

Gardening Matters



Yates County Master Gardener Newsletter

Spring 2022, Issue 1



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Executive Director's Note

Every decade needs its own manual of handicraft

- Liberty Hyde Bailey

March is a month of transition. It is spring in the southern regions of the country—flowers bloom, grass is green, and the days start earlier and end later.

In Upstate New York, we still have snow and freezing temperatures. We have our handful of hardy spring early bloomers in the snow: crocuses, snowdrops and their friends that bring us the first waves of color: tulips, hyacinths, daffodils, cherry, apple and magnolia blossoms. But until that time—we plan and dream.



This is the pre-season of sowing seeds indoor, scouting locations for new plantings, and doing a personal Garden SWOT analysis of the good/bad, the successes/failures and the opportunities [new plants, new colors, alternative landscaping of annuals/perennials] and threats (deer and wildlife pressures, ground water issues, soil quality). Consider getting your soil tested—different tests for different locations of your yard—to know where you are with your minerals (Nitrogen, Calcium and Phosphorus, etc.), soil type (clay, sand, silt), organic matter (mulch, compost) and organisms (worms, bugs, and microbes).

Don't run away, Intrepid Gardener! While this seems like a heavy lift, the reward is well worth the effort. On these cold winter afternoons, set aside some time to research the science end of gardening. Taken in small bites, the learning is easy. You will also develop your own personal 'manual' of gardening for your property. Each year you will build upon the knowledge developed during the pre-gardening season.

As you drive through the area, contemplate the healthy trees, the yards that always have beautiful flowers, blooming bushes, and healthy grasses. Each property owner or resident has put the time and effort into improving the growing in their personal ecosystem. We enjoy the visual fruits of their labors—as visitors to the region will enjoy the views of *your* yard and property.

Stop by the Extension office to get a Soil Test Kit, attend some online [or in person] classes and chat with our horticulture staff!

Discover some tips and strategies for your personal gardening manual!

**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.

Please bring a mask with you to wear when you come to the CCE-Yates County Office.

Garden Chat:

Catching up w/ the Yates County Master Gardeners!



What spot in your garden sparks the most joy?

Jan

I have a small water feature in my garden surrounded by ferns, bearded iris, a flowering dogwood and a couple of P.J.M. Rhododendrons, plus various perennials I can't remember the names of. The birds, small animals and insects love to bathe or drink in the little stream that feeds into the pond. I love to sit and watch the activity from a bench I nestled into the plantings. This little piece of tranquility provides a great place to meditate on the wonders of nature and observe the constant activity found in every garden.



Marian

The places in the garden that spark the most joy are anywhere we try something new. If successful we get to enjoy beauty and / or bounty like last year's shiitake and oyster mushrooms, celery, and less diseased apples. Even if not successful we learn in the process.

Beverly

To be honest, I don't have one favorite place. Just being in any garden, regardless of what I am doing, brings a sense of peace to me.



Caroline

My favorite place in the garden is wherever I can see something has changed (specifically for the better). Sometimes that's the small, bright magenta bloom of a terrestrial orchid peeking out from under larger plants, sometimes it's new foliage uncurling from ground in the spring. The shifts of season and the small pleasures they bring keep me hooked on gardening.

Cheryl

My new favorite garden place is my new vegetable and cutting garden that I planted last year with mulch walkways and steppingstones. This garden provided not only tomatoes, peppers, cucumbers, and onions, but also beautiful bouquets of flowers that I was able to share with so many of my friends.



What to do in...

April:

- * Place peony supports over your peonies. Although they may just be peaking out of the ground, it will be easier to install the supports now before they get taller.
- * Last call for fruit tree and pruning! Make sure to finish pruning before bud break.
- * Oh look, it's weeding time again! A quick early season weed can save you a lot of work later in the spring.
- * As soon as your soil is workable, begin to plant potatoes and pea seeds in the garden.
- * Begin utilizing deer and rabbit repellents early in the season to discourage visits later in the season.



May:

- * Fertilize bulbs after flowering to increase next year's flower display.
- * Continue to plant perennials and trees.
- * Direct seed and transplant hardy vegetables such as peas, radishes, broccoli, lettuce, and cabbage starting in the beginning of May.
- * Begin to seed and transplant tender vegetables such as tomatoes, beans, peppers and eggplant after Memorial Day. Although you can usually get away with slightly earlier most years but these plants grow best once the weather conditions are reliably warm.
- * After Memorial Day begin moving your houseplants outside. Start out by moving them into a shady, protected area and keep well-watered until they adjust to being outside.



June:

- * Early June is last call for transplanting shrubs, perennials and trees until fall.
- * Begin to harvest early-season crops such as lettuce, peas and radishes.
- * Deadhead and prune early spring-blooming shrubs such as azaleas, lilacs and rhododendrons after they finish blooming.



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)

Welcome to Spring!

