

BAILEY LAKE - WAUPACA COUNTY

by
Tim Rasman

Bailey Lake in southwest Waupaca County is a 14 acre maximum 30 feet deep hardwater drainage lake. Chemical monitoring by Department of Natural Resources began in 1980 and will continue through the spring of 1982. Dissolved phosphorus levels were below the detectable limit on five sample dates. Inorganic nitrogen was somewhat high. Nitrogen/phosphorus ratios were not calculated. Secchi disc transparency was greater than 1.5 M on all samples. Chlorophyll a was 6 ug/l on one day and below the detectable limit on 5 other sample days. Some oxygen depletion occurred in the hypolimnion that doesn't threaten a possible winter kill or stress on the aquatic life. Alkalinities were high, providing sufficient buffer for acid deposition.

Nuphar (sp.) was abundant in certain sections of the lake providing potential fish habitat; Chara was also abundant. Rushes and Nymphae were abundant in other areas of the lake. Vallisneria (sp.) was common. The following Potamogetons were present: natans, amplifolius, and zosteriformis. The lake is a class 2 oligotrophic-mesotrophic system.

TR:cs
11/81