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It’s October Again...

It’s still surreal that it’s been a year since Hurricanes Helene and Milton did so much damage to Pinellas County. I know there are many of you still affected, and I do hope you are all on your way to recovery. Parts of the area will never be the same, and I fear the traditional little beach bungalows of the barrier islands are a thing of the past. Our gardens can go on, and now it is even more important to use native plants wherever possible.

Goldenrod: A Pollinator’s Delight for Florida Gardens

By Linda Smock, Master Gardener Volunteer. Photo by Linda Smock.

Looking for a late-season burst of color that also supports Florida’s wildlife? Goldenrod (*Solidago* spp.) is a hardy native that thrives in our state’s diverse landscapes and provides critical nectar and pollen for bees, butterflies, and other pollinators. The following are well-suited to Florida gardens:

- **Wand Goldenrod (*Solidago stricta*)** – A graceful 2 ft. to 4 ft. perennial with slender, golden-yellow flower wands. It blooms in fall and is naturally found in wetter flatwoods and prairie habitats across Florida.
- **Seaside Goldenrod (*Solidago sempervirens*)** – A showstopper along dunes, swales, and brackish marshes. This coastal species can reach up to 6 ft. tall, forming spectacular yellow masses in bloom. Its long, strap-shaped leaves stay attractive year-round.
- **Chapman’s Goldenrod (*Solidago odora* var. *chapmanii*)** – Perfect for landscape beds, this clumping variety stays compact, won’t spread aggressively, and draws a variety of pollinators with its late-summer to early-fall flowers.



These Florida natives add beauty, provide vital resources for native bees and other pollinators, and are easy to grow when planted in sunny spots with well-drained soil. You can find them at native plant nurseries, Florida Wildflower Foundation sales, and Florida Native Plant Society events.



Oysters, Hibiscus, and a Warning from Tampa Bay

By Sheetal Patel, Master Gardener Volunteer, Master of Science in Environmental Occupational Health and Safety. Photo and art credit: Sheetal Patel

In Tampa Bay, the hibiscus blooms bright under warm skies, and the oyster clings to its reef under shifting tides. But both sense a change. The oyster whispers, "The water grows saltier. I struggle to build my shell." The hibiscus replies, "The heat presses on my petals. Rain falls too hard, then vanishes too long."

Tampa Bay has a humid subtropical climate, with a wet season from May to October and a mild dry season from November to April (Wikipedia, 2025). The warming climate makes that wet season more intense, and sea levels rise steadily. Saltwater presses inland.

Freshwater rivers flow less, especially during droughts (Florida Sea Grant, 2017). The oyster, which prefers moderate salinity, faces harsher bruising from excess salt. In fact, over 80% of Tampa Bay's tracked oyster reefs have been lost or converted to mangrove islands over recent decades (University of South Florida, 2022).

The hibiscus feels the toll, too. Intense storms lash its blooms; shifting rainfall confuses its seasons. The petals open too soon or fade before pollinators arrive.