Last year the CCE Yates Master Gardeners had a fall bulb sale which meant that I had the chance to try out many new bulbs. I carefully planted them in groups, said goodnight, and have been eagerly anticipating spring. This is one of the happiest times of the year for me and so many other gardeners as we begin to see the results of last year's bulb planting and the garden begin to wake up again

Penn Yan Community Garden Vegetable Varieties Project 2022 Pleasant Ave, Penn Yan, NY

Our 2022 trial will feature vegetables with connections to cultures from Central America, South America, the Caribbean, and Indigenous Peoples of New York. We have chosen the five-bed trial that features the following themes:

- * First Peoples – sunflower and Bean
- * Herbs for People and Pollinators
- * Central America – Salsa Bed
- * South Americas – Fingerling Potato
- * Central Americas – Summer Squash

The seeds are provided from Harris Seed Company and True Love Seeds. We will have signage on all the garden beds if you would like to come by the garden to see how everything is growing. All produce grown by the Master Gardeners, besides what we need to sample for the Vegetable Variety Trials is donated to the Hope Food Pantry. We also distribute recipes be printed and distributed with the produce so families can learn how to prepare some of the more unique vegetables. Our goal is to donate over 600 pounds of produce again this year! We will also be growing pepper, garlic, potatoes, and tomatoes at the Penn Yan Community Garden to donate to Milly's Pantry kitchen this year! We will also be planting 4 children's garden beds at the community garden, thanks to a generous grant partnership with the Penn Yan Elks #1722. These will be full of

vegetables, herbs and edible flowers for children to come touch, pick and sample freely. Not only will there be beds at the Penn Yan Community Garden, we're also working with the Dundee Community Garden to install children's garden beds there as well, along with several other school partner locations.

Between all our projects we will have a total of twenty beds to be maintained and harvested this year.

We also will be working with Habitat for Humanity's new homeowner, designing the front landscaping, helping them plant, maintain and educate them on gardening practices. Penn Yan School FFA and Agriculture class will be building raised vegetable garden beds in the backyard.

This will be an exciting year! If you would like to be part of our gardening family at the Penn Yan Community Garden and purchase a garden bed for \$25.00 which includes: Soil, water, use of gardening tools, at the Penn Yan Community Garden please contact: Cheryl Flynn at cj348@cornell.edu.



Soil pH Testing Services

Are you starting a new bed or troubleshooting an older one? Spring is a good 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.

Yates County Master Gardener's Corner

Cheryl Flynn (Master Gardener Volunteer Coordinator)

Programming Updates

In addition to the children's garden beds, as part of the grant we were able to work with the Elks to provide container garden kits to Pre-K students throughout Yates County. A total of 200 kits were packed with spinach, pea and nasturtium seeds (easy for small hands to plant), soft sided fabric pots with handles, potting mix and growing instructions. The teachers were happy to share these kits and we were very grateful to provide growing adventures to some of Yates County's youngest gardeners! Finally, we'll be hosting Petra Page-Mann from Fruition Seeds who will come to the County to do 2 children's gardening presentations this summer. Beyond their generous funding, the Elks Club was an integral part of the process, consulting on kit design, assembling the kits and helping with distribution. We are so lucky to have such generous and caring people and organizations within our county!

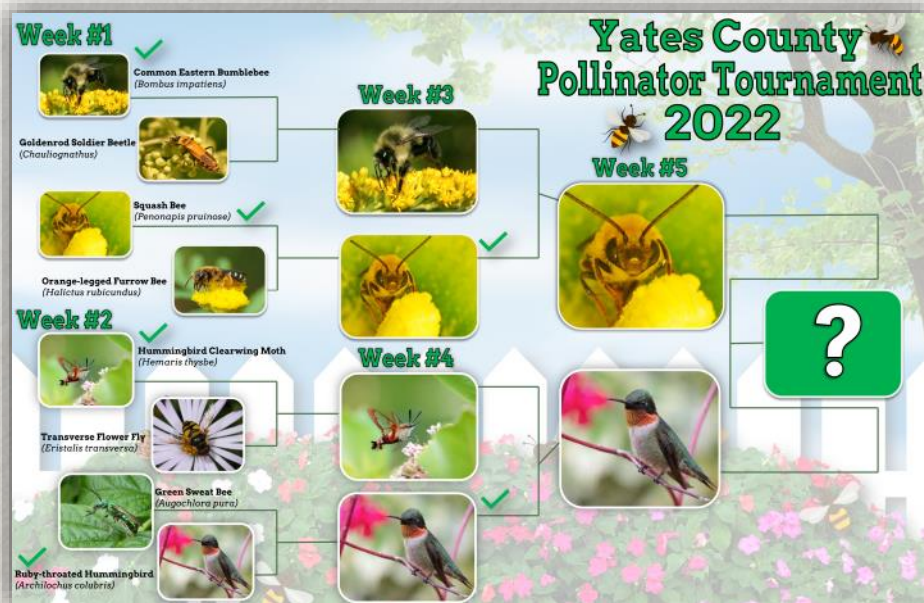


*Pictured: A completed garden kit
Photo Credit: Caroline Boutard-Hunt*

Caroline Boutard-Hunt, and Celeste Lewis also volunteered their Saturdays to teach "Seed to Supper" 2022 in Dundee at Our Town Rocks from February 19th to March 19th. Seed to Supper is a free gardening class that teaches the fundamentals of growing your own food on any budget. It's a great way to learn about vegetable gardening and share experiences with other gardeners. We had 17 participants this year! Participants will receive free garden seeds and transplants in May as well as support throughout the season to set the up for a successful garden this year! Interested in participating next year? We'll be holding Seed to Supper 2023 next February and are happy to put you on the list.

We also started a fun little project- the "Pollinator Championship Bracket" (pictured below). It's March madness for our hardworking insect and avian friends! Every week we matched pollinator against pollinator on social media, giving people a chance to learn more about the many native pollinators we have in our region, and to vote for their favorites. We'll be announcing the winner at this year's Gardening Matters Day and be sure to follow us on Facebook to stay up to date for next year's competition!

As always, the Master Gardeners are happy to help out with any gardening questions you're having from planning to troubleshooting. Please call us at (315) 536-5123 or email Cheryl (cj348@cornell.edu) or Caroline (cb239@cornell.edu). We even do home visits in Yates County!



Let's Get Ready to Garden!

Steve Reiners (Professor and Chair, Horticulture Section, School of Integrative Plant Science, Cornell University, Cornell AgriTech)

Spring is here and I'm sure gardeners can't wait to get outside. Even though your soil is probably not quite ready to work, now is the perfect time to plan your vegetable garden.

