

Forest (Hamilton County) Florida LAKEWATCH Water Chemistry Summary

Location: Latitude 30°31'56", Longitude 83°7'23"

Period of record: 14 sampling dates; March 23, 1996 to November 23, 1997

Lake Region (Griffith et al. 1997): Northern Peninsula Karst Plains (65-06)

Geologic formation (Brooks 1981a):

The geology is dominated by phosphatic sand, clayey fine sand, and clay of the Bone Valley Formation

Physiographic region (Brooks 1981b):

The lake lies in the Jennings Hills subdivision of the State Line Hills division of the Ocala Uplift District

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 14 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	86	142	189
Long-term total nitrogen concentrations (µg/L)	400	820	1387
Long-term total chlorophyll concentrations (µg/L)	3.0	39.5	161.7
Long-term Secchi depth (ft)	2.0	4.5	8.0

2001 Florida LAKEWATCH Data

No samples collected in 2001

Timber (Hamilton County)

Florida LAKEWATCH Water Chemistry Summary

Location: Latitude 30°32'22", Longitude 83°6'16"

Period of record: 27 sampling dates; March 26, 1996 to December 15, 2001

Surface Area (LAKEWATCH 2001): 82 acres

Lake Region (Griffith et al. 1997): Northern Peninsula Karst Plains (65-06)

Geologic formation (Brooks 1981a):

The geology is dominated by phosphatic sand, clayey fine sand, and clay of the Bone Valley Formation

Physiographic region (Brooks 1981b):

The lake lies in the Jennings Hills subdivision of the State Line Hills division of the Ocala Uplift District

Supplemental water chemistry data

Data reported are means from 1 sampling date:

pH	6.0	Total alkalinity (mg/L as CaCO ₃)	3.2
Conductance (µS/cm @ 25 °C)	60	Color (Pt-Co units)	41
Chloride (mg/L)	16.0		

Periodic water chemistry data

Numbers reported below are the minimum, average, and maximum value for the 4 sampling dates:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term color concentrations (Pt-Co units)	36	38	39

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 27 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	64	163	326
Long-term total nitrogen concentrations (µg/L)	770	1509	2563
Long-term total chlorophyll concentrations (µg/L)	2.0	70.8	447.3
Long-term Secchi depth (ft)	2.0	3.5	5.5

2001 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2001:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
Jan-09	132	1803	21.7	3.5
Feb-11	159	1420	3.7	.
Mar-09	181	1140	5.7	5.5
Apr-09	196	1003	6.0	5.2
May-09	233	1330	69.0	3.1
Jun-11	282	1170	33.3	3.3
Jul-10	318	1320	61.7	2.4
Aug-10	193	1280	61.7	3.3
Sep-12	188	1453	51.7	2.8
Oct-12	148	1400	64.3	2.8
Nov-15	156	1427	101.3	2.9
Dec-15	326	2393	447.3	2.3
2001 Average	209	1428	77.3	3.4

Timber (Hamilton County)
Florida LAKEWATCH Bacteria Summary

The following table lists bacteria concentrations found in Timber (Hamilton County). These data are part of a statewide survey that Florida LAKEWATCH is conducting to determine patterns in the abundance of total coliforms and fecal coliforms among Florida water bodies. This is a one-time sample and can be used to describe the bacteria concentrations for that day and not throughout a year. It is important to remember that results could differ over the course of one year or several years based on varying environmental factors such as changes in water temperature, rainfall, aquatic plant abundance, algae blooms and others.

