DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	OGONTZ LAKE	**Lake Area (ha):**	31.28
Town:	LYMAN	**Maximum Depth (m)**	24.4
County:	GRAFTON	**Mean Depth (m):**	6.4
River Basin:	CONNECTICUT	**Volume (m^3):**	1989000
Latitude:	44°44'15" N	**Relative depth:**	3.9
Longititude:	71°71'54" W	**Shore Configuration:**	1.31
Elevation (ft) :	658	**Areal water load (m/yr):**	39.42
Shore length (m):	2600	**Flushing Rate (yr^{-1}):**	6.2
% Watershed Ponded:	2.5	**P retention coeff.:**	0.35
Watershed Area (ha)	2838.8	**Lake Type**	natural w/dam

BIOLOGICAL:		**03-Feb-04**	**28-Jul-03**
DOM. PHYTOPLANKTON (% TOTAL)	**#1**	sparse - no dominant	DINOBRYON 55%
	#2		COELOSPHAERIUM 30%
	#3		CERATIUM 7%
CHLOROPHYLL-A (ug/L)			4.17
DOM. ZOOPLANKTON (% TOTAL)	**#1**	NAUPLIUS LARVA 46%	ACTINOPHRYS 61%
	#2	CALANOID COPEPODS 23%	POLYARTHRA 14%
	#3	CYCLOPOID COPEPODS 23%	NAUPLIUS LARVA 11%
ROTIFERS/LITER		1	24
MICROCRUSTACEA/LITER		12	22
ZOOPLANKTON ABUNDANCE (#/L)		13	133
VASCULAR PLANT ABUNDANCE			Common
SECCHI DISK TRANSPARENCY (m)			4.7
BOTTOM DISSOLVED OXYGEN (mg/L)		6.7	0.4
BACTERIA (E. coli, #/100ml)	**#1**		2
	#2		3
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m):	4
Hypolimnion volume (m^3):	469000
Anoxic Volume (m^3):	119000

CHEMICAL:

Lake: OGONTZ LAKE
Town: LYMAN

	03-Feb-04		28-Jul-03		
DEPTH (M)	7.0	14.0	1.0	5.0	17.0
pH (units)	6.5	6.7	7.3	7.0	6.8
A.N.C. (Alkalinity)	21.4	31.3	23.8	24.8	39.3
NITRATE NITROGEN	0.17	0.26	0.17		0.19
TOTAL KJELDHAL NITROGEN	0.30	0.40	< 0.25	< 0.25	0.30
TOTAL PHOSPHORUS	0.005	0.007	0.006	0.007	0.011
CONDUCTIVITY (umhos/cm)	102.6	118.5	116.0	105.7	137.6
APPARENT COLOR (CPU)	19	24	20	20	20
MAGNESIUM			1.62		
CALCIUM			13.3		
SODIUM			5.6		
POTASSIUM			0.51		
CHLORIDE	8	8	9		
SULFATE	6	6	6		7
TN : TP	94	94	49		45
CALCITE SATURATION INDEX					