I love to put a plan down on paper so I'll be ready to go once planting season starts. For peas and spinach, that could be as soon as next week. It's much better to have a well-thought-out plan ready to go than to make decisions on the fly the first nice Saturday in April.

First thing to include on your list: What do you want to grow? Ask yourself these questions:

- What do you and your family like to eat?
- What have you grown successfully in the past?
- What failures have you had?
- Did you have too much of any vegetable last season?
- Is there anything new you would like to try?

Now that you have a list, consider planting times. We have heat-loving vegetables that require warm temperatures. Plant these after the last spring frost and the soil has had a chance to warm up, around May 20 in our region.

We have cool-season vegetables that stand up to a frost but may wilt and die in a hot summer. These can go out early in the spring, and many can be replanted again in the fall.

We also have some that can handle cool and warm temperatures. Use **Table 1** below to see which crops on your list belong in which group.

Now, where to plant them in the garden? Try to remember where things were planted last year or check last year's plan. Avoid planting the same type of vegetable in the same bed. Some pests and diseases can overwinter in soil from last year's crop and attack this year's crop.

Farmers do this all the time. It's called crop rotation. They try to wait at least three years between similar crops. In a small garden, it's less important. But it's still helpful. And think broadly when planning your rotation and try to keep vegetable family members from following each other:

- **Aster** – artichoke, endive, escarole, lettuce, radicchio
- **Brassica** - bok choy, broccoli, Brussels sprouts, cabbage, cauliflower, kale, mustard greens, parsnips, radishes, rutabagas, turnips
- **Cucurbit** - cucumbers, gourds, melons, pumpkins, squash
- **Goosefoot** – beets, Swiss chard, spinach
- **Grass** - sweet corn
- **Legumes** – beans, peas
- **Mint** – basil, lavender, mint, oregano, rosemary, sage, sweet marjoram, thyme
- **Morning glory** – sweet potato
- **Nightshade** - potatoes (white), tomatoes, peppers, eggplant
- **Onion**- chives, garlic, leeks, onions (bulb and green)
- **Parsley** – carrot, celery, fennel, parsley

vegetables like tomatoes, peppers and squash in the sunniest part of the garden. Leafy greens and spinach can still perform well if shaded a bit by nearby crops.

Maximize space with succession planting – growing two or more crops in the same space. For example, an early crop of peas is finished by the 4th of July. Plant a heat-loving crop like beans or zucchini right after final pea harvest. Follow these with a fall crop of spinach or overwintering garlic. Three crops in the same location!

Planning lets you to estimate how many seeds or plants you will need. And if you are buying seeds, don't wait any longer as seed packets are flying off shelves this spring. **Table 2** below provides yield estimates for your garden, based on typical plant spacings.

Don't forget about plant height and shading. Keep tall growing plants on the north side to avoid shading smaller plants. Aim to have fruiting

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Let's Get Ready to Garden!

Table 1. Planting Recommendations for New York Vegetable Gardens
Annual Vegetables

Crop	Cool/ Warm Season*	Direct Seed or Transplant	Outside Planting Date	For transplants, indoor start date	Spacing Between Rows	Spacing Between plants
Beans, snap	W	Direct Seed	5/10 to 7/15	n/a	24	3
Beets	C/W	Direct Seed	4/25 to 7/25	n/a	12	2
Broccoli	C	Transplant	4/15 to 5/15 7/20 to 8/15	5 weeks prior	24	12-18
Brussels sprouts	C/W	Transplant	6/10 to 7/1	5 weeks prior	24	18
Cabbage	C/W	Transplant	5/1 to 7/10	5 weeks prior	24	12-18
Cauliflower	C	Transplant	7/1 to 7/20	5 weeks prior	24	18
Carrots	C/W	Direct Seed	4/15 to 7/11	n/a	12	2
Cucumber	W	Either	5/25 to 7/15	3 weeks prior	36	6
Eggplant	W	Transplant	6/1 to 6/15	7 weeks prior	48	24
Garlic	C	Plant cloves	After 10/15	n/a	12	3
Lettuce	C	Transplants early, Direct seed later	4/10 to 5/15 8/1 to 8/30	5 weeks prior	12	6
Muskmelon	W	Either	6/1 to 6/15	3 weeks prior	60	36
Onions,	C/W	Plant sets or	4/15 to 6/1	8 weeks prior	12	4
Onions, green	C/W	Direct Seed	4/15 to 7/20	n/a	6	<1
Peas	C	Direct Seed	4/1 to 5/20	n/a	12	1-2
Peppers	W	Transplant	6/1 to 6/20	7 weeks prior	36	18
Potato, white	C/W	Seed piece	5/1 to 6/10	n/a	36	12
Potato, sweet	W	Slips	6/1 to 6/15	n/a	36	12
Pumpkin	W	Either	5/25 to 6/20	3 weeks prior	60	36-72
Radish	C	Direct Seed	4/10 to 7/1 8/15 to 9/15	n/a	6	1
Rutabaga	C/W	Direct Seed	4/25 to 6/25	n/a	18	4
Spinach	C	Direct Seed	4/1 to 5/20 8/1 to 9/15	n/a	12	3
Squash, summer	W	Either	5/25 to 7/15	3 weeks prior	48	24-36
Squash, winter	W	Either	5/25 to 6/20	3 weeks prior	60	36-48
Sweet corn	W	Direct Seed	5/25 to 6/20	n/a	36	8-10
Swiss chard	C/W	Direct Seed	4/15 to 8/1	n/a	18	6
Tomato (staked)	W	Transplant	5/25 to 6/20	6 weeks prior	48	18
Turnip	C/W	Direct Seed	4/25 to 7/25	n/a	18	3
Watermelon	W	Either	6/1 to 6/20	3 weeks prior	60	36-48

