



Know, Sow, Grow Flagler County

UF/IFAS Extension Flagler County

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Growing Vegetables in the Summer Heat

Mimi Vreeland Residential Horticulture Agent, UF/IFAS Extension Flagler County

If any of you have attempted to grow vegetables year round, the most challenging season is typically summer. Once the summer heat is on, it is quite common for homeowners to let their vegetable gardens lay fallow until the cool weather returns beginning to middle of October. However, with a little strategic planning, there are several inexpensive ways to grow veggies all summer long.

The biggest environmental factors affecting summer vegetable growing are heat stress, high humidity levels, poor air circulation, and a plethora of bugs. The following strategies are helpful ways to counteract some of these conditions:

Increasing Shade: It is helpful to have two locations for raised garden beds, one on the south side of the house for cool season vegetables, and one on the east side for warm season vegetables. An east side raised bed also benefits if located near a tree canopy where it will be shaded from midday to late afternoon sun.

Increasing Air Circulation: The combination of high humidity and poor air circulation can spell disaster for many vegetables that are susceptible to certain fungal and bacterial diseases. The best way to lower humidity levels and improve air circulation in your garden is to provide for open areas to let prevailing breezes move from one end of the property to the other. Look for ways to keep dense hedges thinned and well pruned. Remove encroaching or overhanging lower tree branches that constrict the flow of air. Allow the prevailing wind direction to have an open channel, free of obstructions that slow air movement.

Preventing Bug Attacks: The first step to avoiding pest infestations is to look carefully for warm season vegetable seeds and starters that are heirloom and/or diseaseresistant varieties. The next step is to replenish plant containers and raised bed areas with good clean compost free of pest contamination. Avoid bags of compost or garden soil that have been sitting too long with holes as they might be harboring unwanted pests. Carefully inspect the vegetables at least once a day, especially on the undersides of leaves, and remove any brown or decaying plant material.

Selecting Appropriate Warm Season

Vegetables: Certain southern favorites, like okra and peas, can be planted and harvested all summer long. Mid-July is the month to plant pumpkins of every variety. Pole beans and bush beans are typically planted end of summer and ready for harvest through the end October. Rotating crops of eggplant and endive are usually planted beginning of August and harvested up until end of Spring. And last, but not least, a multitude of different varieties of peppers, tomatoes, and squash are planted in August or September and can be harvested until late fall.

With a little diligence and creativity, growing veggies in the summer is not only rewarding, but can also be an incentive to try some refreshing, new recipes like chilled gazpacho, fish gumbo, or ratatouille. Bon Appetit!



Photo Credit: M. Vreeland, UF IFAS Flagler County Extension

msuc mis issue.	
Moles in The Landscape – Friend or Foe?	2
Book Review FLORIDA'S BEST HERBS & SPICES by Charles R.	2
Florida Friendly Land- scaping, Principle #2 – Water Efficiently	3
Lovebugs	3
Bonsai 101	4
Landscaping at a Glance: Summer	4
Summer Gardening- Checklist	5
Summer Planting Guide	5
Flagler County Extension Office Contact Information	6

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http://sfyl.ifas.ufl.edu/flagler/la wn-and-garden/horticulturenewsletters/





Moles in The Landscape – Friend or Foe?

Mary Ellen Setting, Master Gardener Volunteer

Moles have a bad reputation among gardeners and turf lovers when their tunneling destroys the look of lush lawns and beautiful landscapes. The damage caused by moles is temporary and almost entirely cosmetic. Although accused of eating the roots of grass and other plants, they in fact feed on the insects causing the damage. Grass can die off when the roots dry out from the upheaval of tunnels.

The eastern mole, which is not a rodent but a mammal, occurs throughout Florida. It has a pointed snout and large, powerful front feet for pushing soil out of its way. Its soft gray hair points up (not towards the tail like most mammals) to enable the mole to move forward and backward within tunnels without rubbing their fur the wrong way and trapping soil in its coat. The average length of a mole is $5\frac{1}{2} - 6$ " with a short 1-1 $\frac{1}{2}$ " tail. Moles have one litter of 2-5 young per year in March.



