Landscaping for Wildlife

Landscaping to attract wildlife brings nature close by welcoming it into our backyards. Planting certain trees, shrubs, and flowers can create an inviting atmosphere for songbirds, butterflies, and other wildlife. Another advantage of landscaping for wildlife is creating habitat for animals that have been displaced by community growth and development where space is limited.

10 Tips for Creating a Wildlife-friendly Landscape

1. Limit the Amount of Lawn You Have

Grass offers very little food or cover for wildlife. By reducing the amount of mowed lawn around your house, especially in areas of low traffic, you will be creating shelter and food for many animal species. To help speed up the replacement of lawn, you can remove the grass and plant seeds of native wildflowers that are adapted to the conditions in that part of your yard (sunny, shady, wet, dry, etc.).

Replace some lawn grass with groundcovers. These are more valuable to wildlife. Lawn grasses require a lot of maintenance—mowing, fertilizing, and watering—all of which have high energy costs.

Groundcovers also provide food and shelter for small animals.

Add islands of vegetation. These can be planted with native groundcovers, wildflowers, or other vegetation. If possible, locate the islands so they are near each other. A group of islands reduces the amount of open space animals have to cross.

Plant a butterfly garden. For butterfly habitat, add plants for both the adult butterflies and their larvae (caterpillars); they often feed on different species of plants. Keep in mind that the food plants for larvae will be munched on and may look tattered at times. Another way to help butterflies is to create a small, bare area of moist sand in your yard. The butterflies sip water from the damp sand to obtain the needed salts and minerals (a behavior called puddling).

2. Increase Vertical Layering

Increasing plant structure between the ground and the tree canopy is called vertical layering. Planting a variety of vegetation in different sizes and heights provides more cover and feeding opportunities for wildlife species. Clumps (or islands) of native vegetation with plants of different heights are best.
3. Provide Snags and Brush Piles

As trees become diseased or die, consider leaving them standing as snags for wildlife such as woodpeckers to use for feeding and nesting.

A brush pile or two, especially if near other vegetation, will provide excellent cover and feeding opportunities for small mammals, birds, and butterflies. It will also serve as cover in open areas.

4. Provide Water

Water is an essential part of productive wildlife habitats. Wildlife will benefit from any water source you provide, such as a birdbath or small pond. Ponds also attract a variety of amphibian and reptile species and add amphibian breeding habitat.

5. Plant Native Vegetation

Use native plant species in your yard whenever possible. Landscapes with plants that are native to Florida provide better food and cover for native wildlife, and require less care and resources to maintain than those with non-native plants. Native plants are better adapted to local soil conditions, generally do not require fertilizing, and are more resistant to natural pests and diseases.

Information on where you can purchase native plants for Florida can be found at the Association of Florida Native Nurseries. Check the Internet for a similar association of nurseries that sell native plants in your state, such as the National Native Plant Nursery Directory.

6. Provide Bird/Bat Houses and Birdfeeders

Birdhouses. Adding birdhouses of different designs or with different sizes may increase the diversity of birds you can attract to your yard. Be sure to clean all feeders thoroughly, at least weekly during warm weather. Old or wet seeds can rot and make birds sick.

Locating the feeders near cover (bushes, trees) is helpful for songbirds if they have to escape a predator, but keep the feeders at least fifteen feet away from vegetation so that squirrels cannot jump onto the feeder.

Bird and Bat Houses. Adding birdhouses (nest boxes) and bat houses in your yard will provide nesting and roosting shelter for wildlife. Several factors will determine which animals will use these sites including:

- The size of the bird/bat house (overall size, as well as depth)
- The size of the entry hole
- The height at which the bird/bat house is mounted
- The amount of surrounding vegetation
- The habitat adjacent to your yard and in your neighborhood

For more information on how and bat houses, visit the Bat Conservation International Web site. Be sure to check out their information on Criteria for Successful Bat Houses.

For more information about birds and birdhouses, visit Cornell University’s Lab of Ornithology specifically Birdhouse Basics, which includes construction plans for birdhouses and a Nest Box Reference Chart with size specifications for each cavity-nesting species. This information is also useful when buying a pre-built birdhouse. Also check out Cornell’s Birdhouse Network.

7. Remove Non-native Invasive Plants

Non-native invasive plants aggressively take over natural habitats and can replace all the native vegetation. What we do in our individual yards can affect areas far beyond our yards. Once established, these non-native plants destroy wildlife habitat, resulting in areas with fewer plant species and fewer food and shelter opportunities for wildlife.

Before buying plants for your landscape, consult the IFAS Assessment of Florida Non-native Plants (Conclusions) for invasive status, and the Florida Exotic Pest Plant Council (Plant List).

