining your plants

There is a substantial regimen that can be used for maintaining plants for show blooms. For the simple enjoyment of spectacular dahlias in your garden, there are two relatively simple actions that will enhance the appearance of the plant. First is tying the plant to the stake several times as it grows. The first tie should secure the lower portion of the plant's stalk to the stake. Subsequent ties should secure the branches. A simple alternative to tying is to use a tomato cage to support the plant. Then, no tying may be required. You can also use four stakes and crisscross the twine to form a cage.

Video on how to tie plants: https://vimeo.com/184437000

Second is disbudding. Remove the outer two buds from the three that develop at the end of each branch. While that reduces the total number of flowers, many flowers remain and those show up well on the plant. Once plants reach 10" tall, gardeners need to pinch out the tips of the main shoot as they grow to encourage branching. Remove all but five shoots sprouting from the tuber. Pinching or disbudding encourages bushy plants and with only five stems allowed to develop, you will get strong, vigorous growth that will produce lots of flowers. You can also remove some of the shoots that form along the branch to have stems that can be used in tall vases for elegant bouquets.

End of the season

Your dahlias will continue to bloom prolifically right up until frost. A heavy frost will kill the plant and leave you with a decision on your next step. You can do nothing with the plant and replace with new ones next year Or, you can dig them up and store in a cool dry location for the winter. You will discover that the plant has produced a half a dozen or more tubers like the one with which you started.

If you wish to store and plant again in the spring, dig and handle the clumps with care. A dahlia tuber's neck is fragile, especially right after digging. To remove the clumps, dig on all four sides of the plant, about a foot away from the main stalk. When all four sides are loose from longer feeder roots, push the shovel or tined fork under the clump and lift carefully. Carefully remove any large clumps of dirt and turn the clump upside down to drain out any water in the stem. If one digs in the morning and leaves the clumps out for a couple of hours, the tubers will be much less fragile. After a couple of hours as the dirt dries, one can remove the dirt with less opportunity of breaking fragile tubers.

When ready to clean the clump, use a garden hose to wash away as much dirt as possible. (Dirt contains microorganisms, so one wants to remove the dirt before storing the divisions.) At this time, the clump is ready for cutting. Cutting clumps presents another trade off. It is much easier to divide roots in the fall (some varieties become so hard over the winter that one would need a power saw to separate them in the spring), but it is correspondingly harder to find the eyes before they start to sprout. Many growers divide their roots in the fall. Gardeners generally have more time in the fall than spring, and it is easier to remove dirt from and apply fungicide to divisions than to clumps. Growers uncertain about finding the eyes can cut off the tops several days before planning to dig so the eyes will have time to become more visible. Alternatively, just cut-some divisions will have eyes.

Dividing the Clumps

In dividing clumps, each division must have a piece of the crown with an eye. Remove the entire stem, because any remaining tends to promote crown rot and ruin the tuber. **ALWAYS STERILIZE CUTTING TOOLS AFTER DIVIDING EACH CLUMP.**

While cutting the clumps, carefully inspect the divisions. Almost everyone throws away the "mother root." Sprouts from the mother root tend to rely on it for nutrients and develop fewer feeder roots and thus poorer plants and tubers than new divisions. One prominent grower saves the mother root, uses it for cuttings, and then throws it away.

Tubers need only be large enough to keep well through the winter without shriveling. Indeed, many experienced growers prefer small to large roots unless they plan to use the roots only to take cuttings (and then throw them away). Some varieties seem not to push to develop feeder roots if their tubers are large. For these varieties, smaller tubers (or large tubers with all but the top inch or two cut off and thrown away) will produce stronger plants and better blooms than larger tubers. However, smaller tubers are preferable only if they are fully mature. Immature roots from late, partially formed laterals seem more likely to rot than larger, more mature roots. A good compromise is to rely on larger, more mature roots but to cut off all but the top few inches and throw away the excess. Keep enough of the tuber to mark its variety name clearly.

Continued on Page 14

Remove all feeder roots and any stalk (both promote rot). If the inside of the crown has any brown or rusty colored areas, cut them away. The discoloration probably indicates crown rot, and the tuber is unlikely to keep. After cutting divisions, use a hose or indoor laundry tub (cold water) to wash the tubers again and remove any dirt missed when first washing the clump.

