In Florida, we do have some large and frightening-looking spiders, so it is important to recognize which are venomous or just scary. Spiders play a key role in controlling insect populations, both around our homes and in natural environments. Since spiders are reclusive, we may not be aware of them until we are surprised by their sudden appearance.

The huntsman spider (*Heteropoda venatoria*), also called the giant crab spider, is considered the world's largest spider by leg span (3-5 inches and body length of about an inch). Identifying features are the plain, light brown upper body and the dark legs. This spider is presumed to have been introduced from Asia into the United States in crates of produce. It is common in houses and other structures since its flat body shape allows it to fit into small cracks and cervices. The female carries the egg sac, containing over 200 eggs, under the body. If the egg sac ruptures, these tiny spiders can spew out, a truly scary event (which I know from experience after swatting an adult female!). Huntsman spiders are non-aggressive and non-venomous, but their bite can be painful.

The wolf spider (*Araneae lycosidae*) is another large, scary-looking spider. It varies in color from brown to tan and has a row of black stripes from the top of the head to the abdomen. The female also can carry a large ball of baby spiders on her back until they are ready to live on their own, so be careful not to do anything to cause release of these tiny spiderlings. Wolf spiders are mostly found in outdoor spaces such as shrubby or woody areas or open and dry areas where they feed on insects and other spiders.

There are five species of widow spiders in Florida, but the most common one is the venomous southern black widow, *Latrodectus mactans*. The female is shiny black with a distinctive hourglass on the underside of the abdomen. The male is smaller and lacks the hourglass but may have red spotting instead on the top or bottom of the abdomen. He is not dangerous.

Black widow spiders tend to live in low areas outdoors, such as under rocks, wood piles and stumps. They are occasionally found indoors in sheds, basements, barns, outhouses, and even in seldom used shoes. Although deaths from black widow bites are rare, medical attention should be sought immediately. The best prevention against black widow spiders is to use gloves when working outdoors or in areas where they may be.
All spiders produce venom, but most cannot penetrate human skin and only bite when provoked, such as being pressed against skin. If spiders are a problem in the home, it is usually because these are insects available for them to eat. The best defense is eliminating food that attracts insects, and seal entry points for insects and spiders.

Huntsman spiders
http://entnemdept.ufl.edu/creatures/urban/spiders/giant_crab_spider.htm

Wolf spiders -
https://entnemdept.ufl.edu/projex/gallery/dl/Beneficial_Arthropods_Predators/text/wolf_spiders.htm

Southern Black widow Latrodectus mactans (Fabricius)
https://edis.ifas.ufl.edu/publication/IN1000

Spiders -
https://edis.ifas.ufl.edu/publication/MG206

What’s This?: Mexican Petunia Pest
By Maureen Hirthler, Master Gardener Volunteer

This year, Mexican petunia (Ruellia simplex) has been affected with what looks like a white fuzzy blanket. This is the result of feeding by a type of eriophyid gall mite, a microscopic pest that sucks out plant juices. Although unattractive, these mites do not cause serious harm to the plants and appear seasonally.

Ruellia simplex is classified as an invasive species in Florida, so this is the perfect time to remove and replace them with a native species.

The resources below contain valuable information on these mites, and more importantly, suggestions for Florida-Friendly alternative plants that will maintain the lovely look of purple blossoms.

https://blogs.ifas.ufl.edu/manateeco/2022/08/18/tiny-and-mite-y/

https://blogs.ifas.ufl.edu/monroeco/2022/08/30/what-is-this-gall-mites/
HOME GARDENER’S LIBRARY:
“FLORIDA’S CARNIVOROUS PLANTS”
Book review by Kristine Del Vecchio, Master Gardener Volunteer

Fun fact: Florida has more native species of carnivorous plants than any other state! Kenny Coogan, a Tampa writer and grower, unveils this world in *Florida’s Carnivorous Plants: Understanding, Identifying, and Cultivating the State’s Native Species* (Pineapple Press, 2022). This book is a fantastic source of information about identifying, growing and propagating these beguiling plants. The color photographs and illustrations bring them to life and encourage gardeners to include them in their home landscapes.

Coogan, a sustainability activist, is passionate about Florida's wildlife and plants. This book also delves beyond the carnivorous plants and describes the development of Florida’s geography from glacial ice age to the present; giving special attention to the work of key scientists and naturalists. Throughout, Coogan emphasizes cultivating native plants to protect and conserve our environment. Readers will come away with an appreciation of the importance of going native – and exploring our Florida carnivorous plants.

Talk Plants with Me

An Online Place to Ask About Plant and Garden Problems

Alyssa Vinson, UF/IFAS Residential Horticulture Agent in Manatee County, hosts a monthly Zoom session with the public to provide solutions to your garden and landscape problems. Frequent topics include pest insects, growing vegetables, proper pruning techniques, palm trees, turfgrass issues, and growing citrus. If she and her team of Master Gardener Volunteers cannot answer your question, she has access to a host of University of Florida scientists who can!