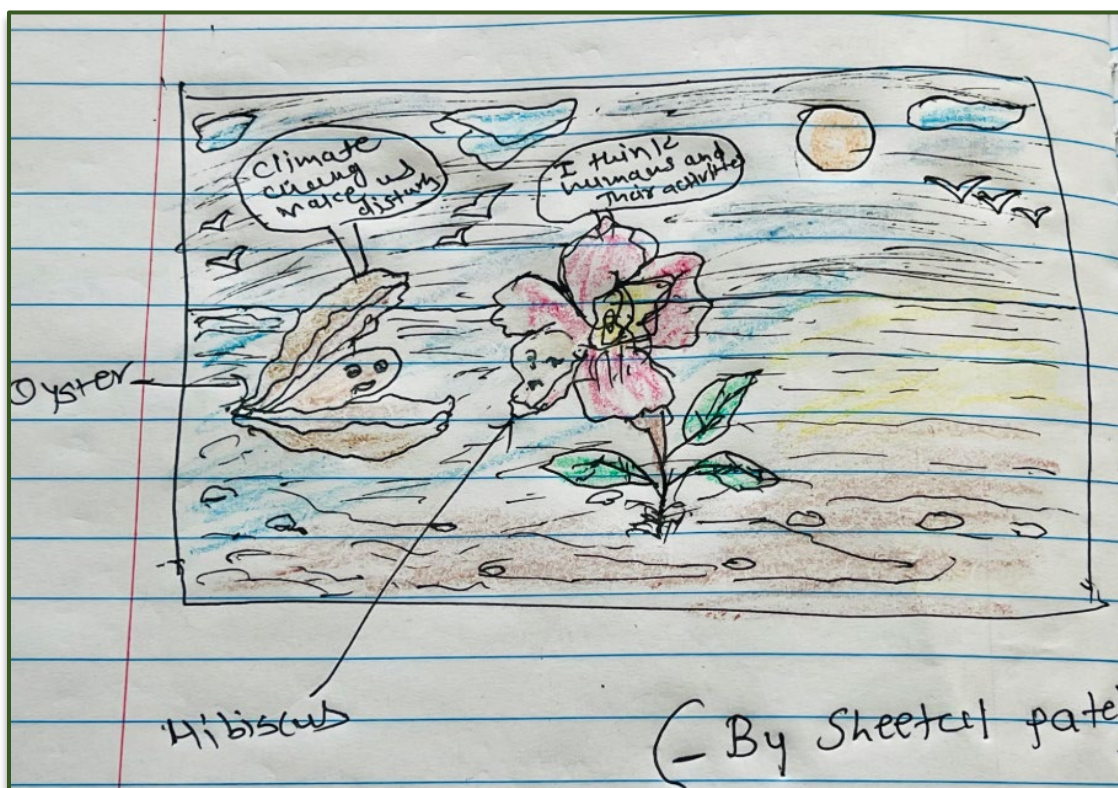
Humans are behind this unraveling. We burn fossil fuels. We cut forests. We build over marshes and channel water away. We interfere with rivers that once tempered salt. The oyster did not cause rising seas; the hibiscus did not ask for hotter storms. Their cracked shells and bruised petals are not silent. They are nature's signals in the Tampa Bay air: "We are dying because you chose this. You can also choose to restore."

The oyster and the hibiscus once met by the shore:

The hibiscus swayed in the salty breeze, its petals glowing like fire. The oyster, resting in its shell, spoke slowly, "The sea grows warmer. My shell thins; my pearls weaken. The water tastes too sharp with carbon. Who has poured this sourness into my home?"

The hibiscus sighed, "On land, the heat presses on my leaves. I bloom too quickly, then wither before the bees arrive. Rains come too late or too heavy. My roots no longer trust the seasons. Who has broken the rhythm of the sky?"

Together they looked toward the human city, smokestacks rising, cars crawling, lights glowing even when the sun was bright.



Science explains what the oyster and hibiscus feel. Carbon dioxide dissolves in oceans, making the water acidic. That eats away at shells and reefs. Rising temperatures disturb flowering cycles, confusing bees and birds. What sounds like poetry is chemistry and physics at work.

Yet humans pretend surprise. They cut forests, burn coal, spill plastic, then write reports as if nature will wait politely. The oyster cannot sign petitions. The hibiscus cannot attend climate conferences. They only suffer silently. But silence is also a message. The thinning shells, the trembling petals, these are nature's letters to us. Simple, clear, urgent.



The oyster and the hibiscus end their talk with the same truth: “We did not do this. You did. And you still can choose to stop.”