May 29, 2001

Lake	County	Station	Station Location	Total Coliforms (MPN)	Fecal Coliforms (MPN)
Timber	Hamilton	1	Off vegetation	1400	0
Timber	Hamilton	2	Off vegetation	1900	0
Timber	Hamilton	3	Off vegetation	2100	0
Timber	Hamilton	4	Off vegetation	2200	100
Timber	Hamilton	5	Off vegetation	1600	0
Timber	Hamilton	6	Off vegetation	2100	0
Timber	Hamilton	7	Off vegetation	1200	100
Timber	Hamilton	8	Off vegetation	2400	300
Timber	Hamilton	9	Off vegetation	1740	40
Timber	Hamilton	10	Open water	1300	0
Timber	Hamilton	11	Open water	1600	0
Timber	Hamilton	12	Open water	780	0

The Florida Administrative Code (FAC), Section 62-302.530 defines criteria for both total and fecal coliform bacteria for Class III waters. The FAC states that total coliform bacteria shall not exceed a count or Most Probable Number (MPN) of 1,000 bacteria per 100 milliliters of water in 20% or more of the samples examined during any month, nor exceed a MPN of 2,400 at any individual station. The FAC also states that fecal coliform bacteria shall not exceed a MPN of 400 in 10% or more of the samples, nor exceed a MPN of 800 at any individual station.

Total coliform bacteria counts for Timber on May 29, 2001 ranged from 780 to 2400 MPN. Total coliform bacteria exceeded 1,000 MPN in 92% of the samples. Total coliform bacteria did not exceed 2,400 at any station. Total coliform bacteria were not within the acceptable range as defined by the Florida Administrative Code (FAC), Section 62-302.530.

Fecal coliform bacteria counts for Timber on May 29, 2001 ranged from 0 to 300 MPN. Fecal coliform bacteria exceeded 400 MPN in 0% of the samples. Fecal coliform bacteria did not exceed 800 at any station. Fecal coliform bacteria were within the acceptable range as defined by the Florida Administrative Code (FAC), Section 62-302.530.

Timber (Hamilton County)
Florida LAKEWATCH Aquatic Plant Summary

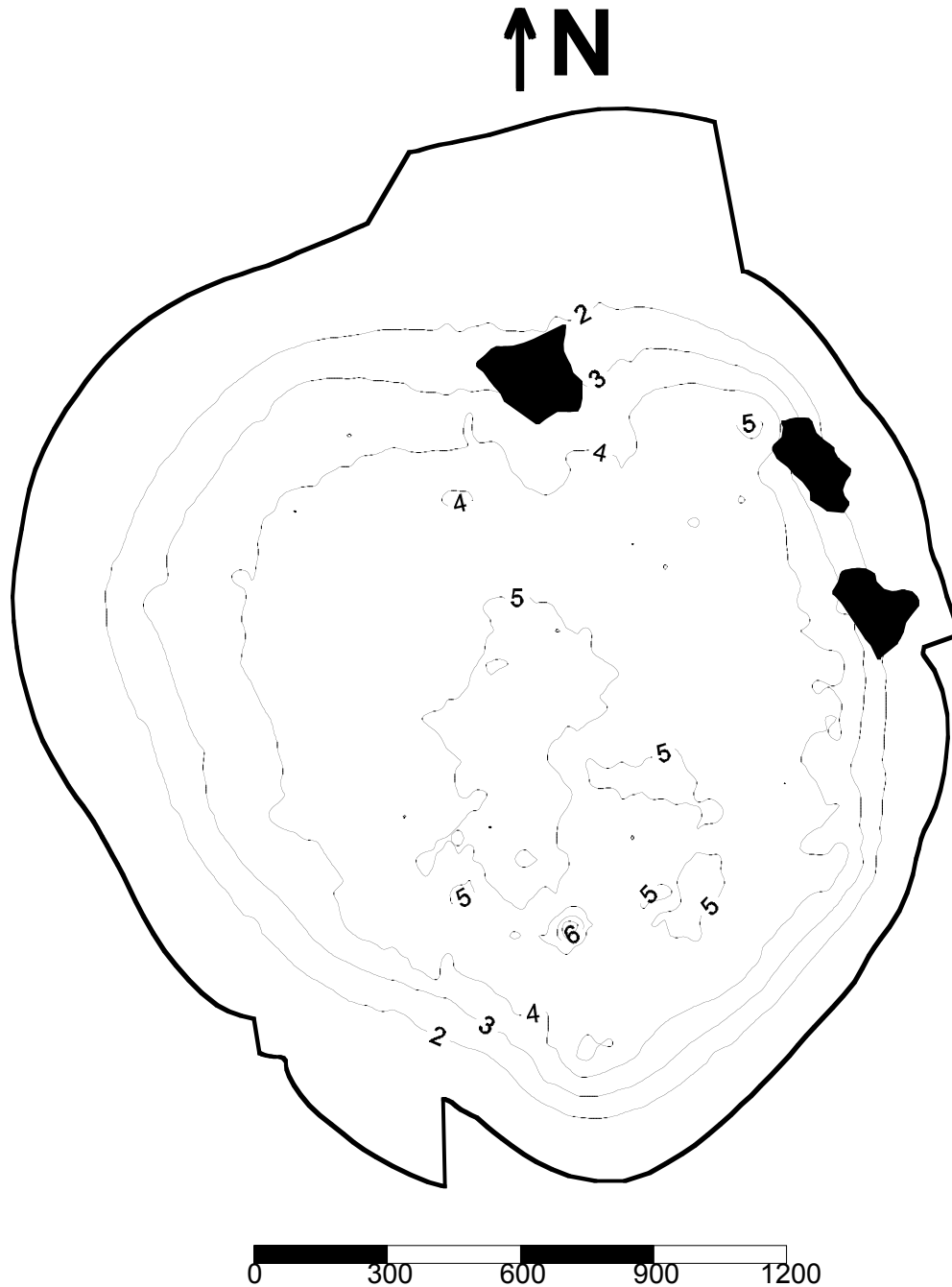
Aquatic plant data collected on May 29, 2001

