January 2020-Vol.6 No.1

Table of Contents

Upcoming Events

By Susan Martin | January 2020-Vol.6 No.1

Piedmont Master Gardeners
Garden Basics: Prune or Not to Prune?
Saturday, January 18
2:00-4:00 p.m.
Trinity Episcopal Church
1118 Preston Ave., Charlottesville, VA 22903

Learn how to keep your trees and shrubs healthy and attractive with proper pruning techniques. **FREE BUT REGISTRATION IS REQUIRED**. Email your name and name of class to: info@pmgarchives.com

For more information, as well as a full listing of winter/spring Garden Basics classes, visit https://pmgarchives.com/events/

Jefferson Chapter Virginia Native Plant Society
Monthly Meeting and Presentation
Wednesday, January 8
7:30-9:00 p.m.
Education Building at Ivy Creek Natural Area, 1780 Earlysville Road, Charlottesville

Chris Asquith on salamanders. Free. All are welcome!

Charlottesville Area Tree Stewards
Tree Basics Class: Tree ID by Season: Winter
Saturday, January 11
9:30-12:00 noon
Education Building at Ivy Creek Natural Area, 1780 Earlysville Road, Charlottesville

Join the Charlottesville Area Tree Stewards for a free tree identification class. Winter unmasks nature, revealing our local woody trees in their most skeletal form. Participants will learn to identify trees by studying the bare bones of plants, branching structure, bark, buds, and leaf scars. Tree Steward Emily Ferguson will present this class. The first hour will be indoors. If weather permits, the second hour will be outside. Attendance is limited to 25 people. **Registration required here.**

Blue Ridge PRISM quarterly meeting (Partnership for Regional Invasive Species Management)
"Winter Activities for Weed Warriors"
Wednesday, January 15
1:00-4:00 p.m.
Education Building at Ivy Creek Natural Area, 1780 Earlysville Road, Charlottesville

FREE BUT REGISTER here.

Charlottesville Area Tree Stewards
Tree Basics Class: Invasive Plant ID and Treatment
Saturday, January 18
9:30-12:00 noon

Ivy Creek Natural Area, Education Building, 1780 Earlysville Rd., Charlottesville

Non-native invasive plants pose an increasing threat to the Piedmont Virginia landscape. Join Tree Stewards Tim Maywalt and William Hamersky to learn about the nature of this threat, how to identify the most common invasive plants and a wide range of treatment techniques. A slide presentation inside will be followed by a walk in the forest and meadows of the Ivy Creek Nature Center where invasives will be identified and treatment techniques demonstrated. Dress for the forest and the weather as we will be outside for up to an hour on and off trails on varied terrain. Also, bring any plants that you have questions about, and we will try to help you identify whether they pose a threat. **Free but Registration is required here.** Attendees are invited for field experience identifying and treating invasive plants assisted by experienced staff the weekend after class. Details will be provided at class.

Charlottesville Area Tree Stewards
Tree Basics Class: Pruning
Saturday, January 25
10:00-12:00 noon
Northside Library, 705 Rio Rd W, Charlottesville

This **free class** is presented by Tree Steward Tim Maywalt. Learn how to prune landscape trees to improve their health and appearance, while reducing the risk of branch failure. Also, find out what tools to use and how to use them safely along with best pruning practices. Slides indoors will be followed by a pruning demonstration outdoors (please dress appropriately). **Registration not required.** Attendees are invited to practice their pruning skills on Sunday afternoon, January 26, assisted by trained Tree Stewards. Details will be provided during the class.

UPCOMING EVENTS FEBRUARY

Piedmont Landscape Association
37th Annual Seminar
Thursday, February 6
The Paramount Theater
215 East Main Street, Charlottesville

For more information on this full-day seminar, and to register, see the online brochure. Note the early bird registration date of January 14.

American Boxwood Society
Third International Summit on Boxwood Challenges
Wednesday, February 19
USDA Library, Beltsville, Maryland

This day-long seminar will include two topics with the morning session covering the Boxwood Tree Moth and the afternoon will be centered on the Boxwood Blight. Please register online at www.boxwoodsociety.org.

