Can you grow cranberries in Florida? Well no, but you can grow a very good substitute. Roselle (*Hibiscus sabdariffa*) is an annual hibiscus which can grow to eight feet if left unpruned. The plant produces numerous 5-inch-wide yellow or buff flowers with a maroon center. After flowering, a red bulb-like structure called a calyx is formed. This calyx can be eaten raw, used in salads, or processed into making drinks, sauces, and jams which taste very much like cranberries. The calyx contains the plant seeds. If the calyx is left to dry, it will split on the plant and provide seeds for replanting. Mine have readily reseeded themselves and they transplant easily. Red Zinger tea is made from the calyx of roselle.

The basic means of preparing the calyces for consumption is to break them apart, remove the seeds, add just enough water to cover them. Boil until the liquid turns a dark red. If making jellies or jams, you will not need to add extra pectin as they contain enough of their own pectin to gel naturally. Add sugar or honey to taste. There are numerous recipes to be found on the web. For more information on roselle, go to [https://www.hort.purdue.edu/newcrop/morton/rosec.html](https://www.hort.purdue.edu/newcrop/morton/rosec.html).

Another hibiscus (*Hibiscus acetosella*) - a.k.a. false roselle or cranberry hibiscus - has maroon colored leaves and stems. Young edible leaves have a cranberry-like flavor and look more like a maple leaf than a hibiscus leaf. It has similar growth habits as roselle but does not form the large calyxes, and its flowers are pink to maroon colored.

All hibiscus flowers are edible and can be used to garnish drinks or made into fine tea. There is a green-leaved variety of cranberry hibiscus, which yields very large maroon flowers. These are absolute show stoppers. I grew them on the side of the house visible to the street, and people would stop and ask what they were. Unfortunately, both the red leaf and green leaf varieties have irritating spiny hairs and prolifically produce seed. Although they are not considered invasive, they have become a nuisance in my yard. It has been three years since I have grown *Hibiscus acetosella* and they keep popping up here and there.

Another Master Gardener makes a drink using equal parts of roselle calyces, young cranberry hibiscus leaves, and the flowers from the green leaf cranberry hibiscus. If you did not know any better, you’d swear you were drinking a cranberry juice cocktail.
Dear Master Gardener:

I'm a winter visitor in Florida and saw this around Memorial Day. It is a woody shrub 1.5 - 2 ft. tall and multi-stemmed. It has somewhat leathery, simple, elongated leaves (3 - 4 in.) and several flowers in a raceme. The plant is growing in full sun in a dry pasture. It reminds me of a cross between a dogwood’s bracts and an iris. What is it? Thanks, JSS

Dear JSS,

Thank you for contacting the Manatee County Extension Master Gardeners.

I was delighted to see your photograph as this is not a cultivated flower and we do not often see them unless we are out on a nature hike. This is an Asimina species, better known as pawpaw. There are eight native pawpaws in Florida. There are also a few hybrid species and variations in Florida.

New species have naturally occurred when two different species, found in the same area, cross-pollinate and produce a third, which then becomes endemic to that area. These hybrids are only found in the geographic area where both parent plants occur and can be limited to an area as small as a pasture in the corner of one county in the whole state!

The particular pawpaw you encountered is a variation of A. longifolia var. spatulata. This variety occurs in the northwest Florida counties of Dixie west to Okaloosa and up into five counties in Alabama. Asimina species are found in sand hills, flatwoods, scrubs, and wet hammocks in Florida and throughout the Eastern United States. Pawpaw is a host food for native zebra swallowtail butterflies.

Although I don't have specific information on A. spatulata, I'm including a link for a generic publication on Asimina species. http://gardeningsolutions.ifas.ufl.edu/plants/trees-and-shrubs/trees/pawpaw.html

Regards,
Karen Holleran, Master Gardener

Master Gardener Karen Holleran answers your email questions and looks at photos for identification of problems at ManateeMG@gmail.com. Or visit our Plant Diagnostic Clinic Monday through Friday (closed Wednesdays) from 9:00 A.M. to 4:00 P.M. at 1303 17th St. W., Palmetto, FL. Or call us with questions at 941-722-4524 and ask for a Master Gardener.

Corrections From the Editors:

In the October 2017 article "Alternatives to Invasive Plants in Florida, Part I: Replacing Mexican Petunia, the third photo from the top was mislabeled "Purple Showers." It is in fact "wild petunia."