References:

- Florida Sea Grant. (2017). Tampa Bay: Health of the estuary and human impacts. EDIS. <https://edis.ifas.ufl.edu/publication/SG138>
- University of South Florida. (2022). Changes to Florida’s climate threaten oyster reefs, USF researchers warn. <https://www.usf.edu/news/2022/changes-to-floridas-climate-threaten-oyster-reefs-usf-researchers-warn.aspx>
- Wikipedia. (2025). Climate of the Tampa Bay area. https://en.wikipedia.org/wiki/Climate_of_the_Tampa_Bay_area

The Oyster, the Hibiscus, and Human Foolishness

By Sheetal M Patel

*Oyster whispers, “Too much carbon, my shell aches.”
Hibiscus sighs, “Heat ruins my bloom.”*

Both laugh bitterly:

*“Humans, burning, cutting,
reporting;
Expecting nature to wait
Like a polite waiter.”*

*Science says: chemistry, physics,
not poetry.
Wisdom says: shells and petals are
letters.
Humor says: humans blame
weather apps,
While melting the world with
receipts.*

*So, we ask you, gardeners of Earth,
Will you heal the soil, cool the seas,
And tend us with care?
Or must oysters crack and flowers fall,
Before you learn?*



Oyster harvesting, Pinellas County



Problem Solved

By Rebekah Heppner, Master Gardener Volunteer

Did you know that the average home gardener grows 270 pounds more food than they can use? Well, not me, but that's a national average that turns into the 17 billion pounds of produce not needed by its grower. That's a lot of produce. I'm not very good at growing food, but even I sometimes end up begging my friends to take some arugula home. Remember the last time the mango trees in your neighborhood produced all at once? Even those delicious fruits became difficult to give away.

That's why Gary Oppenheimer created [AmpleHarvest.org](https://www.AmpleHarvest.org). It's a tech solution to both this problem and to the shortage of fresh food in our food pantries due to the expense of refrigeration and, well, rotting. Oppenheimer was a keynote speaker at the International Master Gardener conference recently. He calls his work "uberizing" the food supply.

Using the website he created, you can donate your excess crop "just in time" for the food pantry to give it to people in need. You just have to go to the website [AmpleHarvest.org](https://www.AmpleHarvest.org) and enter your address. The site will give a list of food pantries near you and tell you the days and times they are there to accept your fresh food. Since pantry information may not always be current, it's best to contact them before visiting. Otherwise, it's just that simple.

Once you connect with a pantry in your community and know their schedule, you can just stop by whenever you have too many tomatoes (can there ever be too many homegrown tomatoes?). If you know of a pantry who would like to have fresh produce (hint: most food pantries are in houses of worship) you can let them know that they can easily register on AmpleHarvest.org. It's free for both gardeners and pantries.

Glimpses into A Fall Garden

by Ellen Mahany, Master Gardener Volunteer. Photo credits: Ellen Mahany unless indicated otherwise.

Finally, summer heat and humidity are behind us, along with the brisk activity of wildlife at its busiest time. Well into fall, we are comfortable in our gardens, where we can reflect on the amazing characteristics of lingering plants that attract dwindling garden inhabitants. Here are glimpses of three of my favorites: partridge pea, bee balm, and muhly grass.



First Glimpse: Partridge Pea (*Chamaecrista fasciculata*).

I think back to the height of summer activity, when bees, butterflies, wasps, moths and other pollinators frequented this plant. Yet, the usual pollinators bypassed the flowers, instead choosing extrafloral nectaries in the bush's stems for their energy drinks. A representative example, the tiny, diurnal, orange-spotted flower moth (*Syngamia florella*), is pictured below and in the close-up shot below. Surprisingly, only bees pollinate partridge pea.



Orange-Spotted Flower Bee



Agapostemon splendens



Agapostemon splendens

A scientific study conducted by four Florida scientists concludes, "Likely, pollinators of partridge pea in Florida are larger bees such as *Xylocopa* and *Bombus* and possibly *Agapostemon splendens*, a smaller halictid bee." * In addition to the carpenter bee, as well as the bumble bee and the green metallic sweat bee, pictured above, the study cites several species of halictid sweat bees, including *Lasioglossum*, as well as the honeybee (*Apis mellifera*), the mining bee (*Andrena*), and the leafcutter bee (*Megachile*) as "possible pollinators."



As year-round fliers, both the honeybee and the *Lasioglossum* use partridge pea as a pollen source in early fall. This host plant for other year-round fliers, sulphur butterflies, also provides them with nectar through early fall. In late September and October, flowers transform into seed pods. After they drop to the ground, small birds eat the released seeds, which will also reseed the plant.