After rewashing, cut the end of the tuber. Any brown or rusty colored area in the middle or part of the way out indicates rot. If any of these signs are present, cut away toward the crown to see whether the tuber has a clear section that includes the crown. If so, the tuber should be viable. If not, throw it away.

Some tubers have insect holes part way down from the crown. Insect holes are only a problem if they make room for an organism that will promote rot. Cut above the insect holes and try to find a portion of the tuber without any brown or rusty area (as in the previous paragraph).

Treating for Fungus and Marking the Tubers

After cutting the divisions, treat the cut ends with a fungicide, such as Cleary's 3336 (systemic and low in human toxicity), Captan, or sulphur. One may use the Captan or sulphur dry or follow directions to mix any of the chemicals in water and dip the roots. No one expresses any concern about spreading virus by using the dip for successive clumps. When using a liquid dip, place the tubers from one clump in the solution for about 15 minutes. Remove the tubers and transfer them to an empty shoebox or other open container (one per clump) to start drying. Never dry tubers on concrete, because it tends to draw the moisture from tubers and make them shrivel. Keep the tag with the cultivar name with the clump at all times. With a few containers, one can keep each clump in a separate dip and soak each clump approximately 15 minutes.

Some growers add a systemic insecticide to the dip. Growers who use a systemic should wear rubber gloves whenever handling wet tubers! Various authors recommend anywhere from 15 to 30 minutes for the dip. Some experienced growers see no noticeable difference in the success rate using or not using a fungicide. Perhaps a fungicide is more necessary in high humidity climates than in areas with low humidity. Discard any tubers that float in a dip, because they will not keep.

After removing the tubers from the dip, mark each division with enough information to identify the variety name.

After cutting, dipping, and marking the tubers, let them dry. Expect to let the tubers dry for about 24 hours for small roots and 24 to 36 hours for medium to large roots. Drying time varies depending on temperature and humidity. Do not dry the divisions on cement, because cement tends to draw out water and promote shriveling.

Storing Tubers over Winter

There are numerous methods to store tubers over the winter. Various methods seem to work about equally well, as long as the procedure keeps the tubers cool (above freezing but ideally below 50 degrees) and allows an exchange of moisture between the tubers and the storage medium. The containers, however, must retain the moisture in the storage medium. If the moisture escapes, the tubers tend to shrivel.

Most growers seem to use vermiculite in plastic bags to store tubers that have dried for one to two days. Coarse vermiculite works better than the fine horticultural vermiculite. One opinion is that fine vermiculite tends to keep moisture too close to the tubers and make them sprout and develop too quickly. Also, vermiculite dust is hard on the lungs. The finer the vermiculite, the worse that problem.

You can also use slightly moistened sand in five-gallon containers. The tubers keep very well but develop sprouts and feeder roots earlier than those in coarse vermiculite. Also, sand is much, much heavier. Perlite is not a good medium, because it does not absorb excess moisture, and its dust is unhealthy to breathe.

Continued on Page 15

Fundamentals of Growing Dahlias

Experienced growers warn against peat moss. Dry peat moss tends to make tubers shrivel while moist peat moss tends to promote rot. Numerous growers use wood chips to store tubers, but some warn that wood chips leach moisture from roots. An inexpensive source of wood chips is pet bedding (available from pet supply outlets). Specify the higher quality wood chips that are supposed to be dust free.

Numerous containers work well for storing tubers. While the discussion assumes coarse vermiculite, one can substitute wood chips without any additional changes. Add some vermiculite, put in some tubers, then add more vermiculite. Some growers use a separate bag for each clump. If a clump generates many divisions, one may need two bags. Each bag, however, must contain at least as much vermiculite (in volume) as tubers.

After filling the vegetable bags, stack them in doubled brown grocery bags and keep them in the coldest part of the basement or in another cool area that should stay around 40 to 45 degrees. An insulated garage with a space heater for the coldest part of winter works well for some growers. Some growers contend that the bags must be air tight while others only twist them so a little air can escape. Some growers in areas with very humid winters pierce holes in their plastic bags. In general, the smaller and thinner the roots, and the lower the average humidity during the winter, the more air tight one would want the bags.

One can also place the tubers in Styrofoam, wood, or cardboard containers with vermiculite separating layers. If one uses a wood or cardboard box, moisture could escape from the vermiculite. To retain the moisture, use newspaper at least eight sheets thick to line all sides of the container and keep the top of the container closed. Freezing temperatures ruin tubers, and higher temperatures encourage microorganisms and fungus to destroy them. Also, warm temperatures prompt tubers to develop sprouts and feeder roots too soon.