Moles are actually beneficial to the landscape because they eat mole crickets, beetle larvae (white grubs, wire worms, etc.); ants; moth larvae and pupae (cutworms and armyworms); and slugs. Moles help to loosen and aerate the

Eastern Mole. Photo Credit: gardeningsolutions.ifas.ufl.edu

soil. In loose soil, moles can tunnel up to 18 ft. per house. They live in tunnels and chambers 6-12" below the surface. Soil from these deep burrows is pushed to the surface in saucer-sized mounds and the entrance holes are 2-4".

If the damage from the tunnels becomes intolerable, press down the disturbed soil to discourage the moles. Since moles prefer to tunnel in damp soils, reduce the amount and frequency of water. Moles can be captured and removed by homeowners, renters, and employees of the property owner without a permit in Florida. Professional trappers must be licensed by the Florida Department of Agriculture and Consumer Services. Traps can be set up at actives tunnels. However, some of the traps are lethal and disposal of the dead moles must be considered. Barriers like hardware cloth or sheet metal buried 1.5' beneath the ground can work to keep moles out of a particular area.

Flooding the tunnels with water may force moles to the surface, but this method rarely works in Florida's sandy soils. Vibrating devices that claim to drive moles way are not effective. Moth balls do not repel moles and sticks of Wrigley's Juicy Fruit gum are also ineffective. Insecticides can be used to eliminate insects on which moles feed but may eliminate beneficial insects as well. Follow UF/IFAS Extension recommendations for proper, science-based pest control.

Never use a pesticide in a way that is not explicitly detailed on the product label.

For more information, visit: <u>Moles - Gardening Solutions -</u> <u>University of Florida, Institute of Food and Agricultural Sci-</u> <u>ences (ufl.edu); WEC326/UW371: How to Use Deterrents to</u> <u>Stop Damage Caused by Nuisance Wildlife in Your Yard</u> (ufl.edu); WEC66/UW080: Moles (ufl.edu)

Book Review: FLORIDA'S BEST HERBS & SPICES by Charles R. Boning

Donna Frangipane Master Gardener Volunteer

Summer in our area brings on the high temperatures and humidity. We may spend less time in our yards and more indoors. However, avid gardeners are always seeking to learn new and interesting ways to enhance their personal garden areas and this is a great time to do so.

Herbs are a fascinating category of plants that can thrive in our area due to our long growing season. They are relatively drought tolerant and maintenance free. I have had the pleasure of growing herbs for a couple of decades now and often refer to the EDIS publications for information on herbs.



A couple of years ago I attended an Herbal Workshop and the speaker recommended this book and I have been referring to it ever since. The book is illustrated and photographed by the author and as the subtitle infers it includes varieties of 'Native and Exotic Plants Grown for Scent and Flavor.'

There is a section covering the history of herbs and spices and a chapter featuring the basics of raising herbs in our area. Yes, our growing conditions are unique and newcomers struggle to adapt without research-based guidance.

The profiles are alphabetized by common name that is perfect for the novice gardener. Each plant profile includes descriptions highlighted by illustrations and photos as well as a description of the characteristics and habit of the plant. The plants flavor and scent are included as well as instructions for cultivation. The author also includes known hazards as well as the harvesting tips and suggestions for the use of each herb.

I highly recommend this book as an addition to your library whether you are a newcomer to Flagler County or are an experienced Florida gardener. The book is available on Amazon and a new edition as pictured has just been released. Herbs are so versatile in that they can be added to your existing flower beds, grown in containers and raised beds or the inspiration for an entire area dedicated to adding interest and color to your garden. Have fun growing them!!!

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Florida Friendly Landscaping Principle #2 – Water Efficiently

Lori Powell, Master Gardener Volunteer

Watering efficiently is one of the nine principles of Florida Friendly Landscaping. Many homeowners water their landscapes incorrectly. This not only depletes our water supply it also makes plants and lawns more susceptible to disease and pests. Approximately 60% of residential water bills in Florida is attributed to landscape irrigation.

You should water your lawn in the early morning, between 4 am and 8 am. At this time the wind is usually calm and less evaporation takes place leaving the water to soak into the roots. Avoid watering at night as leaving plants wet overnight can lead to fungal growth and other diseases.

Water when your plants and lawn need it. Water when your plants and lawn show signs of wilt. Get a rain gauge and watch the weather. Your lawn only needs between 1/2-3/4 inch of rain per week.