Perennial Vegetables

Perennial Vegetables	Cool/ Warm Season*	Direct Seed or Transplant	Outside Planting Date	For transplants, indoor start date	Spacing Between Rows (inches)	Spacing Between Plants (inches)
Asparagus	C/W	1 year old crowns	4/15 to 5/10	n/a	48-72	12-14
Horseradish	C/W	Root Pieces	4/15 to 6/05	n/a	36	10-12
Rhubarb	C/W	Crowns	5/10 to 6/1	n/a	60	36

*C = Does best in cool weather and tolerates a frost

C/W = Prefers cool but does okay in summer

W = Does best after last frost and likes it hot.

Table 2. Expected yield of vegetables grown at spacing recommended in Table 1

Vegetable	Expected Yield from 10 feet of row	Vegetable	Expected Yield from 10 feet of row	Vegetable	Expected Yield from 10 feet of row
Asparagus	5-8 lbs.	Corn, sweet	15 ears	Potatoes, white	20-30 lbs.
Beans, bush	8 lbs.	Cucumbers (trellis)	80 fruit	Potatoes, sweet	15-20 lbs.
Beans, pole	16 lbs.	Eggplant	10-15 fruit	Pumpkin	2-4 fruit
Beets	12 lbs.	Garlic	20 bulbs.	Radish	10 bunches
Broccoli	12 lbs.	Lettuce, leaf	20 plants	Rutabaga	20 lbs.
Brussels sprouts	10 lbs.	Muskmelon/ Cantaloupe	10 melons	Spinach	5 lbs.
Cabbage	15 lbs.	Onions (green)	12 bunches	Squash (summer)	20-25 fruit
Carrots	8 lbs.	Onions (bulb)	30-40 bulbs.	Squash (winter)	20 lbs.
Cauliflower	12 lbs.	Parsnips	10-15 pounds	Tomato (staked)	50-70 lbs.
Celery	20 plants	Peas	10 lbs.	Turnip	15-20 lbs.
Chard, Swiss	30 lbs.	Peppers	30 lbs.	Watermelon	6-10 melons



In Spring 2020, Horticulture Section chair Steve Reiners responded to the pandemic driven interest in vegetable gardening by penning a weekly how-to column designed to help newbies get started and help experienced growers hone their skills. For more articles, visit their website at: <https://bit.ly/3uz0AJy>

Introducing Kid's Corner!

Karen Welch (Master Gardener Volunteer)

For the next few editions of Gardening Matters, we will be adding a Kids Corner with gardening ideas and projects to do with children. Growing plants can foster a sense of responsibility and emotional wellbeing. It can encourage their awareness and care for the environment. Research shows that children who grow some of their own vegetables are more likely to try and enjoy them. They can learn how what they do in the garden can affect the environment. Gardening is a great way to engage a child's natural curiosity.

Herb Gardens for Children



A few years ago, I bought my son's family an elevated raised bed which they continue to use and enjoy. When I visit, they are very proud to show me what they are growing and have expanded to some gardens of their own in the yard. What has struck me is how much they have enjoyed growing some of the herbs. Growing herbs are easy and a wonderful way for children to learn about gardening. Growing herbs exciting for young children and indeed for their adults as well. Herbs have wonderful varying scents, grow fast, and can be used for cooking. Herbs are generally low maintenance and can be grown in a garden bed, raised beds, or pots.

Some of the easier herbs to grow, and that children enjoy are mint, chives, dill, basil, sage, thyme, rosemary, oregano, parsley and lemon balm. Mint and lemon balm are best if grown in a container as they spread rapidly and can become invasive. All these herbs have different scents and it can be fun to blindfold children and let them guess which herb they are smelling. My children and grandchildren always enjoyed running out to the garden with scissors to clip some herbs for that night's dinner. Growing the sage for the Thanksgiving dinner is a source of pride for a child. Herbs such as mint and parsley children love to just chew on. Mint and lemon balm can be dried and made into a tea.

Activity with herbs- Grow a pizza herb garden:

Most children love pizza! For a pizza herb garden, your child will need to grow basil, parsley and oregano as well as two plum tomato plants. A fun way to design the pizza garden is to make it in the shape of a pizza slice.

1. **Start by planting two plum tomato plants in the back, 2 feet apart.**
2. **Next, plant two basil plants in front of the tomatoes with 1 foot between them.**
3. **In front of the basil plants, plant 2 parsley plants, leaving 6 inches between them**
4. **And last, plant one Greek oregano plant in from of the parsley.**

When everything is grown and ready it will be a special day for your child to pick what is needed to make the sauce. They will likely want to be involved in the whole process.

Bon Appetit!



Preventing Garden Diseases

Suzanne DeJohn (The National Gardening Association)

Most garden diseases are caused by fungi -- microscopic relatives of the common garden mushroom. Mature fungi release millions of spores that are then carried on the wind or otherwise get transferred to our plants. And if the conditions suit them, the spores germinate and penetrate leaf tissue, creating spots, lesions, or other symptoms. Most fungi need moisture to germinate, so damp leaves are an open invitation. Some diseases are soil-borne and are transported to foliage when raindrops splash soil onto plants. Preventing infection is the best way to control fungal diseases.

Tools and Materials

- Disease-resistant varieties
- Drip irrigation or soaker hoses
- Mulch
- Pruners
- Rubbing alcohol

1. Choose resistant varieties. Plant breeders have created varieties with built-in resistance to certain diseases. For example, look for tomato varieties with V, F, or T after the names; these indicate resistance to verticillium, fusarium, and tobacco mosaic diseases.