8. Manage Pets

Both cats and dogs can drastically impact wildlife. Cats are extremely good hunters and are thought to kill millions of birds and small mammals each year. Cats and dogs hunt for fun, not necessarily for food, and can be especially problematic if you are attracting wildlife to your yard.

Keeping your cats indoors will also keep them safe from strays, diseases, and traffic. This idea is widely supported by veterinary, conservation, animal welfare, and scientific communities. For more information, visit the American Bird Conservancy’s campaign Keep Cats Indoors! The Florida Fish and Wildlife Conservation Commission also has information on the effects that domestic cats have on wildlife, as well as an official assessment on the issue and an official policy.

9. Reduce Pesticide Use

Anything you can do to reduce pesticide use in your yard will benefit wildlife. Most pesticides do not target one species or pest, but affect anything that comes into contact with the pesticides. By blanket-spraying your lawn, you are also killing beneficial insect species. Almost all wildlife species are connected to insects in some way. Even if they do not eat insects directly, their prey do.

For more information about the alternatives to pesticides, visit Beyond Pesticides.

10. Expand the Scale of Habitat

The required habitat for many species is much larger than what you could provide within your yard. Consider speaking with your neighbors about creating larger wildlife habitat patches. The combination of several different yards will draw more species to the neighborhood. Discuss with your neighbors about designing wild areas at the property lines or on adjacent corners of your properties. See A Bird’s Eye View: How Birds Select Habitat.
Program Announcements

Do you love plants, trees, and gardening? Would you enjoy volunteering your time to help teach youth and newcomers in your community? Then perhaps you should become a University of Florida/IFAS Master Gardener Volunteer! It requires 75 hours of volunteer time to be given back to Nassau County Extension the first year and 35 hours every year thereafter. Ten sessions held on Wednesdays will begin at the end of July and end with graduation the beginning of October. CD Manuals will cost $75. If you are interested and would like an application packet please call 530.6353 or 530.6350 or e-mail rljordi@ufl.edu. Online information may be found here: http://nassau.ifas.ufl.edu/horticulture/mgnassau.html

PLANT CLINICS 10AM-2PM
Monday May 4
Monday May 18
Monday June 1
Monday June 15
Bring us your tired, diseased, insect infested plants yearning to be free of problems. When possible place your plant in a plastic bag to prevent chances of spreading issues to other plants. You will receive current researched based information on proper plant care, disease management and insect control. These sessions are free to the public. No registration required. Come anytime between 10AM - 2PM for expert advice.

Spring Plant Sale 2015
Our biannual plant sale has Master Gardener-propagated plants, select trees and shrubs, “goodies” for your garden, including custom painted planters and new this year, FNGLA Florida Plants of the Year. Don’t miss the best sale Nassau County has ever seen! All proceeds benefit the Nassau County Master Gardener program and their volunteer community projects in Nassau County. For more information, call the Extension office at 904-530-6353.

Saturday May 30  9AM-12PM  Demonstration Garden
Yulee Government Complex  96135 Nassau Place Yulee, FL

Harvest GOLD

Hello everybody! Welcome back to Harvest Gold! This month’s column will discuss climate change, also called global warming. I know climate change is a polarizing issue, but what we are really talking about is each of us doing our part to protect the land which provides us food, water and landscapes.

Why should I talk about climate change, you ask? First of all, scientific study proves the Earth is getting warmer. Secondly, I have personal experience. I remember in the late 70’s when I was in high school and attended Friday night football games in the fall. (Go Flashes!) By late October, we had to bundle up or we would freeze our “tushes” off. Now, it is “shorts weather” up until Christmas - or later. When I was growing up, my grandfather (Joseph Scussel) always planted the most beautiful gardens you ever saw, and they flourished and produced abundantly with only rainfall. Now, I have to water my garden or it will not produce well. I also remember my grandfather always planted potatoes around St. Valentine’s Day. He grew some of the biggest potatoes you ever saw! When I plant my potatoes, I have to plant by mid-January in order to get decent-sized potatoes before the summer heat kills the plants.

Our climate does appear to be changing. Are humans responsible for it? I am not a scientist, but I do listen to what scientists say. After all, they are a lot smarter than me. But, shouldn’t we consider doing whatever we can to be better stewards of the land?

I did a little research, and found many things we ordinary citizens can do to help mitigate climate change right here in our own homes. Here are a few:
• Reduce energy use by replacing conventional light bulbs with energy-efficient compact fluorescent bulbs, unplugging “energy bandits” like cell phone chargers when not in use, and landscaping using trees to shade south and west facing windows to help insulate the house from the sun’s heat in the summertime.

