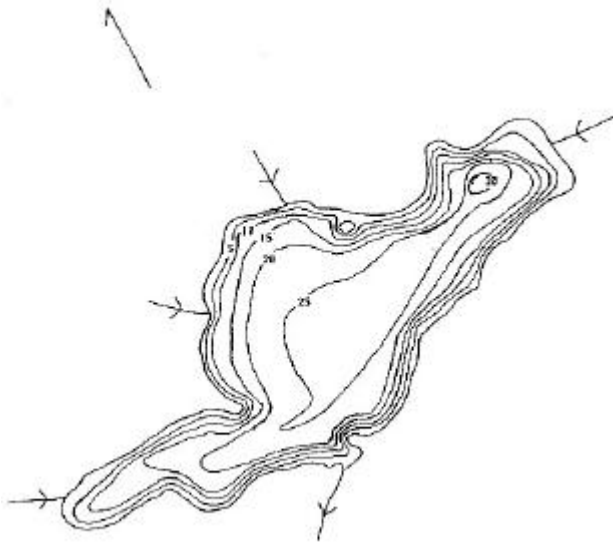


Spy Lake



Location

Pond Number: 050232
 Watershed: Upper Hudson River
 County: Hamilton
 Topographic Quadrangle: Piseco Lake

Sample Site

Latitude: 43° 23.910'
 Longitude: 74° 30.728'

Morphometry

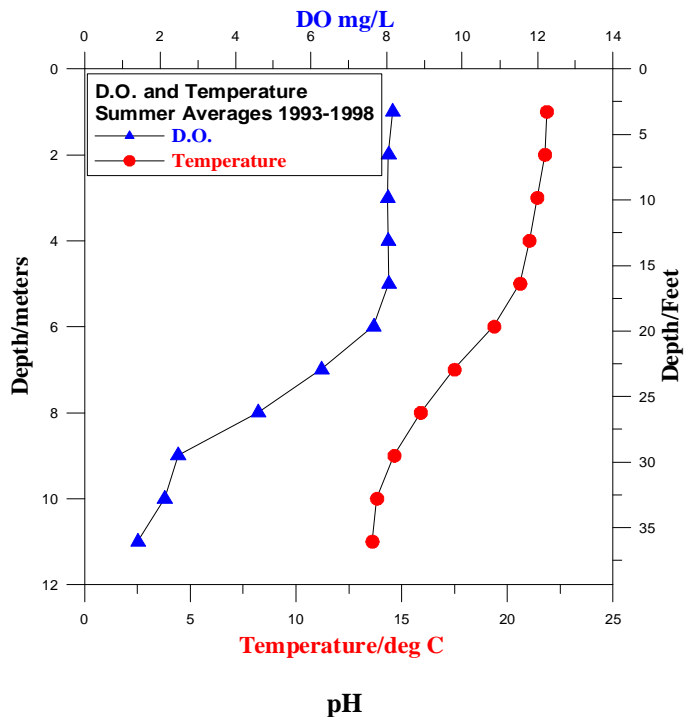
Surface Area: 374 Ac.
 Mean Depth: 17 Ft.
 Maximum Depth: 30 Ft.
 Volume: 6,358 Ac./Ft.
 Watershed Area: 2,234 Ac.
 Hydraulic Retention Time: 1.0 Yr.
 Shoreline Length: 4.6 Mi.
 Elevation: 1,657 Ft.
 Water Quality Classification: C
 Trophic State: Mesotrophic

Temperature

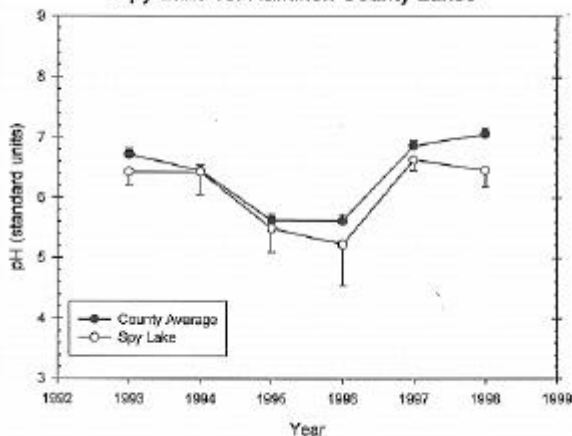
Spy Lake was thermally stratified during the month of August in each of the study years (1993 - 1998). The epilimnion was warmest in August 1995, when the surface temperature was 24.5° C. The epilimnion was coolest in August 1994, when the surface temperature was 20.5° C. In August of each year, the epilimnion was approximately 5 meters thick, the mid-thermocline depth was around 6.5 meters, and the top of the hypolimnion began at about 8 meters. The thermal profiles for August were similar each year, except for 1994, when the lake temperatures were lower.

