

Weyauwega Lake
Lake Survey
Waupaca

MACROPHYTON SURVEY

WEYAUWEGA LAKE - WAUPACA COUNTY

Date - July 19, 1977

Conducted by: Dennis C. Weisensel, Assisted by Tom Bahti

The purpose of the macrophyton survey on Weyauwega Lake was to establish a background listing of macrophytes presence and their relative abundance. It is anticipated that an over winter drawdown will occur during the winter of 1977-78. The over winter drawdown is being utilized to provide control on over abundant macrophyte populations in the lake. Interest was generated by Area fish management personnel as to the effect the drawdown would have on macrophyte populations.

Survey Procedure:

Weyauwega Lake was divided into nine randomly placed north-south transects. Twenty-seven sampling stations were established along the nine transects. Sampling was conducted by sight and raking techniques sufficient times to insure that most macrophyton present were noted. Sampling was conducted in the general areas indicated on the attached map. The macrophyton present were keyed to species and given an abundance rating. The following table describes the rating applied each plant that was found in the station areas:

RATING	DESCRIPTION	CLARIFICATION
1.	Present	1 or 2 plants in the area
2	Scarce	Several plants found in the area
3	Moderate	Plant present in a balanced number
4	Dense	Plant dominating the community with heavy growths
5	Very dense	Plant reaching abnormally heavy growths, creating a dominant matted proportion

Several factors should be kept in mind when reviewing this report.

1. The report relates mid to advanced summer conditions. This is due to the sampling date and the abnormally warm, sunny spring which occurred this year. Early fruiting macrophyton such as Potamogeton crispus may have been in extreme abundance earlier in the summer and the majority have died away by the time the survey was conducted.
2. Sampling was conducted in the general areas pinpointed on the map. A species in low abundance may be present in the area but was not noted. The relative abundance of the individual species would be very low, perhaps 1 or 2 individual plants.
3. The survey should provide ample information to determinations for future alterations in the macrophyte population due to over winter drawdown or aquatic plant harvesting that may be conducted on the lake.

General Conclusions:

Weyauwega Lake is a shallow basin impoundment with an over abundant macrophyton population. This condition is not unique and has been noted in many comparable impoundments throughout the State. The predominant macrophyton present are Elodea and Ceratophyllum. Macrophyton populations throughout the lake are generally abnormally abundant.

The following macrophyton were found at the listed station:

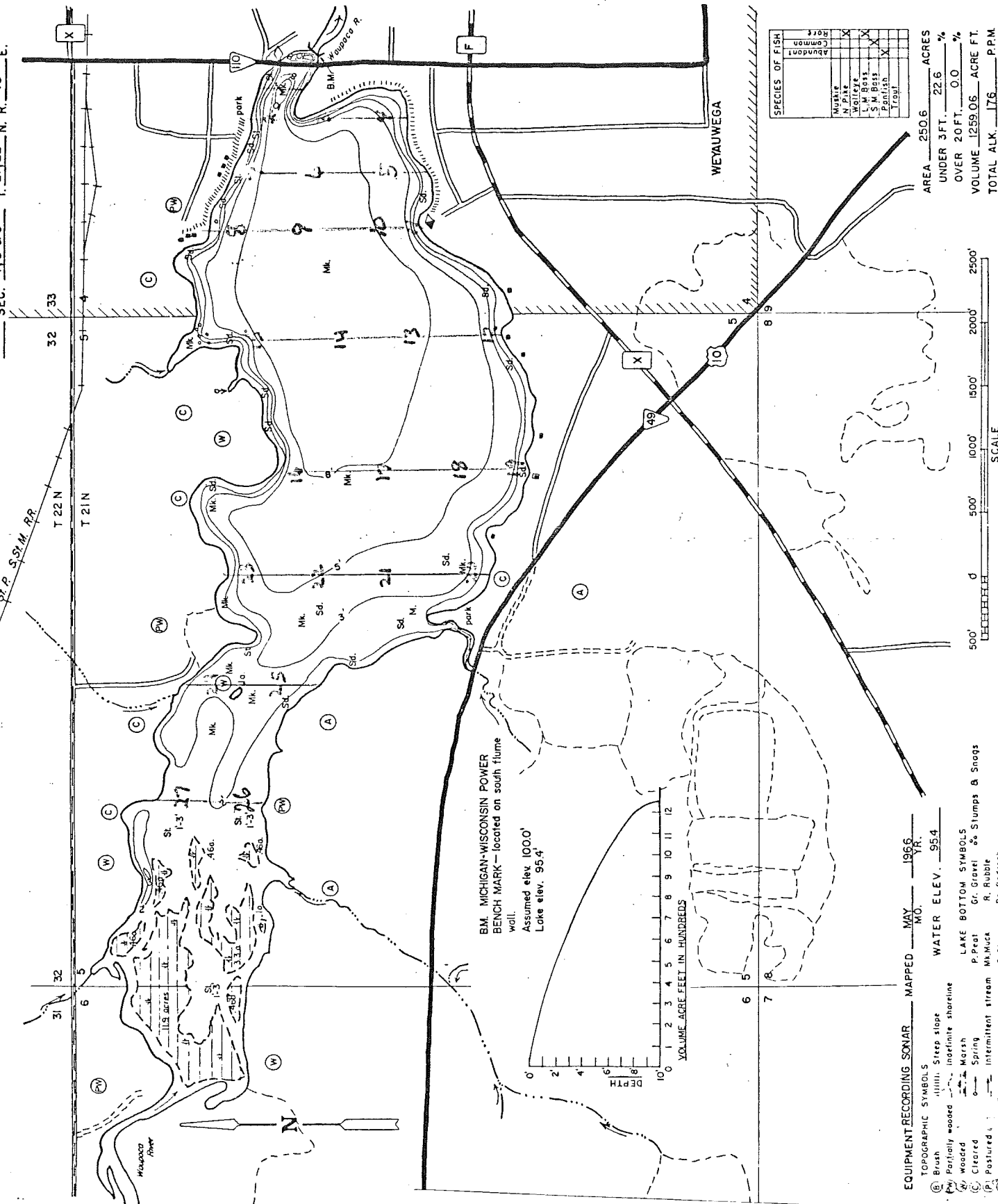
STATION	RATING	SPECIES
1	3	<u>Ceratophyllum demersum</u>
	3	<u>Elodea canadensis</u>
2	1	<u>Ceratophyllum demersum</u>
3	4	<u>Elodea canadensis</u>
4	3	<u>Ceratophyllum demersum</u>
	3	<u>Elodea canadensis</u>
5	5	<u>Ceratophyllum demersum</u>
	4	<u>Elodea canadensis</u>
	1	<u>Potamogeton crispus</u>
	1	<u>Potamogeton zosteriformis</u>
6	3	<u>Ceratophyllum demersum</u>
	3	<u>Heteranthera dubia</u>
	3	<u>Potamogeton crispus</u>
	2	<u>Potamogeton foliosus</u>
	3	<u>Potamogeton zosteriformis</u>
7	5	<u>Ceratophyllum demersum</u>
	2	<u>Elodea canadensis</u>
	1	<u>Potamogeton zosteriformis</u>
8	5	<u>Ceratophyllum demersum</u>
	3	<u>Elodea canadensis</u>
9	4	<u>Ceratophyllum demersum</u>
	4	<u>Elodea canadensis</u>
	1	<u>Potamogeton zosteriformis</u>
10	1	<u>Ceratophyllum demersum</u>
	4	<u>Elodea canadensis</u>
11	4	<u>Ceratophyllum demersum</u>
	4	<u>Elodea canadensis</u>
	1	<u>Potamogeton crispus</u>
	1	<u>Potamogeton pectinatus</u>
	1	<u>Potamogeton zosteriformis</u>

STATION	RATING	SPECIES
12	3	<u>Ceratophyllum demersum</u>
	3	<u>Elodea canadensis</u>
	1	<u>Myriophyllum sp.</u>
	1	<u>Potamogeton crispus</u>
	1	<u>Potamogeton pectinatus</u>
	1	<u>Potamogeton zosteriformis</u>
13	5	<u>Ceratophyllum demersum</u>
	4	<u>Elodea canadensis</u>
	1	<u>Potamogeton crispis</u>
14	None	
15	5	<u>Ceratophyllum demersum</u>
	1	<u>Elodea canadensis</u>
	1	<u>Potamogeton zosteriformis</u>
16	1	<u>Ceratophyllum demersum</u>
	1	<u>Potamogeton rabbinsii</u>
17	3	<u>Elodea Canadensis</u>
		<u>Potamogeton rabbinsii</u>
18	5	<u>Ceratophyllum demersum</u>
	5	<u>Elodea canadensis</u>
	2	<u>Potamogeton crispus</u>
	2	<u>Potamogeton zosteriformis</u>
19	1	<u>Ceratophyllum demersum</u>
	2	<u>Elodea canadensis</u>
	2	<u>Myriophyllum sp.</u>
	1	<u>Potamogeton rabbinsii</u>
	1	<u>Potamogeton zosteriformis</u>
20	1	<u>Ceratophyllum demersum</u>
	4	<u>Elodea canadensis</u>
	1	<u>Potamogeton rabbinsii</u>
21	4	<u>Ceratophyllum demersum</u>
	3	<u>Elodea canadensis</u>
	1	<u>Potamogeton zosteriformis</u>
22	4	<u>Ceratophyllum demersum</u>
	5	<u>Elodea canadensis</u>
	1	<u>Lemma sp.</u>
	1	<u>Potamogeton zosteriformis</u>
23	5	<u>Ceratophyllum demersum</u>
	5	<u>Elodea canadensis</u>
	1	<u>Potamogeton crispus</u>
	1	<u>Potamogeton rabbinsii</u>

