

Boat Lake 9/26/01 Watershed: Sweetwater Creek

II. Ecological Data

Aquatic Plant Survey

Approximately equispaced sites are haphazardly mapped around the lake and the aquatic plants at each site are surveyed. The total number of species from all sites is used to approximate the total diversity of aquatic plants and the percent of invasive-exotic plants on the lake and in the watershed (Table 2). Many of these plants are considered ecologically harmful, as they tend to out-compete native species. Such “nuisance” plants can also make boating and other recreational activities difficult or impossible. The common and scientific names of plant species found on your lake are listed in Table 3.

Table 2. Comparison of species diversity between your lake and other assessed lakes located within your watershed.

	<u>Boat Lake</u>	<u>Sweetwater Creek</u> (Average)
Number of Taxa:	30	30
Percent Exotic Plants:	17%	15%

Table 3. Botanical and common names of the most commonly found plants on your lake. Percent frequency (of occurrence), habit (location where found), status (native or exotic), and EPPC status are provided.

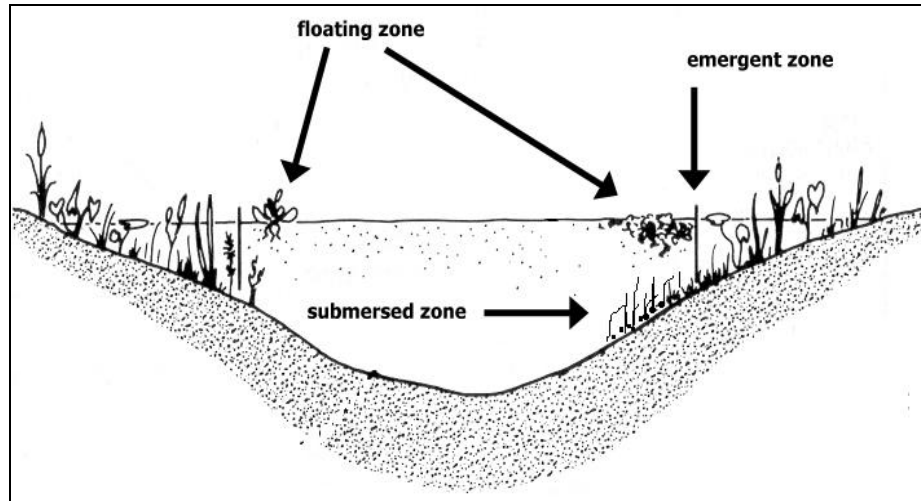
<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency</u>	<u>Habit</u>	<u>Status</u>	<u>EPPC</u>
Rush Fuirena	Fuirena spp.	80%	Emergent	Native	NL
Manyflower Marshpennywort, Water Penny	Hydrocotyl umbellata	80%	Emergent	Native	NL
Torpedo Grass	Panicum repens	80%	Emergent	Exotic	I
Water Primroses, Primrosewillow	Ludwigia spp.	70%	Emergent	Unknown	NL
Cattails	Typha spp.	60%	Emergent	Native	NL
American White Water Lily, Fragrant Water	Nymphaea odorata	40%	Floating	Native	NL
Pickereel Weed	Pontederia cordata	40%	Emergent	Native	NL
Algal Mats, Floating	Algal spp.	30%	Floating	Unknown	Unknow
Common Bacopa, Herb-Of-Grace	Bacopa monnieri	30%	Submersed	Native	NL
Dayflower	Commelina spp.	20%	Emergent	Exotic	NL
Sedge	Cyperus spp.	20%	Emergent	Unknown	NL
Baldwin's Spikerush, Roadgrass	Eleocharis baldwinii	20%	Submersed	Native	NL
Punk Tree, Melaleuca	Melaleuca quinquenervia	20%	Emergent	Exotic	I
Wax Myrtle	Myrica cerifera	20%	Emergent	Native	NL
Bulltongue Arrowhead, Duck Potato	Sagittaria lancifolia	20%	Emergent	Native	NL
Burhead Sedge, Cuban Scirpus	Scirpus cubensis	20%	Emergent	Native	NL

