

October 2015

## Message from Flagler Horticulture Agent

Dear Horticulture Friends,

Please help me welcome our 18 new 2015 Flagler County Master Gardeners! The new Master Gardeners have been trained through an intensive 12 week course and have passed with flying colors. They are a very motivated and enthusiastic crew; we look forward to having their input and assistance with our horticulture program for many years to come! Please look for them in upcoming months at our front desk and at community events!

If you would like to submit information for the newsletter, please send it in to the extension office or contact me directly. Please note that this newsletter will cover October through December of 2015. The next issue will be released in January 2016.

If at any time you wish to have an email address removed or would like an email added to the newsletter email list, please contact the Extension Office: [mfloyd@flaglercounty.org](mailto:mfloyd@flaglercounty.org) or 386-437-7464.

Happy Fall Gardening!



**Maxine Floyd**

UF/IFAS Flagler County Extension  
Horticulture Extension Agent I,  
Master Gardener Coordinator

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## Winterize your Florida Garden by Catherine Walsh

One of our biggest challenges for Florida gardeners are winter temperatures that can get low enough to damage our tropical, subtropical, succulents, and other temperate plants. Plants become acclimated by a gradual decrease in temperature over a period of time and even though most plant parts can adapt to the cold, the fruits and roots may not develop a good cold tolerance. Injury from cold to container plants is very common. Move plants in containers to protected areas where heat can be supplied or trapped. If you have to leave containers outdoors, push them together and protect with mulch to reduce heat loss from container walls.

Every home site has a microclimate that is specific to your home's landscape. Microclimates are areas that are warmer or cooler, wetter or drier than surrounding areas, it is in these areas that we need to consider when deciding where to put your cold-sensitive plants. A good time to check for areas with these climates would be before the first frost.

Avoid planting tender plants in a low lying area where cold air settles. To protect tender plants from cold winds, arrange plantings, fences or to the barriers to protect tender plants from injury. Make sure the soil has good drainage since poorly drained soils result in weak, shallow roots that are susceptible to

cold injury.

Healthy well-nourished plants will tolerate colder temperatures better and recover from injury faster than other plants. Do not fertilize late in the season, this can result in a flush of growth that makes the plant now more susceptible to cold injury.



Tree canopies can be utilized for our plants that like the shade because the heat that is radiating from the ground gets trapped in the canopy. Fences, buildings and temporary coverings, in addition, to adjacent plantings can all serve as windbreaks and protect our plants from the cold winds.

Another way to look at it is that a frost is caused by radiational cooling, that is, the earth loses enough heat that temperatures drop below the freezing point at ground level. Sometimes when there is a very light frost, the freezing temperature occurs just a bit above ground level. This might burn the tips of tender plants such as basil, but the

plants survived.

A freeze, on the other hand, is caused by advection, where a mass of cold air comes into the area from somewhere else (like the Arctic).

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## Winterize your Florida Garden continued by Catherine Walsh

This usually signals the end of the growing season for all but the hardiest plants. When the weather service issues a freeze advisory, they are telling you the party's over. It's time to get serious about fall clean up and winter preparation.

We can also protect our plants with watering. Wet soil will absorb more heat during the day and radiate it during the night.

Inspect your plants regularly for pests and control as necessary since plants that are weakened by disease, insect damage, or nematode damage are susceptible to cold injury. Pruning done in early fall or late summer will make your plants new growth more susceptible to cold injury as well. Covering protects more from frost than extreme cold.

Putting a light bulb under a cover is a good way to provide heat to ornamental plants overnight. Remove plastic coverings during the day to provide ventilation, allow photosynthesis, and to keep the air under the cover from heating up too much.

After a freeze, remove dead leaves once they turn brown. You should wait to do any pruning until the new growth appears insuring you are not removing any live wood and damaging the plant even more. Sometimes cold injury is not as obvious, lack of spring bud break and/or overall weak appearance can be a delayed damage from cold temperatures.

We are fortunate to be able to grow plants that wouldn't survive in other states and just as lucky that freezes don't happen all that often which means that Florida gardeners can enjoy winter gardening just as much as other seasons. However, we still must protect our flora from possible threats, be sure to follow weather reports and protect and prepare vulnerable plants accordingly before freezes take them by surprise.



Keep in mind that saturated soil conditions bring damage to the root systems of most plants. After a freeze, especially on a sunny day, plants can lose water in the soil or when container medium is frozen. Watering plants will give them available water and help thaw the soil.

For perennials, the root system is all that needs to be protected. Using cloth sheets, quilts or commercial frost cloths are recommended over plastic. Plastic can be used, but it is too thin to provide insulation and damage to soft tissue can occur when the plastic touches the plant.

