



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

Horse Lake 9/13/01 Watershed: Brooker 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.

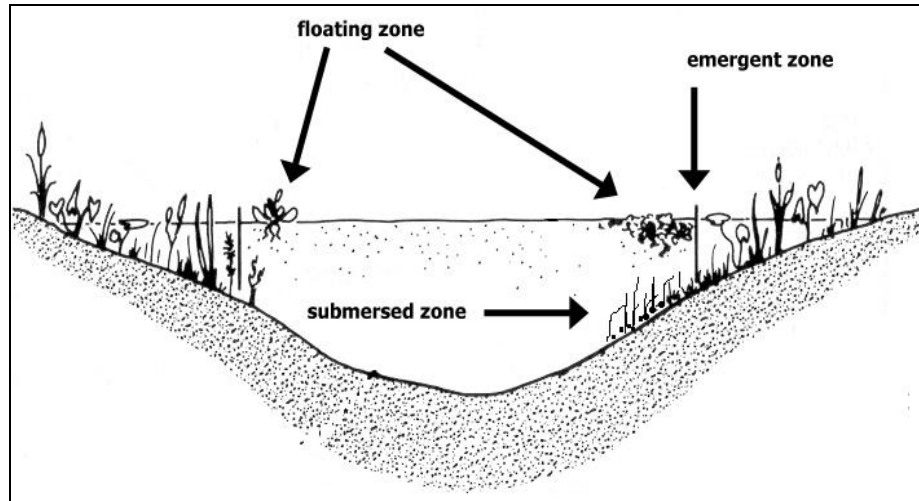
	<u>Horse Lake</u>	<u>Brooker Creek</u> (Average)
Number of Taxa:	16	31
Percent Exotic Plants:	6%	14%

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>
Sedge	Cyperus spp.	100%	Emergent	Unknown	NL
Carolina Redroot	Lachnanthes caroliniana	100%	Emergent	Native	NL
American White Water Lily, Fragrant Water	Nymphaea odorata	100%	Floating	Native	NL
Algae	Periphyton spp.	100%	Submersed	Native	NL
Yellow-eyed Grass	Xyris spp.	100%	Emergent	Native	NL
Water Primroses, Primrosewillow	Ludwigia spp.	86%	Emergent	Unknown	NL
Rush Fuirena	Fuirena spp.	71%	Emergent	Native	NL
Bighead Rush	Juncus megacephalus	57%	Emergent	Native	NL
Punk Tree, Melaleuca	Melaleuca quinquenervia	57%	Emergent	Exotic	I
Muskgrass	Chara spp.	43%	Submersed	Native	NL
Maidencane	Panicum hemitomon	29%	Emergent	Native	NL
Baldwin's Spikerush, Roadgrass	Eleocharis baldwinii	14%	Submersed	Native	NL
Roadgrass, Spikerushes	Eleocharis spp.	14%	Emergent	Native	NL
Climbing Hempvine	Mikania scandens	14%	Emergent	Native	NL
Smartweed, Knotweed	Polygonum spp.	14%	Emergent	Native	NL
Bladderwort	Utricularia spp.	14%	Submersed	Native	NL

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.

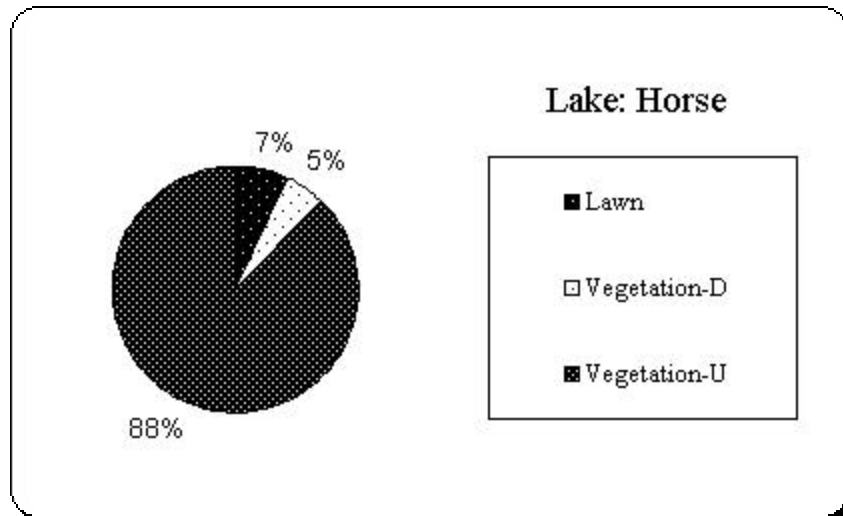




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Habitat Quality

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