

Pomme de Terre Lake - 2001 Data

Ozark Highlands Region

Pomme de Terre is a large lake (7,790 acres) located in Hickory County. Completed in 1961, Pomme de Terre is owned and operated by the U.S. Army Corps of Engineers. Grassland/pasture, cropland and forest make up 56%, 7% and 32% of the 403,448-acre watershed, respectively. The lake is an important recreational resource.

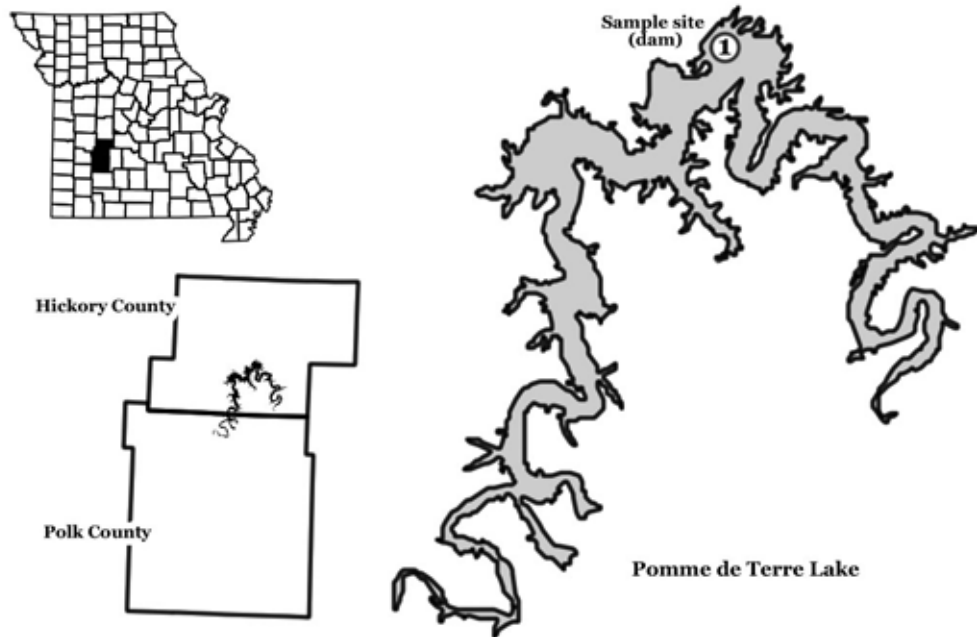


Figure 42. Location of Pomme de Terre Lake and its sample site.

2001 Results

Figure 43 shows how the parameters phosphorus, nitrogen, algal chlorophyll, inorganic suspended solids and Secchi transparency varied in Pomme de Terre Lake during the 2001 sampling season. The descriptive statistics appear in Table 19. A brief description of these results:

- Nine samples were collected at the dam from April 10 to September 26.
- Nitrogen decreased by half during the sampling season.
- There was low variability for all other parameters in 2001.
- Secchi values stayed at ~ 7.5 feet throughout the season.
- ISS values were among the lowest in the state, with only 1 sample exceeding 2 mg/L.
- Pomme de Terre was eutrophic for nitrogen and chlorophyll, and mesotrophic for phosphorus in 2001, based on geometric mean values.

Table 19. Descriptive statistics for Pomme de Terre Lake – 2001.

Parameters	# of Samples	Geometric			
		Mean	Minimum	Maximum	Median
Secchi Transparency (inches)	9	76	71	89	75
Phosphorus ($\mu\text{g/L}$)	9	20	14	26	19
Nitrogen ($\mu\text{g/L}$)	9	519	370	820	450
Chlorophyll ($\mu\text{g/L}$)	9	13.3	9.7	22.9	13.1
ISS (mg/L)	9	0.3	<0.1	2.1	0.7