UPCOMING EVENTS MARCH

Virginia Native Plant Society State Workshop
Saturday, March 14
V. Earl Dickinson Building, Piedmont Virginia Community College

Save the date! More info to follow: https://vnps.org/events/vnps-annual-workshop-2020/

Making the Best Use of Winter

By Melanie | January 2020-Vol.6 No.1

Happy New Year, gardeners!

Join me for a moment while I sip on my “manager’s discount” eggnog and see if I can help you sharpen your gardening preparedness this year, stacking the deck in your favor for the best results long before the roses wake up.

The first step is to keep and develop your gardening journal. Date each entry and gradually log your progress throughout the year. Note what went wrong last season and set up a plan to mitigate these issues. Note what went right as well to recreate success.

The next step is to plan out tasks to be accomplished over the winter months and schedule them for completion between the first frost in fall and bud break in late winter.

Landscaping for managing roots and debris

– Once trees are dormant, perform any necessary tree care including removing broken or dying branches, placing guards around saplings, covering exposed roots with top soil, or removing soil from trees planted too deep.
– Young trees should be shielded in the winter to avoid sun scald, which causes the outer bark to warm and split before the rest of the tree comes out of dormancy.
– You may wish to use horticultural oil if you’ve had problems with certain pests that overwinter on some plants, especially fruit trees. Before you do so, be sure to read the article “Horticultural Oils,” at www.ladybug.uconn.edu, which explains how to use it and **on which plants**. The oil works on aphids, adelgids, spider mites, scale insects, greenhouse whiteflies, mealybugs, plant bugs, lace bugs and some caterpillars.
– Remove vines, weeds, invasive plants, thatch, grass clippings, old mulch, and leaves from trees and beds. You may wish to consider applying pre-emergent herbicide to reduce the occurrence of late winter weeds. If so, be sure to read the label carefully and apply as directed.
– Edge flower beds and shrub borders using an edging spade shovel.
– Edge tree rings but be careful to avoid severing tree roots.
– Use an edging spade to cut out the sod from inside of your edge and add it to your compost pile.
– Lay down cardboard (remove all staples and tape) as a weed stopper before mulching. If you don’t like

cardboard, you could use newspaper instead to create a germination barrier between the mulch and soil. It will break down in the spring.
– Bark mulch or matured wood chip mulch is good for all purposes, just ensure that this material is kept 3 inches away from the crown of the tree or shrub to avoid breeding scale or mold.
– If you create your own wood chips, allow them to mature for one year before applying them to soil.
– Winter is a good time to refresh and repair hardscapes and walkways. You can power-wash and fix cracks in walkways, refresh gravel, or use a weed eater to cut sod back 2 inches away from walkways.

Vegetation Turnover

– In the fall or early winter, pick up all fallen fruit, nuts, seeds, and leaves
– uproot old vegetation that you wish to replace
– dig up any tender perennials or annuals that you wish to salvage, pot them, and bring them indoors before they succumb to frost damage.

-After a few frosts, you may want to cut back some — but not all — perennials. Cut back plants with disease or insect problems to reduce the chance of infection next spring. Cut back hostas and remove all their leaves from the ground because they may contain slug eggs. You may want to cut back plants with blackened foliage and which add nothing in the way of winter interest, such as peonies (*Paeonia*), daylilies (*Hemerocallis*), brunnera (*Brunnera macrophylla*), and speedwell (*Veronica*) for example. Be careful not to cut so low as to disturb new basal leaves, which some plants produce late in the season. For more on cutting back perennials, take a look at "Cutting Down Perennials in the Fall," Pa.State Ext./psu.edu

– Anything that might have a disease or harbor pests should NOT be composted.
– Order your selected seeds, prepare sun boxes, and check light bulbs in your starter incubator.
– Plan your spring garden's layout.

Composting

– Cover your older, mature compost pile with a tarp for protection in winter.
– Start a new compost pile. Collect leaves, thatch from yard, grass clippings, yard waste, old mulch chips; break down larger vegetation and work into a new compost pile.
– They may be brown in color, but coffee grounds are an excellent "green" or nitrogen source for composting. "Coffee Grounds and Composting," OregonState.edu. Some research indicates that coffee ground content should be limited to no more than 20% of the total compost volume. Were you worried that coffee grounds will make your compost acidic? That's unlikely, according to the research. "Using Coffee Grounds in the Garden," Univ.Arizona Coop. Ext.
– To review the general principles of composting, see "Backyard Composting," Va.Coop.Ext.Pub.Hort-49 and the January 2018 issue of *The Garden Shed*, PMG.org/Backyard Composting with Practical Tips from the Pros.