One should inspect tubers monthly during the winter. Throw away any tubers that show signs of rotting. By checking frequently, one can throw away rotting tubers before the rot spreads to otherwise healthy tubers. Some growers say that if one stores tubers so that they do not touch (as one could in a wood container but not in plastic bags), then rot will not spread. A rotting tuber releases a gas that hastens the developing of eyes and sprouts. A rotted tuber can therefore be useful for tubers that are very late to develop. Anyone who uses a rotted tuber for this purpose should check the bag frequently to ensure that the rot does not spread to the healthy, late tubers.

In early spring, move the tubers to a warm location (dark but room temperature) to encourage eyes to develop. One can add a teaspoon of water per quart of bag space 15 days before removing the tubers. After adding the water, retie the bag and put it into a warm location.

My own experience that works best for storing the tubers is to let them dry in the garage for a few day, knock the dirt off and place them in a cardboard box with mulch, Super Coarse Vermiculite and Peat moss.

I suppose this is the “lazy man’s method”. HEY! It works for me!!!

I’ve had my Dahlias for 20 years and they are quite beautiful every year.

Join the **“American Dahlia Society”** - https://dahlia.org/about/membership-join/

THE BEST TIME TO ORDER DAHLIAS IS JAN/ FEB

Many distributers run out of popular verities quickly.

THEY WILL BE MAILED TO YOU IN APRIL – PLANT YOUR TUBERS IN MID - LATE MAY

Purchasing Dahlias, Dahlia tubers are graded by size. **Grade #1** tubers are the largest size available. Larger tubers produce a fuller plant with more stems and more blooms. Regular garden dahlias can be purchased at any garden shop.

Better form and Show or exhibition dahlias are available to order online.

Where to order Dahlias:

Swan Island Dahlias (877) 799-7739
https://www.dahlias.com (has a great catalog w/ pics)

Fred Gloeckner (800) 345-3787
https://www.fredgloeckner.com

Dahlia Barn (425) 888-2155
https://www.dahliabarn.com

K Connell Dahlias (253) 620-0044
http://www.connells-dahlias.com

Planting on Slopes

Ruth Klue (North Central Conservation District)