• Reduce water use by replacing existing shower heads with the lowest flow product you can find, always running full loads of laundry and dishes, and switching to water-conserving models when you need to replace appliances such as washing machines and dishwashers.

• Reduce paper use by replacing paper napkins with cloth napkins, printing on once-used paper, and creating and using note pads from once-used paper.

• Reduce trash by buying products with the least amount of packaging, avoiding products packaged for single use and signing up to avoid junk mail.

• Reuse items by switching from disposable to reusable products and starting a compost pile with yard trimmings and food scraps. Donating old clothes, furniture, computer equipment, building materials, cell phones, ink cartridges, eyeglasses, art materials and unwanted canned food to charity. Shopping at or holding garage sales are other ways to promote reusing items.

• Recycle more efficiently by buying items which can be reused or recycled then recycle whatever you can.

• As far as transportation goes, whenever possible, walk, bike, carpool, or use public transportation. When you buy a car, choose one with the best gas mileage possible. Drive smarter by avoiding rapid acceleration or deceleration, idling and excessive weight in the trunk. Also, keep your car tuned up, change air filters regularly and make sure tires are properly inflated.

• In your diet, whenever possible, buy locally grown and organic foods, shop at local farmer’s markets, eat more meatless meals and eat unprocessed/unpackaged food whenever possible.

• In your lifestyle, buy minimally packaged goods with recycled content, purchase locally produced products and be an advocate. Talk to friends and community leaders about climate-friendly choices.

In short, “Reduce, Reuse, and Recycle” in as many ways as you can and you will be doing your part to protect the environment.

For a more detailed list of what you can do to help mitigate climate change see http://sarasota.ifas.ufl.edu/Sustain/whatyoucando.shtml or to learn more about climate change in general go to http://sarasota.ifas.ufl.edu/Sustain/climate.shtml

These things may not seem like much, but as Aunt Henrietta always says, “All mighty rivers began with a single raindrop.” By our actions, we can create the raindrops that help form the mighty river that stems the tide of climate change/global warming.

I guess it is about time to go for now. Before I end my column, since we mostly talk about how to harvest and what you can do with your produce and we don’t say much about planting, I would like to share with you some words of wisdom I came across several years ago about how to plant a garden. I don’t remember where I found this or who the author is, but I hope you like it.

HOW TO PLANT A GARDEN

Plant three rows of peas:
• Peas of mind
• Peas of heart
• Peas of soul.

Plant four rows of squash:
• Squash gossip
• Squash indifference
• Squash grumbling
• Squash selfishness.

Plant four rows of lettuce:
• Lettuce be faithful
• Lettuce be kind
• Lettuce be obedient
• Lettuce love one another as God loves us.

Plant three rows of turnips:
• Turnip for meetings
• Turnip for church services
• Turnip to help one another.

To maintain your garden, you must have thyme:
• Thyme for reflection
• Thyme for study
• Thyme for prayer.
Russ’ Shepherd’s Pie

Ingredients

- 4 to 5 Large Potatoes (About 1 ½ to 2 Pounds)
- 8 Tablespoons Butter
- 1 Onion (Chopped)
- ½ Pound Mushrooms (Sliced)
- 1 Bag of Frozen Peas and Carrots (Or Mixed Vegetables)
- Salt and Black Pepper (To Taste)
- Garlic Powder (To Taste)
- ½ Teaspoon Nutmeg (Or To Taste)
- 1 ½ Pounds Ground Round Beef
- 1 Teaspoon Worcestershire Sauce
- ½ Cup Beef Broth
- Grated Cheddar Cheese (Optional, To Taste)

Directions

Peel and quarter potatoes, and boil in salted water until tender (about 20 minutes). While the potatoes are cooking, melt 4 tablespoons butter in a large frying pan. Sauté onion and mushrooms in butter over medium heat until tender (about 10 minutes). Add bag of peas and carrots until defrosted. Add salt, pepper, nutmeg, and garlic powder to taste. Add ground beef and sauté until beef is no longer pink. Add Worcestershire sauce. Add half a cup of beef broth and cook, uncovered, over low heat for 10 minutes, stirring and adding more beef broth as necessary to keep moist.

Mash potatoes in a bowl with remainder of butter, and season to taste. Place beef and vegetable mixture in a baking dish. Distribute mashed potatoes on top, and rough up with a fork so that there are peaks that will brown nicely (you can use the fork to make some designs in the potatoes as well). Cook in a 400 Degree Fahrenheit preheated oven until bubbling and brown (about 30 minutes). Broil for about a minute to get brown on top. (If you decide to use cheddar cheese, bake the shepherd's pie first without the cheese, then sprinkle the cheese on top like snow. Put it under the broiler until cheese melts. Keep an eye on it so it does not burn.) Serve.

