Q: When should I apply fertilizer?
A: Concern about the harmful environmental impact to both surface water and groundwater quality caused by leaching of nitrate and phosphorus dictates sound fertilization practices to ensure that the nitrogen and phosphorus applied is utilized by the plants and not lost below the root zone to pollute surface water and our bay. One of the best ways to prevent pollution is to use caution when applying fertilizers.

Do not fertilize when heavy rain is expected and leave a “Ring of Responsibility” around or along water bodies. If a fertilizer spreader with a deflector shield is used, the “Ring of Responsibility” should be at least 10 feet from the edge of the water. Turfgrass should be fertilized with a granular controlled-release fertilizer. Iron can be applied to provide a dark green color in the summer without stimulating excessive growth. Controlled-release fertilizer (Sarasota County Fertilizer and Landscape Management Code (2007-062) requires 50% or more controlled-release), should be applied at the rate of one pound of nitrogen per 1,000 square feet. This is calculated by dividing the percentage of nitrogen into 100. (Example: If the ratio 15-0-15 is used, then 6.6 pounds of the fertilizer should be spread over 1,000 square feet of lawn area).

The Sarasota County Fertilizer and Land Management Code also stipulates that no fertilizers containing Nitrogen may be used from May 1 through September 30. The ordinance applies to all “applicators” (any person who applies fertilizer on turf and or landscape plants in Sarasota County). Members of the landscape industry must obtain certification in the Florida Green Industries Best Management Practices for Protection of Water Resources (GI-BMPs) in Florida. Private homeowners are encouraged to utilize the recommendations of the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Florida-Friendly Landscaping™ Program.

Established trees and shrubs (over three years old) generally do not need supplemental fertilizer unless they are deficient in a specific nutrient. Over-fertilization encourages excessive growth that results in increased demand for pruning. During the establishment phase, shrubs, trees, and ground covers can be fertilized with a granular controlled-release fertilizer three times per year in March, May, and early October at the rate of one pound of nitrogen per 1,000 square feet of planting area.

The fertilizer should contain both nitrogen and potassium in controlled-release form (such as sulfur-coated products). Phosphorous should be no more than 1/4 the percent of nitrogen as our soils already contain phosphorous. The fertilizer must also contain 3% - 5% Magnesium (Mg), 1% - 2% of iron and manganese, and should also contain sulfur. An acceptable formulation is 8-2-8 fertilizer.

Fertilizer type depends on soil conditions. Nutritional deficiencies can develop due to soil conditions, such as high pH or compacted soils, or damaged and diseased root systems. Deficiencies of specific nutrients should be treated with applications of the lacking nutrient in accordance with UF/IFAS recommendations until the deficiencies are corrected. It is best to apply fertilizer by hand in a uniform manner, broadcast around the plants, but never in direct contact with stems and trunks. The fertilizer should be spread evenly from the tree’s outer edge (drip line) inward. Newly planted trees should receive one-half pound of fertilizer in controlled-release form per inch of trunk diameter.
Palms should be fertilized with a granular controlled-release fertilizer three times per year. An acceptable formulation is 8-2-12-4 (N, P, K, Mg plus micro-elements). Palms have different nutritional requirements from other landscape plants. They suffer quickly and conspicuously from improper mineral nutrition, whether due to insufficient or incorrect fertilization. Deficiencies in potassium, magnesium, manganese, and boron are much more prevalent and serious than nitrogen deficiency. Potassium deficiency is perhaps the most widespread and serious of all disorders in Florida palms. Magnesium deficiency is also quite common in Florida palms, but especially in *Phoenix* species. Manganese deficiency or "frizzletop" is a common problem in palms growing in the alkaline soils that cover much of south Florida.