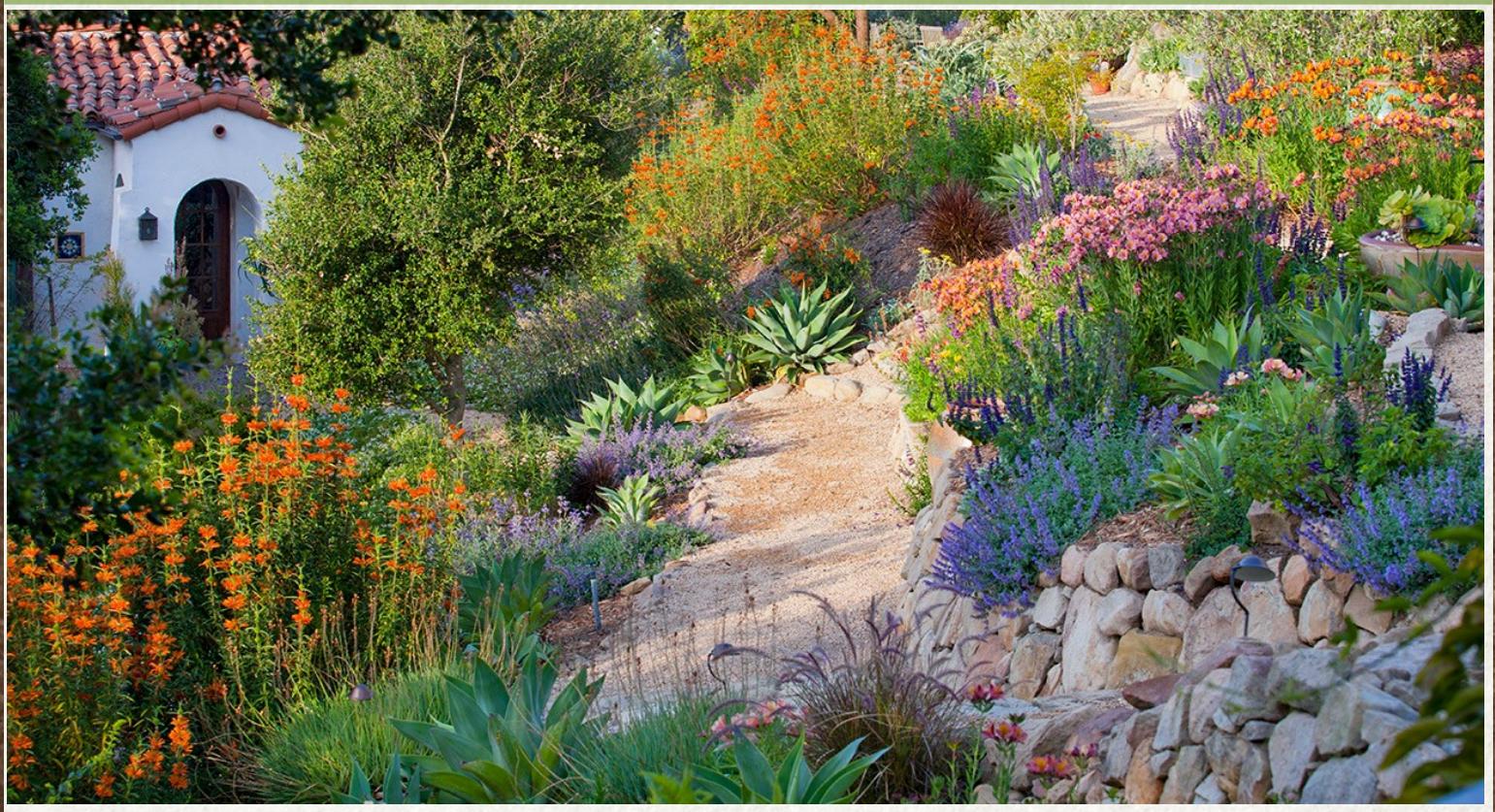

Photo Credit: Edward Gohlich

General Considerations:

* Tops of slopes are generally drier than you might think, since water tends to drain downhill instead of soaking into the soil. Use plants that should be able to survive without irrigation, since soil erodes from slopes saturated with irrigation water. Study different areas of your slope to determine naturally-occuring variance of moisture and light levels.

* Use a variety of mostly native shrubs, perennials, and grasses for the best slope protection. The varying plants will have root systems of varying depths, stabilizing more area of slope soil. Planting younger vegetation tends to result, in the long run, in more successful root systems.

* Don't plant big trees with heavy canopies or shallow roots. There is a risk that the trees could topple, or that heavy shade from the trees could kill undergrowth, leaving bare soil susceptible to erosion. If you wish to plant trees on the slope, use smaller trees, sparingly, and keep lower vegetation growing underneath them.

* While turf grass on slopes helps reduce raindrop-type erosion, its roots are shallow, which can lead to clumps of grass sliding downhill in wet conditions.

* Mulch in between plants until they grow to fill in the area. Mulch helps hold the soil, and prevents growth of invasive plants.

* Many of the recommended plants spread by rhizomes and runners, and can often colonize and stabilize a slope quite successfully. If you wish to prevent colonizing beyond the slope, contain with an edging. Make sure not to use non-native plants known to be invasive.

* If your slope is extremely erodible, call your local conservation district for consultation.

Planting on Slopes (Suggested Plants)

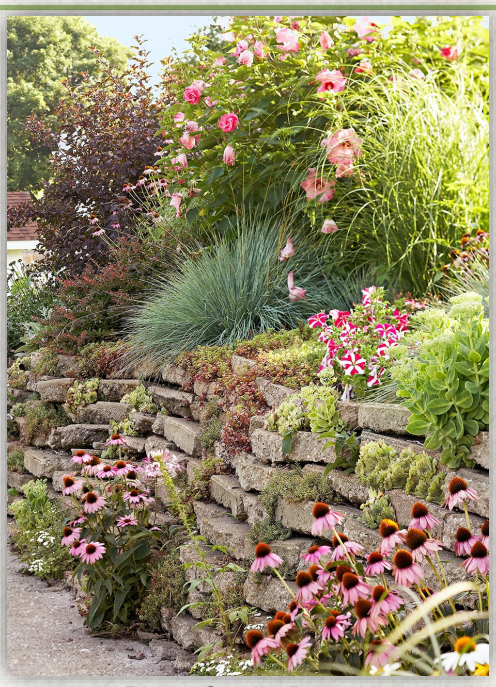

Photo Credit: Peter Krumhardt

Trees

* Amelanchier species (Shadbush/Serviceberry)
* Cersis canadensis (Redbud)
* Cornus florida or alternifolia (Dogwood species)

