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Backyard Gardener

VOLUSIA COUNTY EXTENSION

JUNE 2014

It's Hurricane Season! Is Your Landscape Ready?

Joe Sowards
Urban Horticulture Agent and Master
Gardener Coordinator
UF/IFAS Extension, Volusia County

There have been lots of reminders on the radio and on television about having a plan for your family in case of a hurricane. Where will you go? Where is the flashlight? Where are the batteries etc? these are all good things to know and to have, indeed.

How should you prepare your landscape as well?

This can be just as important to reduce the possibility that your home or your neighbor's home will be damaged by flying debris. This might mean that some of your plants may need some corrective pruning to remove limbs and branches that are most susceptible to high winds.

The University of Florida, IFAS (Institute for Food and Agricultural Sciences) Department of Environmental Horticulture and, Dr. Ed Gilman has done extensive research on preventive pruning and hurricane preparedness in the landscape. It is

worth learning how to prune and shape trees in order to minimize the risks of damage.

Step 1: Make sure the tree(s) is planted properly.

Dr. Gilman of UF, has done extensive research about proper planting. That will help ensure that the tree roots will spread horizontally, maximizing stability in the landscape. There are a number of docu-

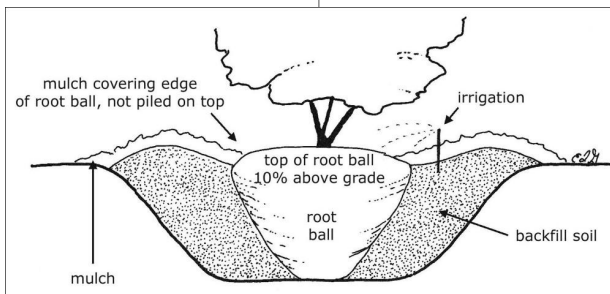


Figure 1: Tree planting diagram

ments available from the University of Florida that detail proper planting procedures. Be sure not to plant it too deep, don't overwater and treat any root defects

(Figure 1). Use 2-3 inches of an organic mulch to conserve soil moisture and to provide organic matter to the soil as it decomposes. Promoting establishment and long-term health is, perhaps, the most important thing.

Step 2: Pruning for Wind Resistance

The most wind-resistant form for a tree is one with a central leader and a well-spaced framework of branches around and up and down the trunk (Figure 2). Most

Continued on Page 2

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From Page 1...

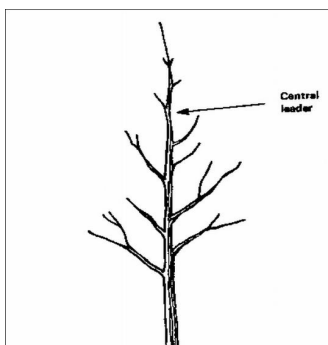


Figure 2: Central Leader form

trees can be grown in this form when they are young, but the growth habit of some species will change to a multi-trunked spreading form as they mature. Mature trees with poor forms should be at the top of the list for corrective pruning. Call a licensed, consulting

arborist for top-notch advice about pruning mature trees to increase wind resistance. Here are few tips for selecting a company to work with your trees:

- Avoid arborists who advertise they top trees. Ask the arborists if they will top your trees. If they say yes, don't use them.
- Have more than one arborist look at the job, and get a written proposal specifying the work to be done. Consider paying an arborist to write specifications so you can give them to the prospective companies.
- Ask for and check local references.
- Be sure the company has the appropriate licenses, insurance, and certifications. Some communities require special permits, insurance or certifications for all arborists to practice in the community.

For more information about how to hire a qualified arborist click this link: http://gardeningsolutions.ifas.ufl.edu/giam/plants_and_grasses/trees/quality_arborist.html

Palms are a Special Case!!!!



Figure 3: Hurricane Cut Sabal Palms (this is bad)

Many folks have palms pruned regularly, ostensibly, to reduce vulnerability during hurricanes. We have all seen palms that are pruned to the so-called "hurricane cut" (Figure 3).

If palms are over-pruned, the reduction in canopy size



Figure 4: Properly pruned palm

results in reduced photosynthetic capacity (Broschat, 2014). A properly fertilized and pruned palm like the one in Fig. 4 should have a round canopy with green leaves right down to the bottom. Consumers must be educated that palms are supposed to have round crowns, not feather-duster crowns.