Photo: Stowe Boyd, CC BY-NC 2.0

Soil Composition

– Take soil samples and send to Virginia Tech. Get detailed instructions at Soil Sampling for the Home

Gardener, Va.Coop.Ext. Pub. No. 452-129.
– Follow recommendations of soil test for application of soil amendments.
– Add appropriate amendments: lime, gypsum, pot ash, Epsom salts, pine straw.
– Solarize unused beds by saturating the soil with water, and then laying clear plastic over the bed, fitting it as tightly as possible over the ground. To achieve a tight cover, anchor the plastic with boards, metal rods, bricks, rocks, or bury the edges into the soil. As the daylight hours increase, the solar energy gets trapped under the plastic, heating the moisture in the soil, eventually reaching temps up to 150°F. in the spring. This sterilizes the soil in that bed, killing off most larvae and seeds and giving you clean soil prior to planting. Find out more at Soil Solarization for Gardens and Landscapes, Univ. of CA, Pub. No. 74145.

Hardware

– Before the onset of winter, drain hoses by hand, and if possible, use compressed air to blow out all remaining water.
– Roll up your hoses and store them where they will not get damaged.
– Identify and repair any hose damage; repair holes and straighten or replace bent or stripped connections.
– Repair or replace trellises, cages, cold frames, boxes (solar boxes), and raised beds.
– Clean out, organize, repair, or paint your tool shed; remove hornet nests, and oil door hinges.
– Repair your fencing, stabilize any loose posts, and repair and repaint hinges.

– Drain fuel from all power tools, cleaning out any foreign matter you encounter; replace any worn out parts, superglue or epoxy cracks in the housing, and sharpen any shears.
– Inspect and refurbish your hand tools; if the handle is made of wood, sand down any splinters that might protrude. Perhaps you might need to apply a coat of polyurethane, use duct tape, or even apply a neoprene sleeve.
– Remove dirt and rust from tools with a wire brush and use sandpaper to remove any remaining rust. After the metal has been cleaned, spray it with a coat of flat black primer to extend its life.
– Blades should be sharpened and oiled.

Photo: Abby Lanes

Now you're looking sharp and ready for spring.
Good luck,
Tom Wilson

Thrivers and Survivors

By Cathy Caldwell | January 2020-Vol.6 No.1

January seems like a good time to look back over the growing season of 2019. It was freakish, right? Excessive heat, extreme storms, and unusually long-lasting drought — all the way into October! After the over-the-top rains of 2018, who would have predicted it? Certainly not me, but I've learned a few things over the past two summers, and one of them is to expect the unexpected. Unpredictable weather is nothing new, but even more of it is in the offing because we're now experiencing climate change, In case you missed it, you may want to read last month's feature article on climate change in central Virginia. pmgarchives.com/Climate Change Is Happening in Central Virginia.

In early November, with the blistering heat behind us, I surveyed my yard for plants that had survived, or even thrived. You probably did, too.

Here were **some of the thrivers in my yard:**

cranberry cotoneaster (*Cotoneaster apiculatus*), N.C.State

rose campion (*Lychnis coronaria*), Mo.BotanicalGarden

wild bergamot (*Monarda fistulosa), Mo.BotanicalGarden*

little blue stem (*Schizachyrium scoparium*), Wildflower.org (pictured above, courtesy of PlantFinder, Mo.Botanical Garden)

Cranberry cotoneaster
Photo courtesy of Purdue Horticulture

Rose Campion
Photo: Valerie75, Wikimedia Commons

It's probably no surprise that my crape myrtles and winter jasmine persevered, shrugging off all that mother nature dished out. They're not natives, but they sure are tough. Read more at Mo.BotanicalGarden/Plant Finder and at The Garden Shed/Crape Myrtles.