Shrubs

* **Aronia species (Red or Black Chokeberry)** 6' to 10' x 3' to 5, suckering, colonizing shrub with numerous, slender stems, brilliant red fall color, persistent red fall fruit eaten by birds. Fall color best in sun, but tolerates part shade, dry or wet sites, easily established, colonizes. Good in massing, useful for stabilizing banks.
* **Clethra alnifolia** 5-8' upright, slowly spreading. Fluffy, bottle brush -like, extremely fragrant white flowers late summer. Glossy green leaves turn luminescent yellow in autumn. Moist to wet soil, sun to shade. Spreads slowly by rhizomes. Flowers attract butterflies and bees.
* **Cornus amomum (Silky Dogwood)** 6 to 8 ‘ vigorous shrub, creamy white spring flowers, lovely blue fruits beloved by wildlife, sun to part shade, moist to wet sites.
* **Cornus racemosa (Gray Dogwood)** 10-15' , white spring flowers, purplish red foliage in fall, white fruits with red stems. Wet to medium dry soil in full sun to part shade. Will grow in poor soil. Spreads to form thickets.
* **Cornus stolonifera (Red-osier Dogwood)** 6-10', rapid-growing, multi-stemmed, showy bright red winter stems, porcelain blue summer fruit attracts birds, reddish purple fall foliage. Moist to wet, full sun to part shade. Deep spreading roots help combat soil erosion.
* **Myrica pensylvanica (Bayberry)** 6-10’, glossy, grayish-green leaves, clusters of grayish-white fruits (need one male for pollination). Full sun to part shade, dry to medium wet. Good in groups or massed. Tends to sucker, and form sizeable colonies. Attractive to birds.
* **Potentilla fruticosa (Shrubby cinquefoil)** 2-4’, attractive grey-green foliage, yellow flowers all summer. Sun to part shade, medium wet to dry, well-drained soils in full sun to part shade. Tolerates poor dry soils. Drought tolerant once established.
* **Rhus aromatica (Fragrant Sumac)** 2' to 6' x 6' to 10' dense irregularly branched shrub, glossy dark green foliage, orange to reddish-purple fall color, red fruit on females. Suckering growth habit enables it to spread rapidly as groundcover. Sun to part sun, moist to dry, well-drained. Good for massing and bank cover.
* **Cultivar 'Gro-low'** 2’x8’, tolerates difficult conditions.
* **Salix discolor (Pussy Willow)** Vigorous medium-large shrub that can stabilize wet slopes and banks. Tolerates sun and shade.
* **Vaccinium corymbosum (Blueberries)** 6-10’, twiggy rounded shrub, dense dark green foliage, white May flowers, summer fruits, bright red or yellow fall color, wet to moderately dry, sun to part shade. Sun to part shade, but more fruit and better fall foliage in sun. Medium wet to wet, well-drained acid soils. Shallow-rooted, mulch around the roots. Attracts wildlife.
* **Viburnum cassinoides (Witherod Viburnum)** 5' to 6' dense multi-stemmed shrub with arching branches, creamy white flowers in June, red to purple fall color, pink fruit changing to black. Sun to part shade, dry to fairly wet soil, easy to grow, moderate growth rate. Good in masses, attracts birds.
* **Viburnum dentatum (Arrowwood)** 5' to 9' dense, multistemmed shrub, upright spreading branches, suckers profusely from base. Creamy white flowers in May/June, yellow or red-purple fall color, black fruit attracts birds. Sun to partial shade, dry to fairly wet, easy to grow, good in masses.