ISS=Inorganic Suspended Solids

Samples were collected between April 10 and September 26

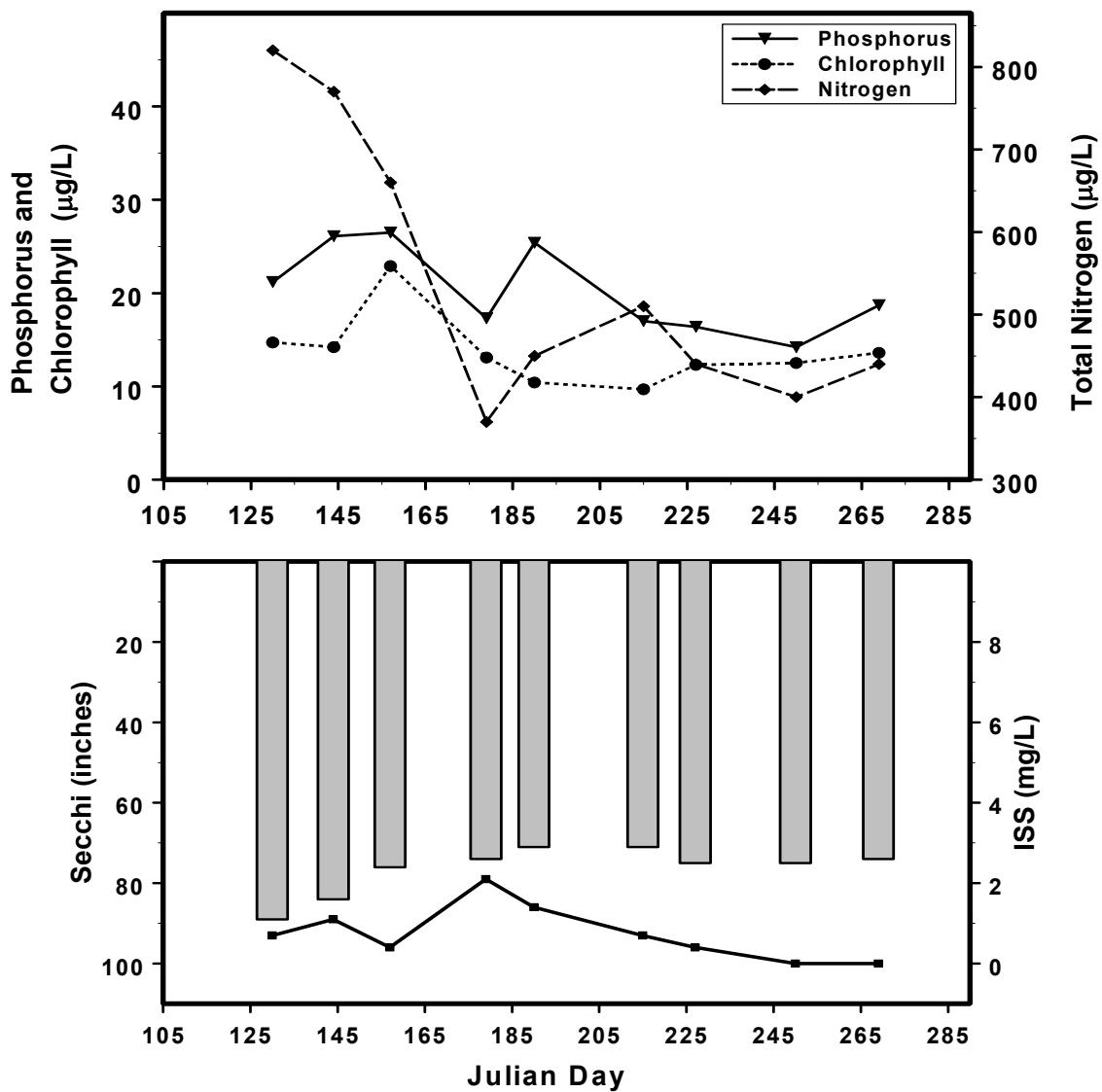


Figure 43. Seasonal fluctuations of parameters in Pomme de Terre Lake – 2001. Bars represent Secchi, line represents ISS.