And now I'm asking YOU to **help me build a list of the tough plants** that are managing the difficult conditions our summers are throwing at them in our new era of climate change. We gardeners tend to be keen observers, and if we collaborate, we can help each other and maybe even build a knowledge base. So please, add to the list by commenting at the bottom of this article or by emailing me at garden-shed@pmgarchives.com.

We can't be alone in wondering which plants are tolerating these new conditions, right? So I did some looking about, and discovered that scientists are indeed hard at work on identifying how and why some plants are managing better than others in handling extreme heat, drought and unprecedented precipitation. But I was looking for a "Climate Change Plant List," and I'm sorry to report that I didn't run across such a thing.

Monarda fistulosa, Photo Courtesy of PlantFinder, Mo.Botanical Garden

But the work is definitely going on. One of the best sources I found is called **State of the World's Plants**, a yearly project begun in 2016 by The Kew Science department of the Royal Botanic Gardens at Kew, England. I had always thought of Kew as strictly a botanical garden, but it's more than that; a number of plant scientists work at Kew Science. They are surveying published research and databases and producing annual reports which collect the current state of knowledge about plants and the threats they face, including climate change. A video explaining this project is linked here: youtube/State of the World's Plants 2017.

The first of these reports noted that a plant has three options in coping with climate change: move, adapt or go extinct. It concluded that "there is compelling evidence for all three processes starting to occur across the globe. Large-scale patterns of changing plant distributions, flowering times and novel community assemblages in response to rising temperature and changing rainfall patterns, are now apparent in many vegetation biomes." So far, research indicates that the following characteristics enable plants to tolerate the weather stresses of climate change:

1. thicker leaves
2. efficient water-use strategies
3. deeper roots
4. higher wood density

—Kew/Climate Change Winners & Losers

I don't know about you, but I'm not in the habit of assessing a prospective plant for these traits. How exactly do you determine if a plant has higher wood density than others?

There's another trait that is helpful in surviving drought. Some UCLA biologists recently discovered what makes certain plants more drought resistant than others: the saltiness of their cell sap. Plants have the ability to accumulate salt in their cells, which attracts water molecules, and they adjust these salt levels in response to drought. As researcher Christine Scoffoni explains it: "The salt concentrated in cells holds on to water more tightly and directly allows plants to maintain turgor during drought." A plant with saltier sap and higher turgor pressure is less likely to wilt and die during drought. Okay, that sounds pretty straightforward, but it's not.

Plants face a difficult dilemma during a drought: they must "choose between closing their stomata and risking starvation, and continuing to photosynthesize and risking cell damage from wilting," UCLA Newsroom. Scoffoni and the rest of her team of biologists collected data from numerous species on the "turgor loss point" — the level of dehydration that causes leaves to wilt. **Plants that have a lower turgor loss point** can lose more water before wilting, and can keep open their pores (stomata) to take up carbon

dioxide for photosynthesis in drier soils. Oh, the drama that was silently occurring in our garden beds last summer!

Meanwhile, my list of questions is growing. How do we identify plants with a lower turgor loss point? Is there a list of these species somewhere? How do we choose plants when it's unclear whether they'll be adapted to the future climate of central Virginia?

As a starting point, we can look at the plants that are native to the American Midwest and are already adapted to both drought and excess rain. The Chicago Botanic Garden recommends Midwestern natives and has a special shout-out for blue false indigo (*Baptisia australis*), which has fleshy roots that can go down 25 feet! www.chicagobotanic.org/Weather-Tolerant Gardens. They remind gardeners that a soil rich in organic matter is better-equipped to nourish plants through both drought and floods. Also, they encourage us to focus carefully on HOW we irrigate:

> "When rainfall is scarce, irrigating deeply but infrequently encourages plants to develop extensive root system capable of finding every available drop of moisture. But extensive roots also help plants to take full advantage of drenching storms. One inch of water delivered at one time penetrates the top 4 to 5 inches of clay soil, and up to 12 inches in sand. In between deep waterings — natural or supplemental — as soils become dry, roots resume growing in search of life-sustaining moisture. **Constantly sprinkled plants become spoiled, and develop shallow root systems that leave them less able or even unable to sustain themselves during drought.**"

Blue False Indigo (Baptisia Australis), courtesy of Missouri Botanical Garden, Plant Finder

Plants are definitely adapting — already — to changes in climate. You can read all about it in "Many Plants Can Adapt when Climate Goes against the Grain: Seasonal plants, including possibly the world's important grains, can adapt relatively quickly to climate change," *Scientific American*, Scientific American (D. Biello, 2007). This is good news indeed. Annuals and other short-lived plants can adapt more quickly than long-lived plants like trees.