Planting on Slopes (Suggested Plants)

Perennials and Ground Covers (preferred moisture levels after name)

Sun to Part Sun:

* Asclepias verticillata (Whorled Milkweed)
* Aster species wet to dry, depending on type
* Baptisia australis (Wild Indigo) dry to medium
* Eryngium yuccifolium (Rattlesnake-master) dry to medium
* Monarda punctata, fistulosa (Bergamot) medium to wet
* Rudbeckia laciniata (Green-Eyed Coneflower) medium
* Solidago species (Goldenrod) dry to medium wet, depending on type
* Verbena hastata (Blue Vervain) dry to moist

Part shade to shade:

* Asarum canadense (Wild Ginger) medium to wet
* Aster divaricatus (White Wood Aster) dry to moist
* Aquilegia canadensis (Wild Columbine) medium
* Chelone glabra (Turtlehead) medium to wet
* Cimicifuga racemosa (Black Snakeroot)
* Geranium maculatum (Wild Geranium) medium
* Lobelia cardinalis (Cardinal Flower) wet to moist
* Phlox divaricata (Wild Blue Phlox) medium
* Polemonium reptans (Creeping Jacobs Ladder) medium
* Polygonatum biflorum (Solomon's Seal) medium to wet

Photo Credit: Laurie Black

Cornell University
College of Agriculture and Life Sciences

Plant Disease Diagnostic Clinic
Plant Pathology and
Plant-Microbe Biology Section
334 Plant Science Building
Ithaca, NY 14853-5904

Summer Patch: *Magnaporthe poae*

Introduction

Kentucky bluegrass (*Poa pratensis)*, annual bluegrass (*Poa annua*), and fescues (*Festuca* sp.) can be affected during the summer by an interaction of environmental factors and a root and/or crown rot caused by the fungus *Magnaporthe poae*. This diseases is known as Summer Patch. Bentgrasses (*Agrostis* sp.) may also become infected but show few symptoms and may continue to perform where other grasses decline.

Summer Patch occurs between June and September. This disease, in combination with another disease now known as Necrotic Ring Spot were once grouped together into a disease complex known as Fusarium Blight. The high level of difficulty involved in clinical evaluations of *Leptosphaeria korrae*, *Magnaporthe poae*, and related fungi, and the extreme ease of isolation of decomposer fungi such as *Fusarium* species, originally led to the mis-naming. Eventually, these organisms and their symptoms were separated out into the diseases now known as Necrotic Ring Spot and Summer Patch. The latter will be described in greater detail here.

Symptoms and Signs

It can be difficult to diagnose this disease by symptoms alone in the early stages. Symptoms begins as scattered small round patches of thin, wilted or slow growing turf . Initially, these patches may be only 3-8 cm in diameter, but they may enlarge to about 30 cm in diameter (about 12 inches) and range from gray-green to light tan or straw-colored **(Fig. 1).**

Figure 1: Symptoms of a Summer Patch infection (provided by **Dr. Eric B. Nelson, Cornell University)**

In rarer circumstances, they may get to be twice that size. As patches enlarge, they may coalesce, and form crescents of yellow or tan turf. Where turf within the center of a patch begins to recover, necrotic rings may become evident. As Necrotic Ring Spot may exhibit similar symptoms, microscopic examination is often necessary to determine the cause of the problem. The roots, crowns and stolons of infected plants may appear to be dark brown as the dark mycelium of the fungus (**Fig. 2)** invades the tissue. As the disease progresses, the cortex may begin to rot, and plants may die.

Summer Patch blighted areas often occur on lawn sites that receive direct sun and are on south-facing slopes, or near sidewalks, driveways, buildings, or other "hot spots" or otherwise stressed areas in the yard or on golf courses. In the cool weather of autumn, the grass may begin to grow into these dead areas again. The disease, however, is likely to reappear in previously affected areas the following

summer, and to increase in intensity. Summer patch usually occurs during the hotter periods (June, July, August) of the year. Summer patch is less of a problem during cool summers with adequate rainfall.

