

Sarasota's Ordinance Promotes Sustainable Fertilizers

by Jessica Benoit

Sarasota County's new fertilizer ordinance is promoting sustainable landscaping practices by limiting the amount, time, and placement of fertilizers. At least eight other Florida cities have also adopted local ordinances in an attempt to protect the state's water from over-fertilization. In Florida, fertilizer use has risen from less than 16,000 tons in 2003 to more than two million tons in 2007. When nutrient levels increase, red tide outbreaks become more frequent and the size of the Dead Zone in the Gulf can become even larger. Our water's condition largely depends on water quality standards that the Federal Environmental Protection Agency (EPA) and State of Florida have been slow to implement. Fertilization misuse has cost millions in tax dollars and poses to diminish commercial and recreational fisheries and tourism which brings in an estimated 60 billion a year.

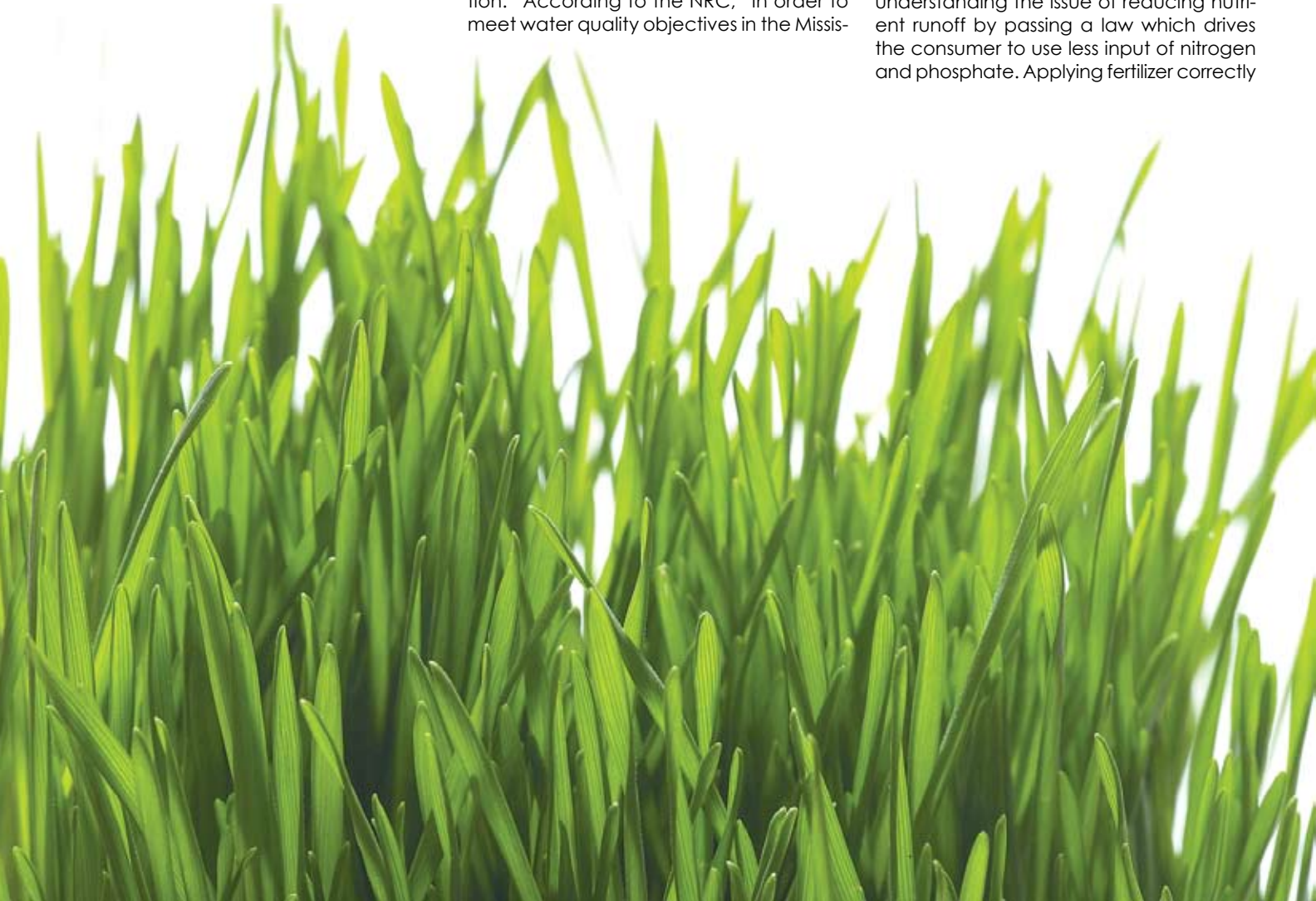
Nicknamed the "chemical time bomb" in Europe, over-fertilization is a global problem as evidence has shown its devastating affects on the environment. Red tide blooms are increasing, and areas lacking oxygen

called dead zones are becoming more common. Presently, states in the U.S. rely on Better Management Practices to regulate fertilizer use, but this is usually a voluntary system and therefore unenforceable. Mandatory BMPs exist in some highly sensitive areas like the Everglades in Wellington and St. John's County Guana Marsh Basin but are criticized for being too lenient. Sarasota's ordinance combines BMPs with other well-drafted considerations from horticultural experts.