Having an automatic irrigation system is a convenience but frequently waste water. Using automatic irrigations efficiently requires regular inspection and maintenance. Performing regular maintenance will ensure water is not wasted and your lawn and plants are getting the water they need.

Photo credit: UF/IFAS irrigator

Regular inspection and maintenance includes checking sprinklers

for proper alignment, leaks, missing heads and clogs. Proper alignment of sprinkler heads ensures that the water is actually getting on your lawn and plants and not the driveway, road or sidewalk. Replace an broken sprinkler heads. Sprinkler heads should be replaced with the same type.

A replacement sprinkler head doesn't have to be the same brand as the broken head but it **does** have to be the same type: pop-up (stationary, rotor- or gear-driven rotor) or impact. The new head must also match the gallons-per-minute (gpm) delivery rate of the old head. You can take the old part to the store with you to confirm that the new head has the same overall length and diameter as the old one. All sprinkler heads within a zone should have the same distribution rate to provide even distribution of water within the zone.

Lawn areas and planting beds should be on separate irrigation zones because they have different moisture needs. In most cases, planting beds need less water that lawn areas. If both of these areas are on the same watering zone it could lead to overwatering of the planting beds as the lawn area generally has a higher water need.

An automatic rain sensor shut-off device can detect when recent rainfall has supplied enough water to your landscape and irrigation is not needed. If your irrigation system is running and it's raining, this is an indication that the sensor may need cleaning, repositioning, have a loose wire or need to be replaced. These are inexpensive devices that can be purchased where irrigation supplies are sold.

For more information visit: <u>https://edis.ifas.ufl.edu/publication/AE144</u>, <u>https://edis.ifas.ufl.edu/publication/AE472</u>, and <u>https://edis.ifas.ufl.edu/publication/LH025</u>.

Photo credit: gardening solutions.ifas.uf.edu

Lovebugs

Mary Ellen Setting, Master Gardener Volunteer



Lovebug. Photo Credit:

UF/IFAS Extension, UF

season when we are inundated with masses of swarming black insects. The lovebug, *Plecia neartica*, is a small fly closely related to mosquitoes and gnats. Although present throughout Florida most of the year, it has two population explosions each year: once during April-May and the second in August-

Native Floridians and "newcomers"

alike quickly learn to dread lovebug

September. The lovebug does not bite, sting or spread disease, so it is basically harmless to humans and animals. The adult flies are a nuisance pest, especially to motorists that encounter them along highways where they accumulate in large numbers. Vehicle windshields, hoods, and grills become spattered with lovebug body fluids that can damage automobile paint if not removed quickly. Adult lovebugs are also attracted to light-colored surfaces, especially freshly painted areas.

Lovebugs can readily be identified as slender black flies with a dull, velvety appearance and red thoraxes (the area immediately behind the head). Males are ¹/₄ inch in length, while females are 1/3 inch in length. They are usually seen flying in tandem with the male facing away from the female. Most of their adult life is spent in a mating love-hold. The male is dislodged when the female is ready to lay her eggs. Adults live long enough to mate, feed, disperse and deposit eggs, all in 3-7 days. Females lay 100 to 350 eggs underneath decaying vegetation. Adults feed on flower nectar. Larvae feed on the decaying plant material and convert it into nutrients for plants to use.

Natural predators of the larvae include birds, spiders, and armadillos. Adults escape predation because of their acidic taste. There are no insecticides registered for use against lovebugs. To minimize lovebug impacts make sure you have a good coat of wax on your vehicle and wash any insects off as soon as possible. Since lovebugs do not fly at night, you can avoid encountering them at this time. The population outbreaks last only a few weeks so before you know it the nuisance will be gone.

For more information, visit: <u>IN69400.pdf (ufl.edu);</u> <u>MG06800.pdf (ufl.edu);</u> <u>IN20400.pdf (ufl.edu)</u>.



Bonsai 101

Jeanne E. Florio, Master Gardener Volunteer

Bonsai, pronounced "bone sigh", is an artistic representation of a mature tree, bush, or vine in nature. The English word bonsai derives from the Japanese Language; bon - meaning "pot", and sai - meaning - "living in". Using horticulture principles and artistic design, a Bonsai is a tree, shrub, or vine grown in a pot to look like a miniature specimen. Bonsai's roots are in China, not Japan as is generally believed. Proof of its existence in China has been found going back many centuries. Bonsai is now a world wide business and hobby. It 'exploded" with a major outburst of interest in the United States during WWII.