Bring your questions, concerns, weird pictures of bugs, or just general curiosity to monthly conversations on the second Thursday of every month at 11:30 a.m. with Alyssa. She will be hosting the live sessions via Zoom and recording for later viewing on our YouTube channel.

Register at talkplantswithme.eventbrite.com.
IPM: Don’t Spray First and Ask Questions Later!
By Kathy Oliver, Residential Horticulture Program Specialist

IPM is not a new meditation technique or computer game but a way of tackling landscape pests and diseases with ecology in mind. IPM stands for Integrated Pest Management, a method that considers the big picture and utilizes preventative, cultural, and mechanical practices rather than going straight to chemical pesticides.

Start with IPM in the planning stage of a garden or landscape: this goes a long way towards prevention of problems. A healthy plant in the right place is less prone to issues than a stressed plant. Consider your site conditions – soil pH and drainage, light and wind exposure, irrigation system - when choosing and placing plants. Know the mature size of plants and space them to avoid overcrowding. Start vegetables in their proper season and plant varieties that are pest and disease tolerant.

You can make informed decisions based on observation and identification. Once your plants are in the ground, keep an eye on them and investigate abnormalities. How much and what type of damage is occurring? Do you see insects; can you identify them? Some insects are beneficial, helping with pest control by preying on or parasitizing others, so identification is important. Diseases can be more difficult to pin down and are best managed through prevention or cultural practices. Know that fungicides are formulated for preventing diseases rather than curing them.

A plan of action will depend on your tolerance level. Chewed leaves and leaf spots are common and may not be cause for concern. Low levels of pests attract beneficial insects to help with control. Insects such as caterpillars are food sources for birds, reptiles, and amphibians in the area so you may want to let nature take its course.

Modifying cultural practices can be effective in managing pests. Mulch bare soil to prevent fungal spores in soil from splashing onto the leaves. Avoid overhead watering, especially late in the day when water sits on the plants for longer periods. Fertilize plants using the lower rates on label directions if appropriate (high nitrogen promotes lush growth that is irresistible to pests) and enrich the soil with organic matter. Set root balls at the proper depth, slightly higher than surrounding soil to account for settling. Add diversity to your garden and landscape with companion plants that attract beneficial insects. Plants with small flowers in clusters work well including herbs, daisy-like flowers, and marigolds.

If control measures are warranted, think about mechanical means such as pruning out infected branches or hand-picking larger insects and dropping them in soapy water. Pulling or mowing weeds will remove habitat for pest insects such as stink bugs and beetles. Pick up and dispose of leaves dropped from diseased plants.

IPM does not rule out the use of chemical pesticides but utilizes them only as a last resort. Look for organic or least toxic products derived from soaps and oils, botanicals, and microbes. Use pesticides targeted toward your identified pest rather than broad-spectrum products that kill all insects.

Keep records of your IPM successes and failures. Your gardens will improve each year as they become balanced with nature. There are a multitude of IPM resources from the University of Florida at IPM Florida https://ipm.ifas.ufl.edu/ and publications.
We have become increasingly aware of the benefits of growing Florida native plants, as they are uniquely suited to Florida’s conditions and provide food and habitat for Florida wildlife. However, many of us do not have landscapes in which to create garden beds. But you may have balconies, patios, or porches on which to place containers. With appropriate pots and carefully chosen native shrubs, palms, and blooming plants, you can enjoy the benefits of mini native habitats, including visits from butterflies, pollinators, and hummingbirds.

The following are native plants suitable for container gardening, some recommended by Master Gardener Volunteers growing them in our Manatee County Extension demonstration gardens.

Common greeneyes (Berlandiera subacaulis) is a perennial wildflower with bright yellow flowers that appear from spring through fall and attract pollinators. Despite a long taproot, it is easily transplanted or started from seed. It prefers full sun and grows 1-1.5 feet tall.

The sages (Salvia spp.) are short- lived perennials with flowers in a suite of colors that are loved by pollinators and hummingbirds. They re-seed easily. Here are several options:

- Tropical sage (Salvia coccinea) - scarlet red flowers in summer-fall, 2-4 feet tall
- Azure blue sage (Salvia azurea) - bright blue flowers in summer-fall, full sun, 3-5 feet
- Creeping sage (Salvia misella) - blue flowers twice per year, can be used as a trailing groundcover, suitable for sun or shade.

Wild petunia (Ruellia caroliniensis) is not the familiar annual petunia, nor the invasive Mexican petunia. This native has blue/lavender flowers and grows 6-18 feet tall in full sun to shade. It re-seeds readily and is a host plant for common buckeye and white peacock butterflies.

