

Pomme de Terre Lake

Region - Ozark Highlands

Pomme de Terre is a large lake (7,790 acres) located in Hickory County. Grassland/pasture, crop land, and forest make up 56%, 7% and 32% of the 403,448 acre watershed respectively. The lake is an important recreational resource.

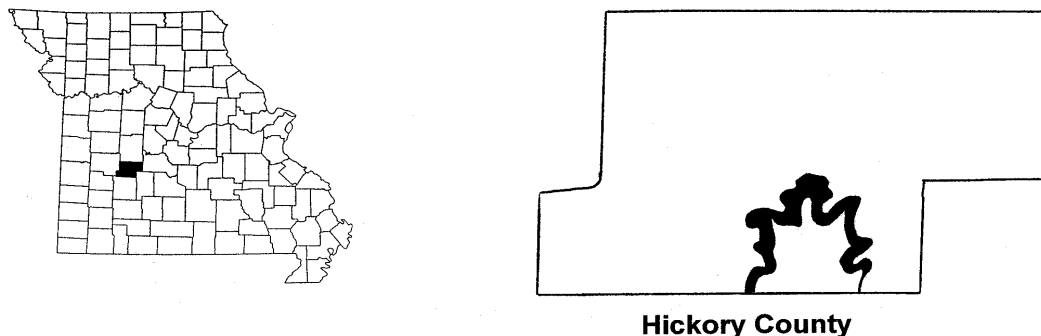


Figure 41. Location of Pomme de Terre Lake.

1999 Results

Figure 42 shows how the parameters phosphorus, nitrogen, algal chlorophyll, and Secchi transparency varied in Pomme de Terre Lake during the 1999 sampling season. A brief description of these results are:

- ▶ Nitrogen and Secchi transparency displayed low variability while phosphorus and chlorophyll were moderately variable.
- ▶ Chlorophyll values on the third and fourth sample dates were approaching bloom conditions as the chlorophyll:phosphorus ratios were 0.8 or greater. (See page 7 for further explanation of ratios.)
- ▶ Average values measured for phosphorus and nitrogen were in the mesotrophic range. Average values measured for chlorophyll were in the eutrophic range.

Table 20. Descriptive statistics for Pomme de Terre Lake - 1999.

Parameters	Average	Median	Minimum	Maximum
Chlorophyll ($\mu\text{g/L}$)	15.9	15.1	10.1	24.8
Nitrogen ($\mu\text{g/L}$)	466	490	380	520
Phosphorus ($\mu\text{g/L}$)	23	22	17	34
Secchi (inches)	62	65	56	67

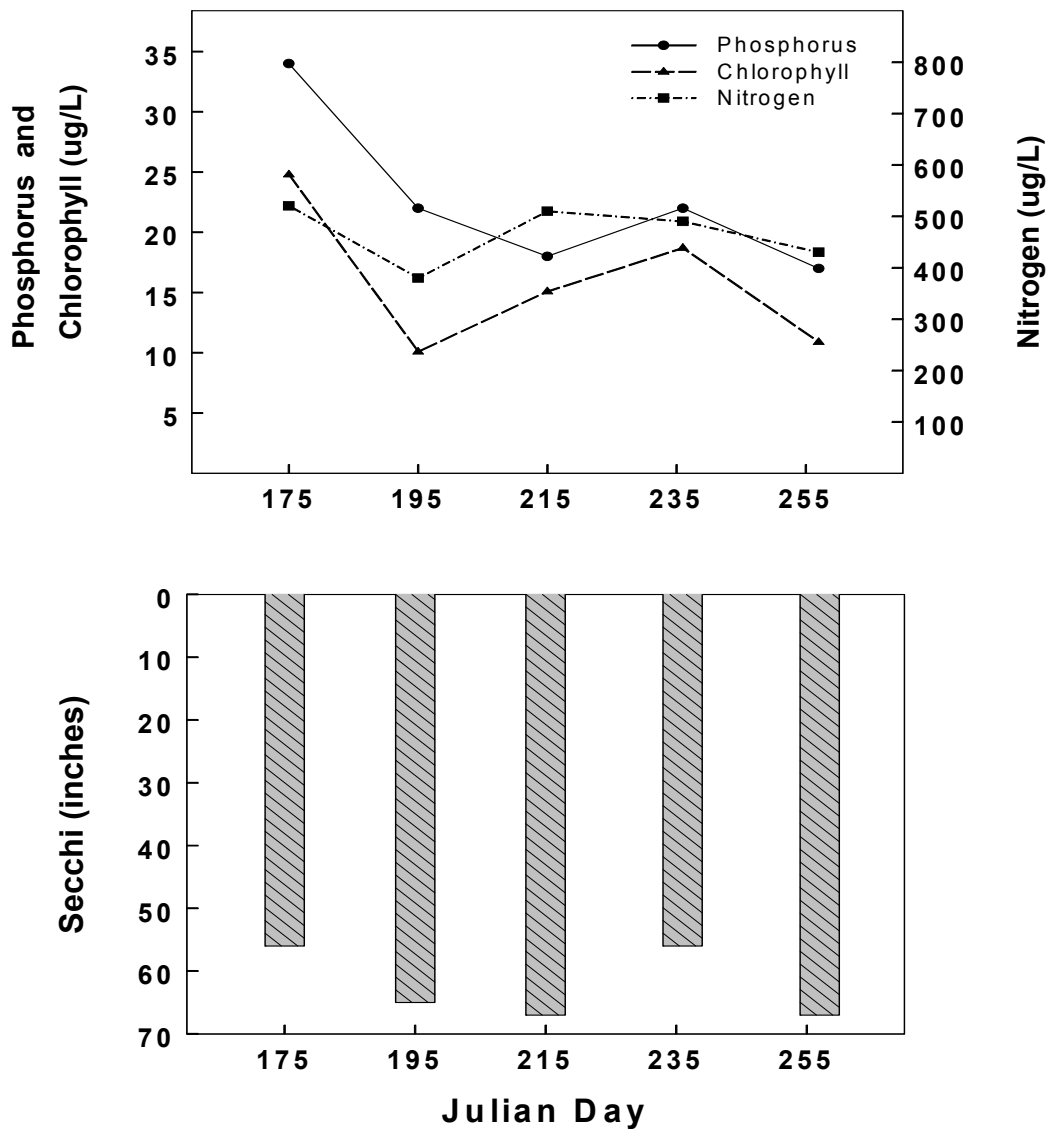


Figure 42. Seasonal fluctuations of parameters in Pomme de Terre Lake - 1999.