For now, **let's start developing our own list of "Plants that Withstand Climate Change in Central Virginia**." We can do it; we're gardeners after all. Please add your survivors and thrivers in the comment section below or email me at garden-shed@pmgarchives.com.

Sources

Kew.org/State of the World's Plants & Fungi

"Plant developmental responses to climate change," www.sciencedirect.com/Dev.BiologyVol 419, No. 1, *Developmental Biology*, 2016

"How a Few Species Are Hacking Climate Change," *National Geographic, www.nationalgeographic.com/news/2014*

"Understanding how plants withstand harsh conditions remains major research challenge," Phys.org/news/2016

Croatian Radish Salad

By Sarah Bingham | January 2020-Vol.6 No.1

Croatian Radish Salad (Salata od Rotkvca)

A group of my friends and I gather a few times a year to cook a meal from a country or region of the world. As part of my contribution to one of those dinners, I found this refreshing and simple salad. It pairs well with grilled meats or grilled fish as a counterpoint. Originally found in *Saveur*, April 2014.

Yield: serves 4

Ingredients
2 tbsp. mayonnaise
2 tbsp. olive oil
1 tbsp. fresh lemon juice
1 tbsp. minced parsley
1 tsp. minced or dried thyme
Kosher salt and freshly ground black pepper, to taste
2 bunches small radishes, trimmed and thinly sliced

Instructions
Whisk mayonnaise, oil, lemon juice, parsley, thyme, salt, and pepper in a bowl; stir in radishes. Chill salad 15 minutes before serving.

Vegetable Gardening in January

By Ralph Morini | January 2020-Vol.6 No.1

As is the natural cycle of things, January in the Virginia Piedmont is a period of dormancy and regeneration for our outdoor plants and for gardeners. It is ideally a relaxing time of planning and preparation for the coming spring, with a little bit of hands-on activity just for fun. Here are some ideas for maintaining some continuity while rebuilding energy and enthusiasm:

- If you have mentioned that you are a gardener within earshot of another human or maybe on Facebook, you are undoubtedly receiving a steady stream of seed and gardening supply catalogs. It's time to recycle all the old ones and review the new ones. Decide what to grow next year and place your orders to assure availability. It makes sense to pay attention to hybrid descriptions and disease resistance. Come summer you'll be glad you did.
- At the same time, identify old seeds for disposal or test for germination viability.
- If you feel like growing something edible, indoor herbs are a good idea. Best to use fresh potting mix. Moisten the mix well prior to filling a clean container, water after seeding and cover with plastic wrap or similar moisture preserving device until germination occurs. Then add some liquid fertilizer and provide regular care to enjoy fresh herbs before winter's end.
- Aphids, spider mites, whiteflies and other pests are winter houseplant nemeses. To minimize

pest damage, keep new plants separate from plants moved indoors, remove dead/damaged foliage and check plants regularly using a magnifier to watch for pests. Washing with soapy water and placing sticky-card fly traps around plants will help manage pests.

