

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.

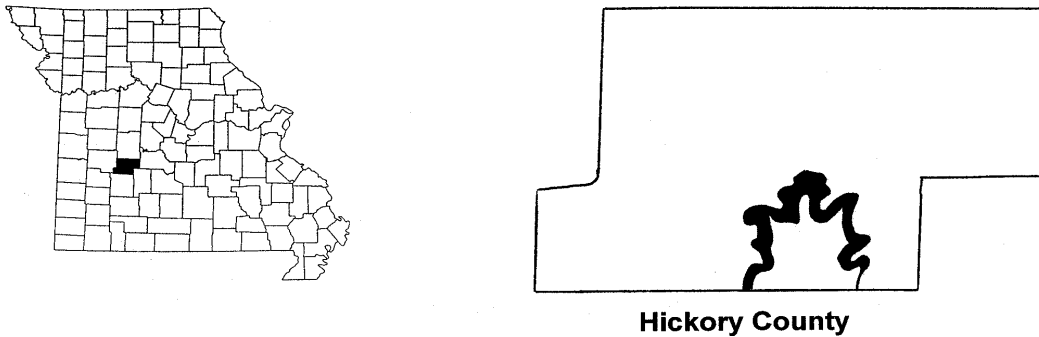


Figure 38. Location of Pomme de Terre Lake.

2000 Results

Figure 39 shows how the parameters phosphorus, nitrogen, algal chlorophyll, inorganic suspended solids, and Secchi transparency varied in Pomme de Terre Lake during the 2000 sampling season. A brief description of these results are:

- ▶ Eight samples were collected, the first sample on 5-4 and the last sample on 9-28.
- ▶ Phosphorus values showed low variability. The average value for phosphorus was similar to the values in the 1999 sampling season.
- ▶ Chlorophyll and nitrogen values were moderately variable and followed similar patterns during the sample season.
- ▶ The maximum Secchi value recorded was 100 inches in 2000 compared to a maximum value of 67 inches recorded in 1999. The deeper readings were taken earlier in the 2000 season. We do not have values recorded for as early in the 1999 season.
- ▶ Average values measured for chlorophyll and nitrogen were in the eutrophic range and for average values for phosphorus were in the mesotrophic range.

Table 19. Descriptive statistics for Pomme de Terre Lake - 2000.

Parameters	Average	Median	Minimum	Maximum
Chlorophyll ($\mu\text{g/L}$)	19.3	17.1	12.8	31.2
Nitrogen ($\mu\text{g/L}$)	631	580	450	940
Phosphorus ($\mu\text{g/L}$)	23	23	21	25
ISS (mg/L)	0.9	0.8	0.4	1.4
Secchi (inches)	69	63	49	100

ISS = Inorganic Suspended Solids

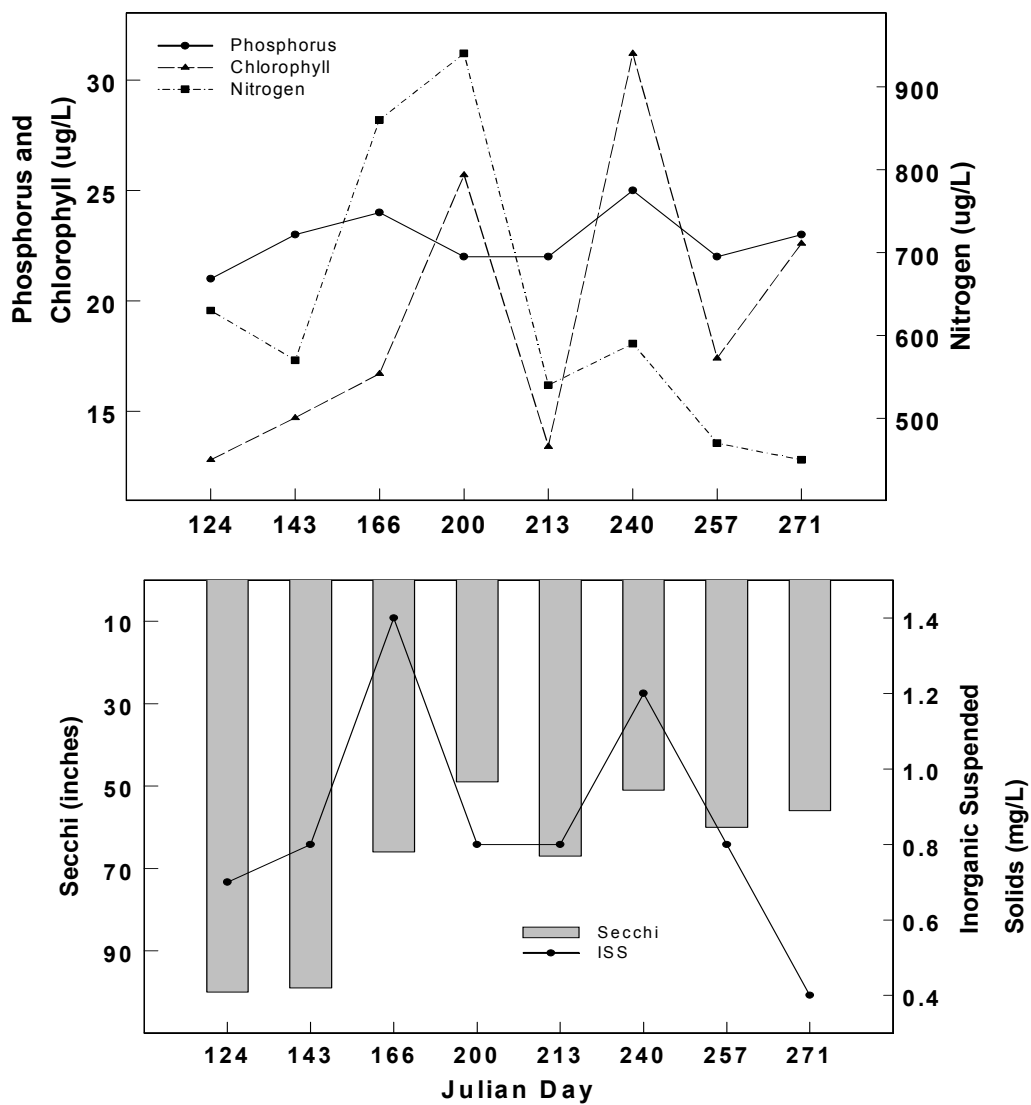


Figure 39. Seasonal fluctuations of parameters in Pomme de Terre Lake - 2000.