## Lucerne Lake - Waushara County

By: Tim Rasman

Lucerne Lake in south central Waushara County is a 48 acre maximum 33 feet deep hard water seepage lake. Quarterly chemistry's have been taken since 1980; this program will continue through the Spring of 1982. Dissolved phosphorus levels since 1980 were below the detectable limit. Nitrogen concentrations bordered on Sawyer's limits. Nitrogen/phosphorus levels were not calculated because of the low phosphorus. Chlorophyll a readings were all below the detectable limit except for one 3 ug/l reading. Secchi transparency ranged from 3.1 to 5 meters. Oxygen was present in the hypolimnion throughout the study. Vegetation is limited. Chara was present in isolated patches Potamogeton natans. P. amplifolius, Nymphae (sp.), Myriophyllum (sp.), Heteranthera, and Scirpus (sp.) were found in limited abundance.

Lucerne is a class 2 oligotrophic-mesotrophic lake with low productivity.