Notes

This is a very nice shepherd’s pie that I think you and your family will enjoy.

Recipe courtesy of Russell Chestnut.

PS: Since I mentioned potatoes, peas, squash, lettuce, turnips, and thyme above, I will leave you with several recipes that among them contain each of these items. Enjoy!
Kassandra’s Turnip Fries

**Ingredients**
- 8 Medium Turnips
- ¼ Cup Grated Parmesan Cheese
- 1 Teaspoon Onion Powder
- 1 Teaspoon Ground Paprika
- 1 Teaspoon Ground Thyme

**Directions**
Preheat oven to 425 Degrees Fahrenheit. Spray a large baking sheet with nonstick cooking spray. Cut turnips into sticks about 3 inches long by ½ inch square. In a gallon-sized re-sealable plastic bag, combine cheese, onion powder, paprika, and thyme. Add turnips and seal bag. Shake bag to coat turnips. Place turnips on baking sheet, and bake for 15 to 20 minutes, turning once, until turnips are tender and golden.

**Notes**
This is a delicious and healthy alternative to French fries. My family just loves them.

*Recipe courtesy of Kassandra Withakay.*

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Miss Alice’s Seven Layer Salad

**Ingredients**
- 1 Small Head Lettuce (Broken into Bite-Sized Pieces)
- 1 Large Onion—Chopped (About 1 Cup)
- 1 Large Tomato—Diced (About 1 Cup)
- 1 Cucumber (Sliced)
- 1 Can (16 Ounce) Le Sueur Petite English Peas (Drained)
- 1 Cup Mayonnaise
- 2 Tablespoons Sugar (Or Splenda)
- 2 Cups Sharp Cheddar Cheese (Grated)
- 1 Pound Bacon (Fried Crisp and Crumbled)

**Directions**
In a large glass bowl, layer ingredients in this order: lettuce, onion, tomato, cucumber, peas, mayonnaise, and sugar. Reserve cheese and bacon. After sprinkling sugar over the mayonnaise layer, cover and refrigerate overnight. Before serving, sprinkle with reserved cheese and crumbled bacon.

**Notes**
My family loves this salad. I have been making it for years, and prepare it for all large family gatherings.

*Recipe courtesy of Mrs. Alice Marie Smith.*
Sonja’s Pickled Squash

Ingredients
• 10 Cups Summer Squash (Sliced)
• 2 Cups Onions (Sliced)
• Kosher Salt (For Sprinkling)
• 2 Cups White Vinegar
• 3 Cups Sugar
• 1 ½ Tablespoons Pickling Spice
• ½ Teaspoon Crushed Red Pepper (Optional)

Directions
In a large pot or bowl, layer sliced squash and sliced onions, and sprinkle each layer generously with kosher salt and let sit for one hour. After one hour, drain and rinse. Meanwhile, in a large stainless steel pot, combine vinegar, sugar, pickling spice, and crushed red pepper, and bring to a boil. Add squash and onions and return to a boil. When pot begins to boil, cut off heat, and divide vegetables between sterilized jars and ladle enough pickling liquid over vegetables to come within a half inch from top of jar. Wipe rims of jars clean, cover with lids, and screw tops in place. Process jars in a hot water bath for 10 minutes. Remove jars from water bath, and cool. Jars will seal as they cool. Any jars that do not seal should be refrigerated and consumed within 2 weeks.

Notes
My family has been making these pickles for as long as I can remember. My Great-Aunt Clara even won a blue ribbon at the county fair for them up in Mount Airy, North Carolina, back in 1961. The entire family was so proud. Hope you all enjoy this old family recipe. I like to make a mixture of zucchini and either straightneck or crookneck squash for a nice color combination.

Recipe courtesy of Sonja Douglas.

Lantana became a favorite greenhouse plant in the 18th century. This plant was such a desired species that many new varieties were bred, resulting in hundreds of cultivars available for sale in the European market. The newer cultivars were introduced to several countries on a regular basis, assisting in the worldwide distribution of Lantana.

Lantana camara is native to the West Indies. Florida has its own native species of Lantana (L. depressa) that is now considered endangered. The native Florida lantana is often confused with the invasive species. Lantana is found in almost every county in Florida but also found in Georgia and Texas. It is a serious pest in California and Hawaii, as well as in other countries including Australia, New Zealand, and China.

Lantana camara is grown as hedge plant and has various medicinal and practical uses. The stalks are used as raw material for paper pulp, which is used for wrapping, writing and printing paper. Lantana bark is astringent and used as a lotion in leprous ulcers and other eruptions of the skin. Lantana camara leaves are boiled and applied for swellings and pain of the body. Alkaloids from lantana have been found to stimulate intestinal movements in experimental animals, lower blood pressure and accelerate deep respiration.

