POLK COUNTY URBAN HORTICULTURER NEWSLETTER

March 2008 **Volume 8 Number 1**

CALENDAR OF EVENTS

Creating a Rain Barrel

- Wednesday, March 18th**,** Latt Maxy Library, 15 North Magnolia Avenue, Frostproof.
- Monday, March 24th, 6:00 to 7:00 p.m. Magnolia Building, 702 East Orange Street, Lakeland.
- Sunday, April 30th, 10:00 to 11:30 a.m. The Health Chic House, 12 N. 5th Street, Haines City.

Compost: Trash to Treasure

- Monday, April 14th, 6:00 to 7:30 p.m. Magnolia Building, 702 East Orange Street, Lakeland.

Organic Gardening

- Saturday, March 22nd, 9:00 to 10:30 a.m. The Health Chic House, 12 N. 5th Street, Haines City.
- Sunday, April 20th, 12:00 to 1:30 p.m. The Health Chic House, 12 N. 5th Street, Haines City.

Creating a Florida Friendly Yard: Water Conservation, Irrigation and Plant Installation Workshop

- Tuesday, April 8th, 6:00 to 8:00 p.m. Lakeland Public Library, Lake Mirror Center, 121 South Lake Ave., Lakeland.

Landscape Design

- March 22nd, March 29th, and April 5th - 8:30 a.m. to Noon. Design Your Own Landscape, Polk County Extension Office, 1702 Highway 17 South, Bartow.

Community Events

- Saturday, March 15th, 10:00 a.m to 2:00 p.m. Kids Nature Fair, Audubon Park, Winter Haven.
- Saturday, April 19th, 10:00 a.m to 2:00 p.m. Home Sustainability, Haines City Walmart.

For information about these programs, call David Shibles at (863) 519-8677 ext. 109 or Anne Yasalonis at (863) 519-8677 ext. 121.

FERTILITY

Turf - If you have not already applied fertilizer to your lawn, now is the time. We generally recommend spot treating with herbicides in February and applying fertilizer in March - not mixing the herbicide and fertilizer. I suggest that you look at the fertilizer label and select one that has similar first and last numbers (nitrogen and potassium) and low phosphorous (middle number) like a 15-5-15 or a 16-3-16.

At times, I have mentioned products like 15-5-15 or 15-0-15 as examples, which some people say they can't find. There are other product ratios available to the homeowner which may

be fine. The important things to consider when selecting a fertilizer is finding a product which fits your pocket book, has equal amounts of nitrogen and potassium and has 30-50% slow release nitrogen. The old stand-by 16-4-8 is still available and is probably acceptable, but current thinking is that high potassium products are a better choice as they build strong roots which makes the turf more tolerant to stress, drought, diseases and pests.

Soil phosphorous should be determined before selecting a fertilizer product with no phosphorous at all. If you have never had your soil tested to determine the amount of phosphorous, then I suggest you call the Extension Office for a soil testing kit. With this kit you take the soil sample and send it to the soil testing laboratory at the UF/IFAS. Within 2 weeks the Soils Lab will report back to you with the soil pH and the quantities of calcium(Ca), magnesium(Mg), phosphorous(P) and potassium(K) in your sample. There is a seven dollar fee for this test.

Most soils in central Florida have more than adequate phosphorous, so you may need just a little phosphorous or none at all on your lawn. Phosphorous leaches, so there is no sense applying it, if it is already present. When phosphorous, as well as other landscape fertilizers, leach and run into bodies of water, it supports the growth of algae and other undesirable exotic plants. Algal blooms die and use oxygen in the water as they decay, lowering the available oxygen to fish. The decaying algae and other plants settle to the bottom forming a sediment which supports undesirable arthropods like blind mosquito larvae.

Also, do not add dolomite or calcium to your lawn until you have had a pH test run. Just because a lot of oak leaves end up on your lawn does not mean the soil is acid and in need of a dolomite treatment. St. Augustinegrass ideally needs a pH of 6.5. If you add dolomite or calcium when the pH is 6.5, then you are actually making matters worse, because at a pH of 7.0 or above, certain nutrients like iron and manganese become marginally available to the turf and deficiencies will become evident. The situation is even worse if you routinely add dolomite to Bahiagrass which likes a pH of 5.5.