Some diseases, such as fusarium wilt of Canary Island date palm (*Phoenix canariensis*) (<http://edis.ifas.ufl.edu/pp139>), are known to be spread by pruning with infested tools (Elliott et al., 2004). Tools used to prune infected palms will be covered with a residue containing fungal material. If this tool is then used to prune living leaves on a healthy palm, the fungus will be transferred in the process. This further impacts the health and vulnerability of your palm.

The palm pruning rule is simple; never remove foliage that has green in it, never prune above the "9 o'clock and 3 o'clock positions of a palm tree. The trees in Figure 3 are pruned to the 10 o'clock – 2 o'clock positions (if not 11 and 1!). Never do this! It weakens the tree, is ugly and actually makes the tree more susceptible to storm damage. It also negatively affects their cold-hardiness. For more information about properly pruning palms, see UF/IFAS publication (<http://edis.ifas.ufl.edu/ep443>).

Again, if you have questions, you can contact your local UF/IFAS Extension Office or, contact a qualified arborist (as explained above).

So, when developing your plan about what to do in the event of a tropical storm or hurricane, include your landscape, especially your trees in your plans.

"The longer I live the greater is my respect for manure in all its forms."

Elizabeth von Arnim

"You can tell how high a society is by how much of its garbage is recycled."

Tahanie

View From The Plant Clinic

For those who are not familiar with the plant clinic it is a resource for residents to learn about issues in the garden. Clients (residents) can come in person to talk with the on-duty Master Gardener. Clients may also email the plant clinic with photos and questions... mastergardener@volusia.org. The Plant Clinic may also be reached by phone... **West Volusia... 386-822-5778... Daytona Beach... 386-257-6012... New Smyrna Beach... 386-423-3368**. Plant clinic hours are from 8:30 AM to 4:30 PM Monday through Friday excluding holidays. The following are some samples of issues brought to us by clients.

Will it kill my trees?... A common question received in the Plant Clinic is about Spanish Moss and its effect on trees. Spanish Moss has no negative effect on trees. The tree only provides support for the Spanish Moss and is not harmed by it. Just think about all the Spanish Moss growing on telephone lines, power lines and fences. For more information regarding Spanish Moss check out this bulletin co-authored by our own Urban Horticulturalist Joe Sowards... <http://edis.ifas.ufl.edu/pdf/EP/EP48500.pdf>

Large Mole Crickets!... Lawn pests and diseases are a common topic of inquiry for Master Gardeners in the plant clinic. This is just one case...

Scenario... A client called quite upset about the severe damage mole crickets were doing to her lawn. She wanted someone to come and check out her lawn and recommend a solution. The homeowner described many holes about four inches square and four inches deep.

Evaluation... These sounded like awesome powerful mole crickets. Actually, the problem sounded more like visitation by armadillos. Armadillos are animals for which there is no easy remedy. Read bulletin <http://edis.ifas.ufl.edu/pdf/UW/UW07000.pdf> regarding the control of animal pests in the urban environment.

Why Are My Trees Dying?... This is a fairly com-

mon question with many correct answers because there can be many causes. The following is just one case...

Scenario... Two clients came in and wanted to know why two of their trees were dead or dying. They brought in one leaf (a larger sample is better) which looked healthy with no evidence of insect damage or disease. They also had a picture (good idea) of one of the trees which was a Halesia (Silver Bells or Snow Drop) which was 3/4 dead. Further inquiry determined that they were tired of trying to grow grass so were killing the grass and some bushes which were being replaced with stone. It turned out that the homeowner was using Malathion to kill the grass and plants and was applying it a long way from the trees... 20 feet.

Evaluation...

1. Malathion is an insecticide and is not labeled for use as a herbicide. It is illegal to use a pesticide 'off-label'. Concentration and amount used is unknown. It should also be noted that Malathion kills bees.
2. 20 feet may seem to be a long distance from a tree. However, mature trees have root structures that grow two, three or more times the spread of the limbs. Applications of chemicals must take this into consideration so the trees are not negatively affected.

No Squash!... This is another common call received in the Plant Clinic...

Scenario... squash plants have flowers but no fruit.

Evaluation... A couple of issues can cause this to happen.