Second Glimpse: Bee Balm (*Monarda punctata*)



Permission from Photographer Aymee Laurain,
Director of Imagine Our Florida, Inc.

Two of the several early fall visitors to partridge pea, the bumble bee and orange-spotted flower moth, shown above, also favor bee balm. By fall, the only surviving bumble bees are the new queens, which must consume sufficient nutrition to last through several months of solitary underground hibernation before they emerge in late January or early February to begin a new life cycle. With their heaviest flying season from July to December, and some even flying year-round, the orange-spotted flower moths are also among wildlife dependent on later-blooming plants.

Along with moths and bees, this gorgeous plant attracts butterflies and hummingbirds. Blossoms and bracts grow in vertical rows, each small, white-spotted flower growing from its green center surrounded by pink, cream, lavender, and purple bracts.

Third Glimpse: Muhly Grass (*Muhlenbergia capillaris*)

Seeing native Muhly grass transform its natural -colored flower tops into a pink to lavender show is a fall garden celebration. This ornamental is spectacular when grown in a group, especially when breezes flutter the clouds of color. The show continues from one to two months, from September to November.

Small animals (like the rabbits in my neighborhood) shelter year-round beneath the spreading canopy, along with a variety of insects. Small birds eat the tiny seeds that form on the flower heads after the color fades.



Purple Muhly Grass

Now, in October, my partridge pea and bee balm bushes have died back to the ground. The beige hue of the muhly grass returns as we move closer to winter. In Florida, every season offers beautiful plants that provide our wildlife with nourishment and protection.

*See "Bee Contribution to Partridge Pea (*Chamaecrista fasciculata*) Pollination in Florida."
Source: The American Midland Naturalist, 179 (1): 86-93. Available online.



The Case of the Resilient Papaya

By Brenda Thomas, Master Gardener Trainee



Once upon a time there was a papaya that was blown to the ground during Hurricane Helene.



So we tried to set it upright. However, the papaya fell again with the winds of Milton.



Henceforth, we determined to train all our future papaya plants to bend sideways so that we can reach the produce!

The moral of the story: Sometimes it is best to let Mother Nature take its course, without undue intervention from meddling gardeners!

Because of the success of this natural process of adaptation, I plan to experiment with the process of ratooning my papaya plants, following the directions of these two articles:

[Ratooning papaya](#)

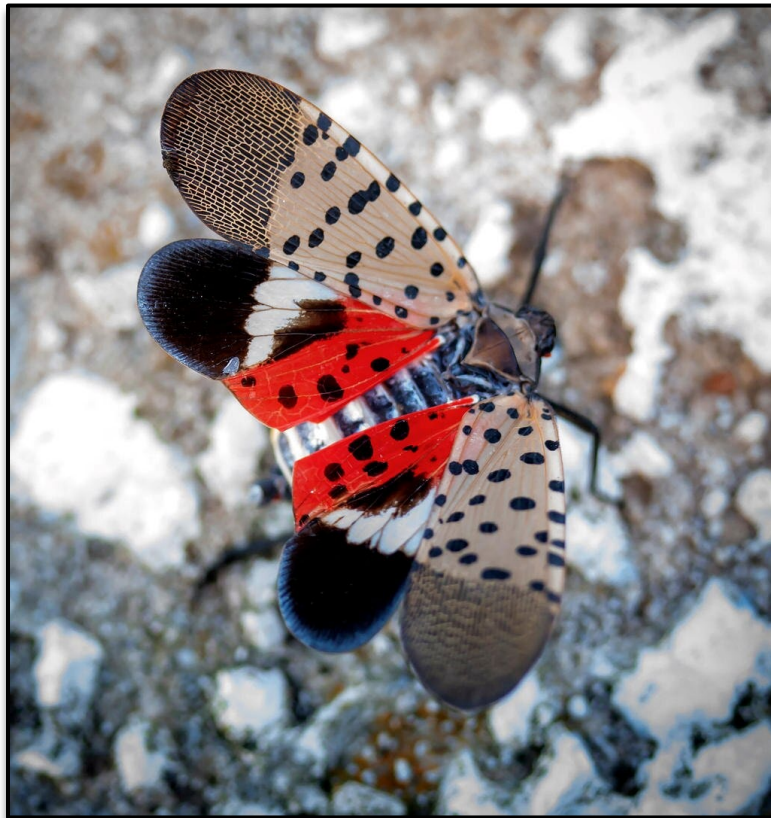
[Effect of Ratooning X17-2 X T5 Papaya Plants on Crop Yield and Survival](#)