Before selecting a fertilizer, look on the label for the amount of water insoluble nitrogen. Under nitrogen on the label, you will see the various nitrogen products like ammoniacal nitrogen and urea which make up the total nitrogen in the bag. Products like ammoniacal nitrogen, urea and ammonium sulfate are fast release. In other words, they are taken up by the grass or leached away by rainfall and irrigation in just a few days or weeks. The last item under nitrogen is usually the amount that is slow release or is often called water insoluble. So, if the nitrogen content is 15%, then the slow release portion should be a minimum of 5%. Many fertilizer products have no slow release nitrogen at all. These are usually the very inexpensive products. You will pay a little more for a good quality fertilizer, maybe $12-14 for a 50 pound bag.

For a moderately fertilized lawn, UF/IFAS researchers recommend an application of a complete fertilizer in March, an application of just slow release nitrogen in May (like Milorganite), an application of iron(Fe) in July, another application of slow release nitrogen in August and another application of a complete fertilizer in October.

If you use a fertilizer with 30-50% slow release nitrogen, apply 1 pound nitrogen per 1000 square feet of turf. To determine the amount of fertilizer in the bag to apply to 1000 square feet of turf, divide 100 by

the percent nitrogen. For example, if you were using a 15-0-15 fertilizer which has 15 percent nitrogen, divide 100 by 15 which equals approximately seven. Therefore, apply seven lbs of this 15-0-15 fertilizer per 1000 square feet - this equals one pound of actual nitrogen per 1000 square feet of turf.

If you decide to use a complete fertilizer with no slow release nitrogen, then only apply ½ pound (3.5 lbs.) per 1000 square feet, but make two applications 30 days apart. This will give the turf time to absorb a maximum amount of nutrients before being leached.

Palms - I receive many questions about palm fertility. Palms are prone to micronutrients deficiency. The ideal fertilizer for palms is one with a nutrient a ratio of 8-2-12-4 - 8 % nitrogen(N), 2% phosphorous(P), 12% potassium (K) and 4% of magnesium (Mg). You usually see only three numbers (8-2-12), but the fourth, if expressed, is magnesium (Mg).

Both the nitrogen (N) and potassium (K) (first and third numbers) should be in a slow release form as well as magnesium. Slow release magnesium is available in a mined magnesium sulfate product called Kiersite. The fertilizer should also contain 1-2% iron (Fe) and manganese (Mg), plus trace amounts of zinc (Zn), copper (Cu) and boron (B). Specialized palm fertilizers with the above ingredients are now available at Lesco in south Lakeland and Growers Fertilizer in Lake Alfred.

The first symptoms of potassium deficiency is orange or yellow spots on the frond leaflets. It is often induced by a high nitrogen to potassium ratio which results when slow release nitrogen and fast release potassium fertilizers (typical turf fertilizers) are used close to palms in the landscape. Potassium deficiency will often lead to the death of the palm. Manganese deficiency results in a "frizzletop" appearance of the new growth. As the deficiency progresses, succeeding leaves will emerge completely withered or frizzled and the death of the bud will follow.

Magnesium deficiency is very common in Florida sandy soils. Date palms are particularly susceptible. Visible symptoms begin on the oldest leaves and progress upward to the younger foliage, typically a broad light yellow band along the margin of the older leaves with the center of the frond remaining green. Magnesium deficiency is rarely fatal to the palm. Kiersite, slow release magnesium sulfate, applied on a regular basis should alleviate this problem.

Mature palms should be fertilized 3-4 times per year with a good palm fertilizer at a rate of 5-8 pounds per application. For palms under 8 feet tall, 2-5 pounds per application should be adequate. A rule of thumb would be to apply ½ pound fertilizer per 2 feet of overall height up to about 15 pounds for a palm greater than 30 feet tall. Place the fertilizer under the canopy of the palm, but not up against the trunk to avoid damaging young roots.

PRUNING

This is about the right time of the year to start pruning our landscape plants. Keep in mind that most plants do best when they receive a minimal amount of pruning. We often put plants in the wrong place and/or fertilize them so that pruning becomes necessary, like putting a large crape myrtle under the soffit of a house. There is a lot of information on-line and here at the Extension Office about the potential height and width of our common landscape plants. Review this kind of information before buying and planting landscape plants.