- This is a good time to clean and maintain tools, pots and planters. Both can be scrubbed and then soaked in a 90% water 10% bleach solution. Store off the ground until they are put back into use.
- If you end up with a stack of plastic pots that you don't need, recycle them. Some local nurseries will take them for their own or community reuse. Lowes has a chain-wide recycling program. Let's keep plastic out of landfills!
- Ditto for natural Christmas trees. The county has a recycling program for them. There are numerous drop off locations. Trees are ground into mulch which is given to residents free of charge at Darden Towe Park in the spring.
- Used potting soil is best not left in the planter from year to year given the risk of transmitting pathogens to new plants. Ideally, replace it with new material. Composting used potting material after chopping up the root and plant material embedded in it is pretty safe as the heat generated during composting should kill any pathogens and it feels much better than throwing it away.
- While you are into maintenance, it is a good time to look over your garage or garden shed to identify ways to improve organization. Now is a good time to create an improved design, even if it is too cold to comfortably build or install any improvements. Garden shed reorganization is one of my January projects this year.
- Winter is a good time to build a compost batch. Microbial activity slows, but if you've gathered leaves into a bin this fall, continuing to add kitchen fruit and vegetable scraps during the winter will provide the nitrogen to boost decomposition as the temperature warms. You should have a nice supply of usable compost for summer planting.
- A key to minimum chemical gardening is to cultivate the most diverse eco-system you can in your yard and garden. Feeding the birds in winter is a good way to keep these helpful predators around for when they are needed. Get some tips on good bird feeder practice in the article Creating a Bird Friendly Garden from the February 2019 issue of The Garden Shed.
- If you burn wood in your fireplace, remember that wood ash is alkaline. It can be mixed with compost or soil but will raise the pH if added in quantity. Not all plants can tolerate alkaline soils. Ornamentals including lilac, weigela, pinks and mock orange as well as vegetables including spinach, beets, corn and cabbage are exceptions. For more info, check the article Wood Ash in the January 2017 issue of The Garden Shed.
- Finally, you can find lots of good reading for a winter afternoon by reviewing past issues of The Garden Shed. A summary of 2019 articles appeared in the December 2019 issue. Or you can go back further using the search key on The Garden Shed's cover page to find great science-based information on the topics you want to explore.

I hope you find a few items of interest on this list. In any case, enjoy our winter break, even if only to dream about the coming spring.

Sources:

Cover photo: *"No time 003" by tomylees is licensed under CC BY-NC-SA 2.0*

"Managing Insects on Indoor Plants," Univ.Minn.Ex.umn.edu

"Plants Grown in Containers: Indoor Containers – Houseplants,"N.C.State Ext.

Let’s Hear It For Radishes

By mking | January 2020-Vol.6 No.1

When I think of a radish, images of colorful, bite-sized pieces in festive salads or thinly-sliced toppings on decorative appetizers come to mind. This familiar root vegetable is well-known as a versatile accompaniment, but once you know its nutritional benefits, you might want to move the radish front-and-center for regular intake. First of all, just about every bit of a radish can be consumed: the bulb (also referred to as the globe), as well as the leaves and seeds are edible. That means it won’t contribute much to your compost pile, but it does pack a powerful punch for dietary health. The radish belongs to the *Brassicaceae* family, so it’s a “cousin” of broccoli, cauliflower, kale, cabbage, turnips, and mustard greens. Let’s explore more about *Rhaphanus sativus* (common radish) and *Rhaphanus sativus var. longipinnatus* (Daikon or Asian varieties).

The term “radish” comes from the Latin word “radix,” which means root. In the United States the most popular variety is small, red, and round with a feathery tail at the bottom. When sliced open, this radish is pungent and creamy white, offering a crisp, peppery-flavor. Other types of radishes are larger, elongated (shaped like a carrot), or cylindrical, and they come in a wide range of colors. Their skin can be white, pink, purple, or black, and the flesh inside might be white, pink, yellow, or green. Common to all radishes is a zesty flavor that announces its presence as soon as you bite into them. For those who prefer more subtle taste bud reactions, the Daikon varieties are a bit milder.

Easter egg radishes
Photo: Jengod, CC BY-SA 3.0

If you’re concerned about your waistline, don’t worry, because a half-cup serving of sliced radishes contains only 12 calories. However, this half-cup serving is an excellent source of fiber, folic acid (reduces cancer risk), flavonoids (anti-inflammatory), and the following vitamins: C (an antioxidant), E, A, B6, and K. Radishes are also rich in potassium, a nutrient that can lower blood pressure and keep blood-flow under control throughout your body. In addition, radishes help regulate the production of bile, which is great news for your liver and gall bladder. They even support collagen production, which is a boost for healthy skin and blood vessels. Wow, plenty of health benefits!