Today, there are a number of Bonsai artists in the United States who have trained, and continue to train, under Japanese Bonsai Masters in Japan. To be successful in developing a bonsai tree, one must ideally have a sound knowledge of the basic principles of horticulture, understand how a tree grows, what shape(s) it takes in nature under various conditions, and what are its needs. In addition, a decision is needed as to what is the mood or feeling one wants to create. The latter is created by the artistic design of the person attempting to develop the tree into a Bonsai. For example, if the designer wishes to create the image of a wind-swept tree barely clinging to life on a mountain, or a tree heavily swept by winds from the ocean, then the tree branches have to be artistically developed to create that look and feeling. The branches are trimmed and then wired into the desired shape the artist wants to create.

Once the desired shape is obtained, the wire is removed. This process may have to be repeated a number of times before the desired effect is achieved. Development of the tree trunk to the appropriate size and shape is another important fact in the Bonsai development. In nature, as the tree grows taller, the trunk and base becomes thicker. Therefore, one of the first steps in obtaining a young specimen, to create a Bonsai in training, is to let it grow until the desired trunk and base size is reached. Then, what is the goal? Is it, for example, to have the tree trunk base look old or knotted, or a segment to look like deadwood? These looks are also achieved by artistic design. The trees roots are cut to help achieve the desired size, as are the branches. An artistic "eye" is required to determine which branch will serve as the main leader for a top or "apex".

A Bonsai tree is not created overnight. During its development, it is considered a Bonsai in training. The process of development by the owner/artist can take many years. The desired feeling can also be created by how the branches are shaped and how the tree is planted in the pot. If it's planted upright, leaning a bit sideways, having short branches, or cascading branches, a different look and feeling results. The Bonsai pot size, shape, and color also help to create the desired look. During its initial growth, until a basic tree base or root flare "nebari" is developed, the specimen can be planted in the ground. Once a determination is made that it is a prebonsai, and is planted in a training pot, the roots need to be cut and initial "styling" of its branches needs to take place. Special Bonsai soil is recommended. Fertilization and regular watering - based upon the specimen- need to occur on a regular basis. As the Bonsai pots hold limited amounts of Bonsai soil, and the roots absorb water, watering needs to be frequent based upon the temperature. For some specimens, watering twice a day in the summer in Florida is indicated.

Every specimen has different needs, so this author's advice is to become a member of a bonafide Bonsai club. There assistance from others, including qualified Bonsai artists and lectures and workshops are available. Here in Florida, all Bonsai clubs belong to the BSF (Bonsai Society of Florida). In addition to clubs having Bonsai artist workshops, club study groups, and other presentations, BSF has a 3- day conference on Memorial Day Weekend every year, segments of which are open to the public free of charge. On a closing note, a Bonsai, once deemed a Bonsai, is never finished. It always needs to be maintained - shape, fertilization, watering, occasional soil change, repotting. etc. But it is nevertheless, a wonderful, fascinating, and educational hobby.

LANDSCAPING AT A GLANCE: SUMMER

Jeanne E. Florio, Master Gardener Volunteer

Gardening is fun. However, for those of us that migrated to Florida, no matter how proficient we were on the gardening scale, the weather, the soil composition and content, the need for moisture, and the temperature are generally different here in Florida. Therefore, times of the year for planting, and in some instances, what we plant, are different.

A general rule of thumb is to check your landscape - lawn, trees, shrubs, plants, and vegetables regularly for wilting, leaf color or size change, pests, stunted or irregular growth, or other signs that do not appear "normal".

Take pictures of your plants or insects and send them to us at: <u>mgardener@flaglercounty.org</u>, You can also bring the photos and/or a specimen to our office for evaluation. Remember, all "pests" are not harmful. There are "good pests" and "bad pests". We will help you determine what the pest is, and if necessary, the best way to remove it without the use of an abundance of chemicals that may damage other segments of the landscape or our aquifers. Take steps to assure that you are not overwatering. If you have an irrigation system ensure that it is in working order and set to provide only the amount of water desired and to the right areas of your landscape.



