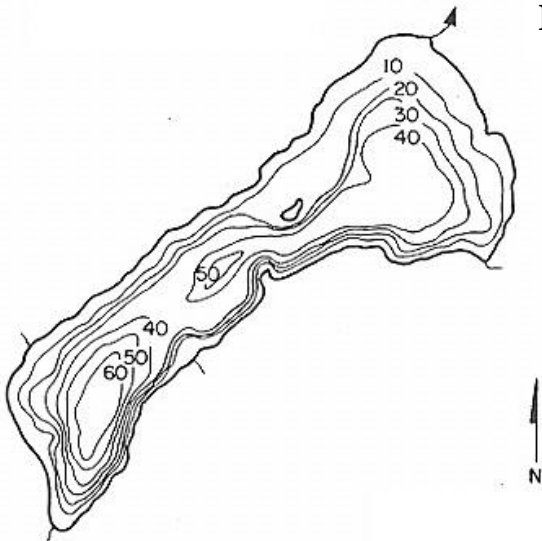


Lake Pleasant



Location

Pond Number: 050313
 Watershed: Upper Hudson River
 County: Hamilton
 Topographic Quadrangle: Lake Pleasant

Sample Site

Latitude: 43° 27.981'
 Longitude: 74° 23.761'

Morphometry

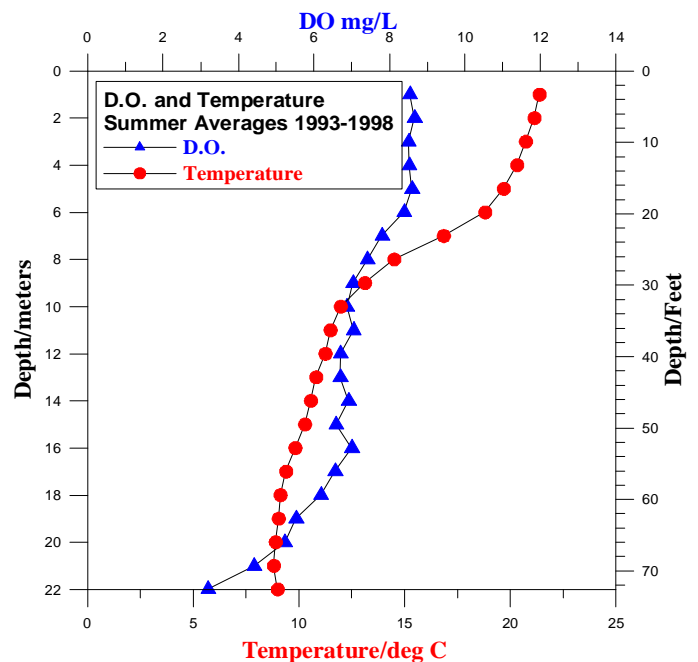
Surface Area: 1,547 Ac.
 Mean Depth: 29 Ft.
 Maximum Depth: 69 Ft.
 Volume: 44,863 Ac./Ft.
 Watershed Area: 7,907 Ac.
 Hydraulic Retention Time: 2.0 Yr.
 Shoreline Length: 9.6 Mi.
 Elevation: 1,725 Ft.
 Water Quality Classification: AA
 Trophic State: Mesotrophic

Temperature

Lake Pleasant 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° C. In August of each year, the epilimnion was approximately 4 meters thick, the mid-thermocline depth was around 6.5 meters, and the top of the hypolimnion began at about 9 meters. The thermal profiles for August were similar each year.

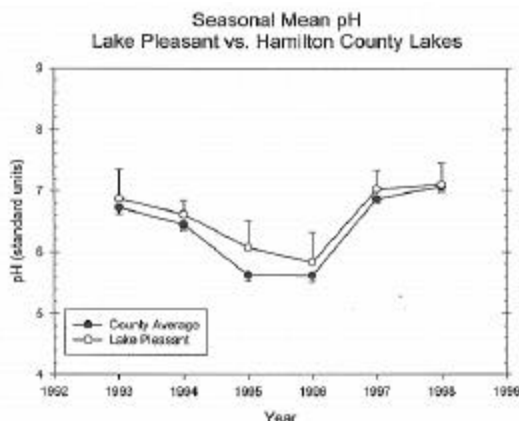
Dissolved Oxygen

The hypolimnion of Lake Pleasant exhibited moderate oxygen depletion during the month of August in each of the study years (1993 - 1998). Dissolved oxygen concentrations tended to drop to 5 mg/L or less at the top of the hypolimnion and fall below 4 mg/L at depths of 14 to 16 m in August of each year. In general, the highest hypolimnetic dissolved oxygen levels occurred in August 1996 and the lowest occurred in August 1993. The dissolved oxygen profiles were relatively similar each year, with high concentrations in the epilimnion and decreasing concentrations through the thermocline.