Percent area covered with aquatic vegetation (PAC, %)	.
Percent of lake's volume filled with vegetation (PVI, %)	.
Average emergent plant biomass (kg wet wt/m ²)	9
Average floating-leaved plant biomass (kg wet wt/m ²)	6.9
Average submersed plant biomass (kg wet wt/m ²)	0
Average width of emergent and floating-leaved zone (ft)	27.4
Average lake depth (m)	.

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
water-pennywort	<i>Hydrocotyle umbellata</i>	100
bald cypress	<i>Taxodium distichum</i>	100
swamp tupelo	<i>Nyssa sylvatica</i>	80
smartweed	<i>Polygonum hydropiperoides</i>	70
maidencane	<i>Panicum hemitomon</i>	60
alligator-weed	<i>Alternanthera philoxeroides</i>	50
buttonbush	<i>Cephalanthus occidentalis</i>	50
wax myrtle	<i>Myrica cerifera</i>	40
water primrose	<i>Ludwigia octovalvis</i>	40
elderberry	<i>Sambucus canadensis</i>	30
duck-potato	<i>Sagittaria lancifolia</i>	20
common arrowhead	<i>Sagittaria latifolia</i>	20
spatterdock	<i>Nuphar luteum</i>	20
pickerelweed	<i>Pontederia cordata</i>	20
cat-tail	<i>Typha spp.</i>	10
elephant-ear	<i>Colocasia esculenta</i>	10
willow	<i>Salix spp.</i>	10
soft rush	<i>Juncus effusus</i>	10
red maple	<i>Acer rubrum</i>	10
sweetgum	<i>Liquidambar styraciflua</i>	10

Timber (Hamilton County)
Florida LAKEWATCH Bathymetric Map



Florida LAKEWATCH personnel created this map using differentially corrected global positioning equipment (GPS). Data were collected May 29, 2001. Scale and map contours are in feet and were generated using kriging technique in Surfer® software package (Golden CO). Islands are shaded in black. The center of this lake is located at Latitude 30°32'22" and Longitude 83°6'15". On this date, the lake surface area was calculated at 82 acres (33 hectares). This is only an approximate bathymetric map and should not be used for navigation.