Description
Lantana is a perennial, erect or prostrate shrub growing to 6 feet or more in height. Leaves are ovate in shape, oppositely arranged, commonly 6 inches long and 2 ½ inches wide. To the touch, lantana leaves feel like fine sandpaper or a cats tongue. Leaf blades are serrate and have an aroma when crushed or rubbed. Flowers of lantana are clustered at the tip of stems. Small, multicolored flowers change color over time from white to pink or lavender, or yellow to orange or red. Typically the more mature flowers are darker in color (lavender and red). Fruit of lantana is tiny (0.2 inches in diameter) and round. Initially green, the seeds will change to a deep purple and eventually black color.

Leaf characteristics can be used to distinguish the native lantana (L. depressa) from the invasive lantana (L. camara). Native lantana has a tapered leaf base, whereas the invasive lantana has a truncate leaf base. Flower color can also be used to distinguish between species. Native lantana has a yellow flower whereas invasive lantana has a multitude of flower colors. Lantana camara has successfully hybridized with native lantana, making identification of the invasive species more difficult.

Lantana reproduces vegetatively and via seed. Flowers are produced year round and are able to self and cross-pollinate. Lantana is an extremely prolific seed producer, with approximately 12,000 fruits per plant. Birds and other animals that consume lantana fruit can spread seed across large distances. Normally seed germination is...
low; however, when seed is passed through the digestive system of an animal, the germination rate is increased. Vegetative reproduction occurs when lantana stems come into contact with moist soil, initiating root formation at the contact site. Lantana can also regrow from the base of the stem, but does not sucker from damaged or broken roots.

**Impacts**

In Florida lantana can grow in a variety of areas including forests, roadsides, pastures, and citrus groves. It thrives in shaded or sunny, moist or dry locations. Lantana continues to be sold as an ornamental plant in garden centers and nurseries throughout the U.S. Through wide cultivation and establishment in the landscape, lantana is able to spread and survive by escaping from home landscapes.

In Florida citrus groves lantana is a serious economic weed pest. Propagation, reduction of manual weeding, herbicide tolerance, and reduced competition from other weedy species has allowed lantana to proliferate and spread successfully. It also decreases productivity in pastures and is toxic to cattle and other animals when grazed.

Lantana invades disturbed natural ecosystems by establishing in creek banks and roadsides. Native species establishment is inhibited by the dense understory created by lantana. In the homeowner setting, there are reports of children being poisoned by consuming unripened fruit. It is also thought that lantana produces allelopathic substances in shoots and roots which inhibits the growth and development of plants near lantana.

**Management**

An integrated approach should be taken when attempting to control lantana. Integrated control tactics include manual removal, burning, chemical control, shading, prevention and revegetation. Natural restoration may prove difficult due to the reduction of seeds of native plants.

**Preventative**

Preventing seed production is a very important step in lantana management. Removing flower heads prior to seed set will greatly reduce the number of seeds released into the seed bank, as well as reduces the number of seeds available for spread by birds or other animals. Homeowners can also help prevent the spread of lantana by removing plants from their landscape, and not purchasing plants from garden centers. An additional consideration is the removal of seeds prior to ripening.

**Cultural**

Weeds such as lantana generally invade open or disturbed areas – following a burn, clearing mowing, etc., so these areas are particularly vulnerable to invasion. Maintaining a healthy ecosystem with an abundance of native plant species will help deter infestations of lantana. Seeds may be hand picked from shrubs and discarded properly; however this may not be a realistic or cost effective tactic for larger infestations.

**Mechanical**

Fire, dozing or stick-raking, and slashing or cutting can reduce dense infestations. These tactics can make spot treatments with chemicals more economically effective. Part of a management plan to control dense infestations includes the use of fire. A suggested control program is:
- To establish a fuel load exclude stock from the area.
- Only burn when you can get a permit.
- Revegetate areas with native plant species.
- Keep stock out until the pasture is established and seeded.
- Carry out another burn in the hot dry months before rain. Spot spray regrowth when it is vigorously growing between 20 inches and 5 feet tall.
- Follow-up controls after each burn, with spot spraying or mechanical methods, are essential for the next few years. Burning without follow-up treatments is ineffective and may increase populations.
- Smaller plants may be hand pulled, whereas older individuals should be dug out.

**Biological**

There are also some biological controls under consideration control of lantana as there are very effective biological control agents available for this species. Over 20 biocontrol agents have been released to control lantana in Hawaii with varying results. The most effective are the defoliating caterpillar Hypena strigata; the seed-destroying fly Ophiomyia lantanae, and the lace bug Teleonemia scrupulosa. Due to popularity of this species in the ornamental industry, the release of biological control agents is controversial.

