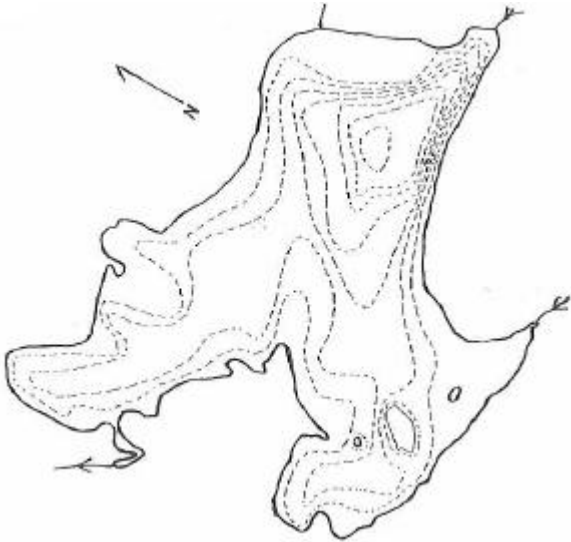


Limekiln Lake



Temperature

Limekiln 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 23.5° C. The epilimnion was coolest in August 1993 and 1996, when the surface temperature was 22° C. In August of each year, the epilimnion was approximately 8 meters thick, the mid-thermocline depth was around 10 meters, and the top of the hypolimnion began at about 13 meters. The thermal profiles for August were similar each year.

Dissolved Oxygen

The hypolimnion of Limekiln 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 4 mg/L each August, although the concentrations decreased throughout the hypolimnion each year. In general, the highest hypolimnetic dissolved oxygen levels occurred in August 1994 and the lowest occurred in August 1996. Limekiln Lake experienced metalimnetic oxygen minima at around 9 meters during August of each year, except for 1998, when the lake experienced a metalimnetic oxygen maximum at around 10 meters. The dissolved oxygen profiles were relatively similar each year.

Location

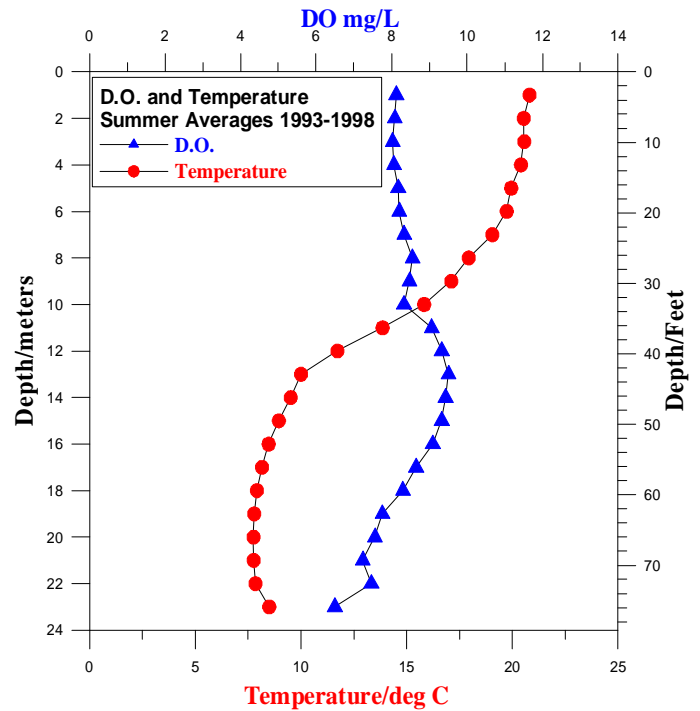
Pond Number: 040826
 Watershed: Black River
 County: Hamilton
 Topographic Quadrangle: Old Forge

Sample Site

Latitude: 43° 42.816'
 Longitude: 74° 47.588'

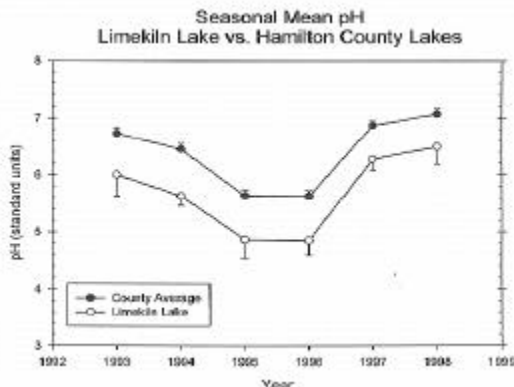
Morphometry

Surface Area: 462 Ac.
 Mean Depth: 20 Ft.
 Maximum Depth: 72 Ft.
 Volume: 9,240 Ac./Ft.
 Watershed Area: 2,580 Ac.
 Hydraulic Retention Time: 1.4 Yr.
 Shoreline Length: 6.2 Mi.
 Elevation: 1,890 Ft.
 Water Quality Classification: A(T)
 Trophic State: Oligotrophic