In the November 2017 article "I Know I’ve Become a Florida Gardener When...", Nancy Porter’s quote concerned armadillos and Nancy Hammer’s quote concerned fire ants were cited the wrong Nancy to the wrong quote!
Weedkillers: One Size Does Not Fit All

By Chris Marble, Ph.D.
University of Florida/IFAS
Ornamental & Landscape Weed Management

For many homeowners, weed control in landscape beds commonly consists of making spot applications of glyphosate (commercially known as RoundUp amongst other brands.) While it can be effective, using this method and this method alone may eventually result in poor weed control, and misapplications may cause irreversible damage to ornamentals. As planting beds can be costly to replace and are generally sensitive to herbicide applications, here are some considerations:

**No herbicide will control all the weeds, and the uncontrolled weed will take over.** Glyphosate (Ranger Pro, Touchdown, RoundUp, etc.) is the most commonly used herbicide in landscape planting beds because it is cost-effective and controls a broad range of weed species. However, some of the most common weeds in Florida landscapes such as artilleryweed (*Pilea microphylla*) (Figure 1) are poorly controlled by this herbicide. Other products like Finale (glufosinate) can provide better results. Pre-emergence herbicides would also be an option for artillery weed. Over reliance on one herbicide can eventually result in weed control failures. It is important to rotate through different modes of action (MOA) to get the best results and prevent the development of pesticide resistance.

- **Use glyphosate with caution around ornamental plants.** Even a small amount of glyphosate can cause severe injury to many different ornamentals. Ornamentals are regularly damaged by glyphosate and the injury is often misdiagnosed. The most common way ornamentals are damaged from glyphosate is the use of small nozzle tips at high pressure, which can increase the chances of spray drift. Very small droplets can contact ornamental foliage and stems. Also, be careful when applying glyphosate around plants that sucker, as well as young and thin-barked trees (e.g., crape myrtles, maples, etc.) as it can be absorbed through tree bark on certain species. If inadvertent contact is made, immediately wash off the foliage or better yet, prune off the portion of the plant that was contacted.

- **Consider using pre-emergence herbicides.** While some pre-emergence herbicides can be costly compared to older post-emergence herbicides, they are usually the safest option in and around ornamental plants and may

may end up being the most economical option. Pre-emergence herbicides may also be the only option to prevent weeds from growing in groundcovers or up through closely planted shrubs where post-emergence herbicides cannot be used. Most of the pre-emergence herbicides that are labeled for turf such as Gallery (isoxaben), Dimension (dithiopyr), Pendulum (pendimethalin), and Barricade (prodiamine) can also be used in planting beds to prevent weed establishment.

- **Know all your options.** Glyphosate is not the only post-emergence herbicide that can be use in and around ornamental planting beds. For example, Basagran (bentazon), Dismiss (sulfentrazone), and Image (imazaquin) can be used in planting beds for control of various broadleaf or sedge species. There are also many graminicides (grass herbicides) available like sethoxydim or fenoxaprop that will control grassy weeds. Products like Finale (glufosinate) are used in a similar manner as glyphosate, but are not as thoroughly translocated, which could mean better plant safety if ornamentals are accidently contacted.

**Know what you are applying (and how to apply it properly).** A huge problem with pesticide use is many people only know different pesticide trade names and do not know what chemical(s) they are applying. A pesticide trade name or brand name does not tell you much, especially in the homeowner marketplace. There are many products that have RoundUp in the name, but some contain some other active ingredients that could severely injure ornamental plants. For example, RoundUp 365 contains glyphosate and a low concentration of imazapic, which can be absorbed by ornamental plant roots and cause severe damage in some cases. RoundUp for Lawns doesn’t even contain glyphosate. Other products such as Ortho GroundClear contain small amounts of imazapyr, another herbicide that has caused damage to ornamental plants in landscapes due to misuse. Most of the problems associated with these and many other herbicides can be avoided by reading and following label instructions. If you are using pesticides, the most valuable time you will spend is the time you take to read a pesticide label from front to back. The more you know about a particular pest and a particular pesticide, the better your results will be.
Golf Courses Provide Urban Green Space
By Jim Haupt, Master Gardener 2015

Urban green space is becoming fragmented and disappearing because of escalating development and population; the need to create urban wildlife habitats is increasingly important. Believe it or not, golf courses, with their ponds and out-of-play areas, can offer sustainable options for wildlife habitats.

In Florida, there are more than 1,500 private and public golf courses, each averaging about 158 acres; of that average, 114 acres consist of maintained turf. However, many newer (as well as some older) golf courses are now turning to the use of Florida native plants to decrease the amount of maintained areas.

All golf courses have areas where golfers don’t usually play. These areas, referred to as out-of-play areas, are located beyond maintained rough along fairway fringes. Water resources, in the form of ponds and water hazards, can be used to attract wetland-dependent wildlife, particularly birds.

