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April 2023 Issue

Welcome to the April issue of The Dirt, though it feels like July already. I hope your spring gardening is going well. Enjoy!

Who am I?

By Linda Smock, Master Gardener Volunteer. Photo credit: UF IFAS

Well, hey there, Human! I've heard that you humans like guessing games and mysteries so let's play a game. Can you guess who I am? I'll give you a few hints...

- I live mostly in Florida, southern Georgia, and southern Alabama, but can sometimes be found as far north as South Carolina and as far west as Louisiana.
- I like grasslands, flatwoods, and scrub for my home. I don't like much tree cover but I do like herbaceous groundcover so I can nibble anytime I feel hungry.
- I am classified as "threatened" which means I'm not yet endangered but could be if you humans don't do a better job protecting me.
- I typically weight 8 to 15 pounds. My legs are extraordinarily strong muscles even though they are short.
- My lifespan is 40-80 years in the wild but I could live to be 100 in captivity.
- My reproductive cycle starts with a batch of three to fifteen eggs. They hatch in 80-100 days. The temperature makes the difference in how long – we like warmer weather.

- I'm called a keystone species, meaning I am very important to many other species. They depend on me for their homes and survival.

So have you guessed? Yes, I'm a gopher tortoise.



Since I am on that threatened list, I'd like to ask your help, Human. First of all, when you see my home, which is easily identified because I dig out a very long series of tunnels underground and all that sand is in a skirt around my entry hole, would you please step away? There are two good reasons for you to step away – first, my eggs may be in that skirt around my entry and you could easily kill my offspring unknowingly. Second, your weight could cause my home to collapse. You could get hurt if you fall because it collapses.

Second, I'd like you to do what you can to keep me and all the other 350 species (including the endangered indigo snake, lots of field mice, and even a little frog that I think might be named after me, the gopher frog) who live in my tunnel or commensal from being buried alive. Yes, that has happened many times in Florida because those big old bull dozers come along and ignore me. Their drivers are focused on making sure the land is prepped for all the buildings you humans use. My home is ignored. So would you do whatever you can to make sure any land you have a voice about is either used to protect us or if it must be buildings, make sure we get moved to a safe location by someone who has a permit to move us?

Third, would you please become aware of how important fire is to us and help educate others about its importance? Without fire, which happens naturally with lightning, the trees provide so much canopy up above that light can't adequately get to the ground to provide me with a place to live and eat. Some humans are now doing some other things to make the habitat suitable for me. I'm glad, because fire can be dangerous for your houses but it is such a blessing for me. I never worry about roasting when it comes my way; I just crawl down in my tunnel and I'm safe,



along with my communal residents. Even the rabbits and rattlesnakes live together peacefully when there is a fire up above.

There's still another thing you can do that will help me: have a Florida Friendly yard. Grow native plants that I can nibble on such as wiregrass, broadleaf grasses, prickly pear, blueberries, wild peas, and gopher apple. Avoid doing so much mowing, especially if you see my burrow. Don't mess with my burrow in any way, please, especially don't drive over it.

Thank you for listening to me. I am especially important to your environment because of the good things I do, including providing housing for those 350 species I mentioned (includes some insects that are really needed in your gardens!) and also spreading seeds of native plants in my dung.

I almost forgot – one more thing that is critical to my survival: don't put me in the water thinking I'm a water creature. I'll drown. I don't swim.

Reference: Wildlife of Florida Factsheet: Gopher Tortoise. AskIFAS

Thank you, Master Gardener Volunteers!

By Theresa Badurek, Master Gardener Volunteer. Photo credits: Amy George

April is National Volunteer Month, and we want to take the time to celebrate our dedicated Master Gardener Volunteers. Their time, talents, and dedication help make our outreach possible.

In December 2022, we held our annual MGV graduation and volunteer appreciation luncheon, where we recognized our newest graduates:

- Carla Aber
- Pamela Breen
- Teresa Cline
- Patty Cooke
- Jerri Davis
- Priscilla Ellicson
- Colleen Garton
- Rebecca Greywall
- Kathy Hefe
- Connie Hite
- Joni Masse
- Kathy Pitton



2022 MGV graduates who attended the annual luncheon (left to right): Connie Hite, Kathy Hefele, Theresa Badurek, Colleen Garton, Kathy Pitton, and Carla Aber.

