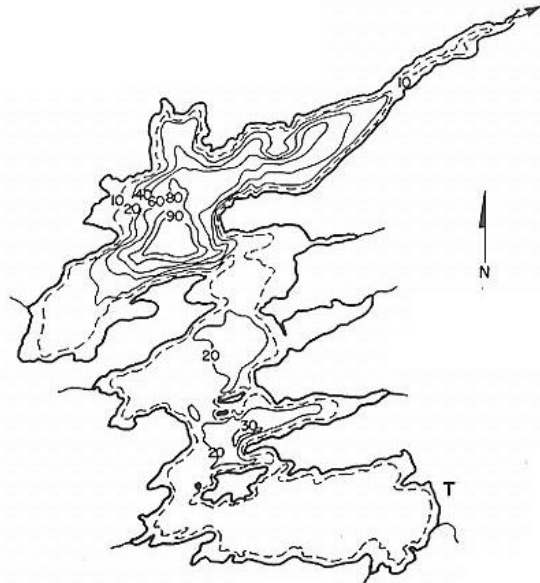


Raquette Lake

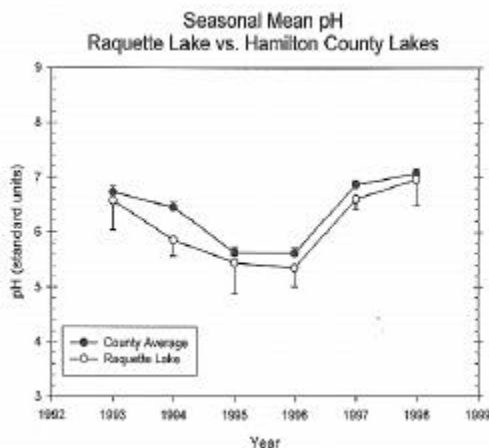


Temperature

Raquette 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° C. The epilimnion was coolest in August 1993, when the surface temperature was 21.5° 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 14 meters. The thermal profiles for August were similar each year.

Dissolved Oxygen

The hypolimnion of Raquette 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 1997 and the lowest occurred in August 1994 and 1996. Raquette Lake experienced metalimnetic oxygen minima at around 8 meters during August. The dissolved oxygen profiles were relatively similar for each of the study years.



Location

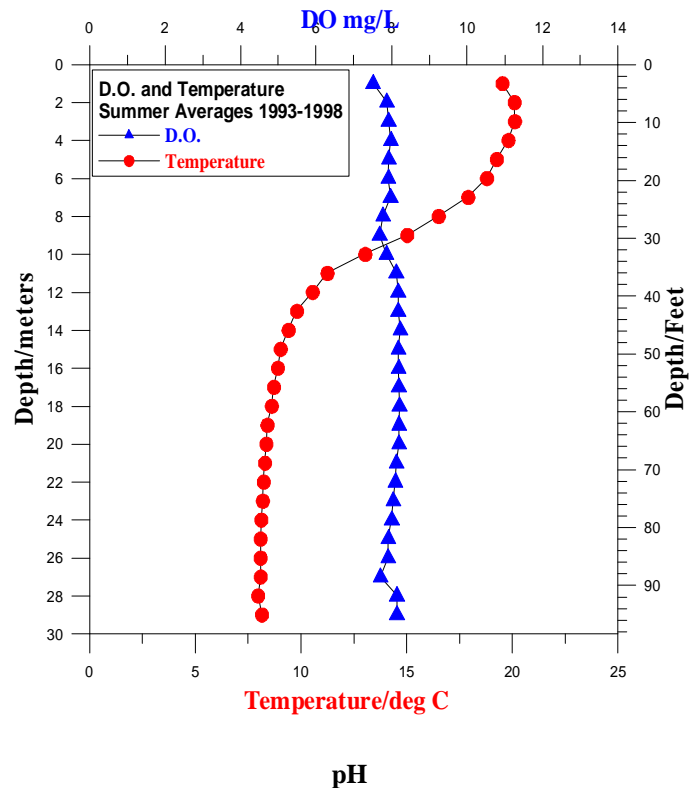
Pond Number: 060293
 Watershed: St. Lawrence River
 County: Hamilton
 Topographic Quadrangle: Raquette Lake

Sample Site

Latitude: 43° 51.132'
 Longitude: 74° 39.189'