The University of Florida researchers conducted a study of 183 ponds on twelve southwest Florida golf courses to identify the various species and numbers of wetland birds. The study revealed that birds are attracted to these water features for foraging. Diving birds were the most abundant, followed by open water waders. The study also revealed that most birds avoided man-made ledges and walls surrounding the ponds.

Florida golf courses have also proven to be a valuable resource for creating habitats for beneficial insects such as pollinators. Out-of-play areas planted with drought tolerant species provide tolerant functional habitats for pollinators and beneficial insects, and that benefits us all.

Two golf courses in Ocala, "On Top of the World" and "Adena," plan to establish two 4,800 square foot wildflower plots, to determine how much water and fertilizer is conserved by incorporating wildflower beds.

In Florida, it is considered a Best Management Practice to reserve 50 to 70 percent of out-of-play areas as natural areas. By maintaining naturalized habitats with native vegetation, leaving dead or fallen trees untouched, planting shoreline and aquatic plants, providing wildflower gardens, and implementing Florida-Friendly Best Management Practices, golf courses can be an important link in creating urban wildlife habitats and providing wildlife corridors for animals to move from one area to another.

For more information visit:
edis.ifas.ufl.edu/uw207
blogs.ifas.ufl.edu/news/2016/11/02/ufifas-researcher-hopes-to-bolster-pollinators-reduce-water-use-other-inputs-on-golf-courses/
Scouting for insects is what we do as gardeners. It is a must, if we want plants to survive. Scouting during the day is a sweaty business and not one I really enjoy much.

While taking my dog out one evening or early morning - whenever he decides he needs to go - I discovered that I could see weevils on my citrus trees much easier by flashlight. I had flashed the light over the tree and bright little beacons of white light appeared like Christmas tree lights. Upon closer inspection, I found them to be Sri Lanka weevils. One night I captured about two dozen of them! A bumper crop, for sure!! Photos below are of just three.

Among the fun creatures were sleeping anoles. They each seemed to have their own sleeping position preference. Some slept with their tails straight out behind them, others curled their tails. Too cute!

This banded sphinx moth is gorgeous. *Geometeric fascinates* is mostly found in the southern parts of the U.S. and way down into South America. Larvae feed on plants in the evening primrose family as well as grapes and Virginia creeper.

Not only was I able to pick off the culprits like blueberries off of a bush, I was able to see other interesting sights. One such sight was a *Condyllostylus* spp. sleeping quite soundly.

Seriously, one must scout during the day, but this night thing is rather addictive. It’s just plain fun to go out in the dark with a flashlight and shine it on your trees, plants, and shrubs. You will be amazed by the many spider eyes that shine back at you. There’s nothing good on television, anyway...although, I was rather startled by a fruit rat that ran by me!!!
In this second article of the series, we will identify a common invasive ‘pine’ in Florida landscapes and suggest several substitutes.

**THE BAD ACTOR:** Discussion of Australian pine (*Casuarina equisetifolia*) is particularly relevant now because of the recent damage done by Hurricane Irma. The Australian pine is a Category 1 invasive species in Florida and has eliminated habitat for Florida native plants. It is not actually a pine, but was named as such because its stems resemble pine needles, and one of its countries of origin is Australia. It can grow to a height of 90 feet and a width of 40 feet. It was introduced into Florida in the late 1800’s as a windbreak and for shade. Ironically, it is known for its minimal resistance to wind due to shallow roots, and it can easily topple during tropical storms and hurricanes.

If you drive on SR 64 just east of Lakewood Ranch Boulevard, you will see dozens of these now fallen trees due to Irma. They are commonly found along our coastal shorelines because they successfully grow in sandy and salty areas. However, their shallow roots do not mitigate soil erosion, and make nesting challenging for sea turtles that dig holes to lay eggs. Twice a year thousands of tiny Australian pine seeds are dispersed by winds and birds that eat the seeds. Australian pine pollen is also an allergen.

**THE GOOD ACTORS:** Southern red cedar (*Juniperus silicicola*) is ideal as a windbreak and screen. This native provides attractive year-round greenery in the large yard. It can reach a height of 40 feet, with a 25-foot spread. It is salt and drought tolerant, and grows happily in a variety of Florida soils.

[continued on page 7]
Bald cypress (*Taxodium distichum*) is a North American native often seen near water, but it is equally at home in drier landscapes. It may reach heights of 60 to 80 feet, with 25 to 35 feet spread. The light green needle-like leaves turn a beautiful copper color before dropping for the winter, which then exposes attractive reddish-grey peeling bark. Cultivars with wide-spreading, narrow or drooping branchlets are available.

