Aquatic Macrophyte Assessment of Forest Lake, Fond Du Lac Co., WI

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Objective: An informal assessment of the Forest Lake macrophyte community was conducted on 10 July 2006. The objective was to visually assess the abundance of *Myriophyllum spicatum* (Eurasian Watermilfoil, hereafter termed EWM). General observations of Forest Lake and its macrophyte community were made by boat with Mr. C. Kendziorski and in the water using snorkeling equipment (Gerber).

Macrophytes: Aquatic macrophyte distribution and abundance have been formally assessed for Forest Lake in the past (see Gerber 2000 and 2004). For this informal assessment, aquatic macrophytes were visually assessed from a boat at and between 20 transect points around the entire lake. Healthy EWM stems were found sporadically around the north end of the lake but growth was heaviest at transect 4 (see attached map for transect site locations) at about 5 ft water depth. Additional areas on the northern and southwestern parts of the lake where large stands of EWM were found on the 2000 survey were also checked. No EWM stems were visually found at these north or southwestern sites. On the east side of the lake, the heaviest stand was in about 3 ft of water at transect 20. Few EWM stems were found on the south and west sides of the lake.

Good native macrophyte growth (e.g., *Najas*, *Chara*, *Potamogeton* spp. *Ceratophyllum*) was found throughout the lake. The native Watermilfoil (Myriophyllum sibericum) was also found sporadically throughout the lake. Heavier native milfoil stands were found at transect sites 2, 8, and 11. This is positive since during the last visual survey (Gerber 2003) no native milfoil was found at any of the transect sites on the lake.

Conclusions: Healthy EWM is still present in the lake based on this visual survey and the plant samples collected from transect sites 1, 2, 5, 8, 20 (June 2006) and sent to me for plant identification verification by C. Kendziorski. Herbicide treatments appeared to have been effective in reducing milfoil growth. Healthy stands of EWM plants were observed during this brief assessment, however, it should be noted that these were small in size. Those EWM stands of greatest concern were found at transect sites 4 and 20. EWM and its growth should continue to be monitored. Monitoring milfoil using snorkeling or scuba equipment provides a good visual assessment of milfoil growth and distribution. Continued monitoring is important since large scale recolonization of Forest Lake from even small patches of EWM is possible.

Milfoil management is a site specific process. Different treatment strategies (i.e., mechanical, chemical, biological) for milfoil have been outlined in Hoffman & Kearns (1997). Each strategy has its advantages and disadvantages. The heaviest EWM growth can probably be controlled by hand pulling, taking care to remove rooted plant material and plant fragments, and/or spot treating the sites with herbicide (contact local WI DNR for permitting requirements).

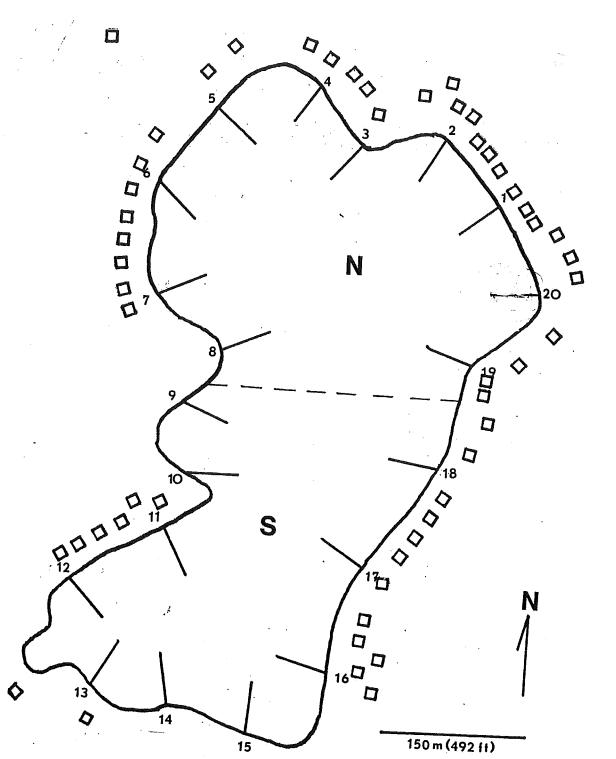


Figure 1. Transect locations for Forest Lake. Squares represent cottages.

References:

Gerber, D.T. 2004. Aquatic Macrophyte Survey of Forest Lake, Fond Du Lac Co., Wisconsin

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Gerber, D.T. 2000. Floating-leafed and submersed aquatic macrophyte distribution and abundance with emphasis on Eurasian Watermilfoil (*Myriophyllum spicatum*) in Forest Lake, Fond Du Lac County, Wisconsin. Transactions 88: 57-66.

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