Are you familiar with the many botanical parks in this area of Florida? Why do we visit botanical gardens? Each one has an individual style and often a unique collection of labeled plants that give us an idea of what grows well in the area and what might work in our own yards.

Botanical gardens instill in visitors an appreciation of the role of plants in the environment. Some focus on native plants, some on tropical plants, and some on specialty plants like palms, orchids, and succulents. Most offer interesting classes about plants and topics that concern plants for adults and children. Almost all of them have gift shops with plants that you have seen in the garden and plant books. Special events are held at the gardens: plant sales, concerts, and art exhibits. And best of all, botanical gardens provide us with a relaxing and peaceful green area to get away from urban pressures.

The best-known botanical garden in our area is Selby Gardens, which was opened to the public in July 1975. William and Marie Selby owned the original property, which Marie donated to the community as a botanical garden “for the enjoyment of the general public.”

A board of directors was appointed and after consultation with the New York Botanical Garden and the University of Florida, it was decided that the garden should specialize in epiphytic plants, making it unique among the more than 200 botanical gardens in the country. Since then, Selby Gardens has become well known worldwide for its collection and study of orchids, gesneriads, and bromeliads. Blooming orchids and other rare plants are on display throughout the year in its Tropical Conservatory.

Besides the orchids, the 15 acres of garden have well-manicured paths and a mangrove board walk along Sarasota Bay under shady trees. There are two butterfly gardens, a peaceful koi pond, a succulent garden, a bromeliad garden, a bamboo section, and a children’s rain forest play area next to a grassy lawn shaded by an enormous banyan.

One of my favorite parts of the garden is along the sidewalk leading up to the front door where a display of constantly blooming vines and sidewalk plantings give me new ideas. There is a gift shop with a good supply of plant books and a nursery filled with orchids, bromeliads, and other epiphytes for sale. You do not need to pay an admission to visit the gift shop. Free parking is available across the street from the main entrance. There are places inside to buy food (although you can bring your own picnic and drinks).

Information about the Selby Gardens admission and opening times is available at their website. http://selby.org/
Q: Dear MG:
This lovely shade tree is in my sister’s new yard in Okeechobee, Florida (zone 9b). It is deciduous (or semi-deciduous), has bark and leaves that resemble Gumbo limbo somewhat, but the fruits (which are on now, perhaps leftover from last year?) are small perfectly round black berries (viewable in the second photo attached.) We have been told by neighbors that they make a mess on cars parked underneath. The bark does not peel like G. limbo. Any ideas? Thanks in advance.
A.S., Palmetto

A: Hello A.S:
This is the camphor tree, *Cinnamomum camphora*, a dense shade tree that has aromatic leaves. Its leaf litter and fruit are quite messy. It is not really suitable for urban landscapes as it grows quickly and can become quite large. Older trees sometimes have large surface roots. This tree has escaped cultivation in some areas of Florida and is considered invasive. I have included a link to a publication about this tree.
http://edis.ifas.ufl.edu/pdffiles/ST/ST16700.pdf

Master Gardener Karen Holleran answers your email questions 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 the NW corner of the Manatee County Fairgrounds, 1303 17th Street West in Palmetto; or call us with questions at 941.722.4524 and ask for a Master Gardener.
Reminder about Nitrogen Fertilizer

Many Manatee County residents have gotten the message of our county's fertilizer ban that prohibits the application of nitrogen fertilizer from June 1st through September 30th. But it does bear repeating. The ban is to protect our waterways from nutrient runoff during our rainy summer months. Here are the main provisions of our fertilizer ordinance:

**Fertilizer blackout**: From **June 1 to September 30**, no fertilizer containing nitrogen (N) shall be applied to turf or landscape plants in Manatee County.

This does not mean your garden will suffer; you can apply:
- Potassium (K) - the third number in fertilizer formulations - plays a key role in many growth related processes in plants.
- Micronutrients, such as magnesium (MG) and manganese (MN).
- Iron (FE), which is particularly useful for keeping lawns green.
- Compost-based products, such as chicken or cow manures, earthworm castings, or composts.