North American native pines such as the longleaf pine (*Pinus palustris*) can be majestic alternatives in large landscapes. Before European settlers arrived, longleaf pine forests covered as much as 60 million acres of the south-eastern United States. Longleaf pine resembles a clump of grass-like needles for five to seven years, then grows moderately, eventually reaching 60-80 feet. It has very long, bright green needles which create an attractive weeping look and has silvery white buds in winter.

Another majestic pine suitable for large yards is the slash pine (*Pinus elliottii*) which can reach heights of up to 100 feet. It has an open, rounded canopy which creates dappled shade below. Several slash pines planted in a group make for a natural-looking setting.

For more information on alternatives to the invasive Australian pine, visit edis.ifas.ufl.edu/ep468 “Alternatives to Invasive Plants Found in Central Florida Landscapes.” For details, Ed Gilman and Dennis Watson, UF/IFAS Extension, have authored publications on each of these trees.

Future articles on Florida invasive plants and alternatives will follow in the months ahead.
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<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>1st Saturday</td>
<td>10:00 a.m.-1:00 p.m.</td>
<td>Ask a Master Gardener – Island Library – 5701 Marina Drive, Holmes Beach. Visit the Extension Master Gardener information table and get answers to your gardening questions.</td>
</tr>
<tr>
<td>2nd &amp; 4th Saturday</td>
<td>10:00 a.m.-1:00 p.m.</td>
<td>Ask a Master Gardener – Rocky Bluff Library – 6750 US Highway 301 N, Ellenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.</td>
</tr>
<tr>
<td>2nd Saturday</td>
<td>10:00 a.m.-1:00 p.m.</td>
<td>Ask a Master Gardener – South Manatee Library – 6081 26th Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.</td>
</tr>
<tr>
<td>Saturday December 9</td>
<td>9:00-11:00 a.m.</td>
<td>Extension Master Gardener Plant ID Tour – Emerson Point Preserve – Stroll through Emerson Point Preserve to learn more about Florida’s native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in tower parking area at 5801 17th Street West, Palmetto. Call the Extension Master Gardeners at (941) 722-4524 to register.</td>
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<tr>
<td>Saturday December 9</td>
<td>9:00-11:00 a.m.</td>
<td>Extension Master Gardener Plant ID Tour - Riverview Pointe Preserve – DeSoto National Memorial – Stroll through Riverview Pointe Preserve to learn more about Florida’s native plants and inhabitants of a coastal habitat. Suitable for all ages. The hike begins in the parking area of the DeSoto National Memorial Park and enters into the Riverview Preserve at 8250 DeSoto Memorial Highway, Bradenton. To register call the Extension Master Gardeners at (941) 722-4524.</td>
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<tr>
<td>Saturday December 9</td>
<td>9:00-11:00 a.m.</td>
<td>Extension Master Gardener Plant ID Tour - Rye Preserve - 805 Rye Wilderness Trail, Parrish 34219. Meet at Rye Preserve on the east side of Rye Road and North of Manatee River. Drinking water and hiking sticks are recommended. There are places to enjoy a picnic lunch, if desired. Register by calling the Extension Master Gardener Plant Diagnostic Clinic (941) 722-4524.</td>
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<tr>
<td>Saturday December 16</td>
<td>10:00-11:00 a.m.</td>
<td>Vermicomposting – Worm Composting – Find out how to turn food scraps and other waste into nature’s perfect compost. This class will teach you how to put a bin together including every step of the process to take the mystery and fear out of what you’ll find to be a most rewarding “hobby” that supports a philosophy of reducing, reusing, and recycling. Worm bins can be purchased after class. Check or cash only. Register online at <a href="http://manatee.ifas.ufl.edu">http://manatee.ifas.ufl.edu</a> or call the Extension Master Gardeners at (941) 722-4524.</td>
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<tr>
<td>Wednesday December 19</td>
<td>9:00-11:00 a.m.</td>
<td>Extension Master Gardener Plant ID Tour - Robinson Preserve – Stroll through the Robinson Preserve’s salt marshes to learn more about Florida’s native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in parking area by main entrance at 1704 99th Street Northwest, Bradenton. To register call the Extension Master Gardeners at (941) 722-4524.</td>
</tr>
<tr>
<td>Saturday December 19</td>
<td>10:00 a.m.</td>
<td>Monthly Guided Tours of the Master Gardener Educational Gardens - Join us for a guided tour lasting about one hour. The gardens illustrate a variety of garden styles and techniques, demonstrate Florida-Friendly Landscaping™ principles, educate residents about plants that perform well in Florida landscapes, and inspire garden visitors to follow recommended gardening practices at home. Register by calling the Extension Master Gardener Plant Diagnostic Clinic (941) 722-4524.</td>
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