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YARD & GARDEN NEWSLETTER

UF/IFAS Extension Duval County

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Extension Update by Larry Figart

"The way I see it, if you want the rainbow you gotta put up with the rain…" -Dolly Parton

The summer of 2022 started out very dry. The rainfall in June was the lowest amount ever recorded for Duval County at 1.19 inches. However since July 1st, the afternoon showers have been fairly consistent. Florida averages 54 inches of rainfall a year and 70% of the rainfall is during the summer months. If we continue to get rainfall and it is distributed evenly, it's possible that our plants will not need supplemental water until soils start to dry out in October.

A rain shut-off device (in photo) will only prevent your irrigation system from running during and just after a rain. If our soils are wet it is best to simply turn off the time clock on our irrigation until the soil dries out a little. Soils that are too wet will create problems for your plants. Saturated soils prevent roots from taking up water and nutrients and can cause plant diseases like root rot. Not to mention more weeds like dollarweed, sedges, and torpedo grass.

What's That? (answer on last page)

Images by Matthew Orwat, Horticulture Agent UF/IFAS Washington County

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For more information contact:
UF/IFAS Extension Duval County
Larry Figart lfigart@ufl.edu (904) 255-7450

Around the Yard by Tonya Ashworth

Starting a Raised Bed Garden: Cost Considerations

Prices at the grocery store have gone up significantly in the past few weeks. Perhaps you have considered growing your food as a result and aren't sure where to start. Raised beds are a fantastic way for a beginner level gardener to begin experimenting with growing their own groceries.

Advantages of Raised Beds

1) No heavy tools are needed. A garden trowel is all that's necessary.

2) Overcome challenges of our native sandy soil with low organic matter. You can choose your soil substrate.

3) Less water is required than a traditional bed with long rows.

4) Less space is required than a traditional garden.

5) Less weed pressure, and the few weeds you have are very easy to pull.

6) A raised bed can go right on top of a concrete slab, if that is the only place you have enough sun.

7) No soil compaction if your bed is less than 4' wide. You just reach in rather than step in the bed to work.

8) They can be attractive additions to your landscape and HOAs may be more likely to approve.

Start-Up Costs for One 4'x 8' raised bed

These prices were compiled on June 29, 2022. Please confirm current prices before starting your project.

All costs assume a 4'x8' bed that is 12" high and 32 cubic feet for soil calculations. These charts show how much you can expect to pay for various building materials and growing media.

Frame Material	Qty Needed	Total Cost
Pressure Treated Lumber (2"x 12"x 12")	2	$76
Landscape Timbers (4"x 3"x 8')	9	$45
Raised Bed kit	1	$120-260
Concrete Blocks	22	$60

Growing Media	Cost Per Unit	Total Cost for 32 cubic feet
Topsoil (bulk)	$38 per cubic yard	$45
Topsoil (bags)	$2.50-3.75 per cubic foot	$80-120
Compost (bags)	$5.38 per cubic foot	$172
Garden Soil (bags)	$3-6 per cubic foot	$96-192

Ways to Cut Costs

- Use materials you have on hand to construct the frame such as bricks and scrap lumber.
- Make your own compost.
- Instead of making the bed 12" high, make it 8" high and use less soil media.
- Fill the bottom 2" of the frame with fallen leaves.

Out on a Limb by Larry Figart

Preserving Trees

Jacksonville and other urban cities are losing more and more trees, mainly because of population growth. Increasingly vacant lots, many that are wooded are being developed throughout Jacksonville. Trees in the urban canopy provide many ecosystem services including lowering utility costs, storm water retention, cleaner air, better health, and higher property value. Developing these vacant lots present great opportunities to preserve trees during the development process. In this article we will discus the planning, conserving, commitment, and communication needed to properly preserve trees throughout the building process.

We have all seen examples of tree preservation during construction that had unsuccessful results. It happens more than we like to see. It is obvious that the builder fully intended on preserving the trees in the construction site. The only problem is that good intentions are not enough to save trees.

So, what does it take to preserve a tree in a construction site? One of the first things that needs to be done is to **plan** for the tree conservation. Tree condition, size, and species are important factors determining which candidate trees to save. Exact location and elevation are also needed to pinpoint tree locations on construction plans. Make sure that the tree is worth preserving. One thing that frequently occurs is that larger trees are given priority in preservation plans at the expense of smaller more vigorous trees. Many times, the larger trees are over mature and less resistant to the changes that will occur in construction. Don't overlook smaller trees that are more vigorous and will withstand the construction stress a lot better.