## Interesting Facts about Ferns by Joy P. Hudson

Ferns are considered to be the oldest living species on earth, existing long before the dinosaurs and provided food for these herbivores. More than a decade ago, cinnamon fern fossils were found in 70 million year old rocks, showing no change in appearance from that time to the present. There is evidence that fern fossils have been found dating as far back as 300 million years. There are more than 10,000 species of ferns, belonging to the Pteridophyta botanical group, which include terrestrial ferns (grown in soil), epiphytes (grown on other plants), and lithophytes (grown on rocks).

During Victorian times, especially in England, the collection of ferns by both people of wealth and the lower classes was such a rage that the term Pteridomania was coined. Greenhouses, conservatories, arboretums and outdoor ferneries were in abundance to house fern collections. Here in the United States, we would not be completely outdone, and hence ferns could be found in parlors, both large and small.

Here in our own State of Florida, ferns have a very special place in the more recent history of ferns. The City of Pierson, just northwest of Deland in Volusia County, is considered the fern production capital of the world. This city was named after the Pierson family who started the first fern farm in that area in the early 1900s. The industry is a multi-million dollar business, shipping a variety of ferns all over the United States and

beyond. However, ferns can be found growing in every state, either as evergreens or deciduous plants.



Ferns are vascular plants, having both xylem and phloem, but differ structurally from other plants, so much so, that their plant parts have been given different names. For example, their stems are called rhizomes, and serve to anchor the plant as roots do; leaves are called fronds; the lower portion of the stem is called the stipe; the upper leafy portion is the lamina, which includes the midrib known as the rachis, along with the leaflets, which are called pinnae. Also, ferns do not produce fruits, flowers or seeds – they reproduce by spores, which are found on the underside of the fronds. The most efficient way to propagate the majority of ferns is through division of the “root” system as the propagation process by spores is long and tedious.

Most ferns are easy to grow under the right conditions, both indoors and outdoors. Ferns lend a softness and calming effect to any environment and create the perfect backdrop for other shade loving plants. Provide them with rich soil, moisture and a humid environment, and you cannot fail. They are perfect for that shady, moist (but not soggy) spot in your yard where you have been unsuccessful in getting anything to thrive. When grown indoors, it is vital to place plant away from direct sunlight, maintain moist soil, and provide frequent misting for best results. The young unfurled fronds of some ferns, called fiddleheads, are edible.

All ferns are special, but here are just a few that are especially noteworthy. For example:

Boston Fern (*Nephrolepis exaltata* vs *Bostoniensis* - a member of the sword fern family) – This plant is a native of the U.S. and the Caribbean. There is much dispute about how this fern got its name, but based on information provided by the University of Florida, this fern is a Florida native and not from Boston as one may suspect. It is believed that the well-known Florida pioneer nurseryman, John Soar, shipped a sword fern to a friend, which had mutated, creating what we know today as the Boston fern.

Unlike the original sword fern that is very erect, like a sword, the Boston fern is cascading and graceful and hence was much more suited as hanging

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## Interesting Facts about Ferns continued by Joy P. Hudson

plants for the elegant parlors of the day.

**Leatherleaf Fern** (*Rumohra adiantiformis*) – The Leatherleaf is a native of Central and South America, and Africa. These ferns are grown commercially and sold to the florists industry. You will find these ferns in most floral arrangements, and as cited earlier, most of these ferns are grown in our own State of Florida.

**Norfolk Tree Fern** (*Cyathea brownii*) – This fern is a native of Norfolk Island, off the coast of Australia and New Zealand. It can grow to a height of more than 66 ft., with large fronds measuring as much as 16 ft. long.

**Mosquito Fern** (*Azolla*) – This fern, a native of Asia, is the smallest fern, measuring only 1/16 of an inch across, and is one of the few aquatic ferns. They do not look like a typical fern, but more like a moss. They can form thick coverings on a body of water that serve to prevent mosquitoes from entering the water to lay their eggs – hence the name Mosquito Fern.

**Resurrection Fern** (*Polypodium polypodioides*) - The resurrection fern is a U.S. native, extending from Florida to New York, and in Texas. It is one of the smaller ferns, an epiphyte, and the most travelled. This fern was taken into space on the Space Shuttle Discovery in 1997 to determine how it would react in space. It did not disappoint. In spite of zero gravity, it died back when deprived of moisture and came back to life when it received the required amount of

water. Here in its natural habitat, they can be found growing mostly on trees, oftentimes on the top portion of branches of oak trees.

## November To-Do List by Maxine Floyd



Cooler weather has arrived! Plants require less water during fall and winter months so only water if needed. It's time for winter weeds to start popping up. Pre-emergent herbicides form the basis for a chemical weed control program in turfgrasses and are used primarily to control annual grasses (e.g., crabgrass, goosegrass, and annual bluegrass) and certain annual broadleaf weeds (e.g., common chickweed, henbit, and lawn burweed). Pre-emergent herbicides are applied prior to weed seed germination, so if the chemical is applied after weed emergence, pre-emergent herbicides have little or no effect.