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2003

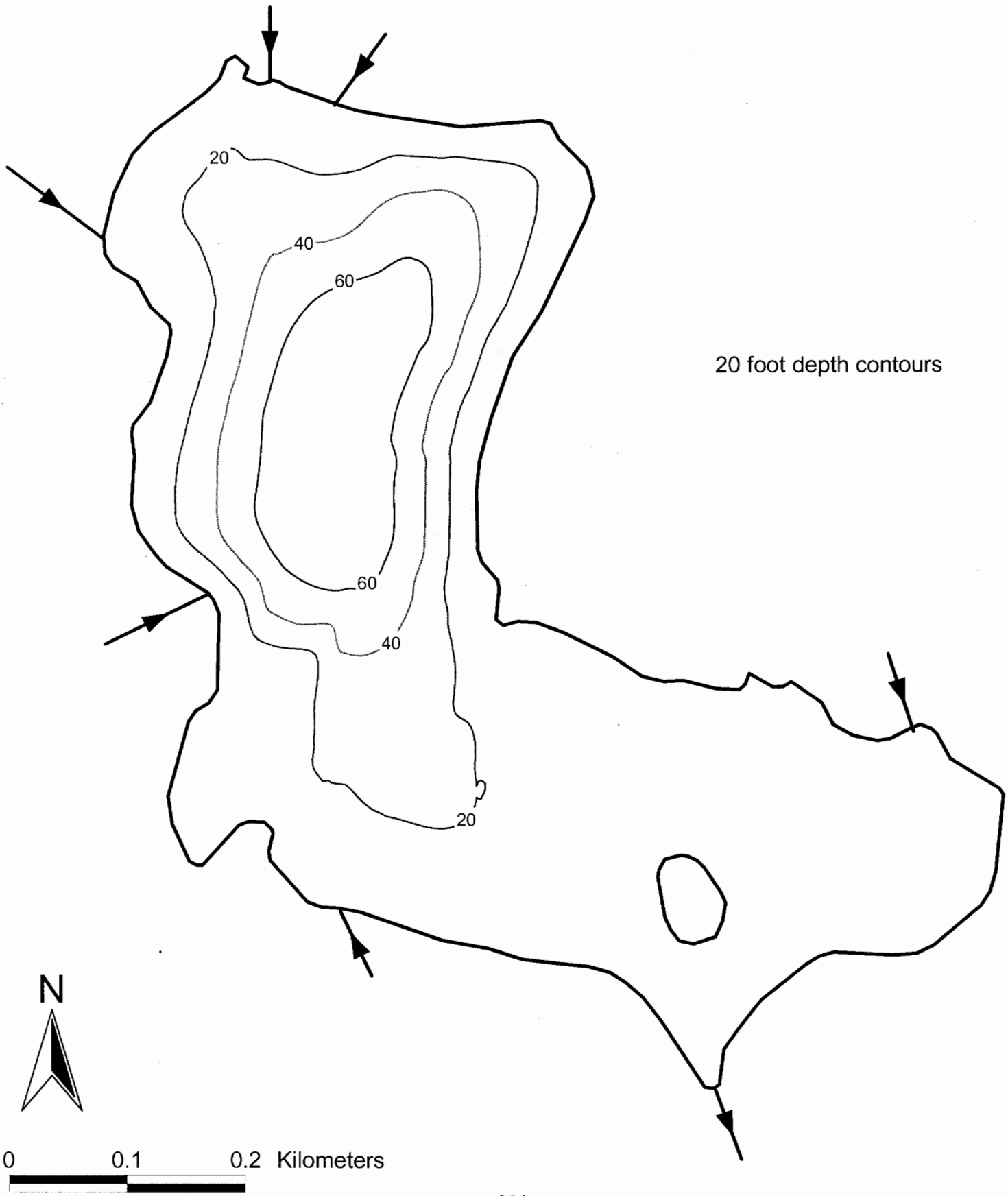
D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
5	2	3	1	11	MESO

COMMENTS:

1. Previously surveyed in 1982. No change in trophic class and little change in trophic parameters between the two years.
2. Rough, unimproved launch site.
3. Relatively undeveloped shoreline; one juvenile camp and 5 or 6 cottages.
4. Summer phytoplankton was not abundant but a cyanobacteria (*Coelosphaerium*) was the second most dominant alga.
5. pH and ANC values were elevated (which is good) above typical values for NH lakes overall, but were not unusual for lakes in this part of the state.

Ogontz Lake

Lyman



FIELD DATA SHEET

LAKE: OGONTZ LAKE **TOWN:** LYMAN

DATE: 7/28/03 **WEATHER:** Partly sunny, cool & breezy

	DEPTH (M)	TEMP (^{o}C)	DISSOLVED OXYGEN (mg/L)	PERCENT SATURATED
	0.1	22.8	8.7	101.0
	1.0	22.8	8.7	100.8
	2.0	22.7	8.7	100.4
	3.0	21.6	8.8	99.9
	4.0	17.4	12.3	128.5
	5.0	12.9	9.3	87.7
	6.0	10.1	8.4	74.5
	7.0	8.2	6.6	55.7
	8.0	7.1	6.0	49.3
	9.0	6.4	4.8	39.3
	10.0	6.0	4.3	34.9
	11.0	5.6	3.9	31.0
	12.0	5.3	3.1	24.6
	13.0	5.2	2.0	16.0
	14.0	5.1	1.3	10.4
	15.0	4.9	0.3	2.0
	16.0	4.8	0.2	1.7
	17.0	4.8	0.2	1.7
	18.0	4.8	0.3	2.0
	19.0	4.9	0.3	2.3
	20.0	4.9	0.3	2.3
	21.0	5.2	0.4	3.0