**Chemical**

Glyphosate is marginally effective as a foliar spray and regrowth is common. Plus aminopyralid (Milestone pt and 7 oz/A, respectively, 6 months is effective, but or imazapyr applied as a is consistently effective, and spraying the freshly cut application technique and
Spotlight on Nassau Gardens

Spring has Sprung!

View more photos online at http://nassau.ifas.ufl.edu/horticulture/spotlight/spotlight.html. To be considered for Spotlight on Nassau Gardens, send a digital photo, with a description of your garden, along with your name, address and phone number to nmg@nassaucountyfl.com. For more information contact Rebecca Jordi at 904.530.6350 or 904.530.6353.
Spotlight on Nassau Gardens

When the road where Ellyn Thomas lives was widened, 21 Cedar trees were removed and she has replaced them with many lovely Red Bottle Bushes. There are others around her home. At this time of the year they are filled with many red blooms that are being enjoyed by hundreds of bees. The bees will pollinate the flowers which will enhance many bright red flowers next spring.

Ellyn has lived here for 54 years. Her Kumquat tree is filled with fruit. The Brown Turkey Fig and Muscadine Grapes will fruit later in the year. The Yellow Buff hens seem happy there and the Black Standard Cornish rooster is definitely in charge. She has a rack of lovely potted plants. The pink one is her favorite. What an amazing collection of special things in her yard!

View more photos online at http://nassau.ifas.ufl.edu/horticulture/spotlight/spotlight.html. To be considered for Spotlight on Nassau Gardens, send a digital photo, with a description of your garden, along with your name, address and phone number to ncmg@nassaucountyfl.com. For more information contact Rebecca Jordi at 904.530.6350 or 904.530.6353.
May initiates the onset of Florida's summer. While nighttime temperatures can sometimes get quite cool, we'll start seeing daytime temps in the 80's and 90's this month. Here are some animal behaviors you should look for this May:

**Birds**
- Brown pelican and white ibis young are now visible in nests.
- Painted Buntings nest through summer in northeast Florida.
- Least terns and snowy plovers nest on Panhandle beaches.
- Bald eagles begin migrating north
- Breeding begins for many resident and summer songbirds
- The last of the cedar waxwings and goldfinches head for their northern breeding grounds.
- Least terns and Snowy Plovers nest on beaches and sandy flats of the Panhandle.

**Mammals**
- Gray Bats congregate at maternity caves now through mid-July.

**Reptiles**
- Alligators begin to court and make loud resounding 'bellows'.
- The height of crocodile nesting in the Keys happens at the beginning of the month as well.
- Loggerhead sea turtles begin nesting on summer nights.
- Soft-shell and alligator snapping turtles complete egg laying.

**Fish**
- Bluegill are bedding at the full moon.
- Redbreast sunfish and spotted sunfish begin spawning in rivers
- Pompano running in the surf in north Florida

**Insects**
- Peak flight month for Schaus' swallowtail butterfly in the Keys.

**Plants**
- White swamp lillies dot wet prairies of the Everglades
- American lotus bloom at Paynes Prairies State Preserve

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**Wildlife Happenings  June**

June not only has the first days of summer, but it also brings some great wildlife activity. Here are some interesting things that are going on in June:

**Birds**
- It's breeding season for laughing gulls, least terns, oystercatchers, and black skimmers. They nest on spoil islands, undisturbed beaches, and even rooftops when their preferred habitat is unavailable.
- Mockingbirds may attack pedestrians who wander too close to nesting sites

**Mammals**
- The Southern Flying Squirrel is starting its breeding season.
- Red bats and Seminole bats give birth.

**Reptiles**
- It's the height of the Gopher Tortoise breeding season.

**Insects**
- Cicadas emerge from their underground growth period to begin making their classic summer sound.

**Fish**
- Snook begin moving into inlets and passes
- Migrating tarpon can be found almost anywhere in the Keys

**Plants**
- Tarflowers bloom in flatwoods

**Special dates in June**
- June 1, 1952 First sighting of cattle egrets in Florida.
- June 14, 1969 Last sighting of Ivory-billed woodpeckers in Florida.
May Checklist

Citrus: Depending on citrus fertilizer label, apply fertilizer every six weeks or as directed. Check for citrus insects; apply ultra fine or all season horticulture oil before 10 am and in early evening if insects are detected. Check for disease; apply fungicide just at new leaf flush or after bloom drop. Maintain 2-3’ unmulched area around citrus trees.

Fruit: Weed as needed. Apply 6-6-6 or 8-8-8 fertilizer if appropriate. Check irrigation to ensure it is working. Make repairs.