**Limits on nitrogen**: From October 1st through May 31st, nitrogen fertilizers must contain at least 50% slow release nitrogen. Look for the terms time-release, slow release or controlled release on the product label. In addition, nitrogen application cannot exceed four pounds per 1,000 square feet annually or one pound per application.

**Phosphorus ban**: No phosphorus (P) can be applied at any time throughout the year without a soil analysis showing a phosphorus deficiency filed with the county administrator. (The filing process can be protracted, so it's not as easy as it sounds.)

**Weather advisories**: If the National Weather Service issues a watch or warning anywhere in the county for severe thunderstorms, hurricanes, tropical storms, flooding, or rainfall of two inches or more in a 24-hour period, no fertilizers can be applied while the advisory is in effect.

**Exempted plants**: Potted or otherwise containerized indoor and outdoor plants are not subject to the fertilizer restrictions, nor are home vegetable gardens.

A list of fertilizers that comply with the ordinance is available at mymanatee.org or (simpler) by googling Manatee County Fertilizer Ordinance.

A last bit of advice from Master Gardeners: don't do your fertilizer applications on or near the START and STOP dates of the ban, as this will defeat the purpose. If every person in the county applies fertilizer on May 31st (just ahead of the ban) and October 1st (just after the ban) imagine the runoff potential! Use common sense.
Doodle, doodle, doodle...

Doodle, doodle, doodle...
Hop up bug! Doodle, doodle, doodle...
Hop up bug!
That doodle jump up and look all around and doodle back in the ground.

(Originally performed by the Georgia Yellowhammers "Doodlebug" or "Song of the Doodlebug," (U.S., 1928.) Echoing the children’s rhymes of American antlion folklore, the lyrics of this song claim that a doodlebug can be enticed out of its hole by putting one’s mouth near its pit and singing.)

By Nancy Porter, Master Gardener 2014

Little did I know 58 years ago, that I would be writing an article about a “doodlebug”, *Glenurus gratus*. At that age, all we (kids) thought about these critters was trying to get them to come to the surface of their sand cones. Often, you could see our little bottoms sticking up in the air and find our noses extremely close to the ground, while we sang the doodlebug song and gently blew into the sand. For our efforts, we were rewarded with a tiny and quite ugly little bug wriggling around trying to rebury itself: *voilà*, the doodlebug.

At some point in time, I learned that it was an antlion, a small insect that could be found in multiple places around our yard, if you knew what you were looking for. Now, I have learned that Florida has bragging rights to the richest antlion population in the eastern United States. Although present in seven other states, Florida alone has 22 species, with four of them endemic or solely found in the Florida Keys.

The next revelation is that the doodlebug is the antlion larva. The larval stage can last up to three years. As the picture shows, the larvae have mandibles and maxillae that form a pair of sucking tubes, armed with many sharp hollow projections. If viewed under a magnifying glass, these insects are quite fierce looking; enlarged images of them have been used in some movie and T.V. productions, e.g., "Star Wars" and "Star Trek," to depict creatures found on alien planets.

When the antlion’s prey falls into its pit, they are first poisoned, then injected with digestive enzymes that breakdown the internal tissues, allowing the antlion to suck the juices out. (Yum!) Once the juices have been consumed, the lifeless shell is flicked out of the hole. If the sand divot is damaged from the life-and-death struggle, the antlion does a good repair job and then lies in wait for its next unsuspecting victim.

The antlion larva eventually creates a cocoon in the shape of a round ball. It does

*continued on page 5*
this by forcing out silken threads that form a hollow sphere. This is held in place by the surrounding sand. Inside this cocoon the antlion morphs into a pupa. The pupation period lasts about a month, then a small adult emerges, making its way to the surface. After about 20 minutes, after its wings have had time to harden, the adult flies off in search of a mate and the cycle repeats itself. This is not a leisurely activity, as the adults live only 20-25 days, so they have to work fast.

The adult is commonly named green lacewing (family: Chrysopidae) not brown lacewing, which is in a different family, Hemerobiidae. We love to have green lacewings in our gardens because they are biological controls; they eat pest insects like aphids, scale, whiteflies, and thrips to name a few of its prey.

The female lays about 20 eggs in different sandy spots. The adult antlion resembles a small dragonfly or damselfly, except it folds its wings back while resting. They are usually active at night and their diets consist of pollen and nectar.