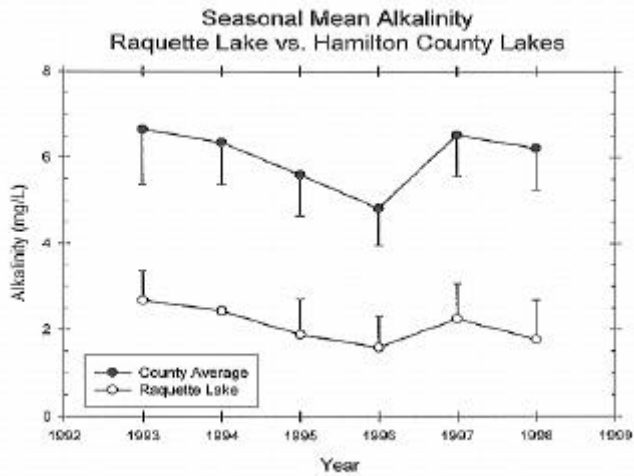
Morphometry

Surface Area: 5,263 Ac.
 Mean Depth: 44 Ft.
 Maximum Depth: 95 Ft.
 Volume: 231,572 Ac./Ft.
 Watershed Area: 80,691 Ac.
 Hydraulic Retention Time: 1.1 Yr.
 Shoreline Length: 32.8 Mi.
 Elevation: 1,762 Ft.
 Water Quality Classification: AA
 Trophic State: Mesotrophic



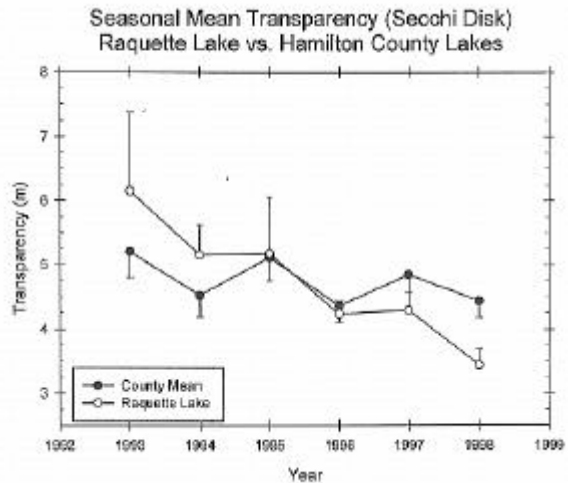
The pH trend in Raquette Lake was similar to the county mean trend, with a low of 5.36 in 1996, and a high of 6.96 in 1998. Overall, the mean pH values were slightly more acidic than the county mean values.

Raquette Lake



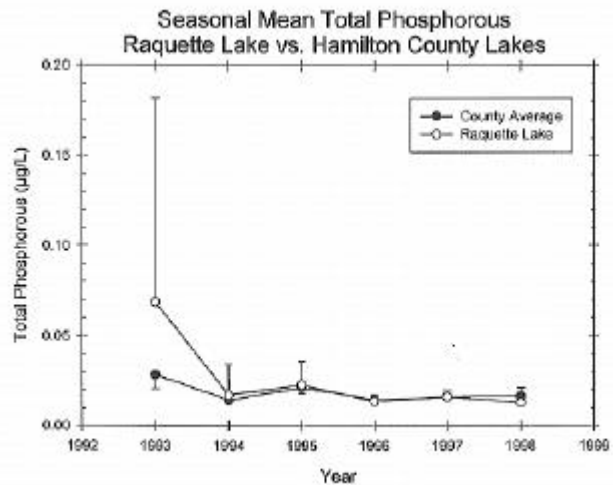
Alkalinity

The alkalinity trend for Raquette Lake was similar to the county mean trend, with a low of 1.58 mg/L in 1996, and a high of 2.68 mg/L in 1993. Overall, the mean alkalinity values were lower than the county mean values.



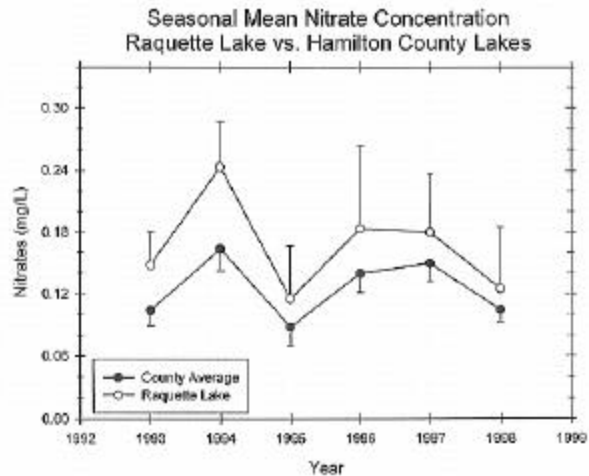
Transparency

The transparency trend in Raquette Lake was a gradual decrease in mean values from 1993 through 1998, with a low of 3.44 m in 1998, and a high of 6.15 m in 1993. The mean transparency values were slightly higher than the county mean values from 1993 through 1995, and slightly lower than the county mean values from 1996 through 1998.



Total Phosphorus

The total phosphorous trend for Raquette Lake was comparable to the county mean trend with the exception of a high mean in 1993. A low of 0.013 µg/L occurred in 1996 and 1998, and a high of 0.069 µg/L occurred in 1993. The high mean in 1993 was due to one data point in September reported as 0.217 µg/L.



Nitrate

The nitrate concentration trend in Raquette Lake was similar to the county mean trend, with a low of 0.12 mg/L in 1998, and a high of 0.24 mg/L in 1994. Overall, the mean nitrate concentrations were slightly higher than the county mean values.