Tree killed by construction damage
Image by L Figart

Once trees are identified to be preserved, then the real work starts. The hardest part is **protecting and conserving** the tree roots underground from construction damage. We often see what I call a "fence post mentality" when it comes to trees. "As long as the trunk is not damaged, the tree will be fine". The key to preserving trees is managing the root zone under the ground. When a greater percentage of roots remain intact during construction, the better the chances that the tree will survive. So, how much root should be preserved? The answer is "as much as possible", but the minimum should be at least one foot of radius for every inch of tree diameter. This goes up to one and a half feet of radius for every inch of tree diameter in the case of older larger trees. For example, a ten-inch diameter tree would have a root protection zone radius of at least 10 feet. The area would be 314 square feet. Durable barricades should be erected at the edge of the root protection zone. The sturdiness of the barricade depends upon the commitment of the contractor.

Commitment is also important when preserving trees. Once a tree or group of trees is slated for preservation, everyone needs to be committed to the endeavor. All it takes is for one person to move a barricade, or clean equipment under the shade of a tree, and the effort is compromised.

Communication of the plan helps to build commitment. I was once asked to look at the plans for building a boardwalk around the Treaty Oak in Jacksonville. The boardwalk was to be constructed with very little impact to the tree. The next page in the stack of blueprints had all sorts of lines running under the tree. When I asked what that the lines were I was told that it was the locations for the trenches to put in the lighting to illuminate the tree. That was an example of poor communication that thankfully was corrected prior to the construction of the boardwalk.

It takes a lot more than good intentions to preserve trees in construction sites. It is not difficult either. All it takes is a little planning, conservation, commitment and communication.

Growing in the Garden by Beth Marlowe

Summer Vegetable Tasks

Wow, it is hot! Like some of us, many of our spring vegetables can't take the intense summer heat of July and August. When we have harvested as much as we can from our tomatoes, beans, and even some bell peppers, we pull the plants up and implement a new plan for the summer season. What we don't want is an empty bed inviting weeds in or losing soil to wind and rain. Generally, we have three choices: we can plant another crop that loves the heat; we can solarize the soil in the bed; or we can plant a cover crop in the bed.

Seminole Pumpkin photo: UF/IFAS

Planting a new crop

Beds that held beans are a great place to follow up with a summer heat-loving crop like okra, Seminole pumpkin or chayote. Be sure to weed well prior to planting, readjust irrigation lines as necessary, and add a trellis if growing the chayote. The nitrogen fixed by the previous bean crop will be available in the soil to the new crop, especially if you leave the root mass from the bean crop in the soil, or turn the chopped up plants under prior to putting in the new crop.

Solarizing with clear plastic photo: UF/IFAS

Solarizing the Soil

In some of our beds where nematodes have been particularly problematic, we use large sheets of clear plastic to trap heat in the top few inches of soil over a period of at least six weeks during the summer. If we can get the soil temperature up to at least 102°F for several weeks, we can reduce populations of problematic nematodes, kill annual weed seeds, and help make nutrients more available for the fall crop to come. Conveniently, solarizing the beds gives us gardeners a break, so if we plan to travel or simply not garden over the summer, we can forget about having to weed.

Planting a Cover Crop

For beds that were planted with heavy feeders in the spring (such as tomatoes, peppers, eggplants and cucumbers), we sometimes plant a warm season cover crop. An easy one for gardeners is iron and clay cowpea. Often used for wildlife food plots, the cowpeas are edible, but their real benefit in the summer garden is as a cover crop. They take a while to get started, so you can even plant the cowpeas around your spring crops before you take them out of the bed. Once they get going, they will shade out weeds, keep the soil covered, lowering its temperature and holding it in place, and—because they are legumes—add nitrogen to the soil. They are relatively drought tolerant, so they shouldn't need much irrigation, especially if the summer rains are frequent. Prior to planting your fall crops, cut the vines and either turn them under or leave them lying on the soil so they will add organic matter as they decay.

Whether you choose to grow crops during the summer or keep the beds covered, you can also use those hot summer afternoons to make notes in your garden journal and dream of the fall garden to come!

In Focus: Squash for the Dog Days of Summer

by Beth Marlowe

Looking for a new crop to beat the summer heat? Try chayote (*Sechium edule*)! Native to Mesoamerica (think Mexico, Guatemala, Honduras), this perennial, vining relative of squashes and cucumbers has been cultivated by native peoples since pre-Columbian times. Chayote is the Nahuatl name for the plant, but it is known by many others, such as vegetable pear, huisquil, chocho and mirliton. Now grown all over the world, it produces versatile fruits that can be eaten in almost any way imaginable—baked, sauteed, roasted, stewed, mashed or even eaten raw—and combined with almost any herbs and spices.