For more information about fertilization, visit: [http://edis.ifas.ufl.edu](http://edis.ifas.ufl.edu). Electronic copies of the Florida Green Industries Best Management Practices for Protection of Water Resources in Florida can be downloaded at: [http://www.dep.state.fl.us/central/Home/MeetingsTraining/FLGreen/FLGreenIndustries.htm](http://www.dep.state.fl.us/central/Home/MeetingsTraining/FLGreen/FLGreenIndustries.htm)

**WHAT TO PLANT**

**Annuals:** Plants that can take summer heat include salvia, torenia, wax begonia, coleus, and ornamental pepper.

**Bulbs:** Some lilies do better when their roots are crowded. Try planting Amazon, Aztec, and Clivias in containers to increase blooming.

**Herbs:** Plant heat loving herbs, including basil, Mexican tarragon, and rosemary.

**Vegetables:** Southern favorites to plant now are okra, southern pea, and sweet potato.

**WHAT TO DO**

**Pests:** Harmful insects become more active as the weather warms. Watch for thrips, scale, and mites on ornamental plants.

**Gardenias:** While some yellowing of older leaves is normal, yellowing of new growth usually indicates a micronutrient deficiency.

**Oleanders:** Chewed or ragged leaves indicate oleander caterpillars at work.

**Lawn insects:** Watch for damage from chinch bugs in St. Augustine and begin scouting for newly hatched mole crickets in Bahia lawns.

**Tomatoes:** Watch for pests, disease, and nutritional disorders on tomato plants.

**Lawn nutrition:** If Bahia lawns are yellowing, iron may correct the problem.

**Prevent lawn diseases:** Prevent or minimize disease by following proper cultural practices when caring for lawns.

**Trees:** Prepare for hurricane season by checking trees for damaged or weak branches and prune if needed. Hire an ISA certified arborist.

**WHAT TO DO EVERY MONTH**

- Adjust irrigation based on rainfall.
- Deadhead flowers to encourage new blooms.
- Monitor the garden for insects and disease.
- Plant trees, shrubs, and perennials and water until established.
- Mow lawns at recommended heights:
  - St. Augustine & Bahia: 3-4”
  - Centipede: 1.5-2.0”
  - Dwarf St. Augustine: 2.5”
UPCOMING EXTENSION EDUCATIONAL PROGRAMS:
Call 861-5000 or register on-line http://sarasota.ifas.ufl.edu
- Organic Food Gardening: Container Growing, Phillippi Farmhouse Market, 11:00 a.m., May 8
- **Spring Garden Tour of Florida-Friendly Landscapes**, 10:00 a.m. – 3:00 p.m. Cost $10.00., May 12
- Sarasota Garden Club Series: Florida Snakes, Sarasota Garden Club, 10:00 a.m., May 15
- Irrigation 101, Twin Lakes Park, 2:00 p.m., May 15
- Irrigation 101, Shamrock Park, 2:00 p.m., May 16
- Canning Tomatoes, Twin Lakes Park, 9:00 a.m., May 17
- Rain Barrel Workshop, Twin Lakes Park, 10:00 a.m., May 18
- Organic Food Gardening: Summer Crops, Phillippi Farmhouse Market, 11:00 a.m., May 22
- Brown Bag Gardening Series: Container Gardening, Garden of the Five Senses 12:00 p.m., May 23
- Chickens 101, Twin Lakes Park, Canning Tomatoes, Twin Lakes Park, 8:30 a.m., May 25
- The Basics of Pressure Canning, Twin Lakes Park, 9:30 a.m., May 29

GETTING HELP
There have been some changes to the Master Gardener Help Desk at Twin Lakes Park. It is now called the UF/IFAS Plant Clinic and it is available to answer your questions. Call 861-9807 or email at plantclinic@scgov.net. Walk-ins are welcome Monday through Thursday from 9:00 a.m.-3 p.m. Satellite Plant Clinics are available weekly at library locations throughout Sarasota County.

(Annemarie Post is an Environmental Horticulture Agent with University of Florida/IFAS Extension Sarasota County. Website: http://sarasota.ifas.ufl.edu)

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