We also thanked many long-time volunteers for their years of service. Here are the people who were there:



Denise Hawks, 10 Years of Service



Debra Kramer, 10 Years of Service



Eoin O'Leary, 10 Years of Service



Pat Dieterich, 20 Years of Service

More Secrets Uncovered in the World of Wasps

By Ellen Mahany, Master Gardener Volunteer

This review of “Endless Forms: The Secret World of Wasps” by Seiren Sumner continues the initial one in the January 2023 issue of *The Dirt*. The author, a prominent entomologist enamored with wasps, is determined throughout her book to defend an unpopular insect.

Her entertaining, masterful writing style gives her great advantage in her endeavor. Amusing and chatty, she shares information about findings of pioneer scientists, the “wasp whisperers.” She describes in detail unique wasp behavior encountered during her field trips. She devises an information-packed discussion with Aristotle stretching to 75 pages. She shines a light on wasps’ positive contributions as pest controllers and pollinators. She looks forward to future scientific windows into the unknown world of this ancient, diverse, remarkable insect family.

The initial review focused on the solitary parasitoid wasps representing 80% of the wasp population of 100,000 species. Defending solitary wasps, which sting only their prey, is easier than defending their social cousins, which can repeatedly and communally sting human beings and other forms of life in defense of their nests. The Vespidae family includes all social wasps as well as some solitary wasp branches. Yellow jackets (*Vespula*) and hornets (*Vespa*) belong to the Vespinae subfamily and paper wasps to the Polistes subfamily. In common with their

Hymenopteran relatives, honeybees and ants, they live in communities with reproductive queens and sterile workers caring for larvae.



*Adult female southern yellow jacket. Photo:
Lyle J. Buss UF/IFAS*



*Paper wasp worker caring for larvae. Photo:
UF/IFAS*

But what insect prey do these subfamilies deliver to their larvae? Sumner cites a study in Australia comparing food balls found in the larvae guts of paper wasps and yellow jackets. The former contained only moth and butterfly material. The vespine mixture was only 5% to 10% Lepidoptera fragments, 50% flies and the remainder a combination of bees, wasps, ants, spiders, grasshoppers, cricket and dragonflies. These species join the ranks of wasp species offering either generalist or specialist biological control.

Sieren gives credit to wasps for being the first paper makers. All 74 Vespine species, nearly 1,100 Polistinae species, and some of the 50 Stenogastinae or hover wasps build paper nests with hexagonal cells. Using their mandibles, they scrape wood pulp from sheds and fences, mixing it with saliva and chewing to form pulp. Mastication bonds the fibers. The rougher wood forms the protective envelope found on some hives. The stronger paper is used to create the larvae combs, often housing hundreds of perfect hexagonal cells, the most efficient shape to save space and allow easier annexing.

As pollinators, wasps display uniqueness in their “extreme behavior with plants.” The fig wasps, members of the Agaonidae family, began pollinating the fig 75 million years ago. This tiny insect can enter a small opening to reach the flower head enclosed within the fig. As the female wasp lays eggs, she collects pollen on her body, spreading it to the stamens. Then she dies, the eggs hatch, the new wasps reach maturity and mate. The males dig exit tunnels, then die within the fig. The females coat themselves with pollen before exiting through the tunnels to replicate this bizarre pollination process.



Two male fig wasps (smaller size) and two female fig wasps inside a fig. Photo: USDA U.S. Forest Service



Pollen wasp found in California. Photo Bug Guide

A 350-species vegetarian subfamily of the Vespidae wasps, the Masarinae, are known as “pollen wasps.” They use their long proboscis to reach pollen, which they store in their “crop,” a special gut cavity. They also use their long proboscis to mix nectar and pollen into a pollen loaf for their brood. Non-pollen wasps with their shorter proboscis collect and transfer pollen as they sip nectar for their personal needs while hunting for insects for their many dependents.

Sieren reveals wonderful secrets throughout this book, creating respect and admiration for her cherished wasps.

Bringing Nature into Your Neighborhood: One Plant at a Time

By Jay Gould, Master Gardener Volunteer

Are you discouraged by twice-weekly watered lawns that are sterile and a hostile environment for native insects, birds, and other wildlife?

Wish you could live in a neighborhood full of songbirds and butterflies?

Douglas Tallamy, author of “Bringing Nature Home: How You Can Sustain Wildlife with Native Plants,” describes how every homeowner can make a difference starting with their own personal spaces. Very intriguing, but how about super-sizing your impact?

How can you make it as convenient as possible for your neighbors to incorporate native plants into their yards?

I have been giving them FREE native plants for the past year!