A chayote squash sprouting
photo: Beth Marlowe, UF/IFAS

Like many of its cucurbit relatives, chayote is a fast-growing and climbing vine whose tendrils need a strong trellis to keep its stems, leaves and fruits off the ground. Almost any kind of trellis will work—even a chain link fence. Male and female flowers occur separately on the same vines, and they require pollination. Native bees of the genus Trigona and honeybees are the primary pollinators, though some wasps (and gardeners!) assist as well.

The 3 to 4 inch-long green fruits can be found at most local grocery stores. They have one large, flattened seed inside. The seed often germinates inside the fruit if stored on the kitchen countertop for a while. If so, you have a head start! In spring or summer, plant the entire fruit (sprouted or not) on its side in the ground. If you have more than one, give them at least 12 feet of spacing. Cover the whole fruit, fertilize and water. Train the vines up your trellis as they appear and fertilize a couple more times over the rest of the warm season. Fruits mature about 35 days after pollination. After harvest, fruits can be wrapped in paper or plastic and stored for several weeks at cool temperatures or in the refrigerator.

A newly planted chayote squash vine reaching for support.
photo: Beth Marlowe, UF/IFAS

If you haven't eaten chayote before, try a few bites raw with a dip to see what you think. You can substitute them for potatoes in many recipes to get an idea of how you like them cooked. Once you become familiar with the taste and cooking methods you like, you can come up with all kinds of new uses. Chayote is relatively low in carbohydrates and relatively high in fiber, as well as vitamins and antioxidants. Leave the thin peel on in order to keep all those nutrients.

When the weather cools, the vines may die back, but the roots should live to produce more vines next year in our growing zone. Then you can enjoy more chayote next summer.

Additional Resources

https://gardeningsolutions.ifas.ufl.edu/plants/edibles/vegetables/chayote.html

https://ffl.ifas.ufl.edu/resources/ffl-minute-radio/2021-archive/april-2021/chayote/

What to Plant in July and August

Annuals: Plants that can take summer heat include angelonia, celosia, coleus, crossandra, exacum, impatiens, nicotiana, ornamental pepper, portulaca, salvia, torenia, and vinca.

Bulbs: Aztec lily, butterfly lily, gladiolus, gloriosa lily, kaffir lily, moraea (African lily), Scarborough lily, sternbergia, spider lily and walking iris. In August, add to the list grape hyacinth, iris and leopard lily.

Vegetables: Eggplant, okra, peppers, and watermelons. In August, plant bush, lima and pole beans, corn, cucumbers, southern peas, peppers, pumpkin, summer and winter squash,

Herbs: Herbs that can be planted from plants (not seeds) include bay laurel, ginger, Mexican tarragon, and rosemary.

Upcoming Classes

Scan Code for current list of ALL Duval Extension Classes

Date, Time, Cost	Event & Registration	Location
July 26th 6-7 pm Free	**Good Bug/ Bad Bug** Join this FREE class to find out if you know the good guy from the bad guy. To register, visit: www.jaxpubliclibrary.org/events	Webb Westconnectt Library located at 6887 103rd St., 32210
July 29th 2-3:30 pm $5.00	**Backyard Hen Training** This informational course is on caring for backyard hens and is a prerequisite to receive a Backyard Hen Permit from Duval County. Register via Eventbrite: https://www.eventbrite.com/e/july-backyard-hen-training-in-person-tickets-368978443457	Duval Extension 1010 N McDuff Ave.
Aug. 17th 9:30-11:00 am Free	**Plan now for Fall Vegetables** This class will cover the basics of planning for a fall vegetable garden Register via Eventbrite: https://www.eventbrite.com/e/in-person-plan-now-for-fall-vegetables-tickets-384604521477	Duval Extension 1010 N McDuff Ave.

Canning Center Classes - call (904) 255-7450 or go to:
https://FRMParks.eventbrite.com for more information

Aug. 29th 9 am-Noon Starts at $25.00	Fall Harvest (Cranberry Tangerine, Mango Lime Salsa, Vidalia & Peach) https://www.eventbrite.com/e/fall-harvest-cranberry-tangerine-mango-lime-salsa-vidalia-peach-tickets-323311502407	Canning Center 2525 Commonwealth Ave.

What's That? Answer! by Larry Figart

While this organism on our turf looks really concerning, slime molds are actually harmless. Slime molds usually appear on warm humid days in the early summer after extended periods of rain. The heat, humidity and moisture initiates the perfect climate for slime mold development.

There is no control necessary for slime molds because after a few days, they will simply disappear just as quickly as they appeared.

For more information on slime molds go to

https://blogs.ifas.ufl.edu/washingtonco/2013/06/17/slime-mold-only-a-cosmetic-problem/

Image by Matthew Orwat
Horticulture Agent UF/IFAS