1. No pollination is taking place. Do pollinators inhabit the property? No pollinators no fruit.
2. Squash plants produce many male flowers and fewer female flowers. It is possible there are no female flowers. How do you know. Check the base of the flower where it joins the stem. A female flower will have a bulge at the base of the flower which will become the fruit if pollinated and fertilized. If you have both male and female flowers, male flowers can be picked and used to brush pollen on the female flower. You become the pollinator.

Article concept by Jean Porter

Blue Porter Weed

Family: Verbenacea (ver-be-NAY-see-ee)

Genus: *Stachytarpheta* (stay-kee-tar-FEE-tuh)

Species: 65 types many exotic

Common Name: Blue Porter Weed, Blue Rat's Tail, Nettleleaf Velvetberry

The Blue Porter Weed is a pest free perennial that blooms during warm months. In Florida that can mean most of the year. Butterflies love the small blue flowers more so than larger showery blooms. Bees and Humming birds also are attracted to this plant. The porter weed is a fast grower and will reach heights of 4 ft or more. If you plant 3 ft. apart it will make a showy hedge but must be pruned to maintain its shape. This plant will become woody over time but even vigorous pruning will not damage the plant. If you choose not to prune then the plant will eventually droop over. It will slowly reseed and in Florida it may be considered invasive. Porter Weed grows best in a sunny location but can grow well in partial shade. When first planted the plant needs irri-



gation until establish but can grow well and require little care after. It is a great plant for the garden, especially beach side as it is tolerant of salt.

Through misinformation and lack of a template this plant is often mistaken as native to Florida. There is but one plant native to Florida, and that is Jamaica porterweed, *Stachytarpheta jamaicensis*, sometimes referred to as "blue porterweed." This plant is a small shrub reaching about 1-2 Ft. Leaves are green to pale

gray-green or gray-green, The flowers grow along a spike lasting no longer than a day

It is thought that the believed medicinal properties lead to the name porterweed. When boiled into a brew it looks much like beer. In the Bahamas it is made into a drink to reduce fevers, sooth skin rashes, relieve constipation, and cure worms. Other local names include "snakeweed," and "rat tails," This may be because of the long spike like flower stem.

I planted one plant many years ago and have never had to plant it again. When I tire of it I cut it almost to the ground and the plant always returns. This plant does reseed but I found it to stay within a small area and not be a problem. I pull up the small seedling and share. They tolerate abuse such as pulling them up and shoving them into a pot. The species is difficult to identify as there are so many exotic's now in Florida. What I do know is that the one in my garden and all the gardens I share with is the same species.

Myrna Moore

Florida-Friendly Demo Garden

Update

Wednesday June 5th... the layout of the garden was accomplished. There was a good turnout of Master Gardeners and Dr. Gale Hansen was here with two of her graduate students. Gale ran us through the procedure to triangulate locations so marker flag placement was accurate. Master Gardeners received work hour credits, of course, and because of the triangulation training also received CEUs. The die is cast and the Rubicon is crossed.

The temporary ECCO grant sign is in places and lets all Ag Center visitors know what we are doing. There are lots of other 'behind the scenes' tasks being accomplished. It appears that Joe may be busy right now.

"Don't be afraid to go out on a limb. It's where all the fruit is."

Shirley MacLaine

"There is a way that nature speaks, that land speaks. Most of the time we are simply not patient enough, quiet enough to pay attention to the story."

Linda Hogan

Solanum Salad

Did you know potatoes are perennials and are the worlds fourth largest food crop? Potatoes have never been one of my favorite foods except when fresh from the garden so this February was a great time to plant After attending Joe Swards' Growin's On about potatoes we decided to plant some spuds.

The first decision was what to plant. So many choices. We decided four varieties were enough so picked French Fingerlings, Gold Rush, Red LaSoda and Adirondack Blue. OK... now where do we plant them?

We like to grow veggies in raised beds but the lazies had set in and I did not feel like building more raised beds. So what to do? After digging through my pile of old nurs-



ery pots two big ones in good shape appeared. Part of the problem solved. Then two old large



plastic trash cans caught my eye (never through anything out). After just a few minutes with a recip-

rocating saw the two trash cans were cut in half horizontally and four more planting containers were available. Six down... what next? The old bathtub (never through anything our) by the bee hives is a perfect candidate. Planting containers have now been identified.