What are the positive effects these small insects provide besides entertaining the small fry for an afternoon? They do eat aphids, as well as ants. If they grow large enough, they will also consume caterpillars, red ants, small spiders, and the larvae of other insects.

In my research, I came across a delightful website designed for teachers and kids: www.antlionden.com. This site offers videos, explanation about the life cycle of antlions, and antlion kits. The site provides children with all the knowledge they need to start their own antlion “farm.” The founder even offers to purchase antlions from anyone industrious enough to go out and collect them!

So, if you’d like to recapture a bit of your youth, grab a kid and take them out into your yard. (Of course, you can do this on your own if you’d like!) Begin your search for one of those little cones in the sand. When you find one, get down on your hands and knees, sing the song, and gently blow into the pit. Perhaps you’ll be lucky enough to capture your very own antlion (a.k.a. doodlebug!)

An Antlion, Glenurus gratus (Say) (Insecta: Neuroptera: Myrmeleontidae)
http://edis.ifas.ufl.edu/in708

Antlion Life Cycle

Antlion trails. Odd winding, spiraling trails the doodlebug leaves in the sand while looking for a good location to build its trap. These trails look as if someone has “doodled” in the sand.

Antlion pits in dry, sandy area.
Kalanchoe spp. is relatively easy plant to find and maintain. On the other hand, like cotoneaster, chamomile, and Achillea, Kalanchoe is a common plant that is difficult to pronounce, or that you have heard pronounced in many different ways. (I've heard it pronounced "KA-luhn-KO-e," "kuh-LANG-ko-e," "KAL-uhn-cho" and "Kal-AHN-cho." To simplify matters, Edward F. Gilman, retired professor of Environmental Horticulture at University of Florida, refers to this beauty as kal-Ian-KOE-ee, defining it as a “dark green succulent perennial with scalloped-edged leaves and large umbels of flower clusters held above the foliage.”

There are about 150 to 200 different varieties of Kalanchoe with flowers that originally were red and orange, but now are available in yellow, orange, pink, red, purple, and salmon. Devil’s backbone, mother-of-thousands, chandelier plant, and Christmas Kalanchoe are common names for some of the more well-known varieties. This beauty is used as a houseplant, but can certainly be used outside as a groundcover, border plant, or potted up in containers. Kalanchoe also attracts hummingbirds!

However, Kalanchoe is a loner and prefers its own space. It will crowd out other plants, so placing it in containers or in its own bed may be an option. It prefers 60- to 85-degree temperatures and does not like the cold. Propagation can be accomplished from seeds, leaf cuttings, stems, or tip cuttings. Kalanchoe is susceptible to leaf spotting disease in humid conditions.

Caterpillars and mealy bugs may become a problem if planted outdoors. Gardeners should be cautioned that all parts of this plant are toxic and should be kept away from small children and pests.

Another caution: Kalanchoe pinnata (Cathedral bells) is an invasive plant. It can be found in central and southern Florida along edges of woodlands and conservation areas. The eye-catching flowers are attractive, but the plant is very invasive and also toxic if ingested.

Examples of Kalanchoe for the home landscape include:

- **Kalanchoe gastonis-bonnieri** or Palm beachbells, produces greenish flowers and plantlets at the tips of leaves.
- **Kalanchoe laciniata** or Christmas tree Kalanchoe, originating in Africa and Asia, produces yellow flowers.
- **Kalanchoe blossfeldiana**, or Madagascar widow's-thrill, can grow in partial shade and sandy soil. It produces reddish-orange flowers.
- **Kalanchoe x houghtonii** is also known as mother of millions or devil’s backbone. Leaves are arched and boat shaped with plantlets growing from leaf margins.
- **Kalanchoe fedtschenkoi** or lavender scallops have blue-green, oblong leaves with conspicuous teeth around the margins.
- **Kalanchoe beharenensis**, or elephant ear, is a slow-growing treelike shrub capable of reaching 12 feet in height.

For more information visit, [http://edis.ifas.ufl.edu/fp309](http://edis.ifas.ufl.edu/fp309).
Go Spot a Kite!