Dissolved Oxygen

The hypolimnion of Spy Lake was anoxic throughout during the month of August in each of the study years (1993 - 1998). The dissolved oxygen profiles were relatively similar each year, with the highest concentrations occurring in the epilimnion, and the concentrations decreasing throughout

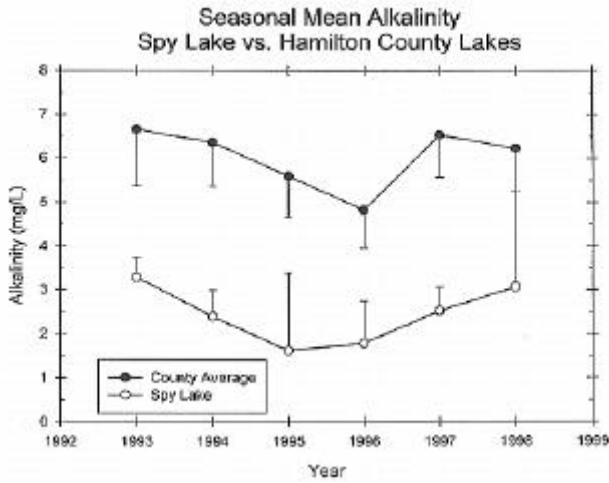


Seasonal Mean pH
 Spy Lake vs. Hamilton County Lakes



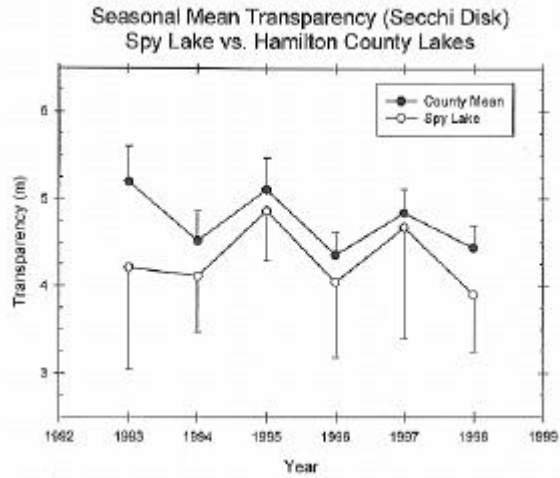
The pH trend for Spy Lake was similar to the county mean trend, with a low of 5.23 in 1996, and a high of 6.64 in 1997. Overall, the mean pH values were slightly more acidic than the county mean values.

Spy Lake



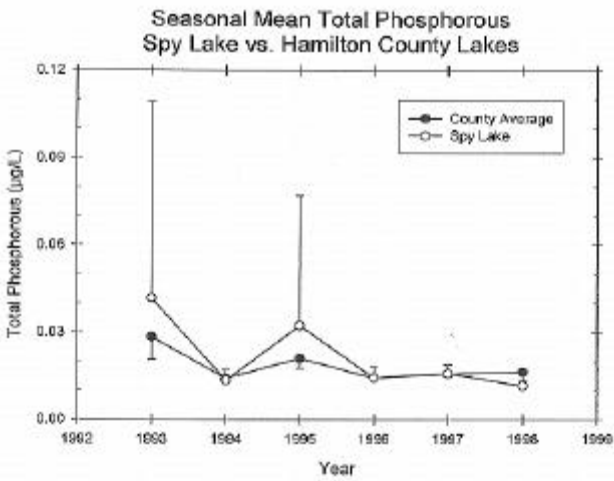
Alkalinity

The alkalinity trend for Spy Lake was similar to the county mean trend, with a low of 1.62 mg/L in 1995, and a high of 3.28 mg/L in 1993. Overall, the mean alkalinity values were lower than the county mean values.



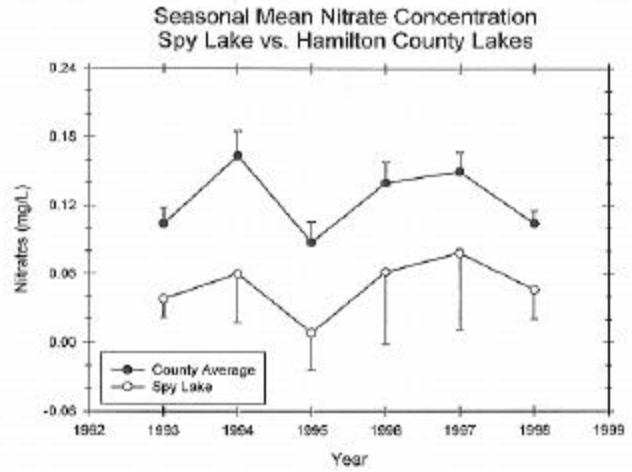
Transparency

The transparency trend in Spy Lake was similar to the county mean trend, with a low of 3.90 m in 1998, and a high of 4.87 m in 1995. Overall, the mean transparency values were slightly lower than the county mean values.



Total Phosphorus

The total phosphorus trend for Spy Lake was comparable to the county mean trend. A low of 0.012 µg/L occurred in 1998, and a high of 0.042 µg/L occurred in 1993.



Nitrate

The nitrate concentration trend in Spy Lake was similar to the county mean trend, with a low of 0.01 mg/L in 1995, and a high of 0.08 mg/L in 1997. Overall, the mean nitrate concentrations were slightly lower than the county mean values.