While advocates are fighting for stronger laws in Florida, the dead zone located below the Mississippi River depends on what the states bordering the river do. These states, including Iowa, Ohio, and Illinois, receive some of the highest nitrogen rates, and as crop productions increase, mass amounts of fertilizer will wash down the Mississippi River, increasing the size of the dead zone. According to the Gulf Restoration Network (GRN), "In a 2007 report on Mississippi River water quality, the Nation Research Council (NRC) was highly critical of the lack of action by the EPA to reduce nitrogen and phosphorous pollution." According to the NRC, "In order to meet water quality objectives in the Missis-

sippi River and reduce the dead zone, the EPA and states must establish standards for nitrogen and phosphorous pollution." Currently, Hawaii is the only state where all rivers and lakes have these standards. GRN quotes Illinois as "creating science that says nitrogen and phosphorous pollution aren't the cause of algal blooms – it's too much sunlight." Most experts agree fertilizer nutrients are largely to blame for increasing red tide outbreaks, and poor agriculture policies have contributed to the damage. The Environmental Working Group (EWG) states, "Failed federal farm policies are leading to 1.7 billion tons of topsoil eroding from agricultural fields nationwide, polluting America's waters and fisheries with sediment and millions of pounds of fertilizer and pesticides."

While protection laws are slow to be implemented, supporters of them are continuing to develop and use sustainable landscaping practices. Ed Rosenthal, CEO of Florikan E.S.A. (Environmentally Sustainable Agriculture) who supports the new local ordinance, says, "Sarasota County Commissioners deserve a lot of credit for understanding the issue of reducing nutrient runoff by passing a law which drives the consumer to use less input of nitrogen and phosphate. Applying fertilizer correctly



is the major focus, and as people become more educated in sustainability, they will want to do the right thing by using products that preserve and protect our natural resources." Rosenthal, who has been pursuing the issue for 35 years, helped develop the "Sustainable Landscape Council with other like-minded companies as a continuing outreach program to educate the community to use more sustainable means of landscaping." Rosenthal sponsors education symposiums and has created an Endowment Fund aimed at developing BMPs for improved environmental stewardship through the Horticultural Research Institute.



Using slow-release fertilizer is a major component of sustainable landscaping and a part of Sarasota's new ordinance. Florikan won awards for its Staged Nutrient Release (Dynamite Plant food). Rosenthal explains that "the patented Florikan technology provides the nutrients that the plants need in controlled-release form at the exact time of plants' growth when the plants can utilize and absorb the nutrients." He also notes that "Improved efficiency of nutrient uptake is the proven result of this Staged Nutrient-release technology."

Sarasota Ordinance Guidelines are as follows: (Sarasota Our Sarasota™ Website & Florikan)

1. Do not apply fertilizer with nitrogen and phosphorus to your lawns during the

summer rainy months of June through September unless deemed necessary through soil and tissue testing.

2. Do not apply any fertilizer within 10 feet of any body of water. If you live on the bay or the gulf, use a larger setback of 25 to 50 feet. Mitigation zones of 10 feet between edge of turf and water runoff areas, surface water, rivers, creeks, etc. should be planted with xeriscape plants and mulched or planted with Zoysia grass or seashore persicaria (low-N and salt-tolerant plant).

3. When you do apply fertilizer in the spring or fall, use a blend that has at least 50 percent timed or slow release and apply no more than two pounds nitrogen and a quarter-pound of phosphorus (if needed) per 1000 square feet per application. Four pounds of nitrogen and a half pound of phosphorus are the maximum allowed per year.

Sustainable Landscaping Recommendations:

1. During the summer rainy season, add fertilizer with controlled-release potassium and controlled-release magnesium. This is found in Dynamite Plant Food or Florikan Landscape Fertilizer, available from Wholesale Landscape Supply in Sarasota. This will keep the plants and turf green and healthy in the summer rainy season. The zero-nitrogen, zero-phosphate fertilizer is called Summer Safe.

2. Remove as much sod as possible in favor of beds of Florida Native plants or Perennial Peanut or Sunshine Mimosa (they

need no fertilizer or watering once established), mulched with Melaluca (an invasive plant) mulch. (Do not use Cypress mulch, as wetland trees are cut down and ground up to make it.)

3. If you live near a pond or other water element, plant aquatic plants at the edges. Some decorative types are: Pickerelweed, Duck Potato, Canna Lily, and Water Lily. Grants are available from Sarasota County, Sarasota Bay Estuary Program, and Southwest Florida Water Management District.

4. St. Augustine grass should be removed. Zoysia grass seems to be a much more eco-friendly turf. It does not require as much nitrogen as St. Augustine and is more pest resistant, allowing less harmful pesticides to be applied. It has a higher drought tolerance as well.

5. Use compost fertilizer.

Rosenthal feels that "the committee headed by Jack Merriam is working hard to make this an easy transition for Sarasota." He concludes by saying, "It is also up to the community to help and encourage all to be good stewards."

Experts agree that we are past the research stage regarding fertilizer use and that people should use sustainable practices even when communities do not mandate them. Unfortunately, Longboat Key postponed adopting Sarasota's ordinance, and locals must act to protect it themselves. We can potentially make an impact on our water sources and may even keep a little money out of the dirt and in our pockets.

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