Seeing Spots

By Charlotte Vaughn, Master Gardener Volunteer

Have you heard? The Asian spotted lanternfly is a growing threat in the eastern USA. Originally identified in Pennsylvania in 2014, today 19 states and the District of Columbia have some degree of infestation. One of the favorite plants where they find food and shelter is the invasive tree-of-heaven (*Ailanthus altissima*). Currently, they are only known to be established as far south as Georgia and Tennessee, but they have been reported in Florida and the potential risk of invasive establishment is imminent.

Part of the ecological damage caused by the spotted lanternfly is sooty mold on trees from their sweet honeydew excrement. Surprisingly, beekeepers in infested regions are finding that honeydew is a late-season source of sugars for honey production. Although the honeydew honey is safe, Penn State Extension noted that it has a distinct smoky odor, dark brown color and a lingering aftertaste.



Spotted Lanternfly. Photo credit: <https://commons.wikimedia.org/wiki/User:WanderingMogwai>

The good news is that there are steps we can take to mitigate the risk of infestation. Quarantine of plant matter from infested areas is already in place, and some reports claim that cardiac glycosides in milkweed (*Asclepias tuberosa*) may be toxic to them (although the Penn State Extension has stated there is no scientific evidence supporting this claim). Virginia Tech researchers have found that scent-trained dogs (and even pets) can help sniff out egg masses for removal. Lady beetles, assassin bugs, and praying mantis are all beneficial predators that can eat spotted lanternflies. If you spot one of these pests in our area, please kill by smashing but take a picture (if possible) and report it to the extension office or Department of Agriculture.

References:

[Plant Pests and Diseases](#)

[Spotted lanternfly experts debunk myths about the prodigious, pestilent pest](#)

[Man's best friend could be the spotted lanternfly's worst enemy](#)



B's Favorite Children's Books

By Barbara Stauffer, Master Gardener Volunteer

As a retired teacher, known as "B" by my grandson, I continue to love reading and collecting children's books. While teaching first grade, a county training class changed my direction in gardening when I received my first milkweed plant. Yes, raising monarchs in the classroom hooked me into a 26-year passion for butterfly gardening, and recently, a pollinator pathway! At school with our school-wide habitat and at home with our own butterfly sanctuary my passion grew.

Working with struggling readers and ESOL students, I discovered that gardening books were very motivating and began to integrate science with literacy.

The McGuire Center for Lepidoptera and Biodiversity at the UF Florida Museum (The Butterfly Rainforest) had a reading area with comfortable chairs and a quality collection of picture books. They believed that books help "young children build basic concepts about the physical and natural worlds forming the foundation for later science understanding" as well as "developing larger, more sophisticated vocabularies, which later helps with reading comprehension." Books about science "can promote positive attitudes toward learning, curiosity, and persistence in solving problems."

The following two picture books are my favorites. Currently they are available on Amazon, Barnes and Noble, and the Pinellas County Library System:

The King of Bees

By Lester L. Laminack (Author), Jim LaMarche (Illustrator)

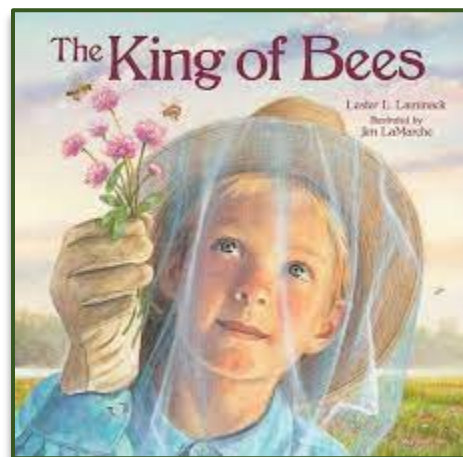
4.9 out of 5 stars

"A gentle intergenerational tale for young readers about the importance of patience and the fascinating work of beekeeping."

