

# LAKE ASSESSMENT REPORT

## LAKE OF THE WOODS

5 /31/2000

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Lake assessments are being conducted to contribute physical and ecological data to the Atlas as a collaborative effort between project partners. The goal is to rapidly assess many of the lakes in the county and thus provide stakeholders a better understanding of the character of the lake, its shore, and the aquatic plants present there. These data are intended to assist in the future management of the lake and its watershed.

The first section of the report provides the results of the bottom mapping effort: a contour (bathymetric) map of the lake, area, volume and depth statistics, and the water level at the time of assessment (if available).

The second section provides the results of the ecological (vegetation) assessment conducted on the lake. These results can be used to better manage vegetation in the lake. A list is provided with the different plant species found at various sites around the lake. Potentially invasive, exotic (non-native) species are identified in a plant list and the percent of exotics is presented in a summary table. The results of this study are compared with other lakes in the watershed.

The intent of the assessment is to provide a starting point from which to track changes in the lake. These data can provide the information needed to determine changes and to monitor trends in physical condition and ecological health of the lake.

### I. Physical Data – Area, Depth, Volume, & Bottom Contours

The bottom of the lake was mapped using a Global Positioning System (GPS) to determine the boat's position, and a depth-finder to provide depth associated with that measured position. The result is an estimate of the lake's area, mean and maximum depths, and volume (Table 1) and the creation of a bottom contour map. *NOTE: This map is for recreational purposes only.*

**Table 1. Physical Characteristics of the Lake**

Surface Area (acres):	52
Mean Depth (feet):	8.4
Maximum Depth (feet):	19.6
Volume (gallons):	142,917,090

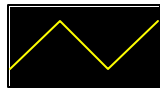


The lake assessments are created in partnership with Seminole County and the Florida Center for Community Design and Research. If you have any questions, please use the "Contact Us" form on the Seminole Atlas Website ([www.seminole.wateratlas.org](http://www.seminole.wateratlas.org)).



# Lake Of The Woods

Section - Township - Range  
19-21-30



Contour Lines  
Expressed in  
2-Foot Intervals



Estimated  
Lake Perimeter

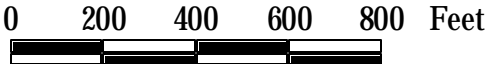
### EXPLANATION:

Assessment Date: May 31, 2000

Lake water level was 74.75 ft above sea level when the lake was assessed. Contours are expressed in absolute depth below this level.

### DATA SOURCES:

Seminole County 1999 color aerials provided by Seminole County Public Works. All contours generated by the Florida Center for Community Design and Research based on GPS/Sonar data provided by the Seminole County Stormwater Division.



## II. Ecological Data - Aquatic Plant Survey

Approximately equispaced sites (typically ten or more) are 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 beneficial 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 the lake and other assessed lakes located within the same watershed**

	<u>Lake</u>	<u>Watershed</u>
	LAKE OF THE WOODS	Howell Creek
	(Average)	
Number of Taxa:	52	42
Percent Exotic Plants:	21%	17%

