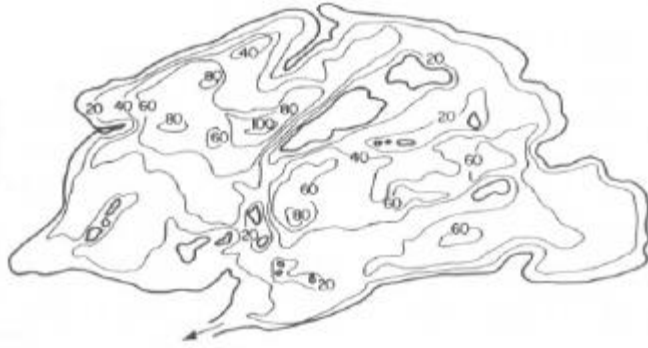


Blue Mountain Lake

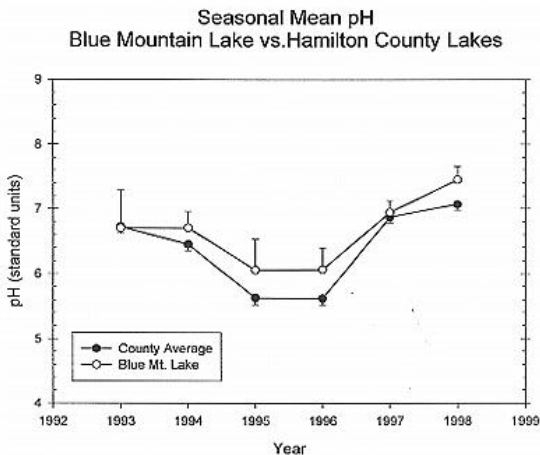


Temperature

Blue Mountain Lake 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 6 meters thick, the mid-thermocline depth was around 10 meters, and the top of the hypolimnion began at about 15 meters. The thermal profiles for August were similar for each of the study years.

Dissolved Oxygen

The hypolimnion of Blue Mountain Lake was well oxygenated during the month of August in each of the study years (1993 - 1998). Dissolved oxygen concentrations in the hypolimnion were above 5 mg/L each August. In general, the highest hypolimnetic dissolved oxygen levels occurred in August 1996 and the lowest occurred in August 1994. Blue Mountain Lake experienced metalimnetic oxygen maxima at around 10 meters during August. The dissolved oxygen profiles were relatively similar for each of the study years.



Location

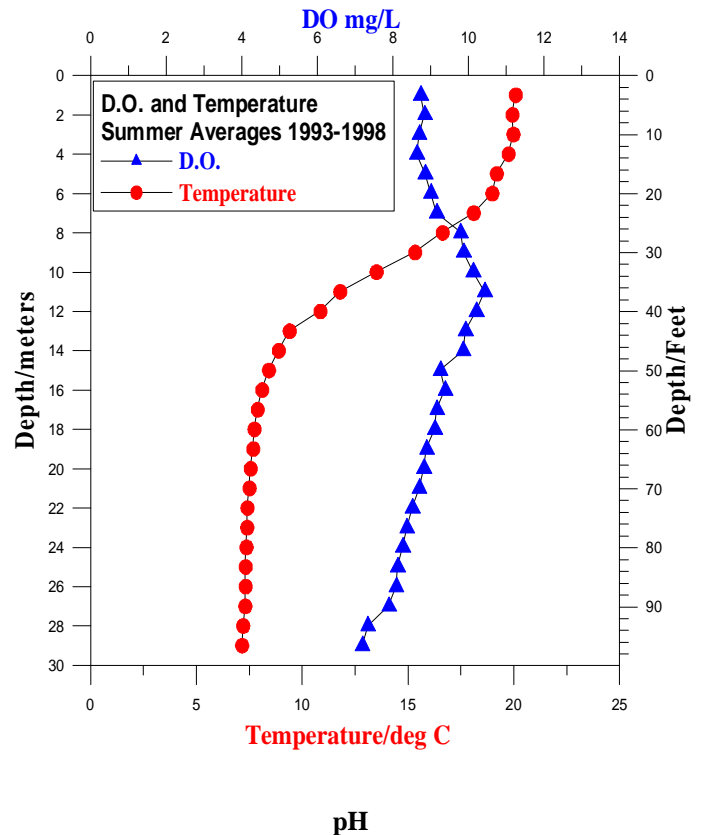
Pond Number: 060307
 Watershed: St. Lawrence River
 County: Hamilton
 Topographic Quadrangle: Blue Mountain

Sample Site

Latitude: 43° 51.955'
 Longitude: 74° 27.654'