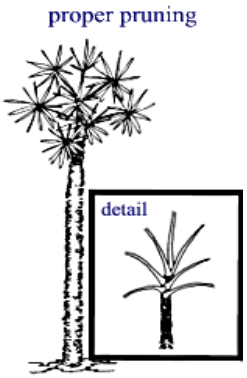
As a rule of thumb do not prune more than 30% of a plant at one time unless you know through experience that the plant will stand to be pruned more severely. Start with the removal of dead or declining limbs. If we should have a severe winter, which hasn't happened for some years, cold sensitive plants like hibiscus, croton, tibouchina, firebush, etc. may be frozen back to major limbs or to the ground. Cut these back to healthy wood. I usually use my thumbnail to make a small incision into the bark. If the inner wood is black or brown, then that part of the branch is probably dead. Keep checking until you find green inner bark and cut back into the green area a few inches.

Trees - Make sure the tree is taking on the proper shape. Trees should keep one straight trunk until they reach a height of eight or so feet. You can prune the lower branches about half way back to the trunk which will encourage the main trunk to grow taller. Check the University of Florida web site http://hort.ifas.ufl.edu under trees and you will find an extensive amount of literature about tree pruning written by Dr. Ed Gilman.

Palms - Palms and cycads are often thought of as low maintenance plants; however, most palms require regular pruning to keep them attractive and safe. Many palms maintain a set number of live fronds. A regular turnover of foliage occurs as dying lower fronds are replaced by new ones at the apex. These dead fronds are not detrimental to the health of the tree. If there is an excessive number of older fronds, determine the cause before pruning. There could be a severe nutrient problem, caused by potassium or magnesium deficiency, that could worsen if the palm is pruned or fertilized with high nitrogen or the wrong type of fertilizer.

Why should palms be pruned? 1) Removing dead or dying fronds improves the appearance of the palm. 2) Dead and dying fronds can fall from a tall palm and injury someone below. 3) Pruning can remove messy fruit clusters. and 4) Pruning can remove sprouts from the base of the trunk.

When pruning palms, remove fronds that are dead or more than half chlorotic. Do not remove green fronds or the palm could become stressed. There is no research supporting the notion that removing live green fronds reduces future pruning requirements. If you decide to remove green fronds do not remove those growing horizontally or pointed upward.



Fronds removed should be severed close to the petiole base without damaging living trunk tissue. There is little reason to shave or sand the trunk smooth. The pineapple shape crafted at the base of date palms is not necessary for good health of the palm.

Over-pruned palms look terrible and could attract pests. Why remove green fronds when the palm was planted for it's tropical look. That tropical look results from live green fronds.

Shrubs - Shrubs are generally kept in a rounded to vase shape. Shrubs should be encouraged to develop several main limbs from the ground or a small trunk. I like to use a technique called drop-crotch pruning in which the shrub is reduced in size by pruning the taller branches 6-12 inches back into the canopy to a lateral branch. If there isn't a lateral branch, then just prune well back into the canopy. This will stimulate the surrounding stems to produce new growth, plus the cut stem will also produce new growth. The shrub will be reduced in

height and have an informal look and will not need pruning more than once of twice per year. You may need to do a little pruning of rat-tail growth from time to time, which can be done any time of the year and is not real time consuming.

You may want to maintain a formal look with a row of shrubs, but keep in mind this will require regular maintenance for it to look nice. There are two important factors to remember when pruning formal hedges: 1) hedges should be clipped while new growth is green and succulent; and 2) plants should be trimmed so that the base of the hedge is wider than the top. Hedge pruning with a narrow base will lose their leaves and branches shaded by the top.

When Should I Prune? - Most evergreens such as podocarpus, holly, boxwood, ligustrum, juniper and wax myrtles can be pruned any time of the year. However, late summer pruning could stimulate a flush of growth which could be damaged by early cold weather. The best time may be just before new growth in the spring.

Some plants produce flowers on the current season's new growth such as crape myrtle, croton, fig, grape, hibiscus, juniper, ligustrum, mandevilla, maple, oaks, oleander, plumbago, poinsettia, sweet gum, sycamore, thryallis, tibouchina and vibrunum to name a few. These should be pruned while dormant during winter or early spring.