Flowers: Annuals to plant this month are celosia, coleus, coreopsis, crossandras, gaillardias, gazanias, hollyhocks, impatiens, kalanchoe, marigolds, nicotianas, ornamental peppers, pentas, portulacas, salvia, thunbergia alata, torenias, verbenas, periwinkles, and zinnias.

Herbs: Anise, basil, bay laurel, borage, caraway, cardamom, chervil, chives, coriander, culantro, dill, ginger, horehound, lemon balm, lavender, marjoram, Mexican tarragon, mint, parsley, oregano, rosemary, sesam, and thyme can be planted now.


Lawns: Check St. Augustine for chinch bugs. It is the beginning of mole cricket season for bahia, Bermuda, and zoysia lawns. The mole crickets have been busy laying eggs which will start hatching this month. Fertilize with 15-0-15 or 16-0-8 this month. Water restrictions (city water or wells) allow odd numbered houses to water Wed. & Saturday; even numbered houses – Thurs. & Sunday. Non-residential properties water on Tues. & Friday. Remember small amounts of fertilizer work best. Too much nitrogen can attract insects and disease.

Trees: Some magnolias may drop their leaves during the spring months. This is normal, as they replenish foliage. Palms should have a “palm special” fertilizer applied over the root system under the spread of the fronds. The configuration should be 8-2-12-4 (N-P-K-Mg). Ideally this would also include manganese, boron, sulfur, etc. with appropriate formulations. Use slow release fertilizer if pH is acid, use quick release for alkaline or high pH soils. Many palms are deficient in potassium, in spite of using palm fertilizers. Apply Muriate of Potash to correct this deficiency.

Vegetables: Scout for insects and hand remove if possible. Check the undersides of leaves for eggs and aphids. Remember some insects are predators. These predators are important part of keeping the pests from totally taking over vegetables. Vegetables to plant this month are lima beans, eggplant, okra, Southern peas, and sweet potatoes.

Selected from Florida Vegetable Guide by JM Stephens, RA Dunn, G Kidder, D Short, & GW Simone, University of Florida and Month-by-Month Gardening in Florida by Tom MacCubbin

June Checklist

Citrus: Depending on citrus fertilizer label, apply fertilizer every six weeks or as directed. Check for citrus insects; apply ultra fine or all season horticulture oil before 10 am and in early evening if insects are detected. Check for disease; apply appropriate fungicide. Weed as needed.

Fruit: Summer pruning to include water sprouts, and fire blight infected wood. Be sure to clean pruners between cuts using alcohol, bleach or Lysol on the blades to prevent transmitting diseases. Apply 6-6-6 or 8-8-8 fertilizer to pears and plums. Apply azalea fertilizer to blueberry shrubs at 1/2 lb per 3’ of shrub. Weed as needed. For mature Loquat trees, fertilize trees 2 to 3 times per year. The fertilizer should be applied just before or at bloom, perhaps during late fall, again in March, and once during the summer. The fertilizer mix should also include phosphate (P2O5) and potash (K2O); use a 6-6-6, 8-3-9 or similar material.

Flowers: If growth appears too slow and the foliage turns yellow, they may need fertilizer. Too much growth and a lack of flowers indicates the plants have all the nutrients they need and you can reduce nitrogen. Globe amaranth, melampodium, pentas, portulaca, purslane, salvia, zinnia, lantana, buddleia, daylily, verbena, purple coneflower, plumbago, and sun coleus can be planted in full sun. Plant agapanthus, blackberry lily, clivia, gloriosa lily, achimenes, crinum, and iris.

Herbs: Bay laurel, culantro, ginger, horehound, lavender, mexican tarragon, mint, parsley, oregano, rosemary, sesame, and thyme can be planted now.


Lawns: Keep mower blades sharp (once a month is a good rule). Mow the lawn on the highest height for several weeks – never cut it too short.

Perennials: Some pests to check for are grasshoppers and katydids. Both may be chewing holes in plant leaves. Try to handpick them from the plants, or if needed, use a synthetic insecticide as instructed on the label for chewing insects.

Trees: Pests may be noticed in many trees. Their damage is minimal and sprays are seldom needed. Look for aphids, borers, mites, etc.

Vegetables: June is not the best month to be starting a garden or planting new crops. Wait until August before putting in new plants. You may still plant tomatoes in containers if you want something to harvest. This is a good month to solarize your garden to fight against nematodes and disease causing fungi.