2. Space plants properly. Adequate spacing allows good air circulation, which helps keep foliage dry.

3. Water the soil, not the foliage. Drip irrigation and soaker hoses are better than overhead sprinklers.

4. Apply mulch. Soil-borne diseases can be thwarted with a layer of mulch, which prevents soil from splashing onto leaves.

5. Rotate crops. Plants in the same family are often attacked by the same diseases, so rotate annual crops. For example, avoid planting solanaceous plants, including tomato, pepper, potato, and eggplant, in the same garden bed year after year. Rather, rotate with plants in a different family, such as cucurbits (squash, cucumber, pumpkin).

6. Remove and destroy diseased plant tissue. If only a few leaves are affected, prune them off and discard (don't compost; composting may not kill the disease organisms). Sterilize pruning shears with rubbing alcohol between cuts.

7. Don't overfertilize. Plants pumped full of fast-acting nutrients (especially nitrogen) grow quickly, but this succulent growth is very attractive to disease organisms. Aim for slow, steady growth by providing slow-release nutrients.

Tips

Fungi aren't the only disease-causing microorganisms. Some diseases, such as fire blight, are caused by bacteria. Others, such as tobacco mosaic, are caused by viruses. Bacterial and viral diseases are difficult, if not impossible, to control in the home garden. Sometimes environmental conditions, such as a late frost, cause symptoms similar to disease infection so rule these out first.

Consider the plant, the time of year, and the degree of damage before resorting to pesticide sprays. A small amount of damage on tomato foliage at the end of the season may be tolerable, while the same damage in early summer may warrant control.

Diseases can spread quickly if not contained, so observe plants frequently. Note that most plant diseases are host-specific; that is, they attack similar plants or plants in the same family. For example, the powdery mildew species that attacks tall phlox is different than the one that attacks cucumbers.



Bedding Plants...Gearing Up For Success!

Dorrie Mininger (Penn State Extension Master Gardener's Program)

It's time to get our hands in the dirt again! And, unless we start them ourselves, it is also time to purchase bedding plants. With some planning, smart plant selection, and a little TLC from greenhouse to garden, this could be your most colorful and successful season yet!

Whether buying plants for your veggie garden or accenting your landscape with color, don't set foot in that garden center until you have a plan and a list in hand!

Start preparing your flower beds now, dividing perennials as needed. This will give you an accurate idea of where annuals are needed to add color. Draw your gardens, noting existing plants and empty spaces, to help you plan.

Record when and how much sun each garden area gets. Consider the mature size of selected plant varieties when deciding where and how close to plant. From your drawings, make a list of plants you need. You are now ready to go shopping!

Early shoppers are rewarded with a good selection of young, healthy plants. This also allows you time to prepare greenhouse plants for garden conditions. You will not be overwhelmed by the wide array of plants available since you have a plan. Allow room, though, to try something new that you may discover at the greenhouse.

Look for short, stocky plants with dark green leaves. Check leaves and stems for spots and insects. Avoid tall, "leggy" plants. Smaller, younger plants take off faster than tall, spindly plants stressed from being in a cell pack for too long.

Sun and wind can kill tender greenhouse plants if put in the garden right away. You need to "harden", or acclimate, plants to garden conditions first. Start by placing plants outside in a shady area, protected from wind. Gradually increase exposure to sun and wind. Water when soil surface is dry to the touch. Check at least twice a day during this time since plants can dry out fast. Take plants inside if frost, wind, or a severe storm threatens. After about 7 to 10 days, plants are garden-ready.

Most plants may be planted after threat of frost is past. The average date of last frost here is May 11 to 20. Beware though! Occasionally a frost may hit us after June 1st. Alyssum, pansies, snapdragons

or cold hardy veggies such as cabbage or broccoli may be planted as early as the last week of April.

Plant in the evening or on an overcast day to reduce stress from wilting under the hot sun. This gives the roots a chance to recover from transplanting.

Water plants well before transplanting. Drain and remove plants from cells by pushing up from the bottoms of the cells. Plant each transplant before removing the next one from its cell to minimize drying out. Using a knife, loosen or cut roots that have wrapped around the outside of root system. These will continue to grow this way if not disrupted. Set plants in the ground at the same depth that they were in cell packs.

Water and fertilize transplants at the time of planting. Make a fertilizer solution by thoroughly dissolving 2 T of all-purpose 5-10-5 garden fertilizer in 1 gallon of water. Apply 1 cup of this solution to each plant and water well.



Pictured: Horning's Greenhouse, Penn Yan NY



Photo Credit: Mark AC Photos

Outdoor Plants That Can Hurt Your Cat or Dog

Karen Welch (Master Gardener Volunteer)



There are many outdoor plants that, if ingested, can hurt your pet. I came to realize this recently when I came home with a new puppy who wanted to chew on every plant in sight. It never occurred to me until then that the outdoor plants could harm him, so I did a little research and was surprised by what I found. He was particularly very fond of sniffing and trying to nibble on the lavender which, of course, I found was on the list of toxic plants (can cause vomiting and diarrhea). As I researched the very long list of outdoor plants, I saw that toxicity varied greatly by plant species. The less toxic ones can cause symptoms such as vomiting, diarrhea, depression and/or skin and mouth irritation. For most plants, it takes a fair amount of ingestion for the animal to show symptoms.

On the other hand, there are some plants that even a nibble can cause severe toxicosis.