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

Common Name	Scientific Name	Frequency	Habit	Status	EPPC
Wild Taro	<i>Colocasia esculenta</i>	80%	Emergent	Exotic	I
Peruvian Primrosewillow	<i>Ludwigia peruviana</i>	70%	Emergent	Exotic	NL
Maidencane	<i>Panicum hemitomon</i>	70%	Emergent	Native	NL
Manyflower Marshpennywort, Water Penny	<i>Hydrocotyl umbellata</i>	60%	Emergent	Native	NL
Duck Potato	<i>Sagittaria lancifolia</i>	60%	Emergent	Native	NL
Climbing Hempvine	<i>Mikania scandens</i>	50%	Emergent	Native	NL
Wax Myrtle	<i>Myrica cerifera</i>	50%	Emergent	Native	NL
Buttonbush	<i>Cephalanthus occidentalis</i>	40%	Emergent	Native	NL
Virginia Willow; Virginia Sweetspire	<i>Itea virginica</i>	40%	Emergent	Native	NL
Spatterdock, Yellow Pondlily	<i>Nuphar lutea</i>	40%	Floating	Native	NL
Torpedo Grass	<i>Panicum repens</i>	40%	Emergent	Exotic	I
Willow	<i>Salix</i> spp.	40%	Emergent	Native	NL
Elderberry	<i>Sambucus canadensis</i>	40%	Emergent	Native	NL
Hairy-pod Cowpea	<i>Vigna luteola</i>	40%	Terrestrial	Native	NL
Grapevine	<i>Vitis</i> spp.	40%	Emergent	Native	NL
Southern Red Maple	<i>Acer rubrum</i>	30%	Emergent	Native	NL
Pigweed, Water Hemp	<i>Amaranthus</i> spp.	30%	Emergent	Native	NL
Common Bacopa	<i>Bacopa monnieri</i>	30%	Submersed	Native	NL



Virginia Creeper, Woodbine	Parthenocissus quinquefolia	30%	Emergent	Native	NL
Cattails	Typha spp.	30%	Emergent	Native	NL
Alligator Weed	Alternanthera philoxeroides	20%	Emergent	Exotic	II
Asian Pennywort, Coinwort	Centella asiatica	20%	Emergent	Native	NL
Spotted Water Hemlock	Cicuta maculata	20%	Emergent	Native	NL
Camphor-tree	Cinnamomum camphora	20%	Emergent	Native	I
Titi	Cyrilla racemiflora	20%	Emergent	Native	NL
Air Potato	Dioscorea bulbifera	20%	Emergent	Exotic	I
Sweetbay Magnolia	Magnolia virginiana	20%	Emergent	Native	NL
Common Ragweed	Ambrosia artemisiifolia	10%	Emergent	Native	NL
Golden Canna	Canna flaccida	10%	Emergent	Native	NL
Sedge	Cyperus spp.	10%	Emergent	Unknown	NL
Queen Anne's Lace	Daucus spp.	10%	Unknown	Exotic	NL
Water Hyacinth	Eichsornia crassipes	10%	Floating	Exotic	I
Baldwin's Spikerush, Roadgrass	Eleocharis baldwinii	10%	Submersed	Native	NL
Earpod Tree	Enterlobium spp.	10%	Emergent	Exotic	II
Dog Fennel	Eupatorium capillifolium	10%	Emergent	Native	NL
Dahoon Holly	Ilex cassine	10%	Emergent	Native	NL
Soft Rush	Juncus effusus var solutus	10%	Emergent	Native	NL
Mexican Primrosewillow, Long-stalked Lud	Ludwigia octovalvis	10%	Emergent	Native	NL
Browne's Savory	Micromeria brownei	10%	Emergent	Native	NL
Cinnamon Fern	Osmunda cinnamomea	10%	Emergent	Native	NL
Swampbay	Persea palustris	10%	Emergent	Native	NL
Frog-fruit, Carpetweed, Turkey Tangle Fogf	Phyla nodiflora	10%	Emergent	Native	NL
Pickerel Weed	Pontederia cordata	10%	Emergent	Native	NL
Mock Bishopsweed; Herbwilliam	Ptilimnium capillaceum	10%	Emergent	Native	NL
Virginia Live Oak	Quercus virginiana	10%	Terrestrial	Native	NL
Sabal Palm, Cabbage Palm	Sabal palmetto	10%	Terrestrial	Native	NL
Wapato, Common Arrowhead, Duck Potato	Sagittaria latifolia	10%	Emergent	Native	NL
Brazilian Pepper	Schinus terebinthifolius	10%	Emergent	Exotic	I
Saw Palmetto	Serenoa repens	10%	Terrestrial	Native	NL
Cypress	Taxodium spp.	10%	Emergent	Native	NL
Para Grass	Urochloa mutica	10%	Emergent	Exotic	I
Creeping Oxeye	Wedelia trilobata	10%	Emergent	Exotic	II