Our supply of potting soil and compost was not sufficient enough to fill all these containers so that became the next challenge. A local mulch supplier had some nice compost (a lot of mushroom compost) so the pickup truck comes in handy hauling a yard of com-

post back home.. This worked out just right as it took a full yard to fill all the containers.

The end result was a reasonably good crop yield and incredibly good potatoes... boiled, roasted, fried, in a frittata and stews. The "grandbrats" got a real kick out of seeing purple potatoes Can't wait until next year to grow more spuds.



The only real issue we had was the weather. If you recall late January and February were cold and rainy. Experience has taught me that storing seeds in cold wet soil is not the best practice so we wound up planting later than optimal. However, the gardening gods were on our side and our results were satisfying.

Text and Photos by Ed Williams

"The man who has nothing to boast of but his illustrious ancestry is like the potato - the best part under ground." Thomas Overbury

"When the world wearies and society ceases to satisfy, there is always the garden."-

Minnie Aumonier

Sunflowers

The sunflower crop this spring has been very good. Sunflowers are quite awesome when their height (6 ft.) and impressive flowers are considered.

One of the best parts of sunflowers is the tremendous food source they provide for critters small and a bit bigger. The number and variety of pollinators that visited our crop was impressive. The flowers provided a huge supply of pollen which is used to feed bee larvae and young bees. Birds enjoyed picking seeds to the point that when the flowers were cut off there were hardly any seeds left for next year's crop.



Can you spot the Rose among the Sunflowers?

Helianthus annuus flowers are not heliotropic as many people believe. That is the flowers do not track the sun throughout the day. However, immature flower buds do exhibit this feature. The final alignment of the flower buds is typically the east and this is the orientation the mature flowers usually have. It is interesting to note that the sunflower seeds we, birds and squirrels like to eat are really the fruit of the plant.

The stems of sunflowers are quite fibrous and rigid. However, the plants can get so tall (7-8 ft.) that a strong wind can break them. Some sort of support system is recommended.



There are many cultivars of sunflowers and all do not have yellow flowers.



Ed Williams

What Does It All Mean?

Biota... the total of all the flora and fauna of a region.

Air Layering... a method of propagating plants where the stem is stimulated to produce roots while still attached to the plant.

Open Pollinated... describes a plant that will remain true to type when pollinated by the same species.

Rhizome... fleshy storage structure from which roots and stems may grow.

Runner... plant stolons that run on the surface or just under. New plants grow from nodes along the stolon.

Pollination... the transfer of pollen from stamens to pistils. (not to be confused with fertilization)

Fertilization... the fusion of gametes to begin the development of a new organism. (not to be confused with pollination)

Fruit... ripened ovary

Axil... the upper angle between two structures such as the leaf and stem.

Dioecious... each plant having male or female flowers only.

Monoecious... separate male and female flowers on the same plant.

Bract... a modified or reduced leaf just below a flower or flower cluster.

Spatulate... oblong or spoon like.

Host Plant... food source for butterfly caterpillars and location for butterfly egg laying.

Nectar Plant... plant which produces nectar which many insects and other animals use as a food source.

Silk Plant... various species of plants that require no water, soil, potting medium or light. Only require dusting.

HYPERICUM

How does your garden grow – quite contrary? Though this may have been a reference to the political climate in sixteenth century England, it is also a good description of a gardener's attempt to figure out how to grow *Hypericum*, especially *Hypericum perforatum* or St. John's Wort. Or it may be just This writer's attempt, having had no luck with them.

There are over 400 species in the Hypericaceae family and they are found all over the world as annuals, perennials, shrubs and small trees. There are about 29 *Hypericum* in Florida alone, most on the order of shrubs and usually found in marshes, wetlands and poorly drained flatwoods. The *Hypericum* are in the order Malphigiales which includes the huge Euphorbia family and the Passifloras, the Violet and Willow families. Many in this giant order of over 40 families and 16,000 species, are tropical. Not as a rule, but quite a number of them in the order have dentate or toothed leaves with a single vein running into a congested apex. Nearly all in the Hypericaceae have yellow flowers and many are considered weeds. *Hypericum perforatum* or St. John's Wort (old name for plant) is considered a weed in many areas of Florida. It has creeping rhizomes. It can cause photosensitivity and restlessness in livestock and even abortion. Oddly though, deer don't seem to eat it. It is also known as Goat Weed or Klamath Weed. Another species is Atlantic St. John's Wort, which grows in non-irrigated sandy woods and coastal dunes and is known as Matted Sandweed. *H. fasciculatum* with its red peeling stems spreads in bogs and swamps. The Fourpetal *Hypericum* is found in moist flatwoods. St. Andrews Cross or *H. hypericoides*, does well in full sun, moist or dry, but grows best in sand, while the Roundpod (*H. cistifolium*) likes wet flatwoods and swamp margins. So you can see that some like it wet and some

