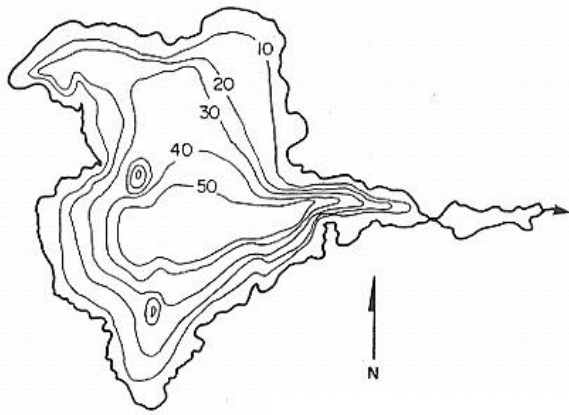


Lake Eaton

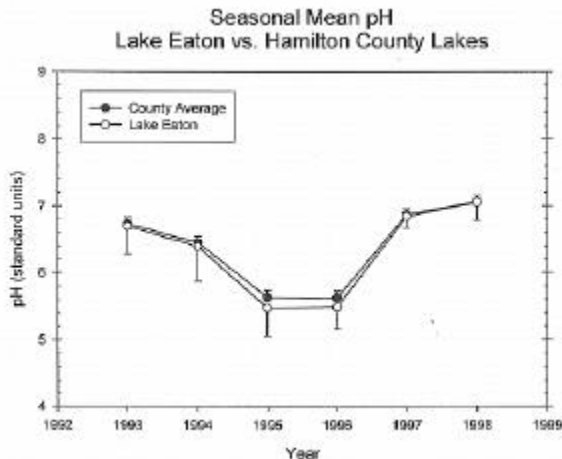


Temperature

Lake Eaton was thermally stratified during the month of August in each of the study years (1993 - 1998). The epilimnion was warmest in August 1995, when the surface temperature was 24° C. The epilimnion was coolest in August 1993, when the surface temperature was 21° C. In August of each year, the epilimnion was approximately 5 meters thick, the mid-thermocline depth was around 7.5 meters, and the top of the hypolimnion began at about 10 meters. The thermal profiles for August were similar each year.

Dissolved Oxygen

The hypolimnion of Lake Eaton was poorly oxygenated during the month of August in each of the study years (1993 - 1998), except for 1994 and 1997. Although there was no overall trend toward oxygen depletion, the dissolved oxygen concentrations were between 0 mg/L and 2 mg/L below 14 meters in August of each year. In general, the highest hypolimnetic dissolved oxygen levels occurred in August 1997 and the lowest occurred in August 1998. Lake Eaton experienced metalimnetic oxygen maxima at around 8 meters during August. The dissolved oxygen profiles were relatively similar each year.



Location

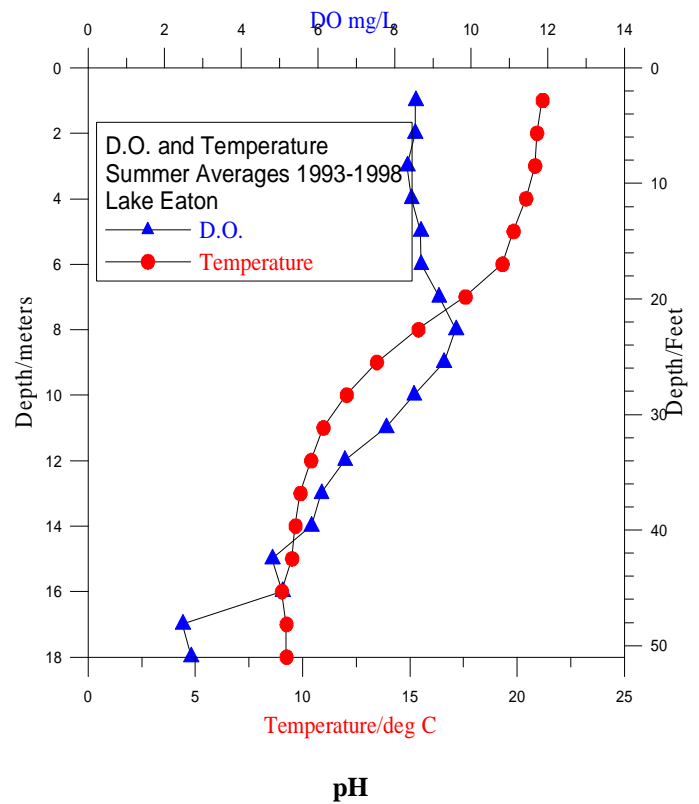
Pond Number: 060248
 Watershed: St. Lawrence River
 County: Hamilton
 Topographic Quadrangle: Blue Mountain

Sample Site

Latitude: 43° 58.662'
 Longitude: 74° 27.837'

