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Garden Scoop

UF IFAS Extension UNIVERSITY of FLORIDA

FLORIDA MASTER GARDENER

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Lake County MGV Mission Statement

The mission of UF/IFAS Lake County Master Gardener Volunteers is to assist extension agents by providing horticultural education programs and current research-based information to the public through plant clinics, community outreach and Discovery Gardens.

Landscape Biodiversity

by K.S. Kennen MGV

Many times I have heard the term biodiversity used when listening to various presentations. It can be complex since it deals with the consideration of all life on Earth and the interactions and interdependence of all. There are four direct drivers that cause biodiversity change. A direct driver is any natural or human-induced factor that directly or indirectly causes a change. Direct drivers are habitat loss, invasive species, over exploitation, and nutrient loading (pollution). Florida's population growth has resulted in many homes being built resulting in the loss of places for plants and animals to live. The United States has over 40 million acres of lawn. Fifty-four percent of the lower 48 states have been converted into suburban/urban use and 41 percent is used for some form of agriculture. We have taken 95 percent of nature and made it unnatural. Besides changing use of land, 3,400 species of alien plants have invaded over 200 million acres of land. American buffalo is one example of over exploitation that almost caused the extinction of the animal. Nutrient loading was witnessed in our backyard in the near extinction of a lake, Lake Apopka, due to the runoff of fertilizers, dirt, and decaying crops. Biodiversity is necessary for fellow creatures to survive. Over 33,000 plants and animals have in essence become functionally extinct. One third of our nations birds are endangered.

One place that we can control and make changes to positively effect biodiversity is our own backyard. Plan for insects and wildlife by having food, water and shelter. Remember that food includes insects, so no insecticides. Recommended diversity for your landscape is 5-10-15. No more than five of the same plants so disease or infestation will not destroy all your landscape. No more than 10 plants of the same genus and only 15 plants in the same family.

Another consideration is to include a keystone plant in your landscape. It is a plant that provides critical food and shelter for many other species. The Southern live oak (*Quercus virginiana*) is a keystone species that provides shade and is a habitat for mammals, birds, insects and other plants. The acorns are food; the branches support epiphytes; and the leaves host butterfly and moth larvae.

Take time to look in your yard at your plants and the wildlife. Do you have only one tree, a lawn, and shrubs? How can you increase your yard's biodiversity and invite more life into your yard?

https://edis.ifas.ufl.edu/uw107
https://www.americanforests.org/magazine/article/backyard-biodiversity

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Backyard Biodiversity

By K. S. Kennen MGV

There are many things you can do to have a biodiverse yard. Following are some that should be easy to do over time:

1. Attract birds to your yard. Be sure to have what birds need to live. Food, water, and shelter are the basics you need to have birds in your yard. Leave the seeds on the cone flower to dry for the birds to eat. Have a bird bath for bathing and drinking. Be sure to keep it clean. My birdbath has to be filled every day since the blue jays are very active bathers and manage to splash most of the water out. Have shrubs and trees so birds will have a place to shelter and get out of the bad weather.

2. Plan and plant a butterfly garden. Be sure to select plants that not only provide food for the butterfly but have plants that are food for the caterpillars. I was lucky enough to identify a new vine growing in my yard as corky stem passion vine that probably grew there as a result of birds. I now have many zebra butterflies. Two blooms my butterflies favor are zinnias and red pentas.

3. Have a nectar garden for all the pollinators other than butterflies. One plant that attracts the native bees is scorpion tail and is an easy to grow Florida native. For honey bees I have English lavender that attracts and provides food for them spring, summer, and fall.

4. Add a log, rock pile, or even compact growth to have hiding places for snakes and toads. I left my lemon grass thick so it was a place for a black snake to hide. I have always had a black snake in the yard and am happy to have such an efficient insect controller. Preserving a snag can also provide a home for woodpeckers and other wildlife.