One of the most surprising items I found on the toxic list are the plants that belong to the Allium family. Plants in the Allium family include garlic, onions and chives which are staples in most people's diet and gardens. Garlic is the most toxic. Any form of these vegetables can cause toxicity. Dried or powdered forms contain a higher concentration based on a per weight basis. For example, 1 teaspoon of garlic powder is equivalent to 8 cloves of garlic if consumed. If ingested, they can cause irritation of the gastrointestinal tract, drooling, nausea, abdominal pain, vomiting and/or diarrhea. Sometimes, if enough is ingested, these plants can damage red blood cell membranes which can lead to anemia. When this happens, your pet may get an elevated heart and respiratory rate, weakness, kidney damage and even death. Dogs of Japanese descent have a higher risk of toxicity from these plants.

Here are some common outdoor plants from the ASPCA website list of poisonous plants that that can be toxic to dogs and cats:

- * **Apple, peach, plum and cherry trees** These trees are particularly more toxic when the stems, leaves and seeds are wilting. The stems, leaves and seeds contain cyanide. Ingestion can cause difficulty breathing and shock.
- * **Azalea and Rhododendron** Can cause vomiting, diarrhea, weakness and heart failure.
- * **Castor bean** This can cause vomiting and diarrhea, convulsions and kidney failure.
- * **Chrysanthemum** Can cause vomiting and incoordination
- * **Daffodils, tulips, crocus, and hyacinths** It is predominantly the bulb portion of these spring plants that is toxic. Ingestion can cause vomiting, diarrhea, convulsion, low blood pressure and heart arrhythmias.
- * **English Ivy** The foliage is more toxic than the berries. It can cause vomiting and diarrhea and abdominal pain.
- * **Grapes** These can cause rapid kidney failure in some dogs so have them avoid the plants and the fruit. Remember, raisins are grapes so make sure your pet avoids them.
- * **Horse Chestnuts (also known as Buckeyes)** Ingesting the leaves or seeds of horse chestnut usually will just cause vomiting and diarrhea but can cause coma and convulsions.
- * **Lily of the Valley** This is mostly toxic to cats and can cause vomiting, heart arrhythmias, low blood pressure, coma and seizures.
- * **True lilies** Any lily in the genus *Lilium* is highly toxic to cats. All parts of the plant are toxic. Animals can show symptoms within hours of ingestion. They are highly toxic to the kidneys. A veterinarian consulted for this article recommended not to have them where cats can access the plants.
- * **Marijuana** Eating the plant itself can cause behavioral changes, stupor, depression, disorientation and urinary incontinence. If it is cooked, it is more concentrated and more likely to cause more severe symptoms, even death.
- * **Milkweed** Can cause vomiting, diarrhea, weakness, seizures, kidney or liver failure, and even death.

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Outdoor Plants That Can Hurt Your Cat or Dog

- * **Rhubarb** The leaves can cause vomiting and tremors and kidney failure.
- * **Tomatoes** There are several toxins in the tomato plant which are predominantly in green tomatoes, the stem, leaves and the flowers. There is very little in the ripe tomato. Ingestion can cause an upset stomach, heart effects and neurological effects such as behavioral changes, tremors, and seizures.
- * **Yew** Can be quite toxic and an animal can suffer from acute cardiac failure. Larger animals are more likely to be affected because of their grazing behavior (pictured right).



The full list of toxic plants is much longer than this. Whenever you introduce a new pet or plant to your yard, I recommend review the list of toxic plants found on the ASPCA website. The ASPCA website, www.asPCA.org, has a complete list of poisonous or toxic plants that can hurt your pets. It also lists what side effects to look for. The ASPCA also has an Animal Poison Control Center that is staffed 24 hours a day with veterinarians that can be reached at 888-426-4435. The ASPCA also has a free app- Animal Poison by ASPCA, that has all the known plants that can be poisonous to your dog, cat or other pets. Of course, you should always make a call to your local veterinarian if you are concerned your dog or cat has ingested something toxic. They may want you to bring your pet in or do some bloodwork to evaluate your pet. Prompt recognition and treatment of a problem with your pet can be lifesaving!

Here are a few other things to think about to protect your pets in the great outdoors. Secure your compost bin. Your pet may be attracted to it and it may include toxic plant material such as onion scraps. Avoid cocoa bean mulch as it contains the same compounds that make chocolate toxic for dogs. Ingestion may cause vomiting, trembling, convulsions, increased heart rate and even seizures. Make sure you store all pesticides and fertilizers in a safe place that your pet cannot reach. Permethrin is a common insecticide that is safe at a 1% concentration but can be toxic at a 5-10% concentration. Bone meal is not toxic but can cause intestinal obstruction and constipation. Remember, they can jump up pretty high! If you are planting bulbs, secure your pet before you lay your bulbs out on the ground before planting.



Pictured: Algreen Products Soil Saver Classic Compost bin

Sometimes our pets may seem ill and they can't really tell us what is wrong. If they have been wandering outside that day, keep a close eye on them for any worsening of symptoms and seek help if you feel symptoms are progressing.

I want to thank Dr. Scott Lutgens, DVM, for his consult and review of this article for accuracy.

Sources

- ASPCA Toxic and Nontoxic Plant list- <https://bit.ly/3j5kLtd>
- Merck Veterinary Manual online resource: Poisonous Plants- <https://bit.ly/3v0qpm1>

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!

No Mow May: 3 Ways Not Mowing Your Lawn Benefits Your Landscape and Pollinators

Ta'Leah Van Sistine (Green Bay Botanical Garden)

In 2019, Plantlife — a wild plant conservation charity — asked citizen scientists across the United Kingdom to participate in “Every Flower Counts.” This project required some people to not mow their lawns for the month of May, and Plantlife ultimately found that it benefited the participants and the environment.