SECCHI DEPTH (m) : 4.7

BOTTOM DEPTH (m) : 21.5

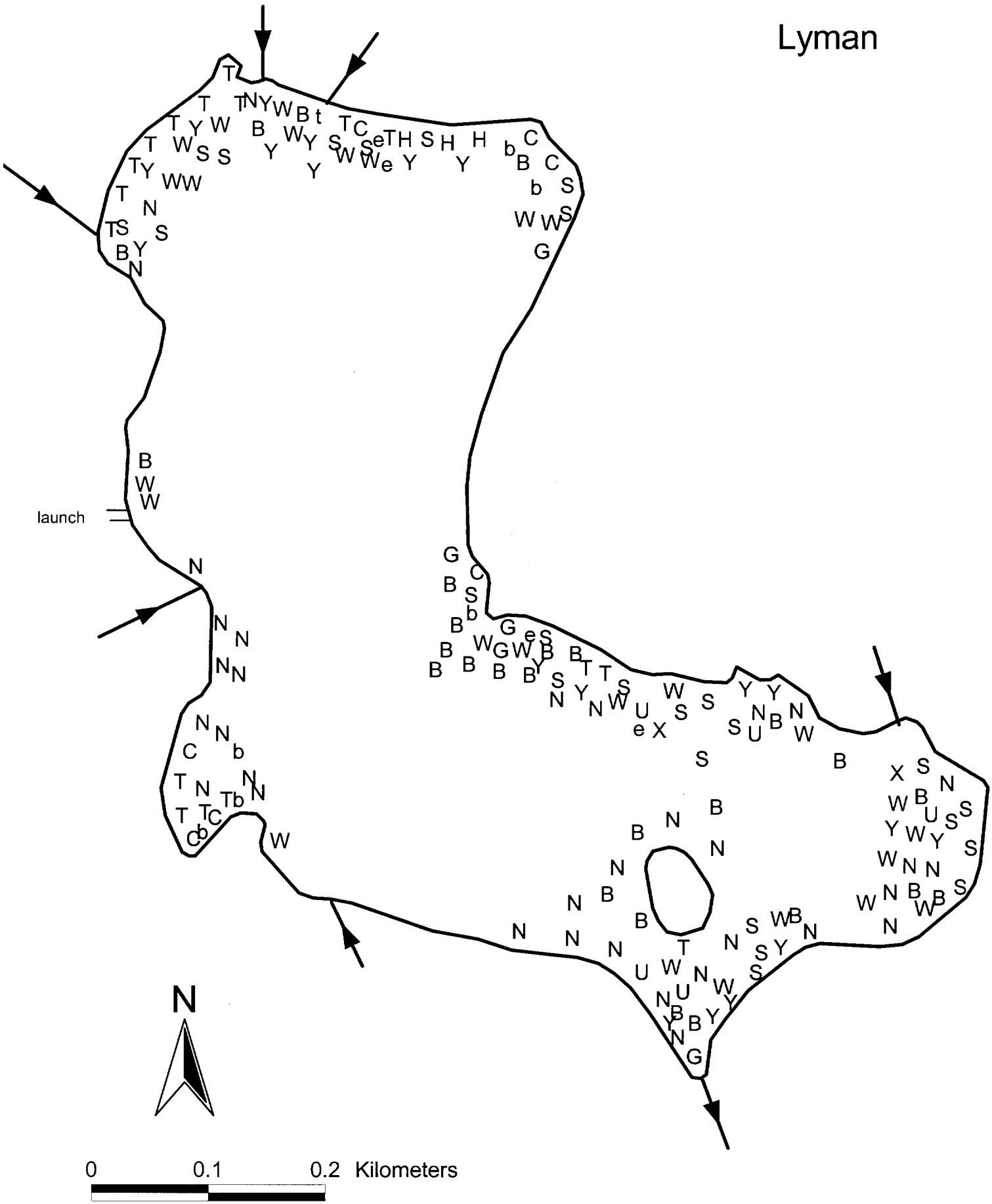
TIME: 1145

COMMENTS:

Note the D.O. maxima on the thermocline at 4 meters.

Ogontz Lake

Lyman



AQUATIC PLANT SURVEY

LAKE: OGONTZ LAKE **TOWN:** LYMAN **DATE:** 7/28/03

KEY	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
W	Potamogeton	Pondweed	Common
B	Brasenia schreberi	Water shield	Scat/Common
N	Nymphaea	White water lily	Common
C	Cyperaceae	Non-flowering sedge	Scattered
T	Typha	Cattail	Scattered
S	Sparganium	Bur reed	Scattered
b	Scirpus	Bulrush	Sparse
U	Utricularia	Bladderwort	Sparse
Y	Nuphar	Yellow water lily	Scattered
d	Dulichium arundinaceum	Three-way sedge	Scattered
G	Gramineae	Grass family	Sparse
X		Sterile thread-like leaf	Sparse
e	Eleocharis	Spike rush	Sparse
H	Equisetum	Horsetail	Sparse
t	Potentilla palustris	Marsh cinquefoil	Sparse
		OVERALL ABUNDANCE :	Common

GENERAL OBSERVATIONS :

1. Plants were abundant in the shallow, southwest end but were scattered elsewhere, for an overall rating of 'common'.