

Long Lake - Waupaca County

By: Tim Rasman

Long Lake in southwest Waupaca County is one of 22 lakes in the chain. Long is a 104 acre drainage lake with a maximum depth of 76 feet. Quarterly chemistry's have been taken since July 1980, this program will continue through the Spring of 1982. Phosphorus levels were all below Sawyer's limits. Nitrogen levels were high on all sample dates. Some enrichment with increases in aquatic vegetation occurs. Secchi disc readings were all greater than 1.5 M averaging around 4.0 M. Nitrogen/phosphorus ratios were very high indicating the low phosphorus and high nitrogen concentrations. The highest chlorophyll a was 6 ug/l. Oxygen depletion occurred in the hypolimnion, however, the area lacking oxygen wasn't that extensive. Chara was most abundant. Najas⁵ (sp.) and Nymphae (sp.) were present. The following varieties of Potamogeton were common: zosteriformis, amplifolius, pectinatus. Myriophyllum (sp.) and Vallisneria were also present. Alkalinities are indicative of hard water and typical of other surface waters in the area.

Long Lake is a class 3 mesotrophic-oligotrophic body of water.