This narrow window of application timing is a potential disadvantage for many lawn care companies and homeowners, who often wait too late in the spring to apply the pre-emergent herbicide. A general rule of thumb for pre-emergent herbicide application is February 15 in Central Florida, and March 1 in North Florida, or before if day temperatures reach 65°F–70°F for 4 or 5 consecutive days. These application timings generally coincide with blooming of landscape plants, such as azalea and dogwood. For pre-reemergence control of winter annual weeds such as annual bluegrass, apply an herbicide when nighttime temperatures drop to 55°F–60°F for several consecutive days (early October for North Florida; late October to early November for Central and South Florida).

Irrigation before and after application is necessary to activate most pre-emergent herbicides. Preemergent herbicides are generally effective in controlling weeds from 6–12 weeks following application. Most herbicides begin to degrade soon after application when exposed to the environment. Therefore, to obtain season-long control, an additional application should follow 6–9 weeks after the initial one. **See:** *Weed Management in Home Lawns* (<http://edis.ifas.ufl.edu/ep141>)

A wide variety of herbs prefer cool, dry weather, including cilantro, parsley, sage, and thyme. **See:** *Herbs in the Florida Garden* (<http://edis.ifas.ufl.edu/vh020>).

**Vegetables:** Continue planting cool season crops such as beets, broccoli, cabbage, carrot, kale, lettuce, spinach, and Swiss chard. **See:** *Florida Vegetable Gardening Guide* (<http://edis.ifas.ufl.edu/VH021>).

## November To-Do List continued by Maxine Floyd

There is still time to over-seed bare spots with rye grass in November, but if you over-seeded with rye grass last month apply a slow-release or organic fertilizer now. **See:** *Your Florida Lawn* (<http://hort.ifas.ufl.edu/yourfloridalawn/>). Watch for brown patch and large patch fungal diseases that cause areas of grass to turn brown. Since treatment is difficult, prevention with proper cultural practices is the key to management. **See:** *Large Patch* (<http://edis.ifas.ufl.edu/lh044>).

**Fruit:** Keep an eye on citrus trees for stress caused by excessive rains last month and previous years of cold stress which can lead to fruit drop or dried out fruit. Stressed trees need rest from fruit production, if your tree has been stressed pick fruit and allow foliage production to increase. Better foliage will provide better protection from cold damage. Navel, Hamlin, Parson Brown, Satsuma, tangelos, Meyer lemons and kumquats should be checked for ripeness this month. If black leaves appear on your citrus trees, this is caused by sugar excretions from insects such as aphids, mealy bugs, and white flies. Spray with a horticulture oil every ten days for a total of 3-4 treatments. Do not apply any pesticides while the tree is in flower; these chemicals can be harmful to you, harmful to the pollinators, and can lead to resistance from insects.



Large Patch Fungal Disease:  
<http://edis.ifas.ufl.edu/lh044>

**Landscape:** Divide and replant overgrown perennials and bulbs now so that they establish before the cold weather arrives. Many bulbs like to get a cool start, so plant agapanthus, amaryllis, crinum, and daylily now for blooms next spring or summer. **See:** *Propagation of Landscape Plants* (<http://ufdc.ufl.edu/IR00003393/00001>). Poinsettias: Watch for hornworms on poinsettias planted in the landscape. This pest can quickly defoliate the plant; handpick or treat only the area infested. **See:** *Poinsettias at a Glance* (<http://edis.ifas.ufl.edu/ep349>) Plant Calendula, dianthus, foxglove, larkspur, flowering cabbage, flowering kale, pansies, petunia, and snapdragons for fall annuals. **See:** *Gardening with Annuals in Florida* (<http://edis.ifas.ufl.edu/mg319>). Most plants should not be pruned until late February or early March, pruning too early can cause new growth to be susceptible to cold damage. Any trees or shrubs that are to be transplanted should be root-pruned before moving them, transplanting should occur between December and February. Choosing the proper time of year is important. Oaks are best moved in the dormant season; magnolias transplant best in summer. Be sure not to plant the tree too deep, the tree will settle with time. Remember to water after transplanting to decrease stress and encourage root growth.



Grey Leaf Spot:  
<http://edis.ifas.ufl.edu/pp126>



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A CENTURY OF SERVING FLORIDA

University of Florida Master Gardener Volunteers

**Our Mission**

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

**Our Vision**

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



Confederate Rose (Hibiscus mutabilis 'Plena') Jack Schaper © 2005 FloridaData.com

**Stay Connected with Flagler County  
Horticulture!**

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If you are interested in joining the Flagler County Master Gardener Program, please contact Maxine Floyd at [mfloyd@flaglercounty.org](mailto:mfloyd@flaglercounty.org) or 386-437-7464. The Flagler County Master Gardener and Horticulture program is open to all regardless of gender, race, color, nationality, creed or disability.