

Lake Munson Lake Vegetation Index Results (7-25-2013)

The Lake Vegetation Index score for Lake Munson was 61, placing the lake's vegetative community in the healthy category.

The Lake Vegetation Index (LVI) is a multi-metric index that evaluates how closely a lake's plant community resembles one that would be expected in a condition of minimal human disturbance. It is based on a rapid field assessment of aquatic and wetland plants as indicators of various effects of human disturbance over time. Plants respond to physical disturbances such as introduction

of exotic species or lakeshore alterations, and chemical disturbance such as introduction of excess nutrients, particulates, or herbicides from the surrounding land uses.

The LVI method is performed from a boat, and involves dividing a lake into 12 units and identifying plants in 4 of the 12 units. Plants are identified in the selected unit by a visual boat "drive by" and also via a transect approach. The resulting data is used to calculate the LVI and is evaluated according to the scoring system in Table 1. County staff are available to discuss this information as desired.

TABLE 1. Category names, ranges of values for LVI, and example descriptions of biological conditions typically found for that category.

Aquatic life use category	LVI Range	Description
Exceptional	78–100	Nearly every plant present is a species native to Florida, invasive taxa typically not found. About 30% of taxa present are identified as sensitive to disturbance.
Healthy	43–77	About 85% of plant taxa are native to Florida; invasive taxa present. Sensitive taxa have declined to about 15%.
Impaired	0–42	About 70% of plant taxa are native to Florida. Invasive taxa may represent up to 33% of total taxa. Less than 10% of the taxa are sensitive.

Sixty-nine species were found during the survey. The native species pond cypress (*Taxodium ascendens*) and coastal plain willow (*Salix caroliniana*) were the most dominant species in the lake. Other native shoreline vegetation included; red maple (*Acer rubrum*), buttonbush (*Cephalanthus occidentalis*) and swamp tupelo (*Nyssa sylvatica* var. *biflora*).

Unfortunately, silk tree (*Albizia julibrissin*), camphor tree (*Cinnamomum camphora*), wild taro (*Colocasia esculenta*), Chinese privet (*Ligustrum sinense*), Peruvian

primrosewillow (*Ludwigia peruviana*), Japanese climbing fern (*Lygodium japonicum*), small-leaf spiderwort (*Tradescantia fluminensis*) and Chinese tallow (*Sapium sebiferum*), all listed as Category I Invasive Exotics by the Florida Exotic Pest Control Council, were found in the littoral zone of Lake Munson. Tung tree (*Aleurites fordii*), alligator weed (*Alternanthera philoxeroides*), sweet autumn virginibower (*Clematis terniflora*) and rattlebox (*Sesbania punicea*) are Category II Invasive Exotics found in the lake.

Additionally, the exotic giant reed (*Arundo donax*) was also found in lake.

For a complete list of plants found during the LVI survey, please see Table 2.

TABLE 2. Scientific and common names of the plants identified during the Lake Munson LVI survey (7-25-13).

Scientific Name	Common Name
<i>Acer rubrum</i>	red maple
<i>Albizia julibrissin (I)</i>	silk tree
<i>Aleurites fordii (II)</i>	tung tree
<i>Alternanthera philoxeroides (II)</i>	alligator weed
<i>Ampelopsis arborea</i>	peppervine
<i>Apios americana</i>	ground nut
<i>Arundo donax</i>	giant reed
<i>Baccharis glomeruliflora</i>	silverling
<i>Bidens</i>	beggarticks
<i>Bignonia capreolata</i>	crossvine
<i>Boehmeria cylindrica</i>	false nettle
<i>Campsis radicans</i>	trumpet vine
<i>Carex comosa</i>	long-hair sedge
<i>Carex crus-corvi</i>	ravenfoot sedge
<i>Carex decomposita</i>	cypressknee sedge
<i>Carex lupuliformis</i>	false hop sedge
<i>Cephalanthus occidentalis</i>	buttonbush
<i>Cinnamomum camphora (I)</i>	camphor tree
<i>Clematis terniflora (II)</i>	sweet autumn virginsbower
<i>Colocasia esculenta(I)</i>	wild taro
<i>Crinum americanum</i>	swamp lily
<i>Cyperus odoratus</i>	fragrant flatsedge
<i>Echinochloa walteri</i>	coast cockspur grass
<i>Eupatorium sp.</i>	Eupatorium
<i>Galium sp.</i>	bedstraw
<i>Gelsemium sempervirens</i>	evening trumpet flower
<i>Hydrocotyle sp.</i>	water pennywort
<i>Hyptis mutabilis</i>	tropical bushmint
<i>Iris hexagona</i>	dixie iris
<i>Juncus effusus</i>	common rush
<i>Lemna minor</i>	common duckweed
<i>Leucothoe racemosa</i>	sweetbells
<i>Ligustrum sinense (I)</i>	Chinese privet
<i>Liquidambar styraciflua</i>	American sweetgum
<i>Ludwigia peruviana (I)</i>	Peruvian primrosewillow
<i>Lycopus rubellus</i>	taperleaf water horehound
<i>Lygodium japonicum (I)</i>	Japanese climbing fern
<i>Magnolia grandiflora</i>	southern magnolia
<i>Morus rubra</i>	red mulberry
<i>Myrica cerifera</i>	wax myrtle

<i>Nyssa aquatica</i>	water tupelo
<i>Nyssa sylvatica</i> var. <i>biflora</i>	swamp tupelo
<i>Panicum hemitomon</i>	maidencane
<i>Parthenocissus quinquefolia</i>	Virginia creeper
<i>Phanopyrum gymnocarpon</i>	savannah panicgrass
<i>Polygonum densiflorum</i>	denseflower knotweed
<i>Polygonum punctatum</i>	dotted smartweed
<i>Quercus laurifolia</i>	laurel oak
<i>Quercus nigra</i>	water oak
<i>Quercus virginiana</i>	southern live oak
<i>Rhynchospora inundata</i>	narrowfruit horned beaksedge
<i>Rubus argutus</i>	sawtooth blackberry
<i>Sabal palmetto</i>	cabbage palm
<i>Sagittaria latifolia</i>	broadleaf arrowhead
<i>Salix caroliniana</i>	coastal plain willow
<i>Sambucus canadensis</i>	American elderberry
<i>Sapium sebiferum (I)</i>	Chinese tallow tree
<i>Saururus cernuus</i>	lizard's tail
<i>Schoenoplectus californicus</i>	giant bulrush
<i>Sesbania punicea(II)</i>	rattlebox
<i>Smilax rotundifolia</i>	bullbrier
<i>Solidago</i> sp.	goldenrod
<i>Taxodium ascendens</i>	pond cypress
<i>Toxicodendron radicans</i>	eastern poison ivy
<i>Tradescantia fluminensis (I)</i>	small-leaf spiderwort
<i>Triadenum virginicum</i>	Virginia marsh St. John's wort
<i>Vitis rotundifolia</i>	muscadine
<i>Woodwardia areolata</i>	netted chain fern
<i>Woodwardia virginica</i>	Virginia chain fern

I - Category I Invasive Exotics

II - Category II Invasive Exotics

For additional information about the LVI, please review the Florida Department of Environmental Protection's [LVI Primer document](#).

For additional information about Category I and II invasive exotic plants, please visit the [Florida Exotic Pest Plant Council](#) webpage.

For more detailed information about the above species, please visit the [Atlas of Florida Vascular Plants](#) website.