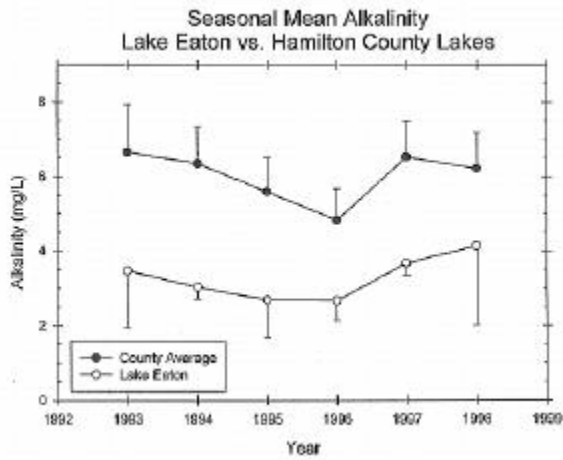
Morphometry

Surface Area: 556 Ac.
 Mean Depth: 26 Ft.
 Maximum Depth: 56 Ft.
 Volume: 14,456 Ac./Ft.
 Watershed Area: 3,157 Ac.
 Hydraulic Retention Time: 2.0 Yr.
 Shoreline Length: 4.8 Mi.
 Elevation: 1,721 Ft.
 Water Quality Classification: AA(T)
 Trophic State: Oligotrophic



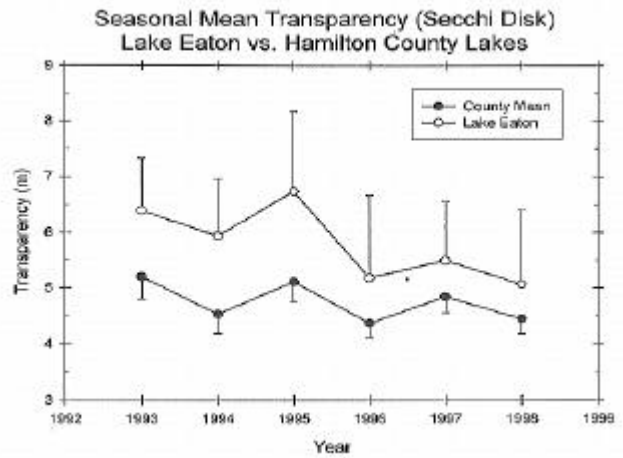
The pH trend for Lake Eaton was comparable to the county mean trend, with a low of 5.47 in 1995, and a high of 7.05 in 1998.

Lake Eaton



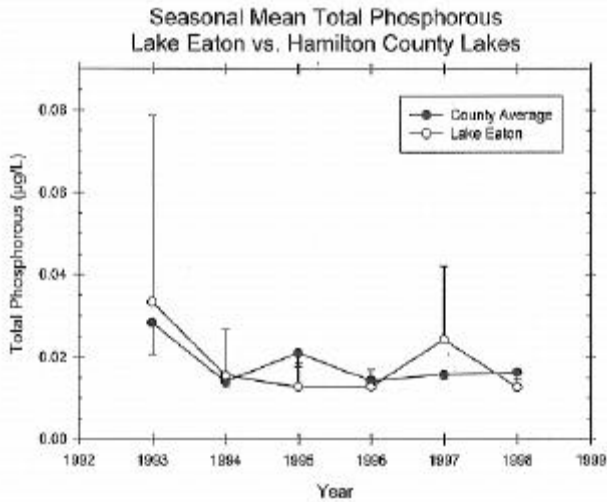
Alkalinity

The alkalinity trend for Lake Eaton was similar to the county mean trend, with a low of 2.67 mg/L in 1996, and a high of 4.13 mg/L in 1998. Overall, the mean alkalinity values were lower than the county mean values.



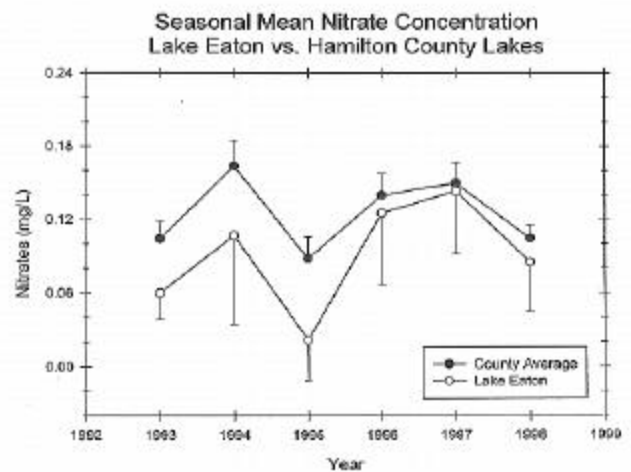
Transparency

The transparency trend in Lake Eaton was similar to the county mean trend, with a low of 5.07 m in 1998, and a high of 6.74 m in 1995. Overall, the mean transparency values were higher than the county mean values.



Total Phosphorus

The total phosphorus trend for Lake Eaton was comparable to the county mean trend. A low of 0.013 µg/L occurred in 1995, 1996 and 1998, and a high of 0.033 µg/L occurred in 1993.



Nitrate

The nitrate concentration trend in Lake Eaton was similar to the county mean trend, with a low of 0.02 mg/L in 1995, and a high of 0.14 mg/L in 1997. Overall, the mean nitrate concentrations were slightly lower than the county mean values.