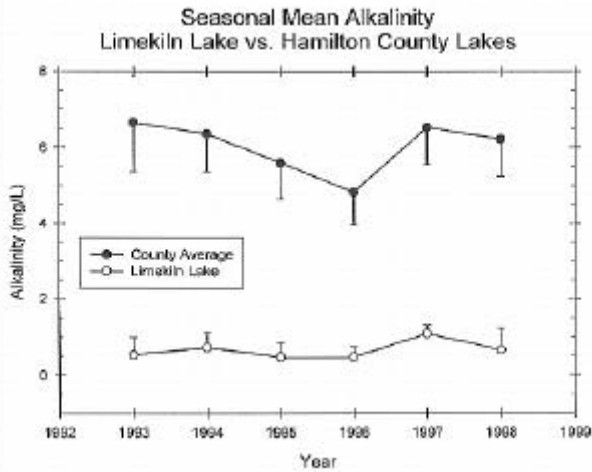


pH

The pH trend for Limekiln Lake was similar to the county mean trend, with a low of 4.85 in 1996, and a high of 6.49 in 1998. Overall, the mean pH values were lower (more acidic) than the county mean values.

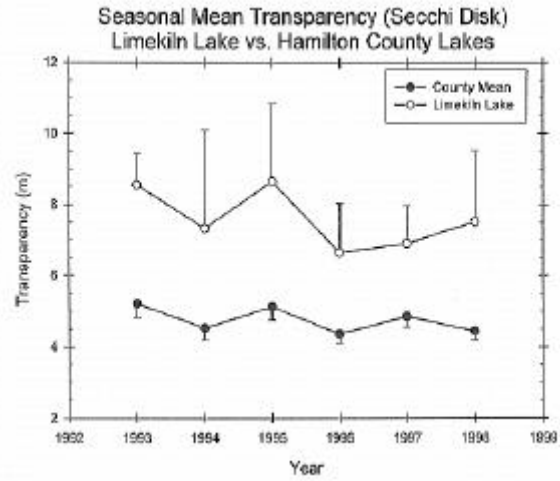


Limekiln Lake



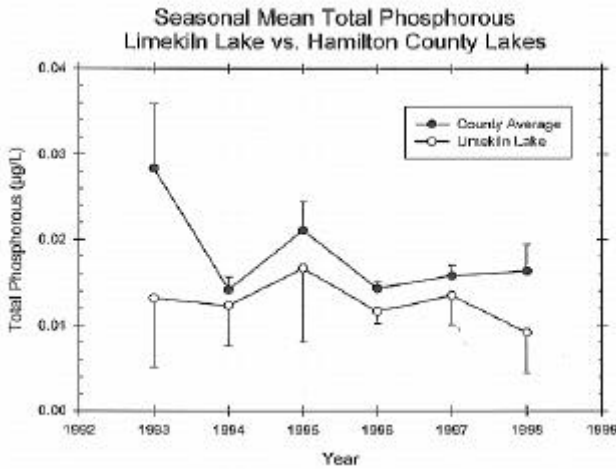
Alkalinity

The alkalinity trend for Limekiln Lake was similar to the county mean trend, with a low of 0.47 mg/L in 1995 and 1996, and a high of 1.08 mg/L in 1997. Overall, the mean alkalinity values were lower than the county mean values.



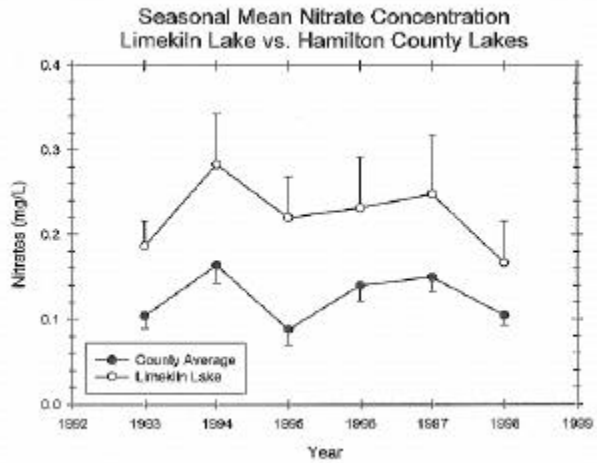
Transparency

The transparency trend in Limekiln Lake was similar to the county mean trend, with a low of 6.65 m in 1996, and a high of 8.65 m in 1995. Overall, the mean transparency values were higher than the county mean values.



Total Phosphorus

The total phosphorus trend in Limekiln Lake was similar to the county mean trend. A low of 0.009 µg/L occurred in 1998, and a high of 0.017 µg/L occurred in 1995. Overall, the mean total phosphorus values were slightly lower than the county mean values.



Nitrate

The nitrate concentration trend in Limekiln Lake was similar to the county mean trend, with a low of 0.17 mg/L in 1998, and a high of 0.28 mg/L in 1994. Overall, the mean nitrate concentrations were slightly higher than the county mean values.