Sound too good to be true? Well, even better is the fact that radishes can be eaten raw, cooked, or pickled. To enjoy them raw, be sure to select younger, smaller radishes for the most satisfying flavor. Slice or cut them for tossed salads, grate them and add to fresh slaw recipes, chop them and put into chicken salad or tacos, or add radish slices to your favorite sandwich or burger. Remember not to discard the radish greens. They can be sautéed in olive oil with garlic and/or mixed with other greens, such as kale or spinach, to yield a yummy, highly nutritious side dish. And, for those who want more possibilities, you can pickle radishes in brine (like cucumbers) to create a tasty treat. If your tummy isn’t growling yet, the creative radish recipes at this site might lead to that outcome. Although not widely known, radish seeds can also be pressed to produce oil used for biofuel.

Regarding cultivation, my experience has proven that radishes are super-easy to grow from seed. They do well in loose soil with a pH of 6.0 – 8.0. They appreciate organic matter, but don’t over-fertilize, or plants will have beautiful foliage, leaving the root crop less-developed. Radish seeds can germinate and grow just about anywhere, as long as the earth is not too rocky. Radish plants thrive in full sunlight, but they tolerate partial shade. Seeds will be happiest when sown in cool weather (60 – 65 degrees F), so early spring or late summer (for fall crop) are optimal times to plant radishes.

To start, use a trowel or spade to gently till the soil, reaching down to at least 8 inches below the surface. Seeds are small, so handle them carefully as you plant at a depth of ½ inch, leaving about an inch of space between each seed. As often happens in a garden, expect the unexpected! I remember how the wind came along one spring day when I was planting my radish seeds and knocked the packet right out of my hands. As you can imagine, I later had a bumper crop of radishes smack in the middle of a garden pathway that resembled a crazy pile instead of a tidy row.

Raphanus sativus var. longipinnatus
Photo: Prenn

Your planting efforts will be rewarded quickly because radish seeds germinate in just 4 – 6 days. Be vigilant and thin them early on (no more than an inch tall) to prevent overcrowding and malformation of the globes underground. Keep the soil moist, and the seedlings will thank you as they stretch upward. Small varieties of radishes will be ready for consumption within a month, and are best picked when young to avoid bitterness. Consider this clever strategy: sow a new group of seeds every ten days to provide a steady harvest of crunchy radishes throughout the growing season. Note that radishes are a great companion plant in the garden because their strong odor tends to deter insect pests, such as aphids, squash bugs, and tomato hornworms. So, regardless of taste preferences, radishes are your friend!

Raphanus sativus var. sativus
Photo: □□□□, CC-BY-SA-3.0

I find it fascinating to know where plants originated, and the history of the radish doesn't disappoint. The Chinese cultivated radishes way back in 700 B.C. and then introduced them to the Japanese, who still use radishes extensively in their cuisine. Wild radish varieties are found in Southeast and Central Asia and India today, so it's likely that early civilizations were growing the plant in those regions. Historical records indicate that laborers who built the ancient Egyptian pyramids were paid unusual wages: they were given onions, garlic, and radishes. 400 years later (300 B.C.) written records suggest that the Greeks and Romans were growing and consuming radishes in southern Europe. Today, wild varieties are found in areas of western Asia and Europe, which suggests that radishes were domesticated there. As for the new world, British settlers took the radish over to America in the 1600s, where it was often served at breakfast, lunch, and dinner. And Thomas Jefferson, who took copious notes about his agricultural pursuits, wrote about cultivating radishes at Monticello on May 27, 1767.

If you haven't yet tried cultivating radishes and are eager to enrich your diet with a nutritious root crop that's a snap to sow and grow, give it a whirl this spring! Or, if you prefer to let others do the digging, look for fresh radishes at your local farmers' market and try a few new recipes with this little red marvel.

Raphanus sativus var. longipinnatus 'Florian' Photo: Anna

Resources

https://www.bonappetit.com/recipes/slideshow/radish-recipes

https://www.britannica.com/plant/radish

https://extension.purdue.edu/foodlink/food.php?food=radish

https://lenoir.ces.ncsu.edu/2019/06/root-for-radishes/

https://www.organicfacts.net/health-benefits/vegetable/health-benefits-of-radish.html

https://www.seedsavers.org/grow-radish

http://www.vegetablefacts.net/vegetable-history/radish-history/

"Root Crops," Va.Coop.Ext. Pub.No. 426-422,
"https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/426/426-422/426-422-pdf.pdf

https://web.extension.illinois.edu/veggies/radish.cfm