Button rattlesnake-master (Eryngium yuccifolium) is a consistent bloomer and particularly attractive to native bees, as well as a host plant for black swallowtail butterflies. Growing 3-5 inches tall, it is suited for a large container in full to partial sun.

Additional blooming natives to consider include beach sunflower (Helianthus debilis), snow squarestem (Melanthera nivea), lanceleaf coreopsis (Coreopsis lancerolata), and Stoke’s aster (Stokesia laevis).

The following compact native shrubs and palms can be attractive in larger containers:

- Simpson stopper ‘compacta’ is a dwarf native evergreen shrub that boasts small fragrant white flowers in the spring, followed by attractive red berries during the summer. It is a slow grower and tolerant of significant pruning. Blooms are attractive to pollinators. It will take full or partial sun.
- Coontie (Zamia integrifolia) is a native palm-like plant called a cycad that grows to about 3 feet. It has feathery evergreen leaves and produces interesting cones. It is the host plant for the atala butterfly which has recently reappeared in our area.
- Silver palm (Coccothrinax argentata) is a small, slow-growing native palm with blue-green leaves and silver undersides. Zone 10B.

Other native shrubs and palms suitable for container gardening include Jamaica capertree (Capparis cynophallophora), locustberry (Byrsonima lucida), little strongbark (Bourreria cassinifolia), and Florida thatch palm (Thrinax radiata).

Visit ‘PlantRealFlorida.org’ or ‘fann.org’ to find native plant nurseries near you.

‘Growing Native: How to Create a Beautiful Garden in a Container’ by Molly Griner, Master Gardener Volunteer, Polk Co.
‘Pollinator Pots – Saving the Bees and Butterflies One Pot at a Time’ by Norma Kisida MGV, The Master Gardening Bench, April ‘19
Create a Pollinator Pot – Florida Wildflower Foundation
Florida Wildflower Foundation
Florida Native Plant Society
There is a lot of science behind chimeras. Reading the scientific articles left my head spinning with all the technical terms and with trying to understand what was happening with my plant. My wild coffee may or may not be a true example of chimera since multiple branches are involved. The unusual color of the leaves can be the result of a nutrition deficiency or another environmental factor, but outside of the color, the shrub is healthy. The look of the shrub is very unusual, and for now, it holds a special place in my landscape.

Editor’s note: I also have a chimera wild coffee. It is a stunner!
**A Biorational Option for Insect Control: Bt**

*By Amy L. Stripe, Master Gardener Volunteer*

*Bacillus thuringiensis* (abbreviated *Bt*) is a soil bacterium whose spores produce toxic compounds when consumed by target insect pests. The compounds are released during the digestion process where pH is between 9 and 10.5. Pets, people, and plants are safe as are many beneficial insects.

*Bt* is considered a larva killer. This includes caterpillars of moths and butterflies, maggots of flies and mosquitoes, and worms of many vegetable pests including tomato hornworm, a common pest in our area.

When ingested, *Bt* interferes with an insect's gut, causing it to stop feeding and die. Repeated applications of *Bt* may be required as it does break down quickly on sunny days (refer to the label: it is THE LAW.)

One size does not fit all! There are many subspecies of *Bt*, suited for different pests. Here are some available brands:

- **Mosquito control**: *Bt* subspecies *israelensis*: Products: Mosquito Dunks, Mosquito Bits
- **Moth caterpillars** (bagworm, tomato hornworm, oleander caterpillar, etc.): *Bt* var. *kurstaki* Products: Monterey, Thuricide, Dipel
- **Butterfly caterpillars** (but why?): *Bt* subspecies *kurstaki* and *aizawai* Product: Thuricide, Dipel
- **Sri Lankan weevil**: *Bt* spp. *galleriae* (Product: Beetlejus)

Make sure you identify your pest BEFORE applying anything. For more information: https://ffl.ifas.ufl.edu/resources/ffl-minute-radio/2020-archive/may-2020/controlling-caterpillars-with-bt/
https://sfyl.ifas.ufl.edu/media/sfylifasufledu/baker/docs/pdf/horticulture/Bt_NaturesWayToControlCaterpillarsandMosquitoes.pdf

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**Master Gardener Volunteer Plant Clinics**

