



THYMES
CUMBERLAND COUNTY MASTER
GARDENERS

JANUARY, 2024

President: Mike Barron

The “Experiment” 2024

I like to experiment, probably due to working in laboratories in my earlier life. The definition of an experiment is *a trial carried out under controlled*

conditions to test or illustrate an expected outcome. For me, every time that I plant a seed, shrub or tree, it is an experiment. I start with an expected outcome, usually based on a picture in a catalog of a healthy, grown plant. I then do research into the right amounts of sunlight, water, nutrients, and care that are required for success and try to apply them correctly and on time. At the end of the season, I look at my results and compare the outcome with my earlier expectations. From there, I can decide if the outcome is worth repeating, or should I try a different experiment in the next year. In 2024, I would like to encourage all Master Gardeners to experiment a little. Try a new plant; a new location; a new type of gardening; a new expected outcome. Try something new in 2024 and be prepared to share your experiment, progress and results with the rest of the Master Gardeners. It should be fun! P.S. Look for my blue sunflowers!

The year 2024 will be a good one for the Master Gardeners. I expect to see a great class of interns, beginning January 30. In April we will welcome back the Flower, Lawn & Garden Show. The PDG Plant Sale will be held in May and there will be two new *Teas in the Garden*. Bulb and water barrel sales are in the planning stage, and we always look forward to the Fall Gardener’s Festival in August. The schedule for *Classes in the Garden* is firming up, and we are discussing a *Day Lily Day* in June or July. We also have several projects at the PDG, so everyone can help put their stamp on the Garden.

On Tuesday, February 6th, we will hold our regular membership meeting, beginning at 12:30 with a potluck luncheon. At the last general meeting, members voted to add the potluck so that we can have our new intern class join us after their class. As previously planned, we will go back to our evening meeting schedule in April or May, depending on the timing of the final Intern class.

See you in February. Don’t forget to bring items you wish to donate for the silent auction—part of the fundraising effort of the Spring Flower Show.

NEWS AND VIEWS FROM MASTER GARDENERS



Connie Farley: Mary Jane's Farm

My husband, Jim, recently brought home a few issues of *Mary Jane's Farm* magazine for me. This magazine was first published in 1996. But I had never heard of—or read—it before now.

Mary Jane's Farm is all about sharing ideas, household tips and *how-tos* on gardening, canning, crafting, quilting and much more. It brings city farm girls and rural farm girls together in one common sisterhood of helping each other. In fact, Mary Jane herself says it best: *It's not all about where we live, but how we live!*

My magazines are now thoroughly read and filled with yellow sticky notes to flag must-try items or helpful hints. One flagged article features helpful tips for getting my orchid to bloom again. Another is about edible flowers. An additional article focuses on turning lawn space into garden space. Yet another of my favorite articles is about sisters making a difference; entitled, *Sister Act Hall of Fame*.

And, in true sisterhood fashion, I am passing the magazines along to Susan Partch. I've also put in a subscription, so I never miss another issue.

Sue Partch: Groundhogs in the Garden

This year's articles will feature some of the many, non-human residents and visitors at PDG. I've seen several during my quiet hours tending the daylilies. I invite you to come see if you can get a glimpse of them, too; just pick a less busy time for volunteers and a time more likely to provide a sighting—for example, a weekend, near dusk or dawn.



In honor of the upcoming Groundhog Day on Feb 2, I'm starting with the resident groundhogs. I've seen only one, a fat sleek fellow munching on grass near the herb garden. When I walked in from the parking lot, I startled it into scurrying away to disappear under the raised deck by the office building. Shalena (Garden coordinator) says there only seems to be one, living under the office area deck; and it has become somewhat *humanized*, in that it often tolerates nearby people.

She's found another den in the kindergarten where they had a groundhog family. She saw mom, dad, and at least two little ones there last summer. We've also seen a den entrance/exit near the MG tool shed.

Some online research reveals groundhogs, also called woodchucks, are a species of marmot. They are essentially a very large ground squirrel and, therefore, a rodent. Adults can weigh up to 13 pounds and average about 20 inches long with a 7-inch tail. Their thick fur varies in shades of brown with darker feet and a buff underbelly. Found from the Eastern and Central United States, Northward across Canada and into Alaska, they most commonly live along forest edges--near meadows, open fields, roads, and streams. The groundhog is solitary, except in the spring, when a litter of four to six young is born. The young stay with the mother for two to three months.

Although basically a burrowing animal, groundhogs can climb sturdy shrubs and some trees and are good swimmers. They are often active in the morning and early evening. Primarily herbivores with a preferred diet of grasses and other tender greens, they do eat bark and buds from trees and shrubs, as well as, some insects. They feed heavily in the summer and fall as they store up fat for the winter hibernation. During hibernation, each curls into a ball; its temperature drops almost to the burrow temperature, and the heart rate drops from 75 to 4 beats per minute. It is so *out of it*, that it never realizes that others animals--like rabbits, skunks, foxes, and raccoons--may share the burrow.

Because it makes burrows and eats plants, the groundhog is often considered a pest to farmers and gardeners. I asked Shalena about groundhog damage at PDG. She said the burrows are so deep there's little noticeable ground disturbance, except at the entrances. She did comment that the overhanging plant branches in the planter boxes at the office area deck were kept well *trimmed*. Other spots showed some nibbling but it was minor. It appears the PDG groundhogs mostly just help mow the grass.

Part of the info for this article came from www.britannica.com

Winter Survival Strategies of Plants and Animals



By Kristi DuBois

Photos by David Clark

Oh, the weather outside is frightful, but the fire is so delightful. And so is tucking into a soft recliner with a fuzzy blanket and a cup of hand-warming, hot chocolate. We humans can retreat from the icy cold and storms of winter into our cozy climate-controlled homes. But what do animals and plants do to survive the frigid temperatures and winds of winter? They have a number of clever survival strategies.