5. Add a birdhouse, bat house, or native pollinator house. My daughter was lucky enough to attract carpenter bees without having a house built for them. They used a bamboo trellis mounted on the garage wall and could be observed entering and exiting the end of the rod while they made a nest for eggs. When deciding to have a birdhouse, the dimensions are an important item to attract certain birds. For example, a downy woodpecker needs a house that is four inches wide and ten inches high with the entrance opening seven inches above the floor of the birdhouse. Be sure to mount it from eight to twenty-five feet high. For other birdhouse dimensions refer to the chart at https://edis.ifas.ufl.edu/uw058

6. Limit the use of or avoid the use of pesticides. When there is an infestation of concern use the least harmful to beneficial pests such as soap sprays or horticultural oils. Sometimes the best way to control an infestation is by removal and proper disposal of the infected plant.

7. Plant natives and replace some tropical ornamental plants with natives. For example, remove any Mexican petunia introduced as an ornamental in 1933 and now an invasive and replace it with wild petunia that is native to the northeastern states. For a list and description of native plants to use in your landscape refer to website at https://gardeningsolutions.ifas.ufl.edu/plants/ornamentals/native-plants.html.

Remember: A bio-diverse garden is a happy garden.

Backyard Birding

By Reggie Doherty MGV

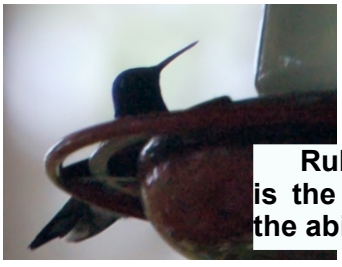
Birds have always been a fascination of mine. My father bought me my first birding book when I was in third grade and I used it to write a report on my backyard birds (with illustrations in crayon). I've been an amateur ornithologist ever since. When I moved to Florida, the amount of bird species I've spotted in my own yard surpasses what I saw when I lived in New Jersey. The number of birds is just amazing! I thought I'd share some of my backyard sightings.

Kingfisher (January) likes to dive into the water to catch fish to eat.

Palm warbler (February) wags and bobs its tail while hunting and eating insects.

American redstart (May) has interesting actions of hopping and darting when feeding on insects.

Eastern phoebe (November) uses hawking as it sits on the end of a branch and flies out to catch an insect.



Ruby-throated hummer (April) is the smallest in the state with the ability of flying backwards.

Yellow-throated warbler (April - September) likes to nest in coniferous trees and feeds on insects, berries, and nectar.

Painted bunting (March) has a beautiful combination of green back, blue head, and orange chest/belly.

Blue-gray gnatcatcher (January – May) likes to flick its tail from side to side and up and down while giving a wheezy call.

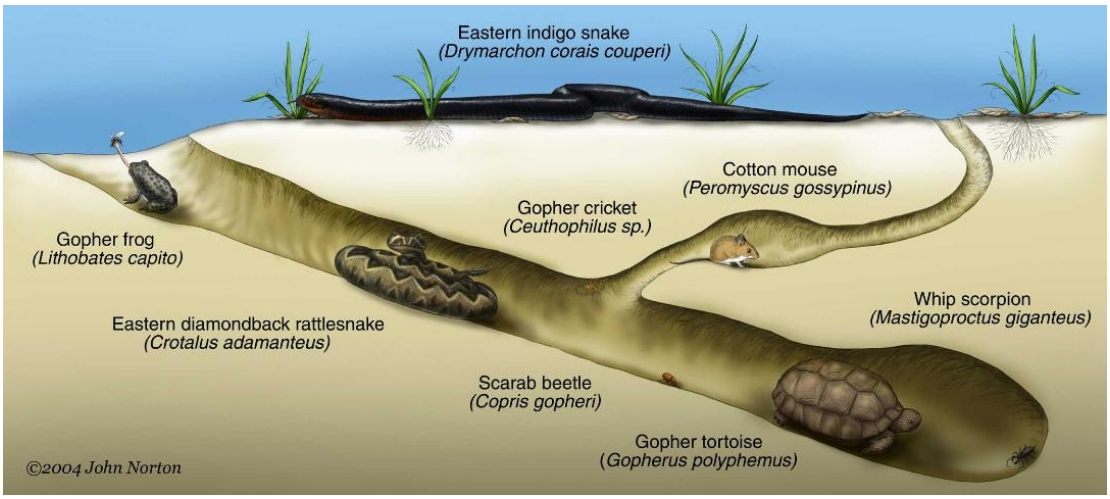
https://www.blog.catandturtle.net/backyard-bird-identification/

