

## “IN THE WETLANDS, IT IS ALL ABOUT THE FLOW”

By, Larry Eichert



Stoneybrook contains a diversification of natural wild life areas. There are 11 different micro-ecosystems that can be seen in 76 different places within our community. These ecosystems are divided into three major groups. The wetland preservation areas comprise 429.5 acres of our community. Upland preservation systems occupy 60.4 acres, with many of them containing mitigated sections. The wetland mitigation areas cover 43.7 acres. Mitigated areas are land that is set aside to replace the wetland areas that have been destroyed by community development. Their development is mandated by environmental laws.

*In 2012 the C.D.D. board dropped this 5 year program.* (The most visible areas are found on Haven Harbour Way, west of New Briton Ct. looking north, two different sections on Stone Harbour Loop, plus 5 other more secluded areas.) Our community also contains three different types of hammocks. Hammocks are raised areas within the wetland areas. They are Hardwood Hammocks, Flatwoods, Wet Prairies, Swamps and Fresh Water Marshes. The wetland mixed forested areas and mixed wetland hardwoods are also found in Stoneybrook. These are easily recognized because of their plant diversification, a variety of oak trees holding Spanish moss, woody vines, devil's claw, Virginia creeper and poison ivy, plus a few epiphytes – orchids, some ferns and a few bromeliads. Wetland management is an ongoing challenge that has three basic levels, maintenance, management, and restoration. Each different type of wetland ecosystem has its' own unique challenges and possible treatments.

(A series of articles concerning wetland problems appeared in the monthly newsletter on the following dates 4/13 through 9/13).

The wetland environment and its various ecosystems have four basic parts to them. All of these are concerned with the flow of nutrients through the system and are determined by climatic conditions, natural and man-made disturbances, and a maturation toward a complex energy efficient ecosystem. All of the various systems have the following aspects in common; 1. Hydrology -the speed at which water flows through the system plus the biological and chemical load that it contains; (*The engineering company suggested to the C.D.D. board that this was the most probable cause for wetland problems. It was quoted in last month's article*); 2. Biogeochemistry - chemical loading, soil physics and biological released chemicals; 3. Biological Adaptations - opportunistic and invasive species as well as maturation complexity species; 4. Ecological Development - increased diversification to indigenous species; 5. Human Impact - encroachment by domesticated plants, nutrient rich lawn water run-off, throwing waste vegetation into the areas, modifying buffer zones by planting ornamental vegetation along property lines etc.; 6. In all cases restoration should be favored over new creations.

These pre-existing natural areas just didn't happen to remain here. A community development plan had to be approved before the developer started construction. Saving natural areas were part of a conscientious environmental awareness plan that the county required. Heritage Harbour's "Environmental Awareness Program"<sup>1</sup> was intended to "serve as a guide for preserving the community's environmental conscience for generations to come."<sup>2</sup>

(1,2 :Heritage Harbour Environmental Awareness Program, Pamphlet) It is well worth reading and it should be part of the C.D. D. set of documents.

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