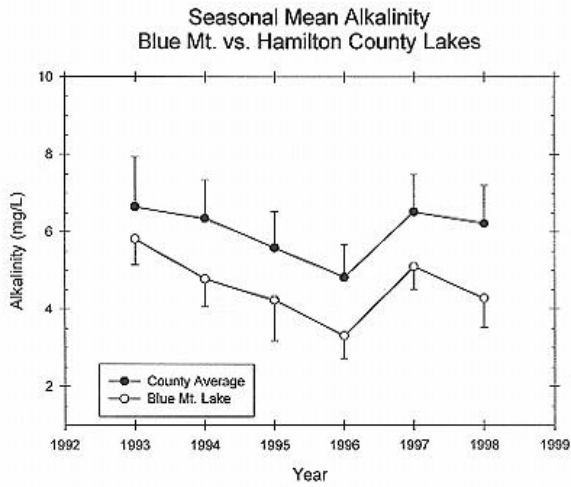
Morphometry

Surface Area: 1,334 A.
 Mean Depth: 46 Ft.
 Maximum Depth: 100 Ft.
 Volume: 61,364 Ac./F.
 Watershed Area: 7,130 Ac.
 Hydraulic Retention Time: 3.5 Yr.
 Shoreline Length: 7.7 Mi.
 Elevation: 1,789 Ft.
 Water Quality Classification: B(T)
 Trophic State: Oligotrophic



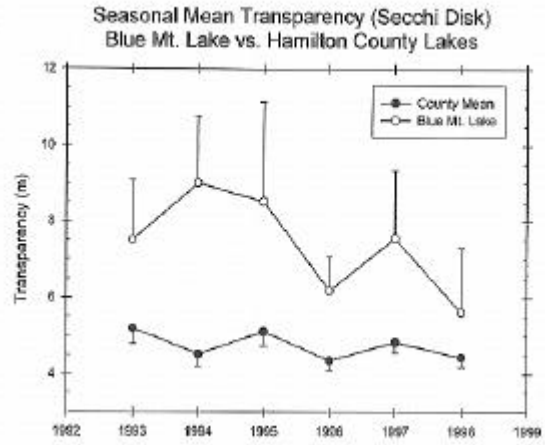
The pH trend in Blue Mountain Lake was similar to the county mean trend, with a low of 6.06 in 1995 and 1996, and a high of 7.45 in 1998. Overall, the mean pH values were slightly higher (less acidic) than the county means.

Blue Mountain Lake



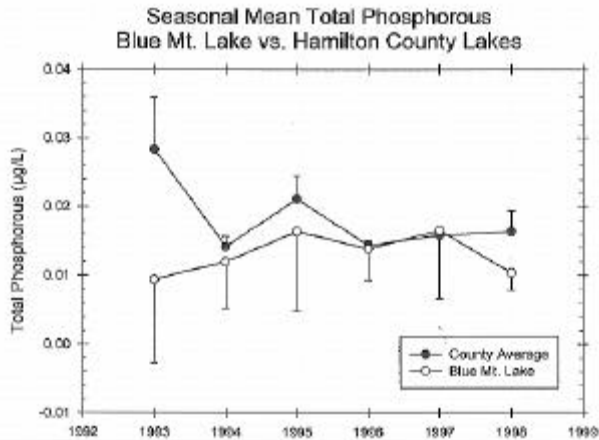
Alkalinity

The alkalinity trend in Blue Mountain Lake was similar to the county mean trend, with a low of 3.32 mg/L in 1996, and a high of 5.82 mg/L in 1993. Overall, the mean alkalinity values were slightly lower than the county mean values.



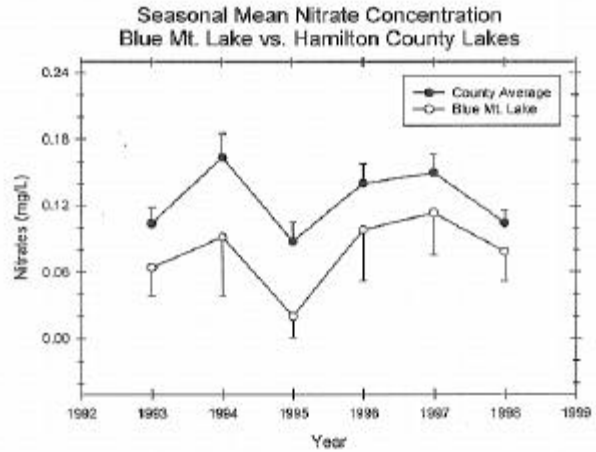
Transparency

The transparency trend in Blue Mountain Lake was similar to the county mean trend, with a low of 5.62 m in 1998, and a high of 8.99 m in 1994. Overall, the mean transparency values were higher than the county mean values.



Total Phosphorus

The total phosphorus trend in Blue Mountain Lake was comparable to the county mean trend. A low of 0.009 µg/L occurred in 1993, and a high of 0.017 µg/L occurred in 1997.



Nitrate

The nitrate concentration trend in Blue Mountain Lake was similar to the county mean trend, with a low of 0.02 mg/L in 1995, and a high of 0.11 mg/L in 1997. Overall, the mean nitrate concentrations were slightly lower than the county mean values.