Photo credit: blogs.ifas.ufl.edu



SUMMER CHECKLIST

Jeanne Florio, Master Gardener Volunteer

JUNE

- Add additional mulch in garden beds if needed. USE ONLY UF RECOMMENDED MULCH! Do not pile up mulch against the base of trees and bushes (have at least a distance of six to twelve inches) or tight against the stems of plants (check regularly).
- Deadhead old blossoms; this will increase the production of more blossoms.
- June is generally the beginning of the rainy season. This is the best time to plant palm trees. Mulch, but remember to keep the mulch at least six to twelve inches from the base. DO NOT MOUND SOIL OR MULCH UP THE PALM TRUNK!
- Watch for pests: thrips, scale and mites become more active in warm weather. Oleander caterpillars leave chewed or ragged leaves on oleanders. Brown patches in St. Augustine grass may be due to lack of water or chinch bugs. Dying grass, irregular tunnels, or disturbed soil in bahiagrass may indicate mole crickets.
- Distinguish between the normal yellowing of older leaves and the yellowing of new growth.
- Maintain your lawn at the recommended height, and leave the cuttings in the grass as they serve as nutrients.

JULY

- Begin to check trees for weak or dead limbs, and have them trimmed or removed. Do not "hurricane cut" your palm trees as this ultimately weakens them. If you do not trim yourself, use a company/individual that is appropriately certified. Cut back plants that are becoming to leggy due to summer rains.
- Lightly prune summer flowering shrubs; they bloom on new growth.
- Solarize your vegetable garden if you deem it necessary.

AUGUST

- Check older palm fronds for yellowing; it MAY indicate a magnesium or potassium deficiency
- Monitor your lawn for signs of insect damage, especially fall armyworms, chinch bugs, mole crickets. and sod webworms.
- Fertilize ornamental plants that show signs of deficiencies. Rapid growth and leaching rains may result in nutrient deficiencies in some plants. Read the labels and remember LESS IS BEST!
- Pinch back mums and poinsettias before the end of the month to allow time for buds to form for the winter months.
- Remove spent blooms, cut back, and fertilize flowering annuals and perennials to extend the bloom season into the fall months.



Summer Planting Guide

Vegetables

Beans Okra Southern Peas Sweet Potato Coleus Ornamental Peppers Salvia Torenia Wax Begonia

Annuals/Perennials

Herbs

Basil Mexican Tarragon Rosemary

UF/IFAS Extension provides a printable garden calendar. Planting dates and other vegetable gardening information are also available as a free mobile app called 'Florida Fresh.' Access an app provider for your mobile phone or download it from <u>http://m.ifas.ufl.edu</u>.

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Our Mission

To assist Extension Agents in providing research-based horticultural education to Florida residents.

Our Vision

13

To be the most trusted resource for horticultural education in Florida.

Florida Friendly Homeowner Recognition Program

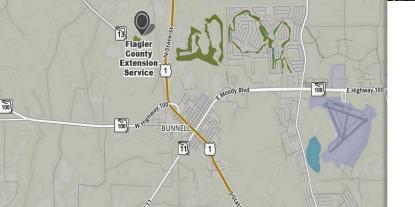
If you have implemented the nine principles of the Florida Friendly Landscaping program in your yard it could be formally recognized as a Florida Friendly yard.

A Florida Friendly Landscape (FLL) is a landscape that is designed, installed and maintained according to the nine Florida-Friendly Landscaping [™] principles.

Contact our office and a site visit will be scheduled for your home to evaluate how you have incorporated the nine Florida Friendly principles in your landscape.

If you want to learn more about the FFL program or need assistance in how to implement the principles into your landscape contact us or visit: <u>https://ffl.ifas.ufl.edu/about-ffl/landscape-recognition/</u> for more information.









Stay Connected!

Flagler County Extension: <u>http://flagler.ifas.ufl.edu</u> University of Florida Solutions for Your Life: <u>http://sfyl.ifas.ufl.edu</u> Florida-Friendly Landscaping™: <u>http://ffl.ifas.ufl.edu</u> UF/IFAS Gardening Solutions: <u>http://gardeningsolutions.ifas.ufl.edu/</u> University of Florida Master Gardener: <u>http://gardeningsolutions.ifas.ufl.edu/mastergardener</u>

The Flagler County Master Gardener and Horticulture program is open to all regardless of gender, race, color, nationality, creed, or disability.