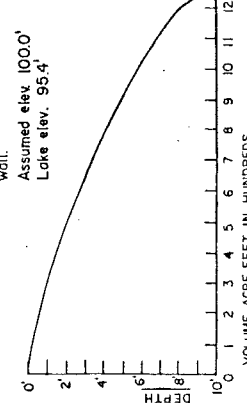
<u>STATION</u>	<u>RATING</u>	<u>SPECIES</u>
24	2	<u>Ceratophyllum demersum</u>
	2	<u>Elodea canadensis</u>
	1	<u>Lemna sp.</u>
	3	<u>Potamogeton rabbinsii</u>
	1	<u>Potamogeton zosteriformis</u>
	1	<u>Sedge</u>
25	1	<u>Ceratophyllum demersum</u>
	1	<u>Lemna sp.</u>
	4	<u>Potamogeton rabbinsii</u>
	1	<u>Sedge</u>
26 and 27		Primarily emergent vegetation such as cattails, sedges, and arrowheads

Dennis C. Weisner

8-1-77



**BM. MICHIGAN-WISCONSIN POWER
BENCH MARK** - located on south flume
wall.
Assumed elev. 1000'
Lake elev. 95.4'



SPECIES OF FISH	
Abundant	
Common	
Fair	
Rare	X
Muskie	X
Northern Pike	X
Walleye	X
L. M. Bass	X
S. M. Bass	X
Panfish	X
Trout	X

AREA 250.6 ACRES
 UNDER 3 FT. 22.6 %
 OVER 20 FT. 0.0 %
 VOLUME 1259.06 ACRE FT.
 TOTAL ALK. 176 P.P.M.
 SHORELINE 7.33 MILES
 MAX. DEPTH 10' FEET

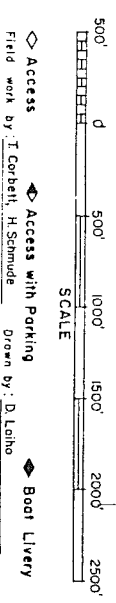
- EQUIPMENT RECORDING SONAR MAPPED MAY 1965**
- TOPOGRAPHIC SYMBOLS**
 [Symbol] Shrub
 [Symbol] Partly wooded
 [Symbol] Wooded
 [Symbol] Cleared
 [Symbol] Pastured
 [Symbol] Agricultural
 [Symbol] Bench Mark
 [Symbol] Dwelling
 [Symbol] Reservoir
- WATER ELEV. '54**
- LAKE BOTTOM SYMBOLS**
 [Symbol] P. Peat
 [Symbol] G. Gravel
 [Symbol] R. Rubble
 [Symbol] M. Muck
 [Symbol] C. Clay
 [Symbol] M. M. M. M. M.
 [Symbol] Sd. Sand
 [Symbol] St. Silt
- Other Symbols**
 [Symbol] Steep slope
 [Symbol] Indefinite shoreline
 [Symbol] Marsh
 [Symbol] Spring
 [Symbol] Intermittent stream
 [Symbol] Permanent inlet
 [Symbol] Permanent outlet
 [Symbol] Dam

Field work by T. Corbett, H. Schumacher, D. Lallo
 Drawn by D. Lallo

Access with Parking Access Boat Livery

1-5
1-scarce
5-very abundant

- EQUIPMENT RECORDING SONAR MAPPED MAY 1966
MO. YR.
- TOPOGRAPHIC SYMBOLS
 (B) Brush
 (W) Partially wooded
 (C) Cleared
 (A) Pastured
 (F) Agricultural
 (M) BM Bench Mark
 (D) Dwelling
 (R) Reservoir
- WATER ELEV. 95.4
- LAKE BOTTOM SYMBOLS
 P, peat Gr, gravel Sd, Stumps B, Snags
 M, Muck R, Rubble B, Bedrock
 T, Submerged vegetation
 Sd, Sand
 St, Still
 A, Flooding vegetation
- STEADY SLOPE
 Indefinite shoreline
 Marsh
 Spring
 Intermittent stream
 Permanent inlet
 Permanent outlet
 Dam



AREA 250.6 ACRES
 UNDER 3 FT. 22.6 %
 OVER 20 FT. 0.0 %
 VOLUME 1289.06 ACRE FT.
 TOTAL ALK. 176 P.P.M.
 SHORELINE 7.33 MILES
 MAX. DEPTH 10 FEET

SPECIES OF FISH	Abundant	Common	Rare
Muskie			
N Pike	X		
Walleye	X		
L M Bass	X		
S M Bass	X		
Perch	X		
Trout			X

