Bay Lake 9/25/01 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.

	Bay Lake	Sweetwater Creek (Average)
Number of Taxa:	26	30
Percent Exotic Plants:	19%	15%

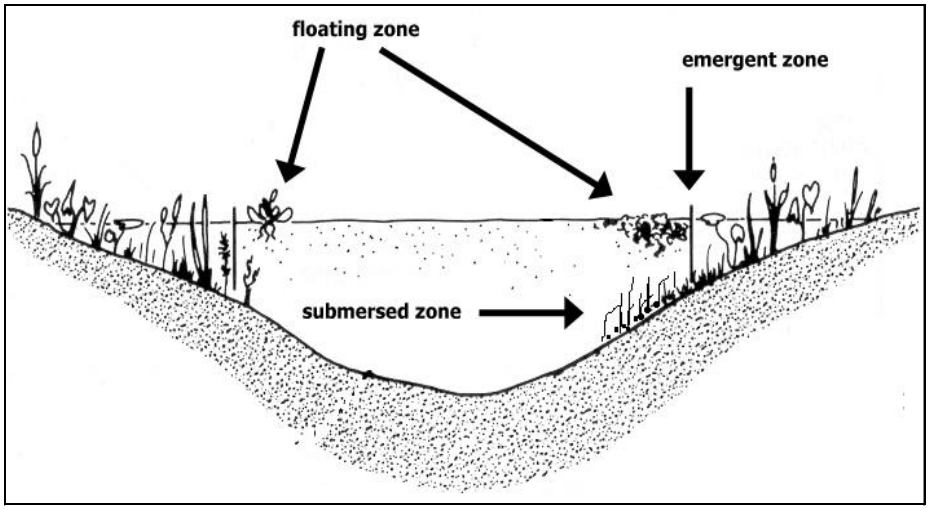
Table 3. Botanical and common names of the most commonly found plants on your lake. Percent frequency (of occurence), habit (location where found), status (native or exotic), and EPPC status are provided.

Common Name	Plant Species	Frequency	Habit	Status	EPPC
Southern Red Maple	Acer rubrum var. trilobum	90%	Emergent	Native	NL
Water Primroses, Primrosewillow	Ludwigia spp.	90%	Emergent	Unknown	NL
Torpedo Grass	Panicum repens	80%	Emergent	Exotic	I
Cattails	Typha spp.	80%	Emergent	Native	NL
Wax Myrtle	Myrica cerifera	70%	Emergent	Native	NL
Pickerel Weed	Pontederia cordata	50%	Emergent	Native	NL
Common Buttonbush	Cephalanthus occidentalis	40%	Emergent	Native	NL
Camphor-tree	Cinnamomum camphora	40%	Emergent	Native	I
Punk Tree, Melaleuca	Melaleuca quinquenervia	40%	Emergent	Exotic	I
Maidencane	Panicum hemitomon	40%	Emergent	Native	NL
Cypress	Taxodium spp.	40%	Emergent	Native	NL
Bulltongue Arrowhead, Duck Potato	Sagittaria lancifolia	30%	Emergent	Native	NL
Popcorn Tree, Chinese Tallow Tree	Sapium sebiferum	30%	Emergent	Exotic	I
Alligator Weed	Alternanthera philoxeroides	20%	Emergent	Exotic	II
Sedge	Cyperus spp.	20%	Emergent	Unknown	NL
Spatterdock, Yellow Pondlily	Nuphar lutea var. advena	20%	Floating	Native	NL

Smartweed, Knotweed	Polygonum spp.	20%	Emergent	Native	NL
Brazilian Pepper	Schinus terebinthifolius	20%	Emergent	Exotic	I
Dahoon Holly	Ilex cassine	10%	Emergent	Native	NL
Sweetbay Magnolia	Magnolia virginiana	10%	Emergent	Native	NL
Swamp Hornpod, Miterwort	Mitreola sessilifolia	10%	Emergent	Native	NL
Water Paspalum	Paspalum repens	10%	Emergent	Unknown	NL
Redbay	Persea borbonia	10%	Emergent	Native	NL
Pine Tree	Pinus spp.	10%	Emergent	Native	NL
Willow	Salix spp.	10%	Emergent	Native	NL
Unidentified Plant Species	UNKNOWN SPP	10%	Unknown	Unknown	Unknow

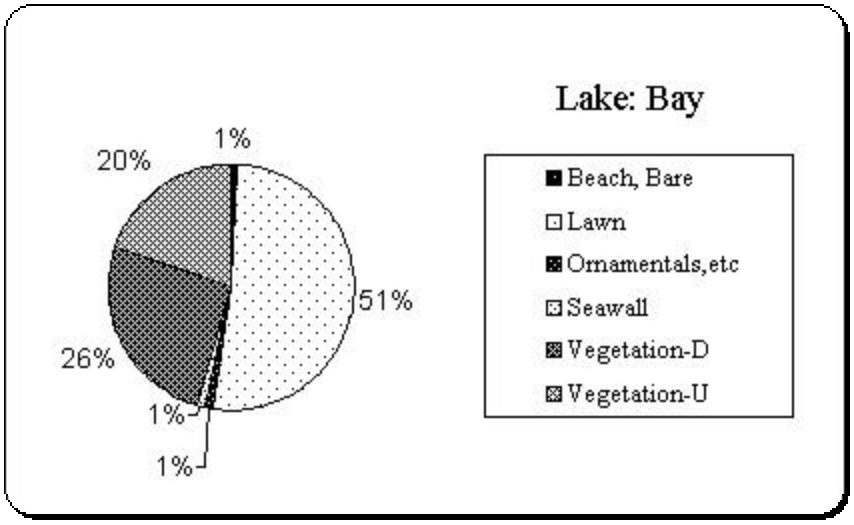
Standing Crop

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.



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