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>Day(s)</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob Gardner Park</td>
<td>2710 White Eagle Blvd., Lakewood Ranch</td>
<td>Third Sundays</td>
<td>9AM – 12PM</td>
</tr>
<tr>
<td>Crowder Bros. Ace Hardware</td>
<td>5409 Manatee Ave W., Bradenton</td>
<td>Third Saturdays</td>
<td>9AM – 12PM</td>
</tr>
<tr>
<td>Central Library</td>
<td>1301 1st St. W., Bradenton</td>
<td>Third Saturdays</td>
<td>11:30AM – 2:30PM</td>
</tr>
<tr>
<td>Lakewood Ranch Farmers Market</td>
<td>Waterside Place, 7500 Island Cove Terrace, Sarasota</td>
<td>First Sundays</td>
<td>10AM – 2PM</td>
</tr>
<tr>
<td>Rocky Bluff Library</td>
<td>6750 US Hwy 301 N., Ellenton</td>
<td>Second &amp; Fourth Saturdays</td>
<td>10AM – 1PM</td>
</tr>
<tr>
<td>St. George’s Episcopal Church</td>
<td>912 63rd Ave. W., Bradenton</td>
<td>First and Third Thursdays</td>
<td>9AM – 12PM</td>
</tr>
<tr>
<td>Island Branch Library</td>
<td>5701 Marina Dr, Holmes Beach</td>
<td>First Saturdays</td>
<td>10AM – 1PM</td>
</tr>
<tr>
<td>UF/IFAS Extension Manatee County</td>
<td>1303 17th St. W., Palmetto</td>
<td>Every weekday except Wednesdays</td>
<td>9AM – 4PM</td>
</tr>
</tbody>
</table>

**Contact Information**

UF/IFAS Extension Manatee County  
Tel. 941-722-4524  
manateemg@gmail.com

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<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10/7/23</td>
<td>9:00AM</td>
<td><strong>Master Gardener Volunteer Plant Sale</strong> Affordably-priced plants grown by Master Gardener Volunteers! All proceeds go to the Master Gardener Program's educational and outreach efforts.</td>
</tr>
<tr>
<td>10/11/23</td>
<td>2:00PM</td>
<td><strong>Organic Vegetable Gardening</strong> Join UF/IFAS Extension Master Gardener Volunteers to discuss organic vegetable gardening do's and don'ts for southwest Florida.</td>
</tr>
<tr>
<td>10/12/23</td>
<td>11:30AM</td>
<td><strong>Talk Plants with Me</strong> Submit your questions to our Horticulture Agent for live Q&amp;A. We will talk about hot topics in the plant world and may have a few guests join us along the way.</td>
</tr>
<tr>
<td>10/13/23</td>
<td>10:00AM</td>
<td><strong>Creepy Crawlies: SSssnakes</strong> Learn about these interesting, mysterious, and often maligned reptiles, especially how to distinguish between venomous and non-venomous snakes.</td>
</tr>
<tr>
<td>10/20/23</td>
<td>10:00AM</td>
<td><strong>All About Epiphytes</strong> This class will open your eyes to many plants from around the world that you may never have realized were epiphytes! From elusive native Florida orchids and bromeliads to tropical rainforest species in South America, we'll explore the fascinating world of the plants that perch on other plants!</td>
</tr>
<tr>
<td>10/24/23</td>
<td>10:00AM</td>
<td><strong>Irrigation with Water Conservation in Mind</strong> Learn how to adjust your in-ground sprinkler system to conserve water, how you can repair parts, and the benefits of installing water-saving irrigation devices.</td>
</tr>
<tr>
<td>10/25/23</td>
<td>2:00PM</td>
<td><strong>Wicked Weeds: Invasives &amp; Control</strong> Join UF/IFAS Extension Master Gardener Volunteers to learn all about those undesirable plant species in your landscape and how to best manage them and manage your landscape expectations.</td>
</tr>
<tr>
<td>10/26/23</td>
<td>10:00AM</td>
<td><strong>Ground Covers: Plants That Work</strong> Landscaping with low-growing ground cover plants has become a popular trend in landscape practices because once they are established, these plants will need little or no water. Learn noteworthy plants, site considerations, and management of these plants.</td>
</tr>
<tr>
<td>10/27/23</td>
<td>10:00AM</td>
<td><strong>Creepy Crawlies: Good Bug, Bad Bug</strong> Join us to learn about the interesting insects that we want to have around and the not-so-beneficial ones too. New to gardening in Florida- with all the unfamiliar insects? We'll help you figure out which ones will help you out!</td>
</tr>
<tr>
<td>10/28/23</td>
<td>9:00AM</td>
<td><strong>Perico Preserve Tour</strong> Explore one of Manatee County’s newest preserves and learn about Florida's native plants, how they benefit wildlife, and how they can be used in the home landscape. Learn about the wide variety of ecosystems on display and how the preserve was transformed into what it is today.</td>
</tr>
<tr>
<td>10/28/23</td>
<td>10:00AM</td>
<td><strong>Orchid Rescue: Care and Repotting</strong> Do you have an orchid bursting from its pot and wonder what to do now? Learn the proper way to care for and propagate several varieties of orchids. Bring your overgrown orchid and pruners for a hands-on exercise of dividing the orchid. We will provide you with an orchid pot, potting media, and other materials.</td>
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</table>

Scan the QR code below with your smartphone's camera to register for any of the events listed above.