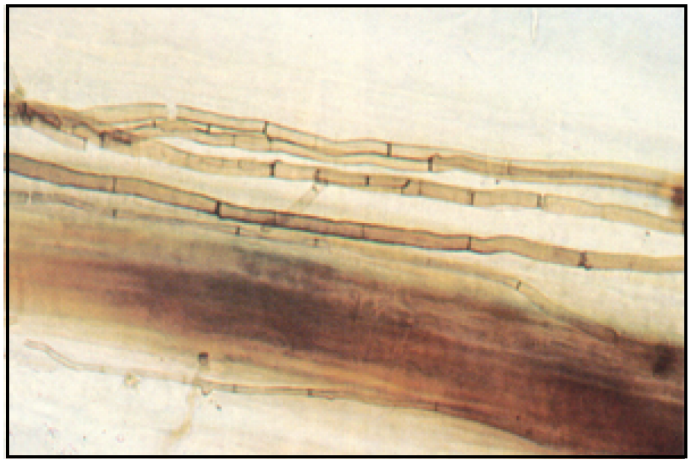

Figure 2: Dark Hyphae strand running through a root. (provided by **APS Press)**

Disease Cycle

The fungus, *Magnaporthe poae,* survives unfavorable conditions as mycelium in infected plant tissue or plant debris. The optimum temperature for fungal growth is 28°C. Infection takes place in late spring when soil temperatures reach 19-20°C. Spread during the growing season occurs as the fungus grows between roots. Symptoms may not be evident until the temperature increases very drastically during wet weather. The pathogen may also be spread by movement of infected plant material and on mechanical equipment.

Management Strategies

The primary stresses that influence disease development include excesses of thatch, fertilizer, and turf canopy temperature, as well as incorrect timing of fertilizer applications, low mowing height, and pH extremes. Each of these stresses can be reduced through appropriate cultural practices described below.

Disease severity may worsen at a higher pH, so try to maintain the pH of the soil and rhizosphere at 5.5 to 6.0. Use an acidifying fertilizer where the pH is above 6.0, and try to avoid the use of products that may raise the pH.

For most bluegrass lawns, two to five lbs of nitrogen/1000 sq. ft. is sufficient. Apply this in a fertilizer balanced by phosphorus and potassium. Do not apply even small amounts of fertilizer during the June-August stress period because this will tend to stimulate the disease. Therefore, fertilize only in autumn (September through November) and in late spring (May).

Deep watering is essential for proper root growth. Water the soil under disease-prone areas to a depth of 15 to 20 cm every 7-10 days during the dry periods of the summer. Soaker hoses are very useful for supplementary watering on steeper slopes where other sprinklers are inefficient. The harmful effects of excessive temperature can be reduced by a light sprinkling of the surface at mid-day.

Proneness to disease in turf is increased as the cutting height is decreased. Cut lawns at 5 to 10 cm height, and often enough so that less than 1/3 of the leaf blade is removed during each mowing.

Thatch (the layer of organic matter between the mineral soil and the green grass) should be no more than 1.5 cm (1/2 inches) in thickness. Thatch can be removed by vertical slicing machines and/or aeration during the spring and early fall. Over a longer period thatch will be reduced by using the cultural practices discussed above.

Kentucky bluegrass cultivars such as *Adelphi, America, Aspen, Columbia, Eclipse, Glade, Midnight, Nassau, Parade, Ram I, Sydsport, Touchdown, Vantage, Windsor*, and *Victa* are less susceptible to summer patch than others. Blend seed of resistant cultivars with that of one or more otherwise desirable cultivars. Blending 10-15% (by weight) of perennial ryegrass seed into bluegrass seed will prevent this disease from occurring. Ryegrass can also be seeded into existing lawns.

Chemical treatment is efficient only when the previously mentioned cultural practices are first used. Furthermore, applications must be made before the crown rot develops sufficiently to cause visual symptoms of the disease.

For homeowners in New York, a list of some products that may help to manage this issue may be found in our turf fungicide table. Be certain any formulation of pesticide you purchase is registered for the intended use, and follow the label instructions. The label also contains information on how to apply the fungicide as well as any precautions.

Additional pesticides may be available for commercial turf applications. Commercial applications should refer to the appropriate pest management guidelines, or contact their local Cooperative Extension Office for more information on currently registered products.

Thoroughly water (applying 2 to 3 cm of water) areas with a history of this disease several days before applying a fungicide. To determine the best time to treat, monitor soil temperature to a depth of 2 inches, and make the first application when the soil temperature reaches 55°F. or about 13°C.

In upstate New York, the first application may be made in early to mid-June with a second application two to three weeks later. In southeastern New York or on Long Island, applications may need to be made a few to several weeks earlier, depending on the soil temperature. Additional applications may be required for certain fungicides. Always adhere to the rates and procedures recommended on the fungicide package label.

Reference:

Compendium of Turfgrass Diseases, Third Edition, 2005. R.W. Smiley, P.H. Dernoeden and B.B. Clarke. APS Press.

Updated SLJ 3/19

READ THE LABEL BEFORE APPLYING ANY PESTICIDE! Changes in pesticide regulations occur constantly. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office.