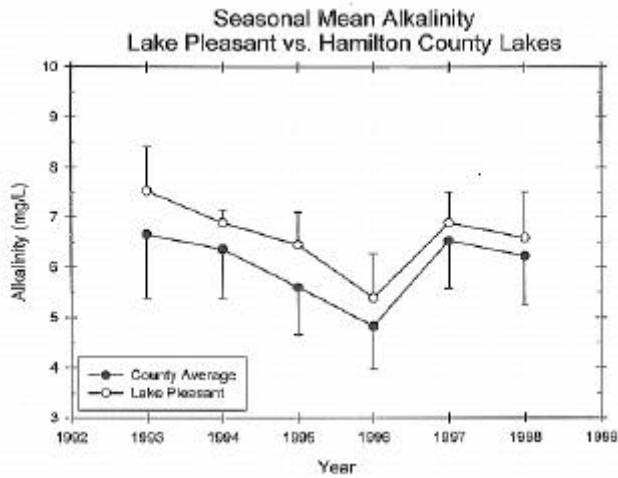


pH

The pH trend for Lake Pleasant was similar to the county mean trend, with a low of 5.83 in 1996, and a high of 7.10 in 1998. Overall, the mean pH values were slightly less acidic than the county mean values.

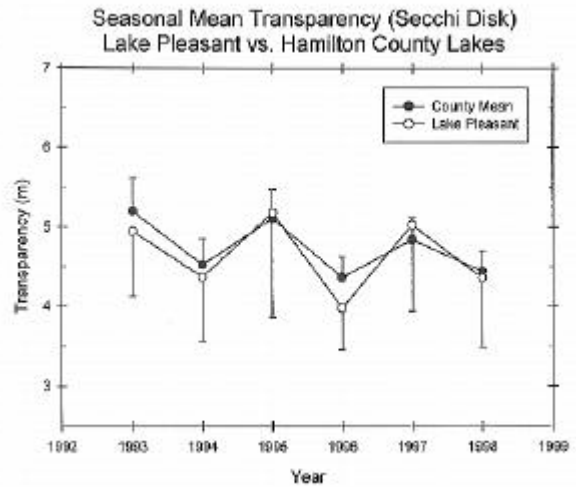


Lake Pleasant



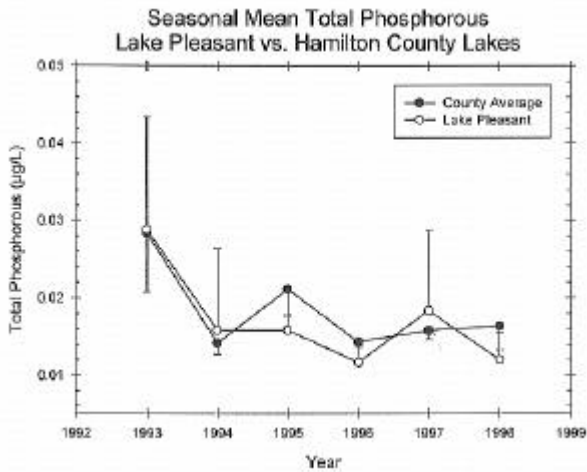
Alkalinity

The alkalinity trend for Lake Pleasant was similar to the county mean trend, with a low of 5.38 mg/L in 1996, and a high of 7.53 mg/L in 1993. Overall, the mean alkalinity values were slightly higher than the county mean values.



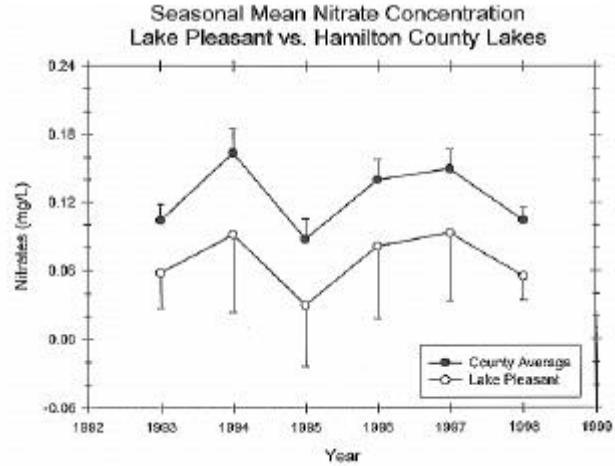
Transparency

The transparency trend in Lake Pleasant was comparable to the county mean trend, with a low of 3.98 m in 1996, and a high of 5.18 m in 1995.



Total Phosphorus

The total phosphorus trend for Lake Pleasant was comparable to the county mean trend. A low of 0.012 µg/L occurred in 1996 and 1998, and a high of 0.029 µg/L occurred in 1993.



Nitrate

The nitrate concentration trend in Lake Pleasant was similar to the county mean trend, with a low of 0.03 mg/L in 1995, and a high of 0.09 mg/L in 1994 and 1997. Overall, the mean nitrate concentrations were slightly lower than the county mean values.