Appleton, Wisconsin has now followed in the footsteps of Plantlife. Last month, 435 Appleton property owners registered for the “No Mow May” initiative. As a “Bee City,” Appleton is committed to creating sustainable bee habitats. For this reason, participating property owners volunteered to delay their lawn care for the month of May, and they ended up contributing to 40 acres of land that was protected for pollinators.

There seems to be an unspoken rule that people should mow their lawns once a week, but No Mow May challenges this idea. Here are three ways not mowing your lawn can benefit you, your local biodiversity and your land:

IT INCREASES BEE PRESENCE.

In one week of the No Mow May initiative in Appleton, a sampling of participating lawns indicated there was a fivefold increase in bee abundance and a threefold increase in bee diversity compared to nearby parkland that was mowed regularly. Plantlife’s “Every Flower Counts” project had similar results where 80% of participating lawns supported about 400 bees a day and 20% of lawns supported up to 4,000 bees a day! This increase in pollinator presence is one of the reasons why not mowing your lawn can also produce more flowers.

AS LONG AS YOUR GRASS IS GROWING, YOUR NUMBER OF FLOWERS WILL, TOO.

Plantlife’s study also concluded that about 200 species were found growing in unmowed lawns and some of them were rare plants. Several tall grass species such as knapweed take a while to reach flowering size, and they can’t cope with being cut off regularly. Therefore, they only bloom in grass that has not been mown for a significant amount of time. Long grass allows for a greater variety of flowers that you wouldn’t usually see with short, cut grass. While knapweed is considered an invasive species in the prairies of the US, the red clover plant has a similar growth pattern.



Photo Credit: Chad Krause



Pictured: Red Clover

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No Mow May: 3 Ways Not Mowing Your Lawn Benefits Your Landscape and Pollinators

YOU'LL SAVE TIME, GAS AND FERTILIZER.

Instead of dedicating an hour or more out of your week to cutting your grass, not mowing will allow you to instead enjoy your green spaces as they diversify and grow around you. You also won't have to purchase gas to power the lawnmower or fertilizer if you typically fertilize your lawn after you mow.

Appleton continued to not enforce long-grass ordinances until mid-June and Minnesota recently allocated nearly one million dollars to encourage people to stop spraying herbicides and mowing so often. Through this state's new program, citizens living in bumblebee zones are eligible for grants up to \$500, so homeowners in those areas who agree to let their lawns grow would be paid for it!

There are still some people who oppose the idea of No Mow May, so one website recently released a suggestion to acknowledge these individuals: stick a sign in your yard that reads "certified wildlife habitat."

No matter if it's May or a different month in the summer, consider becoming a pollinator supporter and leaving the lawnmower in the shed or garage for a little while.

Want to start creating your own "no mow" yards? Visit the websites listed below for additional resources:

- <https://www.prairienursery.com/resources-guides/no-mow-resources/>
- <http://www.stonesiloprairie.com/>

Additional Sources:

- No Mow May Campaign (<https://bit.ly/3Ny1JJM>)
- Appleton Resolution for No Mow May (<https://bit.ly/36L934a>)
- Minnesota Pays Homeowners to Replace Lawns with Bee Friendly Plants (<https://bit.ly/3IXDtNE>)
- No Mow May Campaign (<https://bit.ly/3DqEJrD>)
- Appleton's No Mow May Attracts Greater Abundance, Diversity (<https://bit.ly/3NvIRvb>)

Adjusting Back to Mowing in June...tips from Caroline Boutard-Hunt (CCE-Yates Ag & Horticulture Educator)

When No-Mow-May ends, many people will want to jump back into their normal lawn care routine. It's important to gradually adjust your mowing strategy to reduce shock to your grass.

1. Measure your grass- finally a use for that ruler you've had kicking around in your drawer! Go out and measure how tall your grass is from the ground to the top of the blades.
2. Use the rule of thirds- Adjust your blade to remove 1/3 of the total height of your grass with each mowing. This will reduce stress to your lawn.
3. Gradually reduce your mower blade height to bring your grass back to your preferred cutting height- cool season grasses do best maintained at heights of at least 3 inches. Increasing mowing height will reduce the effects of insect pests, reduce undesirable weeds such as crabgrass and increase drought tolerance.



Photo Credit: Andres Siimon

Upcoming Events

Gardening Matters Day

Date: Saturday, April 9th, 2022

Time: 10:00 AM – 12:00 PM

Where: Yates County Building Auditorium (Basement Level)

417 Liberty Street

Penn Yan, NY 14527

Cost: Pay what you can sliding scale (\$0-\$20 per person)

Register: Visit <https://bit.ly/gmday2022> or call 315-536-5123 (Pre-registration is **REQUIRED**)

All attendees will receive a free “Garden in a Bag” collection of vegetable, herb, and flower seeds.

Topics Include:

- **Growing Peanuts in New York State** (Jan Barret, Master Gardener and Cheryl Flynn, Cornell Cooperative Extension – Yates County Master Gardener Volunteer Coordinator)
- **Companion Planting** (Beverly Barnwell, Master Gardener Volunteer)
- **Gardening in a Changing Climate** (Arlene Wilson, Cornell Cooperative Extension - Yates County Executive Director, Master Gardener Volunteer)
- **Growing Apples for Hard Cider** (Lindsey Dawkins)
- **Pollinators In Your Garden** (Caroline Boutard-Hunt, Agricultural and Horticultural Educator)



Growing a Garden for the Birds

Date: Saturday, April 23rd

Time: 9:00 am-10:00 am

Cost: \$10

Location: Cobblestone Springs Retreat Center
4306 Lakemont Himrod Rd, Dundee, NY 14837

Learn how to increase natural food sources and other aspects of habitat in the garden for your favorite feathered friends. If possible, we'll take a walk and discuss options “in the field.”