Gopher Tortoise

By Cathy Leavers MGV

The gopher tortoise, a land tortoise that came from a species of land tortoise that lived 60 million years ago, is considered a keystone species. But, what is a keystone species? This is a species on which other species in its environment depend. It has a disproportionately large effect on the ecosystem in which it lives relative to its abundance that, if it were removed, the ecosystem would change dramatically or cease to exist altogether. This concept was introduced by zoologist Robert T. Paine in 1969. These keystone species play a critical role in maintaining the structure of an ecological community, helping to determine the types and numbers of other species in the community. This idea can be compared to the role of a keystone in an arch. The keystone is only a small part of the arch and is under the least pressure, but the arch will collapse without it. In nature, even though a keystone species is a small part of the ecosystem as measured by biomass or productivity, if taken away, the system will be greatly changed and could even collapse.

As a keystone species, gopher tortoises enable other species to survive. The gopher tortoise excavates burrows that are on average 15 feet long and 6.5 feet deep, and provide shelter from weather, fire and predators. The longest recorded burrow was an incredible 47 feet long! These burrows are used by as many as 350 other species, called commensals, including burrowing owls, raccoons, opossums, the Florida mouse, gopher frog, eastern indigo snake, spiders, insects, cotton rats, rattlesnakes, etc.



edis.ifas.ufl.edu/WEC396/UW441

The gopher tortoise prefers to live in well-drained, sandy areas with little tree cover and lots of herbaceous ground cover. Unfortunately, developers also prefer this terrain. Thus, habitat loss from human development poses the greatest risk to the gopher tortoise. Relocation of the tortoises to new sites has been tried, but is often unsuccessful because they rarely stay at the new sites, may spread disease, or disrupt the resident tortoise population. Government agencies are endeavoring to restore and maintain gopher tortoise habitat and populations. This effort will also benefit the other species that depend on their burrows for their survival.

If you have property where the gopher tortoise might live, you can plant gopher-tortoise-friendly plants such as wire grass, broadleaf grasses, wild peas, blueberries and prickly pear (their favorite food). Gopher tortoises spread fertilizer and seeds through their dung, thus benefiting the plant community in which they live. Don't worry about providing water as they obtain most of their water from the plants they eat and rarely need to find water, unless there is a drought.

As a final note, there is a difference between tortoises and turtles. Turtles live in and around water and tortoises are mainly land dwelling creatures. So never relocate a gopher tortoise to water -- they cannot swim!

Plant Clinic Clatter

Dear Master Gardener,

My hibiscus has yellow leaves sporadically around the bottom of the branches. This seemed to happen overnight. What is causing this and how do I stop it from happening again?

Dear Gardener,

Hibiscus is a flowering tropical shrub with a range of brilliantly colored flowers. Besides many colors, the shrub also can be a variety of sizes from small and compact to big and tree-like. The yellow leaves could be a sign of too much water or even too little. It is important to monitor how much water your shrub receives especially during drought in our summer months. You should definitely water periodically during those times. Hibiscus also prefer at least five hours of sunlight; too little sunlight may not let the plant produce enough chlorophyll and result in yellowing leaves that fall off the plant. Also consider the soil pH. If too high or low, it could cause the leaves to yellow.

Finally, and what is likely the cause of your leaf yellowing, is the cold weather we have had lately. Tropical hibiscus are sensitive to cold weather; the slightest cold wave can cause lower leaves to yellow and drop off. Don't worry, the shrub could freeze to the ground but should come back when the weather warms up and be happily blooming again.

Reference:
https://gardeningsolutions.ifas.ufl.edu/plants/ornamentals/hibiscus.html

Dear Master Gardener,

I received a lovely little poinsettia plant for Christmas and was wondering if I can plant it in my yard and if there is any special care that it needs?

Dear Homeowner,

Yes you can plant it outside. Just be sure to wait until the danger of frost passes so it can not suffer freeze damage. Just like any other flowering plant, it needs a sunny spot with 3-6 hours of sunlight with no artificial light at night since that could affect the blooming of the plant. Remove fading bracts and leave at least 4 to 6 inches of stem. The plant likes moist well-drained soil. Mulching will be helpful to control moisture. Use a time released fertilizer or a liquid fertilizer monthly. Prune once a month if necessary and leave four leaves on a branch. Stop pruning in the month of September.