Selected from Florida Vegetable Guide by JM Stephens, RA Dunn, G Kidder, D Short, & GW Simone, University of Florida and Month-by-Month Gardening in Florida by Tom MacCubbin
Q: I found these unusual growths on my oak trees. What are they and will it cause my oak tree to die?
A: Thank you for bringing this to the Extension office; I have seen this gall only one other time in my thirteen years of being a Horticulture agent in Nassau County. I believe the gall is called an oak apple gall. Galls occur on a wide variety of plants. These growths may be the result of fungi, bacteria, nematodes or mites, but insects are the prime cause. Gall-forming insects include aphids, phylloxerans, psyllids, midges (gall gnats) and cynipid wasps (gall wasps). Of the more than 2,000 gall-producing insects in the United States, 1,500 are either gall gnats or gall wasps. About 80 percent of the gall wasps produce galls specifically on oak trees. In fact, 60 percent of all known insect galls occur in the oak family and 30 percent occur in the daisy, rose and willow families. These growths are called galls because they contain large amounts of tannin, which has a very bitter taste. Long ago, they were known as “gallnuts” because they tasted as bitter as gall. Plant galls are abnormal growths of plant cells formed as a response to the insect's stimulus caused by egg laying, or larvae or nymphs feeding. Galls seem to cause a lot of concern to the general public. Generally they do not seriously harm the plant. Most ornamental plants and trees are not apparently injured even by relatively large numbers of galls. Attached is the publication for more information on insect galls: http://edis.ifas.ufl.edu/pdffiles/IN/IN02200.pdf

Q: What is the name of this moth? What does it eat?
A: I believe the moth is the adult form of the spiny oakworm, Anisota stigma. It is a very common moth and is found throughout the eastern part of the United States and parts of New England down to central Florida as far west as Texas and Minnesota. The adult causes no damage to our landscape plants but the caterpillar feeds on numerous tree leaves – most specifically oaks. The spiny oakworm larva can be an aggressive feeder but generally it feeds late in the season when most of the leaves of the oaks will be defoliating anyway. Here in the south, the damage is minimal and mostly aesthetic. Fully grown larvae enter the soil, pupate, and overwinter in the pupal stage. Usually only one generation develops during a year so they are not considered important enough for chemical control. If there is significant loss of foliage, it is possible to reduce the overall growth of the tree, but a severe infestation would have to occur for us to be concerned. The photos I have attached are of the early oakworm moth stage with wing buds. The wing buds have not fully developed which may take several hours to complete. The adult spiny oakworm moth is also photographed. The robust body is bright orange with rusty-brown wings and a distinct white dot. The wings have an iridescent purple cast – very pretty. Females are larger than males.

Q: What is wrong with my oak tree? This stuff is all over the leaves.
A: This disease is called oak leaf blister and it is caused by a fungi. The disease is very common on oak trees and is found throughout the eastern part of the United States. You will notice cupping or bulging of an area of the leaf, which we call a blister. Ultimately, the area will turn brown and with a severe infestation, the leaves will drop off but more often than not, the leaves remain on the tree. Since some of the leaf is still green, it is able to carry on photosynthesis and provide food for the rest of the tree. Oak blister is not considered a serious disease and fungal treatments have shown to be of little benefit. However, if you have a young tree and wish to treat it with a fungicide, you may do so when the tree is putting out new leaves in the spring. Removal of leaves once they defoliate have helped to some degree as it reduces the amount of spores available to attach to other leaves.
Garden Talk - with Rebecca Jordi

Q: I am interested in growing okra, is it too late?

A: Okra, *Abelmoschus esculentus*, grows best when the temperatures are consistently above 65 degrees F, which makes this pod vegetable a warm season vegetable. Okra is part of the Mallow family which includes plants such as cotton and hibiscus. Here, in Northeast Florida, okra should be planted between March and July – so you still have time to get it in the ground and reap the benefits. Okra will be ready to harvest between 60 – 70 days but it is best to harvest the pod when it has grown about 2-3 inches long. The pods will be tender and edible at this stage. Long pods around 5-6 inches are too fibrous and tough. Ideally, the soil pH should measure between 5.8 and 6.8. Okra prefers well-drained, sandy soils high in organic matter, but it can be grown in a wide variety of soils. You can have the soil pH tested at either of the Nassau County Extension offices at no cost to you. Bring in a sample of your garden soil between 10am and 2pm on Fridays (except for holidays) at the Yulee office (attached to fire station #30) or any day from 8am – 5pm at the Callahan office (near the Fairgrounds). Okra produces the highest quality and quantity when planted in a full sun area. Moisture is especially important during flowering and pod development. During prolonged dry periods, a deep soaking once every seven to 10 days with one to 1.5 inches of water should be adequate. Soaker hoses or drip irrigation tape are the best methods for applying water. The University of Florida suggests the following varieties for growing here in Florida: ‘Clemson Spineless’, ‘Emerald’, ‘Annie Oakley II’, ‘Cajun Delight’.