like it dry though the balance leans toward wet.

Hypericum, weedy and injurious to animals, has paradoxically been used by man as a healing herb since ancient times. The name derives from the Greek words "hyper" (over) and "eikon" (picture) with the meaning that it was over ghosts or apparitions. Sprigs of it were hung over religious icons to dispel evil spirits. It got its reputation from the fact that it blooms on or around June 24th, the birthday of John the Baptist which coincides with the summer solstice

as well. It is used to combat depression but can cause reactions when used with other drugs. Specifically, "Perforatum" refers to tiny black dots on the leaves and flowers that hold the plant oils. The plant has canals throughout its body and used to be in the family Guttiferaceae because of this feature.



Common St. John's Wort – *H. perforatum*

Florida Friendly recommends full sun for *H. perforatum* but wet or dry is the question. The writer subscribes to the statement by Gil Nelson in The Shrubs and Woody Vines of Florida. He says: "Though few *Hypericum* species are recommended for ornamental or landscape use, many are attractive shrubs which bloom profusely." Sigh. .

Rebecca Turner

"Your first job is to prepare the soil. The best tool for this is your neighbor's garden tiller. If your neighbor does not own a garden tiller, suggest that he buy one."

Dave Barry

"I suppose that for most people one of the darker joys of gardening is that once you've got started it's not at all hard to find someone who knows a little bit less than you."

Allen Lacy

"A cauliflower is a cabbage with a college education.".....Mark Twain

Master Gardener Program Vision Statement

To be the most trusted resource for horticultural education in Florida

Master Gardener Program Mission Statement

To assist extension agents in providing research based horticultural education to Florida residents

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Can You Name This?



Answers on
page 9

Photo by Ed Wil-
liams



June & July 2014 Calendar of Public Events

Event	Date	Location
Ormond Bch Library/Plant clinic	6/2/2014	Ormond Beach Library
Operating & Maintaining your irrigation system (1 CEU)	6/5/2014	Debary Historic Hall
Wildflowers(1.5 CEU)	6/7/2014	Debary Historic Hall
MG Plant Clinic NSB Library	6/17/2014	NSB Library
Sugar Mill Garden Q&A	6/18/2014	Sugar Mill Garden
Bees and Other Pollinators (1 CEU)	6/19/2014	Ormond Beach Library
Using Plants to conserve energy(1 CEU)	6/19/2014	Debary Historic Hall
Blueberries for the Sustainable Home Landscape - Cost: \$5 (2 CEUs)	6/21/2014	Ag Center
Independence Day - office closed	7/4/2014	Office Closed
Ormond Bch Library/Plant clinic	7/7/2014	Ormond Beach Library
Palms for Central Florida (1 CEU)	7/10/2014	Debary Historic Hall
Pest Control (1.5 CEU)	7/12/2014	Debary Historic Hall
Enviro Camp	7/14/2014	The Casements
MG Plant Clinic NSB Library	7/15/2014	NSB Library
Sugar Mill Garden Q&A	7/16/2014	Sugar Mill Garden
Preparing for the Fall Vegetable Garden - Cost: \$5 (2 CEUs)	7/19/2014	Ag Center
Herbs (1 CEU)	7/24/2014	Debary Historic Hall

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Can You Name This—Answers

Cicada Killer (wasp) and Turkey Oak (tree)

Volusia County Agricultural Center

3151 E. New York Ave. (S.R. 44),

Deland, FL 32724

At the Volusia County Fair Grounds

West Volusia... 386-822-5778

Daytona Beach... 386-257-6012

New Smyrna Beach... 386-423-3368

Email questions to... mastergardener@volusia.org