Reference:
https://gardeningsolutions.ifas.ufl.edu/plants/ornamentals/poinsettia.html

Treemendous: Longleaf Pines

by J. Daugherty, RHA

A keystone species is a vital part of biodiversity. Keystone species are named such because several other organisms depend on them to survives. If a keystone species is removed from an ecosystem, it is likely to collapse. A keystone species is different from an indicator species. An indicator species is one that only exists in a mature healthy ecosystem. It *indicates* a healthy ecosystem.

Longleaf pine (*Pinus palustris*) is a keystone species in the high pine grassland ecosystems of Florida. This pine once covered 30-60 million acres of the southeast. Now about 10% of this area remains as a longleaf pine forest. As we gain an understanding of the importance of these ecosystems, restoration efforts are increasing.

Longleaf pines are well adapted to fire, having several different life stages designed to protecting the growing tissue from damage during fires. These trees start out in the 'grass' stage and can remain in this state for 5-7 years. During this time the pine resembles a club grass and grows a strong root system. The grass-like clump of needles protect the growing tissue from fire. The next stage is referred to as the 'broom' stage. This is a stage in which the plant will go from the grass stage to about 6 feet very quickly. This brings the growing tissue above the average fire line, protecting it. Should the growing tissue be damaged by fire, the plant will die. After this stage the plant continues toward a maximum of 125 feet. Full maturity is reached in around 100-150 years! In ideal conditions these trees can live for hundreds of years.

One of the indicator species of a healthy/mature longleaf pine ecosystems is the endangered red-cockaded woodpecker *(Picoides borealis*). This bird species prefers to make its home in pines with a preference for longleaf pine. These birds are unusual because they nest in LIVE trees. Longleaf pines over 80 years old can start to house the birds because older trees tend to be infected with a fungal disease called heart rot. This fungus softens the inner tissue, making it easier to nest in. These primary nesting holes can then be used by other organisms not able to create cavities in live trees.

Other wildlife also depends on the longleaf pine ecosystem. Gopher tortoises, Florida mice, gopher frogs, and eastern diamond-back rattlesnakes are among the native animals in the ecosystem. Endangered species such as red-cockaded woodpeckers and indigo snakes are threatened by the loss of the longleaf pine habitat. The seeds are an excellent food source for squirrels, turkey, quail, and brown-headed nuthatches.

It is important to protect biodiversity in all ecosystems because once a keystone species is lost, it is not always possible to bring it back.

Arbor Day

By Art Swanton

A chilly but sunny, winter morning greeted a team of Lake County Master Gardener Volunteers at the 4th annual Arbor Day Celebration at Wooten Park on Saturday, January 16th. It was spearheaded by Traci Anderson and her team from Tavares Public Works and Parks Department assisted by groups from various organizations including Master Gardener Volunteers, Lake County Water Authority, Lake Apopka Center for Birds of Prey, and local Girl Scout troops. Well-rooted plants donated by the city and Lake Soil and Water Conservation District included: Nellie Stevens holly, pineapple guava, "Blue Ice" cypress, Walter's viburnum, bottlebrush, loquat, golden trumpet tree, and brown turkey fig. Jamie Daugherty, Lake County Extension agent, and reps from the Lake Apopka Birds of Prey Center were speakers at the event. The public also had gardening questions answered at the master gardener staffed mobile plant clinic.

Ron Hausermann, Carol Zito, Art Swanton, Jamie Daughtery, and John Braun

Calendar Of Events

Due to COVID 19 activities and educational offerings are virtual. Please refer to our website for future offerings. plans will soon be completed for an upcoming series. The site is at http://sfyl.ifas.ufl.edu.lake/ or https://lakegardeningprograms.eventbrite.com

Extension programs are open to all persons without regard to race, color, sex, age, disability. religion, or national origin.

Be sure to read the monthly *From the Extension* articles in the *Daily Commercia*l.

Discovery Garden

Now is a perfect time to visit the gardens especially the raised bed garden. The cool weather is perfect for the herbs planted here. Please plan a visit to the over twenty different gardens located at 1951 Woodlea Road in Tavares. The hours are Monday through Friday and on the third Saturday Of each month from 9 a.m. until 4 p.m. Just like your yard, Discovery Garden changes with the seasons and will reveal something new with each visit. Pictured to the left is the raised bed garden.