The Plant Disease Diagnostic Clinic
Phone: 607-255-7850
Fax: 607-255-4471
Email: Cornell-plantdiseaseclinic@cornell.edu
Web: plantclinic.cornell.edu

Plant Disease Diagnostic Clinic

Upcoming Events

What's Bugging You First Friday Events: Practical solutions to pest problems on the first Friday of every month

Time: 12:00 pm– 12:30 pm
Location: Via Zoom
Free; registration required

To register: https://nysipm.cornell.edu/whats-bugging-you/first-friday-events/

Each month, spend half an hour over lunch learning about practical solutions for pest problems with the New York State IPM Program. Each presentation will end with an IPM Minute.

Upcoming First Friday Events:

- August 5, 2022: **Feature Presentation: Do's and Don'ts for ladybugs in the garden** *(IPM Minute: Risks associated with pest control home remedies)*
- September 2, 2022: **Tackling white grubs in your lawn: scouting, decision-making, and sustainable management** *(IPM Minute: Shoo flies, don't bother me!)*
- October 7, 2022: **Fall lawn IPM: managing leaves and ticks** *(IPM Minute: Is that a praying mantis egg case?)*
- November 4, 2022: **Repellents, fencing, and other IPM approaches for managing deer damage** *(IPM Minute: Where you chuck your pumpkins matters)*
- December 2, 2022: **Homeowner update on emerald ash borer management** *(IPM Minute: Creepy crawly Christmas - what to do if you find insects in your Christmas tree)*

Garden Troubleshooting

Date: July 28th
Time: 10:00 am-11:00 am
Location: Our Town Rocks in Dundee New York
Free; registration required

Got an issue in your vegetable garden? Join us for an interactive presentation where we cover some to the most frequent garden issues that we've encountered this summer. Bring your plant problems and we'll do our best to help solve them!

To register: visit https://reg.cce.cornell.edu/gardenissues2022_257 or call (315) 536-5123

Photo Credit: Arlene Wilson

Upcoming Events

Food Safety and GAP Certification Class

Date: August 25th, 2022
Time: 10:00 am-11:00 am
Location: Our Town Rocks in Dundee New York
Free; registration required

Are you a produce grower? Are your buyers encouraging you to become GAP-certified? Or are you interested in learning more about increasing food safety on the farm? The Cornell Vegetable Program, CCE-Yates County, and CCE-Seneca County will hold an introduction to Good Agricultural Practices (GAP) course on August 25th in Yates County **(fee, location, and time is TBA)**.

The goal of the class is to improve your understanding of GAPs, help you with assessment of risks and introduce practices to increase food safety on fresh produce farms.

For more information or to register, please contact Caroline Hunt at **(315) 536-5123**.

Growing Great Garlic

Date: September 17th
Time: 10:00 am-11:00 am
Location: Our Town Rocks in Dundee New York
Free; registration required

Join us at Our Town Rocks in Dundee to lean how to grow your best garlic ever! Caroline Boutard-Hunt and her husband have been growing garlic commercially and for fun for over 10 years. Caroline will share her tips for growing beautiful garlic. Participants will receive a head of seed garlic to get off to a great start!

To register: https://reg.cce.cornell.edu/greatgarlic_257 or call (315) 536-5123

About Us

The Master Gardener Program is a national program of trained volunteers who work in partnership with their county Cooperative Extension Office to share information throughout the community.

Master Gardeners are neighbors teaching neighbors about landscapes, vegetables, fruits, herbs, houseplants, beneficial and harmful insects, plant diseases, integrated pest management, wildlife management, soils, birds, composting, water conservation, and much much more.

Master Gardeners are considered researchers rather than experts. They participate in 40 hours of training provided by experienced staff from Cornell Cooperative Extension to gain a basic understanding of horticulture and available horticultural information and online resources. Course topics include plant nutrition, soils, vegetable, fruit culture, trees, shrubs, lawns, diseases and insects that affect plants, pruning and more.

You don't need to be an expert to join, if you enjoy gardening as a hobby, this may be perfect for you.

To become a Master Gardener, all you need to do is attend a 10-week training offered by Cornell Cooperative Extension.

For more information, please call us at 315-536-5123!

Cornell Cooperative Extension
Yates County

417 Liberty Street
Penn Yan, NY 14527

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