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Cypress	Taxodium spp.	20%	Emergent	Native	NL
Southern Red Maple	Acer rubrum var. trilobum	10%	Emergent	Native	NL
Alligator Weed	Alternanthera philoxeroides	10%	Emergent	Exotic	II
Bur Marigold	Bidens spp.	10%	Emergent	Native	NL
Fragrant Flatsedge	Cyperus odoratus	10%	Emergent	Native	NL
Creeping Primrosewillow, Red Ludwigia	Ludwigia repens	10%	Emergent	Native	NL
Manatee Mudflower, Baby's Tears	Micranthemum glomeratum	10%	Submersed	Native	NL
Algae	Periphyton spp.	10%	Submersed	Native	NL
Frog-fruit, Carpetweed, Turkey Tangle Fogf	Phyla nodiflora	10%	Emergent	Native	NL
Pine Tree	Pinus spp.	10%	Emergent	Native	NL
Marsh Fleabane,Camphorweed	Pluchea spp.	10%	Emergent	Native	NL
Smartweed, Knotweed	Polygonum spp.	10%	Emergent	Native	NL
Soft-stem Bulrush	Scirpus validus	10%	Emergent	Native	NL
Creeping Oxeye	Sphagneticola (Wedelia) trilobata	10%	Emergent	Exotic	II

Standing Crop

In addition to an overall survey of the types of plants on a lake, an estimate of the standing crop (biomass) of the lake has been obtained for many lakes. This was done by calculating the average weight of the vegetation within a quarter-meter square quadrat tossed haphazardly into three zones (see Figure) at each sampling site around the lake: (1) the emergent zone, (2) the floating zone and (3) the submersed zone. The average weight of the plants (Table 4) from all sampling sites and the dominant type of vegetation (Table 5) are provided. If data tables are not shown, no standing crop estimates were obtained for this lake.

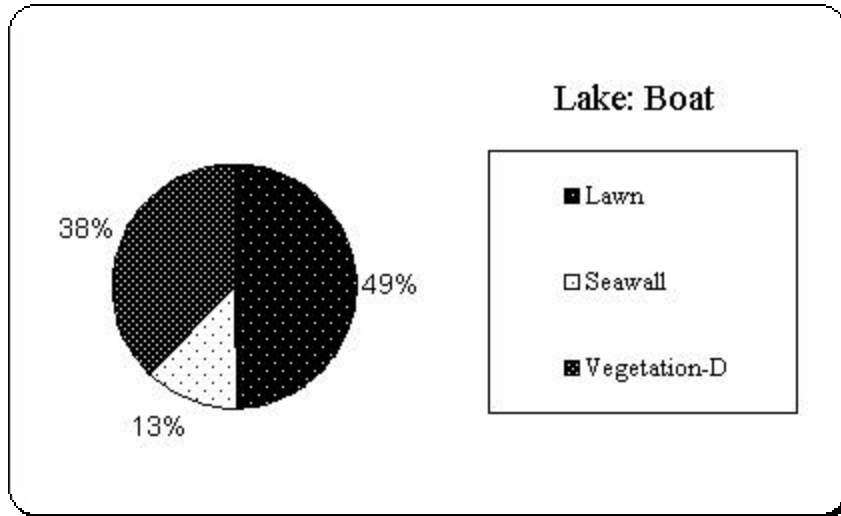




The lake assessments are created in partnership with Hillsborough County and the Florida Center for Community Design and Research
LAKE ASSESSMENT DOCUMENT

Habitat Quality

The shoreline is mapped by navigating the circumference of the lake and characterizing the adjacent shore using sophisticated GPS. Categories for characterization include: 1) Lawn 2) Seawall 3) Beach, Bare Soil 4) Undisturbed Vegetation (*Vegetation-U*) 5) Disturbed Vegetation (*Vegetation-D*) 6) Impervious Surface and 7) Ornamentals, etc. The result is an estimate of the percent of each type of shoreline per lake. This information assists in the interpretation of the aquatic plant survey as an indicator of relative habitat quality.



Percent of lake shore types