Your first response might be, “where do I get the plants?” If you’re reading this, you probably already have some natives in your yard. Start with them. Many natives are very easy to



propagate and it's fun. Walk through your yard and identify all potential "sharing" plants. You'll probably be surprised by the variety. You already have a natural nursery from which to source plants.

On my little city lot, I have "harvested" all of the following:

Wild coffee	<i>Psychotria nervosa</i>
Senna	<i>Cassia angustifolia</i>
Elliott's love grass	<i>Eragrostis elliottii</i>
Purple Love Grass	<i>Eragrostis spectabili</i>
Native Porterweed	<i>Stachytarpheta jamaicensis</i> ,
Native Milkweed	<i>Asclepias</i> spp.
Tropical Sage (three colors)	<i>Salvia coccinea</i>
Sunshine Mimosa	<i>Mimosa strigillosa</i>
Beach Sunflower	<i>Helianthus debilis</i>
Florida Privet	<i>Forestiera segregata</i>
Simpson Stopper	<i>Myrcianthes fragrans</i>
Climbing Aster	<i>Aster carolinianus</i>
Rouge	<i>Rivina humilis</i>
Carolina Petunia	<i>Ruellia caroliniensis</i>
Spiderwort	<i>Tradescantia ohienensis</i>
Scorpion-Tail	<i>Heliotropium angiospermum</i>
Muhly Grass	<i>Muhlenbergia capillaris</i>
Dwarf Yellowtop	<i>Flaveria linearis</i>
Dwarf Fakahatchee grass	<i>Tripsacum floridanum</i>
Tea Bush	<i>Melochia tomentosa</i>
American Beauty Berry (Purple and White)	<i>Callicarpa americana</i>
Firebush	<i>Hamelia patens</i>
Black-eyed Susan flowers	<i>Rudbeckia hirta</i>
Tickseed	<i>Coreopsis species</i>
Creeping Sage	<i>Salvia riparia</i>
Sky blue Sage	<i>Salvia urica</i>
Spotted Bee Balm	<i>Monarda punctata</i>
Frog fruit	<i>Phyla nodiflora</i>
Coral Honey Suckle	<i>Lonicera sempervirens</i>
Seaside Goldenrod	<i>Solidago sempervirens</i>
Blue Mist Flower	<i>Conoclinium coelestinum</i>

After you have discovered your potential inventory, the next step is to find and/or grow giveaway plants.

The easiest method is to dig up volunteer/orphan plants after a good, soaking rain. Pot them and you're on your way to spreading nature in your neighborhood.



I find tropical sage, native coffee, beauty berry, petunias, blanket flower, spotted bee balm and many more happily start offspring in my yard.

Once these “freebies” have been harvested, you can be more adventurous and consider propagating techniques such as division. A large clump of dwarf Fakahatchee grass can easily be subdivided into more than a dozen plants! Talk about spreading the message!

Other grasses and clumping plants such as goldenrod can be divided into new plants.

Now that you are on a roll, consider growing new plants from seeds. Milkweeds can easily be sprouted from seed as well as Senna. Gather mature seed heads and experiment. Black-eyed Susans are a bit more difficult to grow from seed, but fun to try.

As your skills and confidence grow, you’ll be ready to try propagating from cuttings. This requires more patience and time, but dramatically expands your potential inventory.

After multiple failures, cuttings from Simpson Stopper, Tea Bush, Firebush, Beauty Berry and others are thriving. Experiment and be amazed.

Once you have plants to share, how do you become Johnny Appleseed? I placed a small stand next to the street where up to four plants at a time can be placed in a water-filled tray. The “free” sign attached to the tray makes the plants disappear sometimes within hours or overnight.



Photo by Jay Gould



I suggest offering single specimens of a plant to prevent someone taking all your milkweeds in one visit and limiting the number of possible new homes.

Obviously, a plant flowering has the greatest curb appeals. And, like a good merchandiser, rotate your stock. If a plant doesn't disappear after several days, return it to your nursery and offer something else.

For a brief period, I added a second sign, "Pots needed" and soon began receiving almost daily donations of pots to fill and give away.

Over four months, more than 200 plants were voluntarily dispersed into my neighborhood. Now that's encouraging!

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 **June 8**. If you would like to submit an article or photo feature, see the following guidelines:

- Articles should be 250 to 300 words.
- 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.
- Send tips or information about a community or Master Gardener project for a potential article.
- Send photos as attachments and include proper attribution.
- 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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