

Urban Horticulturer

March 2001

PRUNING

If you have not already done so, finish pruning cold damaged plants. Be sure to prune back to live wood. If you pruned earlier and see that you did not prune out enough wood, go back and cut this wood out now. While pruning cold damaged plants, you can also prune hedges, shrubs, and trees that have gotten ragged over the winter. Do not prune azaleas and camellias until they have finished blooming.



TURFGRASSES

Fertilization - Fertilize turfgrasses with a complete fertilizer. A complete fertilizer contains nitrogen, phosphorous, and potassium. These are often known by their grade such as 16-4-8, 10-10-10, or 6-6-6. A 16-4-8 fertilizer, for example, contains 16% nitrogen, 4% phosphorous, and 8% potassium, thus a 100 pound bag of 16-4-8 contains 16 pounds of nitrogen, 4 pounds of phosphorous, and 8 pounds of potassium. Besides the primary elements (N, P and K), the fertilizer may contain secondary plant foods such as calcium (Ca), magnesium (Mg), sulfur (S), manganese (Mn), zinc (Zn), copper (Cu), iron (Fe) and molybdenum (Mo). All of these basic ingredients should be listed on the label.

Both primary and secondary nutrients are listed on the fertilizer label. The label also

tells the materials from which the fertilizer has been made. Of particular importance is whether the nitrogen is water soluble or water insoluble.

The soluble forms, such as nitrate nitrogen, ammoniacal nitrogen, and water soluble organic nitrogen (urea) are readily available to the plant within days or a few weeks. These products are readily leached from the soil with heavy watering or rainfall, and can cause serious environmental problems

The water insoluble kinds originally meant natural organic materials such as manure or dried blood. Natural materials such as these break down very slowly and yield their nitrogen over a long period of time. Today, however many forms of water insoluble nitrogen have been developed such as IBDU (isobutylidene), sulfur coated urea, or polymer coated nitrogen. A common one found in lawn fertilizers is sulfur coated urea, however you may find others. Look for water insoluble nitrogen sources on the fertilizer label. You will want one where 30-50% of the nitrogen is water insoluble. These will provide a continued release of fertilizer over a long period of time which gives the plants enough time to use it, before it is washed away.

Your best choice is to use a fertilizer that has 30-50% slow release (water insoluble) nitrogen, such as sulfur coated urea. In this case use 1 pound actual nitrogen per 1000 square feet of turf. To determine the amount to use in 1000 square feet, divide 100 by the total percent nitrogen. In other words if the

product was 16-4-8, divide 100 by 16 which equals 6 pounds. Distribute the 6 pounds evenly over 1000 square feet. This will equal 1 pound actual nitrogen per 1000 square feet. If the product contains total water soluble nitrogen, use 3 pounds per 1000 square feet which equals ½ pound total nitrogen per 1000 square feet. A typical lawn type fertilizer with 29% **water insoluble nitrogen** is as follows:

Total Nitrogen	16%
Ammoniacal Nitrogen (Leaches from soil rapidly)	8.5%
Nitrate Nitrogen (Leaches from soil rapidly)	2.0%
Water Soluble Organic Nitrogen (Leaches from soil rapidly)	0.9%
Water Insoluble Nitrogen (Sulphur coated urea-leaches slowly)	4.6%
Available Phosphoric Acid	4.0%
Soluble Potash (potassium)	8.0%

Fertilizer can burn turfgrass if improperly applied, so calibrate your fertilizer spreader to make sure you are applying the proper amount of fertilizer once you have determined how much fertilizer to use. The label on some bags of fertilizer list several types of spreaders with the recommended setting for applying 1 pound of nitrogen. Don't fertilize the grass if it is under drought stress (in other words water a day or two before applying the fertilizer), but don't fertilize when the grass is wet. Be sure to move the fertilizer off the grass blades and into the soil after applying it by watering 1/4 to 1/2 inch of water. Watering in fertilizer or herbicides is a legal water use on any day of the week at the proper time of day.

Weed Control - Generally, a vigorous growing St. Augustine lawn will not require chemical weed control. However, there are times when chemical weed control is necessary. Mid February is the best time to

apply Atrazine herbicide. It is now a little late, but still can be applied. Be careful not to get Atrazine on shrubs and other broadleaf plants, as they can be damaged. The product, 2,4-D and relatives, are not recommended for use in St. Augustinegrass, but can be used on bahiagrass for broadleaf weed control. Halts



or Dimension can be applied now on St. Augustinegrass for preemergence (only kills seed) control of crabgrass. This is a good year to apply such a product as the freezing December temperatures killed most mature crabgrass plants. In mild winters, the mature crabgrass plants sometimes make it through to the following year. The product formerly used to kill crabgrass plants during summer months, Asulox, has been taken off the market. At the moment, there aren't any available products to replace Asulox, however some lawn spray services are still using up their Asulox inventory.

Nutsedge, including kyllinga, is a weed which often plagues lawns. There are a number of nutsedge species which occur in central Florida turf which are difficult to identify. These can be controlled, but it is important to know what specie(s) are present. Basagran will control yellow nutsedge, globe sedge, and annual sedge and another product, Image, will control purple nutsedge. A third product, Manage, which is very expensive and used mostly by professional lawn care companies, will control most species of nutsedge.