Other plants set their flower buds on the previous season's growth and the buds over winter on this older growth such as azaleas, banana shrub, bottle brush, bougainvillea, Bridal wreath spirea, chaste tree, climbing roses, coral honeysuckle, dogwood, gardenia, hydrangea, Indian hawthorn, Jerusalem-thorn, loropetalum, magnolia, orchid tree, peaches, pears, red bud and wisteria. These and others like it should be pruned after flowering.

Composting: Turning Your Yard Waste to Garden Treasure

by Anne Yasalonis
Florida Yards and Neighborhoods

Composting is a great way to practice recycling in your yard. It has been estimated that you can reduce your total annual volume of waste by 35% if you practice home composting. Most people have all the elements they need to create a successful compost pile without purchasing a bunch of fancy equipment. Kitchen waste along with yard waste make a great mix for your compost pile.

There are many methods of composting and there is one that will fit your needs. Whether you have a small yard, a large yard or live in a deed-restricted community; there is a method for you. Basic knowledge of how the process works will ensure your success in creating usable compost.

Your compost pile requires five basic elements to work. They include adequate moisture (adding water with a hose or bucket to your pile), aeration and oxygen (turning the pile), pile temperature (not so important if you want a slow pile), particle size (less than two inches so that the material can break down quickly) and carbon to nitrogen ratio. The carbon to nitrogen ratio often seems like the most confusing part to get right, but if you know you are adding a "brown" (high carbon material like leaves, branches or paper) add a "green" (high nitrogen material like grass clippings, fruit waste or coffee grounds) as well.

Practicing the "art of composting" is rewarding to both the environment and to your landscape. Your plants will appreciate all the wonderful nutrients the compost will give them. If you

would like more information on home composting attend one of the free Composting Workshops offered by the Florida Yards and Neighborhoods Program and the City of Lakeland Lakes and Stormwater Division. At these workshops you will learn how to compost and will even be able to purchase a compost bin. Go to http://polkfyn.ifas.ufl.edu to register.

MISC. MARCH GARDENING

Flowers to plant - African daisy, ageratum, balsam, begonia, black-eyed Susan, blue daze, bush-daisy, celosia, cleome, coreopsis, cosmos, dahlia, dahlberg daisy, dusty miller, four o'clock, gaillardia, geranium, goldenrod, impatiens, Joseph's coat, marigold, melampodium, moon vine, morning glory, nierembergia, salvia, strawflower, torenia, verbena, vinca and zinnia.

Herbs to plant - Anise, basil, bay laurel, borage, cardamon, chervil, chives, coriander, costmary, dill, fennel, ginger, lemon balm, sweet marjoram, Mexican tarragon, mint, oregano, rosemary, sage, thyme and watercress.

Vegetables to plant - bean, calabaza, cantaloupe, cassava, chayote, corn, cucumbers, dasheen, eggplant, Jerusalem artichoke, jicama, luffa, malanga, New Zealand spinach, okra, pepper, pumpkin, southern peas, squash, tamarillo, tomato and watermelon.

Florida bulbs - Try bulbs like amaryllis, caladiums, cannas, gladiolus, rain lilies, blood lilies, African lilies and many others which are available at many retail garden centers. You can usually find them in nylon net bags. Most will grow in full sun. They should last for a few years. Periodically remove old flower heads and leaves. Dig and divide every 3-4 years.

Soil Test - This is a good time of the year to have your soil analyzed for pH - acidity or alkalinity of your soil. The Master Gardeners here at the Extension Office conduct soil pH tests every Thursday for a $3.00 fee. Call the Extension Office for details - (863) 519-8677.

Lubber grasshoppers - They are back. Adult female grasshopper laid egg cases in the ground late last summer and fall and they started to hatch 2-3 weeks ago. Hardest hit are the areas up around Highway 557 and 557A south of I-4. Last year some neighborhoods had thousands of individuals in one yard eating everything in site. As summer approaches, the grasshoppers get bigger and are harder to kill.

You will see the nymphs as they hatch and emerge from the ground as kind of a black mass of little nymphs. They stay together for several hours before they spread out and begin to feed.

Make sure these masses of nymphs are destroyed either by mechanical or chemical means. Products containing bifenthrin seem to be the most effective. The Florida Department of Agriculture put up a web site last week on the lubber grasshopper. It offers some limited help to the homeowner.

Have a good gardening day,

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For Gardening Information:
http://polkhort.ifas.ufl.edu