By Kathy Oliver, Program Assistant, Urban Horticulture

Springtime in Florida marks the return of the swallow-tailed kite (*Elanoides forficatus*), one of our most graceful and easily identified raptors. This gliding bird swoops low to the ground or just above the treetops, giving us good looks at its black and white plumage, long narrow wings, and deeply forked tail. Its prey is typically flying insects, so it lacks the ferocious talons and beak of other raptors such as hawks and eagles. It is super-aerobatic turning sharply with a twist of the tail or flipping backwards to pursue grasshoppers and dragonflies. The kite may also pluck reptiles, amphibians, and nestling birds from the branches of trees.

The swallow-tailed kite is a master of the air, staying aloft with few wing beats and rarely alighting except to roost or nest. It drinks water by skimming the surface of ponds. Mating pairs construct nests in trees of lowland swamps and pine forests and line the insides with Spanish moss and lichen. Several pairs may nest nearby, choosing the tallest trees in the area. Here is a fun fact: they often carry whole wasp nests to their own nest where the larvae are consumed or fed to young birds.

Although the kites range into other southeastern states, Florida is the best place to see them. In late summer or early fall, the birds migrate to South America for the winter months. Protection of bottomland hardwood and natural pine forests is essential to the conservation of this magnificent species.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</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>
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<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>
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<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 June 3</td>
<td>9:30-11:30 a.m.</td>
<td>Is Your Turf Troubling You? – Learn the cultural requirements for Bahia, St. Augustine, and Zoysia grasses and discuss the common summer diseases and insect problems for each. $5.00 fee covers materials on each type of turfgrass. 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>Saturday June 10</td>
<td>10:00 a.m.-Noon</td>
<td>Landscaping to Attract Wildlife - Would you like to learn more about how to turn your backyard into a refuge for wildlife? This workshop provides you with tips for creating a habitat for Florida’s birds and beasts. Class is free but if interested in “Doing Something Wild” in your backyard and applying to have your yard recognized in the future as a Backyard Habitat, complete the online application for a $5 fee to cover the cost of shipping and materials. 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 June 14</td>
<td>10:00-11:00 a.m.</td>
<td>What is the Master Gardener Volunteer Training Program? A Meet and Greet - What does it take to become a Master Gardener? It takes a special gardener who want to expand their gardening knowledge and share it with the community. Come and learn about this University of Florida volunteer program to extend horticulture outreach into our community. Open to Manatee County residents 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>Saturday June 17</td>
<td>9:30 -11:00 a.m.</td>
<td>Tillandsia “Make and Take” – Learn about these lovely epiphytes that only require air and water to live. This is a “make and take” workshop where you will create a wreath using Tillandsia plants. Bring wire cutters and pliers. $35 advance payment for materials due by June 9. Check or cash only – make checks payable to Friends of Extension. 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>Saturday June 17</td>
<td>Noon-1:30 p.m.</td>
<td>Growing Staghorn Ferns – Have you always loved the look of staghorn ferns but never knew how to care for them? In this workshop, you will learn how to mount a staghorn on wood and take home your own plant. Space is Limited! $20 advance payment for plant and mounting materials due by June 9 (cash or check only, payable to Friends of Extension). 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>Tuesday June 20</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>
</tr>
<tr>
<td>Starting Wednesday August 9</td>
<td>8:30 a.m.-4:00 p.m.</td>
<td>We’ve Got A Good Thing Growing! Become a Master Gardener and “get a good thing growing!” We are accepting applications for the Manatee County Master Gardener Volunteer Training Program. This is a 14-week course that will meet weekly on Wednesdays. The $200 fee covers all textbooks and program materials. Call Cindy Mozeleski (941) 722-4524 to have an application mailed to you or download an application today! Visit: <a href="http://manatee.ifas.ufl.edu/lawn_and_garden/master-gardener/index.shtml">http://manatee.ifas.ufl.edu/lawn_and_garden/master-gardener/index.shtml</a>.</td>
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We’re offering a variety of programs for both Master Gardener Volunteers and the general public. Visit our website or call us for more information.

University of Florida IFAS Extension - Manatee County
1303 17th St. W., Palmetto, FL 34221 Telephone: (941) 722-4524
Web site: http://manatee.ifas.ufl.edu E-mail: ManateeMG@gmail.com

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