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Know the Flow; Understanding our Florida stormwater ponds



A stormwater pond

Living in Florida for many of us is a dream come true, but very often the dream becomes a nightmare when we are confronted with the challenges presented by the needs of our landscape plants and lawns. Often though, a significant part of the landscape in which plants do grow is missed or taken for granted because it tends to sit in our backyards and do its extremely valuable job silently. Attention is only paid to it when things go out of equilibrium and a shocking blue or blue-green scum forms over the top of the tranquil surface, and when this happens the nightmare really begins. You guessed it; I'm talking about the quiet pond, or 'lake,' as northerners prefer to call it. The ponds we have in our yards are stormwater facilities designed to collect and hold water that has already passed through the yard around it, other yards that drain to it, as well as the drains leading to it from the connection of gutters from streets in the neighborhood.

To provide the extra nutrients for grass or plants to grow in our landscape, we often use fertilizer. As water flows over land, it picks up some of these nutrients in the soil and carries them into the pond. It also picks up other materials and contaminants from the street drains. These nutrients then provide for the growth of either algae, or other plants, depending on conditions. When algae grow in large quantities due to excessive nutrient levels, we refer to the bluegreen coloration as an algae bloom.

The number, variety and amount of plants in any pond are often held in check by the level of nutrients. If nutrient loads are high there is the possibility for the pond holding lots of plants, and conversely, if there are less nutrients the pond will be incapable of holding many plants. When ponds bloom green due to algae or duckweed – which is also a common small plant that grows in pond water – it is simply nature's way of balancing the equilibrium and making sure the excess nutrients are used up. That disgusting sight is boldly telling us that we have overloaded our pond water most often by the actions we carry out in the surrounding landscape.

To clean up the water in our ponds and reduce the incidence of blooms, we can simply introduce native species of aquatic or water tolerant plants into and around the shoreline to strain out undesirable material and absorb nutrients which will inevitably end up in the water. Species of flowering plants such as Pickerel Weed, Duck Potato and Yellow Canna can add a welcoming aqua-scaped appearance on the water's edge while helping to stabilize the pond bank and prevent the proliferation of algae and duckweed.

Of course, changes in landscaping habits in the yard can reduce the amount of nutrients and improve pond water quality. Suggestions include the use of 'slow-release' fertilizers, if fertilizers are necessary; having soil or dirt tested to determine what the specific nutrient needs are; composting leaves and not allowing them to clog drains and get into ponds; picking up after pets; washing the car over lawn to prevent run-off and conserve water.

After all, mistakes in the landscape do not stay there. They end up in our ponds and cost money. A healthy pond is a good indicator of the general health of the surrounding environment, and the benefit of an ecology in balance is priceless.