

Binder Lake - 2001 Data

Ozark Border Region

Binder Lake is a 155-acre lake located within a 650-acre park. The lake is jointly managed by the Missouri Department of Conservation and the city of Jefferson City. Overall, 26% of Binder Lake's 3900-acre watershed is cropland and 18% is urban.

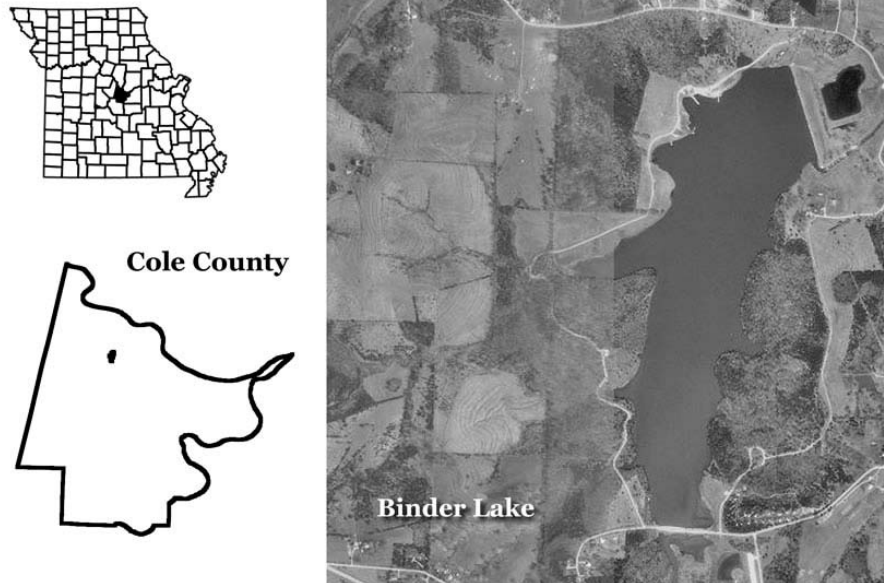


Figure 14. Location of Binder Lake.

2001 Results

Figure 15 shows how the parameters nitrogen, phosphorus algal chlorophyll, inorganic suspended solids and Secchi transparency varied in Binder Lake during 2001. The descriptive statistics appear in Table 6. A brief description of the results:

- 9 samples were collected between April 30 and September 26.
- Values for nitrogen showed modest variation during the sampling season.
- Binder Lake was eutrophic for chlorophyll, phosphorus and nitrogen in 2001, based on geometric mean values.

Table 6. Descriptive statistics for Binder Lake - 2001.

Parameters	# of Samples	Geometric Mean	Minimum	Maximum	Median
Secchi Transparency (inches)	9	32	21	71	32
Phosphorus ($\mu\text{g/L}$)	9	63	47	124	58
Nitrogen ($\mu\text{g/L}$)	9	870	790	1010	850
Chlorophyll ($\mu\text{g/L}$)	9	36.2	21.1	120.2	29.3
ISS (mg/L)	9	1.7	0.6	5.1	2.0

ISS=Inorganic Suspended Solids

Samples were collected between April 30 and September 26

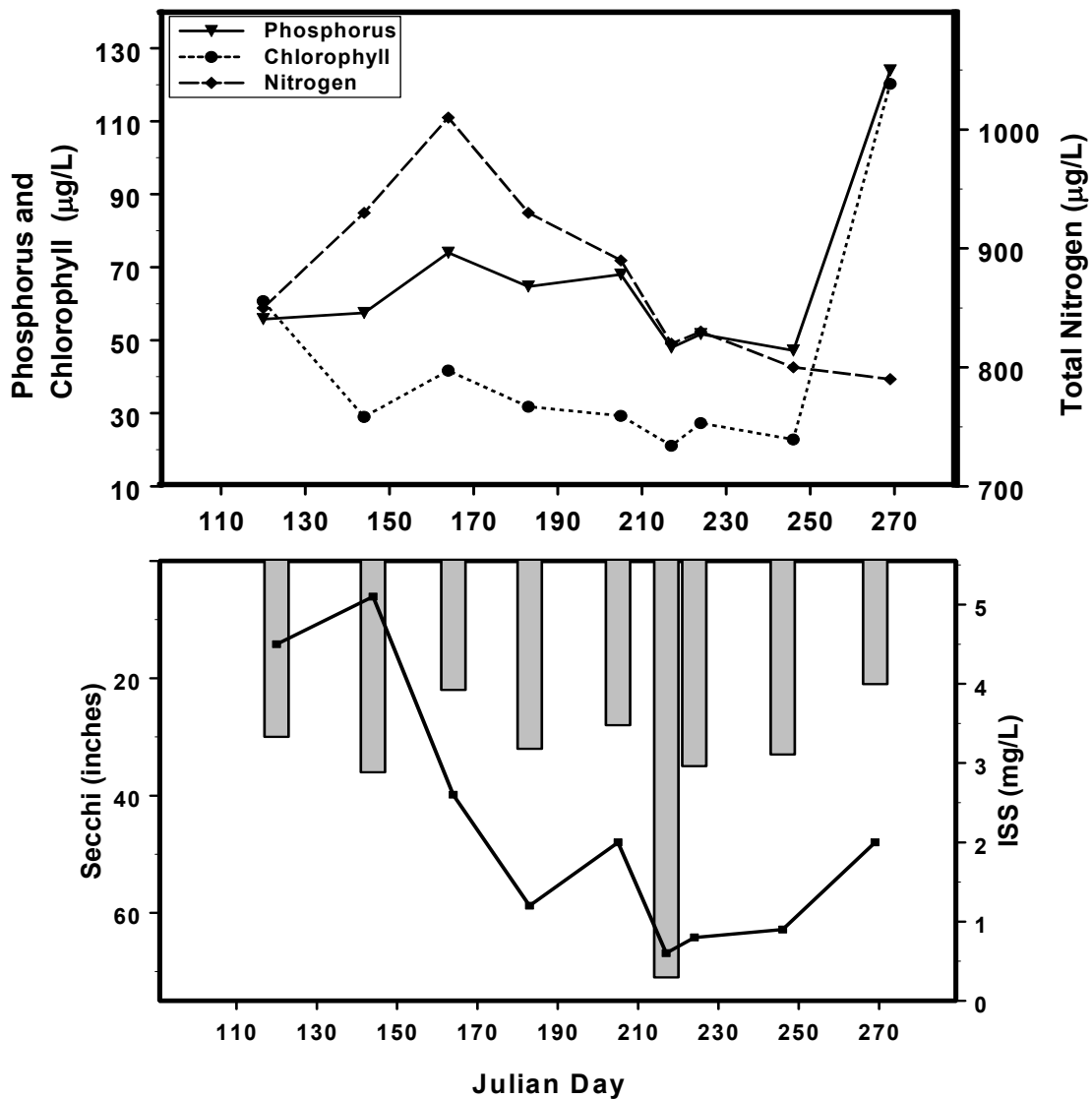


Figure 15. Seasonal Fluctuations of parameters for Binder Lake – 2001. Bars represent Secchi, line represents ISS.