The most well-known winter strategy of animals is hibernation. Contrary to popular belief, hibernation is not actually sleep, but extended torpor or inactivity, says National Geographic. The metabolism dramatically slows which leads to a lower body temperature, slowed breathing and a reduced heart rate. Smaller animals like groundhogs and gray bats tend to hibernate, living off fat or stored food all winter long. The American black bear, however, does more of a *lite* hibernation. On warmer days, he might leave his den to forage.

Cold-blooded animals, like reptiles and amphibians, have their own version of winter torpor called brumation. Like the tiger salamander at Reflection Riding Nature Center in Chattanooga, they retreat into burrows underground or in rocks where their body temperature, heart rate and respiration slow considerably. Unlike mammals, reptiles and amphibians stop eating before and during brumation, because they can't digest food with their slowed metabolism, according to Effie Yeaw Nature Center.



The Tennessee Aquarium says that during brumation, frogs that burrow in trees or soil in the winter can have glucose that acts as an antifreeze, preventing ice crystals from becoming big enough to pierce cell walls. Aquatic turtles can retreat deep into warm spots of a lake, seldom coming to the surface to breath; because they can exchange oxygen and carbon dioxide through their mouth and cloaca, the cavity at the end of their digestive tracts. Fish, like logperch darters, can cool their body temperatures as the stream around them cools--moving to calm, deep pools where less energy is needed.

Animals can also grow their own insulation for the winter. We all know about the extra fat that we and other mammals put on as the nights get colder and the days shorter. Many mammals, such as, white-tailed deer, fox and river otter also grow thicker, often darker, fur to insulate themselves and absorb more sun. Birds have the benefit of a down *coat* under their flying feathers, and we've all seen them puff up adorably on an especially cold day to create air pockets between their feathers to trap heat.

On the warmer winter days, many animals just keep moving, eating food with more calories. Bobcats try for bigger prey like deer, and squirrels search frantically for their buried nuts. During frigid, icy storms, these animals take shelter--bobcats in hollow logs and rock outcroppings, squirrels in leaf nests in the crook of trees, deer in laurel thickets and pine duff in a thick forest.

Some animals like bluebirds huddle together for warmth. Even sociable honeybees and ladybugs huddle together under frigid conditions, says the Tennessee Aquarium.

And if all else fails, animals might migrate to more agreeable habitats. Elk are often seen more in the winter when they migrate from the snowy mountains down to grassy valleys to graze. Sandhill cranes and white pelicans migrate from the Arctic North to warmer places in the Southeast like Hiwassee Refuge and Reel Foot Lake in Tennessee. Monarch butterflies migrate up to 3000 miles from the U.S. and Canadian winters to the more hospitable central Mexico.

But what do plants do when winter approaches? They can't pick up and fly to a warmer region. They must rely on physiological adaptations to survive.

The biggest dangers to plants in the winter are freezing and dehydration. Woody plants, like trees and shrubs, have bark that acts as an insulator. In the cold winters, woody plants convert starches to sugar which acts as an antifreeze, says Purdue Extension Forestry.

Evergreen trees, like our eastern hemlock and shortleaf pine, have thin needles that hold less water and so are less susceptible to freezing than plants with bigger leaves. However, these needles retain water more effectively with a waxy coating. Evergreen rhododendrons also have thick, waxy leaves as a shield from the cold, but they look depressed in the winter when they hang and curl their large leaves to protect themselves from transpiration and subsequent dehydration.

Deciduous trees such as oaks and hickories protect themselves from water loss by losing their leaves entirely and putting their limited energy into their roots. They are in a state of hibernation called dormancy. When dormant, less water is needed, as with the cacti species that can dry out to survive the freezes of winter.

Non-woody perennials go dormant when the leaves and stems wither away, and the reduced energy without photosynthesis moves instead to the roots, rhizomes or bulbs underground. Think trillium or purple coneflower.

Annual wildflowers, including some species of sunflowers, give up the ghost entirely in the winter, leaving their seeds in the soil to create the next generation if the rodents and birds don't get them first.

It is amazing the diversity of strategies our plants and animals use to survive the winter. The next time a winter storm billows and blusters while we're inside our toasty homes, let's give a thought to our plant and animal neighbors trying to stay warm and nourished outside. Maybe throw a frost cloth over a vulnerable young plant or put extra seeds into your bird feeders to help the birds and rodents through the tough time. And be grateful!

Laura Reister: Winter Garden

Winter's Vegetable Garden

Laura Reister MG class of 2023

For the second year I have been growing vegetables which are considered hardy. I live in a condo and grow herbs, ornamentals and vegetables in grow bags and big pots in the carport.* Russian kale *Redbor*, rosemary and oregano were potted 2 years ago and are still alive.* This Russian kale is an impressive plant. It grew so beautifully last spring, I allowed it to flower and go to seed. The flowers were beautiful. I trimmed the old growth but left the stems. A few weeks later, new leaves started to grow.



Flowers (April 2023) of Russian Kale *Redbor* (left) and the plant with its intense coloring (right)

Another attractive vegetable that is performing well is Mizuna. The one I have is a vibrant wine red. Mizuna is considered to be leafy greens native to East Asia. Well, mine happens to be red. I use it in salads and soups. It has a mild, peppery flavor. (on right)



My favorite of the vegetables planted last fall is Tatsoi(left). It is also known as spoon mustard or rosette bok choy. It is tender and has a very mild flavor.

CONGRATULATIONS TO THE NEW OFFICERS OF 2024

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➤ *Many thanks to all who contributed to this month's newsletter*