Henry wants nothing more than to be like his Aunt Lilla and work with the beehives on their Lowcountry farm. He watches her every day, working hard outside in her bee suit, but what amazes him the most is her ability to communicate with the bees. Henry feels certain he can, too.

Then one day, Aunt Lilla tells him the bees are preparing to leave the hive and may leave the farm entirely. Henry believes it is up to him to communicate with the bees and convince them to stay, before it's too late.

An author's note in the hard book includes additional information about bees and bee conservation."





Reading age - 4 - 8 years
Grade level - Preschool – 3
Publication date - April 3, 2018
ISBN-10 – 1561459534

About the Author

Lester L. Laminack is a specialist in children's literacy and professor emeritus at Western Carolina University. He lives in North Carolina.

Jim LaMarche lives in California. For more information and resources:

www.peachtreebooks.com/book/the-king-of-bees

If You Like Butterflies

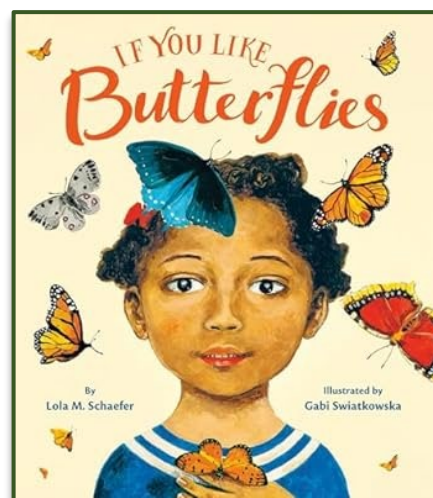
by Lola M. Schaefer (Author), Gabi Swiatkowska (Illustrator)

5.0 out of 5 stars

"A poetic and informative picture book about the mesmerizing life of a butterfly—featuring gorgeous illustrations highlighting each stage of its life cycle."

Lyrical and informative and with beautiful artwork, this stunning picture book highlights the wonder in each stage of a butterfly's amazing life cycle, and includes informative bonus material about creating your own butterfly garden."

Reading age - 4 - 8 years
Grade level - Preschool – 3
Publication date - May 13, 2025
ISBN-10. 0316337676



About the Author

"Lola M. Schaefer lives in the mountains of north Georgia, where she has her very own butterfly garden. Lola invites you to visit her online at lolaschaefer.com."

"Gabi Swiatkowska is the illustrator who lives in France, where she spies on the butterflies in her garden. She makes little notes with drawings about their daily goings-on. And she likes to grow plants that are hospitable to butterflies."

Holiday Shopping? Consider a book for all your future Master Gardeners!

Sources:

<https://www.amazon.com/King-Bees-Lester-L-Laminack/dp/1561459534>
<https://www.amazon.com/You-Like-Butterflies-Lola-Schaefer/dp/0316337676>
<https://www.floridamuseum.ufl.edu/mcquire>



Blazing Star

By Kathy Hefe, Master Gardener Volunteer. Photo credits: Kathy Hefe



If you find yourself at Brooker Creek Preserve in mid-October, one of the most colorful pine woods meadows contains hundreds of blazing stars. *Liatris spicata* is the native that we see here in Florida. Another native species, *Liatris pycnostachya* is found in the central US prairies.

It's a perennial, and very easy to grow. Obtain a single plant, and in a year or two, you'll see many blazing stars sprouting from the same base. It spreads by means of forming an underground corm, which is just a rounded, underground stem. The corm stores water and nutrients, so that even with multiple years of drought, the plant can survive. When your plant has multiplied, and finished blooming (Dec./Jan), dig up the clump and separate the corms. Plant 4-5 inches down with roots down and knobby side up. If you do decide to propagate by seed, collect the stems after the flower turns brown. Place in a cool, dry place or paper bag for a week or so to ensure the seeds are dry. Carefully run your hands over the stalk to release the seeds. The seeds are black and small, with a feathery tip.