For information or to register please contact Cobblestone Springs at cobblestonespringsrc@gmail.com

Master Gardeners Native Plants for Pollinators Sale

Date: Saturday, May 21st

Time: 9:00 am – 12:00 pm

Location: Penn Yan Public Library Gazebo

A wide variety of native plants at great prices will be available! - please contact Caroline Boutard-Hunt at (315) 536-5123 for more information!



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

New York State IPM hosts monthly webinars to share practical information and answer questions on using integrated pest management (IPM) to avoid pest problems and promote a healthy environment where you live, work, learn and play. We'll end with an IPM Minute, and cover a specific action you can take in the next few days to help you avoid pest problems.

To register or to learn more, please visit: <https://nysipm.cornell.edu/whats-bugging-you/first-friday-events/>

A New Can of Worms: Asian Jumping Worms

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Jody Green, PhD
Extension Educator

It is often debated whether worms are friends or foes. It depends on the specific context and number of worms in a given environment. Vegetable gardeners may welcome the benefits of worms in the soil, while golf course managers and some homeowners may want worms out of their turf.

Where Did They Come From? Where Are They Now?

Meet Nebraska's newest invasive species, the Asian jumping worm (*Amyntas* species and *Metaphire* species). Its native range is East Asia, but was found in Wisconsin in 2013. Today, approximately 17 species of jumping worms have been found in North America, and they have been reported throughout the eastern and southern United States, parts of the Midwest and Oregon.

What Damage Do They Cause?

Jumping worms feed in large numbers at the soil surface, rather than the layers beneath like European earthworms (we do not have native earthworms). They readily consume



Jumping worm adult with characteristic clitellum, which is light colored, flush with body and encircles the entire body.

organic material, including mulch and fallen leaves. Jumping worms replace soil with their worm castings, which are small, loose, hard pellets, resembling spent coffee grounds. This material is not conducive for plant growth as the soil structure has changed and lacks water-holding capacity. Without organic matter in the soil, plant roots have a hard time staying rooted.

Asian jumping worms outcompete, outnumber and out-consume other worms in the landscape, and therefore have a significant impact on the ecosystem. Instead of mixing nutrients

in the soil, nutrients are released quickly and ultimately get washed out of the soil by irrigation and heavy rains.

How Do I Identify Invasive Jumping Worms?

Without looking at the worm, a sign of a jumping worm infestation is the change in the texture of the soil. Rather than create a casting pile or middens like European earthworms and night crawlers, jumping worms will leave loose, granular soil particles with the same consistency as spent coffee grounds. Jumping worms are present in the topsoil, so if your mulch is being consumed at a faster rate than normal, you may have jumping worms.

Sometimes called "snake worms" or "crazy worms," they thrash about wildly when disturbed, moving side-to-side in a snake-like motion and break off tail segments to escape.

Out of the soil, jumping worms appear smooth and glossy and are rubbery to the touch, rather than slimy and squishy. Another way to confirm identity includes examining the clitellum (light band) on mature worms. If the clitellum is a cloudy-white color, completely encircles and is flush with the body, you have an invasive jumping worm.

Continued on next page

What is the Life Cycle of the Jumping Worm?

Invasive jumping worms have an annual life cycle. Adults die each winter, but not before they produce (without needing to mate) multiple cocoons in the fall. Cocoons are about the size, shape and color of mustard seeds and cannot be easily detected in the soil. Cocoons survive the winter in the soil and hatch in the spring, developing rapidly to adulthood (60 days) by the end of the summer. Discovery of jumping worms is usually in August and September when worms are at their largest.

How Are Worms Spread?

The spread of jumping worms may be from a number of avenues, all of which involve the transport by human activities. Some worms may have originated as fishing bait, while others were purchased as composting worms for vermiculture. The most common means of spread is by the movement of infested soil, mulch or compost used for gardening and transferring plants into the landscape. Many people obtain plants and seedlings from community sales, friends and neighbors. The soil that comes with the plants may contain tiny cocoons, which hatch the following spring.

Do I Have Asian Jumping Worms?

If you are curious whether you have invasive jumping worms, you can perform a mustard pour on a portion of your soil:

1. Mix 1/3 cup of ground yellow mustard seed with 1 gallon of water.
2. Clear a bare patch of soil and pour slowly over the soil.
3. Worms will move to the surface and you can determine whether they are invasive jumping worms or common worms.

What Do I Do if I Find Asian Jumping Worms?

If you find jumping worms, please report to <https://neinvasives.com/species/insects/asian-jumping-worm>.

Reduce the movement of soil to stop the spread of cocoons from one place to another. Clean equipment, garden tools and personal gear like the treads of footwear between work sites. A good motto is "Arrive clean, leave clean."

For some infested open areas, it may be possible to use a treatment called solarization, which consists of laying a clear plastic sheet over the affected area to heat the soil for a couple weeks and kill jumping worm cocoons. Current research out of the University of

Wisconsin–Madison Arboretum showed that 104°F killed cocoons after three days.

What Can I Do to Control Them?

There are no EPA-registered chemicals labeled for the control of jumping worms once they are in the landscape. Some products, like Early Bird Fertilizer and tea seed pellets have been tested, but additional research is needed to determine application rates and long-term effectiveness.

What Are the Ways to Prevent the Spread of Jumping Worms?

- Educate others about Asian jumping worms and how to identify them.
- Buy plants from seed or bare-root (triple-rinsing roots will remove cocoons).
- Do not buy fishing worms advertised as "snake worms," "Alabama jumpers" or "crazy worms" for fishing or composting.
- Do not dispose of unused worms in the environment.
- Any collected worms should be killed.

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
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