It is generally best to apply the herbicides as a spot treatment to infested areas in mid to late February and then apply fertilizer alone in mid March. This prevents applying a herbicide to the whole yard when only part of the yard is infested, which reduces unnecessary chemical runoff and leaching.

Mowing - When mowing do not remove more than 1/3 of the leaf area and allow the cuttings to remain on the lawn. Clippings will not cause a buildup of thatch in the turf as long as not more than 1/3 of the leaf blades are cut. Always use a sharp blade as a clean cut will reduce stress on the turf. Mow when the turf is dry and clean the mower after each use. Mow weedy areas last so that weed seeds are not spread around your yard.

Irrigation - Please keep in mind that we are still under water restrictions. Calibrate your sprinkler system. Place coffee cans or some other can with a flat



bottom at various places within the irrigated area. Run the system for 15 minutes and then measure the amount of water in inches in each container with a ruler. Add the amounts in each can and divide by the number of cans. This is the average amount of water put out by your sprinkler system for 15 minutes. Multiply this number by four to determine the amount of irrigation put out in one hour. From this you can determine how long your irrigation system must run to put out 3/4 inch of water. This will wet the top 8-12 inches of root zone. Any additional will pass through the root zone and be wasted. Conversely, less water will cause the roots to grow close to the surface and make them less drought tolerant.

If you have a sprinkler system, learn how to operate it manually. Check your irrigation system for problems. Make sure that all risers are working correctly. Try not to water driveways and roads.

The extended forecast is for below average rainfall through May and its now only the beginning of March. We have three months to go with rainfall expected to be minimal.

Turf Renovation - Probably your St. Augustine lawn has some areas which are just not recovering like it should, but it is really difficult to tell if it was damaged by cold weather, drought, disease or insects. In any case, it probably has many dead runners which will need to be removed. The dead runners will become the basis for a thatch problem in your lawn later on. As new grass starts to grow, try to rake out these dead runners doing as little damage as possible to the new runners. You can buy or rent vertical cutting machines, but I don't recommend this unless you have had experience with these machines. Now is a good time to put sod or sprigs in these bare areas.

MISC. MARCH GARDENING

Vegetables - Your garden should be about ready to plant if you haven't already planted it. You can now plant bush and pole beans, cantaloupes, sweet corn, cucumbers, eggplant, peppers, pumpkin, summer and winter squash, tomatoes, watermelon, beets, carrots, collards, endive/escarole, kohlrabi, head lettuce, mustard, bunching onions, English peas, radish, and turnips.

Citrus - Fertilize with a complete fertilizer such as 6-6-6 or 8-8-8 at a rate of 1 pound of fertilizer per inch of tree diameter up to about 8 pounds per application. The fertilizer should contain secondary nutrients including approximately 2% magnesium (Mg). Spread the fertilizer evenly under the drip line of the tree and maybe out an additional 2-3 feet.



The drip line of the tree can be mulched to conserve water and reduce weed growth, but the mulch should be kept 1-2 feet out away from the trunk to prevent conditions leading

to root rot. Fertilizer can be applied on top of the mulch, but some of the fertilizer will be utilized by microorganisms living in the mulch.

Watch for aphids on the new flush of growth. Spray with liquid dish soap at 2 tablespoons per gallon of water. If left uncontrolled, the honeydew deposited on leaf surfaces by aphids will support unsightly black sooty mold. If an insecticide such as malathion is used to control aphids, do not spray while the trees are in bloom, because beneficial insects such as pollinating bees will be killed.

Bulbs - A few that can be given a Spring start are African lily, amaryllis, Eucharist lily, blood lily, caladium, canna, crinum, rain lily, and spider lily. Most will survive in full sun to partial shade. Beds should be amended with organic matter and a small amount of fertilizer such as 6-6-6.

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

Soil Test - This is a good time of the year to have your soil analyzed. The Master Gardeners here at the Extension Office conduct soil pH tests every Thursday for a \$3.00 fee. Or you can send your soil sample to the University of Florida Soil Testing Lab and for a fee of \$7.00 they will determine pH along with the potassium, calcium, magnesium and phosphorous content of your sample. Call the Extension Office for details - 533-0765.



2001 Master Gardener Training Program

The Master Gardener Training Program for 2001 is scheduled to start September 12. Call our office for an application.

The Master Gardeners report that they have sold all of their calendars for 2000 and want to thank all who purchased one. They are currently selling two items which are of use to the home gardener. One is called a Honey Hoe, which is a hoe with a very narrow blade (ca. 1/2 inch). This very narrow hoe can reach weeds in tight places, where a normal hoe is useless. The other item is a 15X hand lens (magnifying glass) which is a necessity when trying to spot small pests in the garden such as scale crawlers, aphids mites and thrips. Call the Extension Office for prices and ordering information.



Have a good gardening day,

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For gardening information:
<http://edis.ifas.ufl.edu>

For Polk County Extension Information
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