Blazing stars thrive in full sun, but can still do well in partial shade. Water well as a young plant to ensure a healthy plant. Don't be surprised if your blazing star is taller than you. Many grow to be 5-6 feet.



Blazing stars attract many pollinators due to the rich nectar produced. The rare Glorius Flower moth feeds here. Tiger swallow tails, sulphurs, grey hairstreak, hummingbirds, and bees like it...but deer don't. A perfect native plant for your garden.

*The Florida Native Plant society lists it as "not salt tolerant" but mine survived 3' of sea water inundation, coming back from the roots after several months.

The Early Bird Catches the ... Holly Berry?

By Susan Ladwig, Master Gardener Volunteer. Photo credits: Susan Ladwig

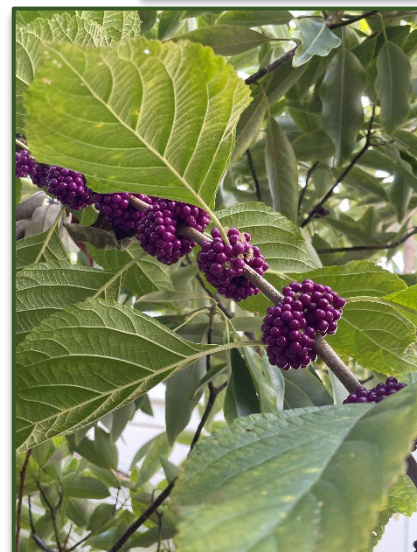
One of the big benefits of growing native plants is observing the birds and insects that come to feed on them and take shelter. Five years ago, I replaced a lawn with a microforest of native trees and shrubs. This year I counted 21 species of birds in my yard. I have a small, downtown St. Petersburg lot, but it's planted with a variety of native trees, shrubs, and flowers. My bird visitors are great entertainment, and it is very rewarding to provide food and refuge to our feathered friends.

One of the most resilient berry-producers in my yard is the yaupon holly (*Ilex vomitoria*), top right photo. The yaupon is not fussy about soil, is fairly drought tolerant, and produces lots of red berries that are beloved by mockingbirds and many others including cedar waxwings.

The mockingbirds, cardinals, finches, and thrashers are also crazy about my beautyberry (*Callicarpa americana*), bottom right photo.

Other Florida native bird friendly trees and shrubs include:

- Simpson stopper (*Myrcianthes fragrans*)
- Wild coffee (*Psychotria nervosa*)
- Scrub blueberry (*Vaccinium myrsinites*)
- Pawpaw (*Asimina sp.*)
- Wax myrtle (*Morella cerifera*)
- Native persimmon (*Diospyros virginiana*)
- Seagrape (*Coccoloba uvifera*)
- Sabal palm (*Sabal palmetto*)



Notes: Remember to leave seed heads on grasses for the seed eating bird species. Also, a bird bath will provide water for birds, and hours of entertainment for you.



Submit Your Articles and Pictures to The Dirt

The Dirt is published January, April, June, and October for Master Gardeners by Master Gardeners. The deadline for the next issue is **January 10, 2026**. If you would like to submit an article or photo feature, see the following guidelines:

- Articles should be 250 to 300 words.
- NOTE! All images must be open source – i.e., your own work, photos from UF/IFAS, or an image for which you have been granted permission.
- The topic can be anything you would like to share to educate your fellow gardeners.
- You may send pictures, poetry, or garden-related articles.
- Submit only Word documents, not PDF, so that edits are possible. NOTE: If you do not have Word, you can email the content and images.
- Send tips or information about a community or Master Gardener project for a potential article.
- Include proper attribution for photos/images.
- Send submissions to Susan Ladwig at ladwig.susan@gmail.com

Editors: Susan Ladwig and Amy George

Graphics: Paula MacDonald

Advisor: Theresa Badurek, Master Gardener Coordinator and Urban Horticulture Extension Agent. The advisor reviews and approves all submissions prior to publication.

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