

Ashland Lake - 2001 Data

Ozark Border Region

Ashland Lake is located in the 2,300-acre Baskett Wildlife Research Area, east of Ashland. It is approximately 12 acres in size and is owned by the University of Missouri. The lake's fishery is managed by the Missouri Department of Conservation and public fishing is allowed.

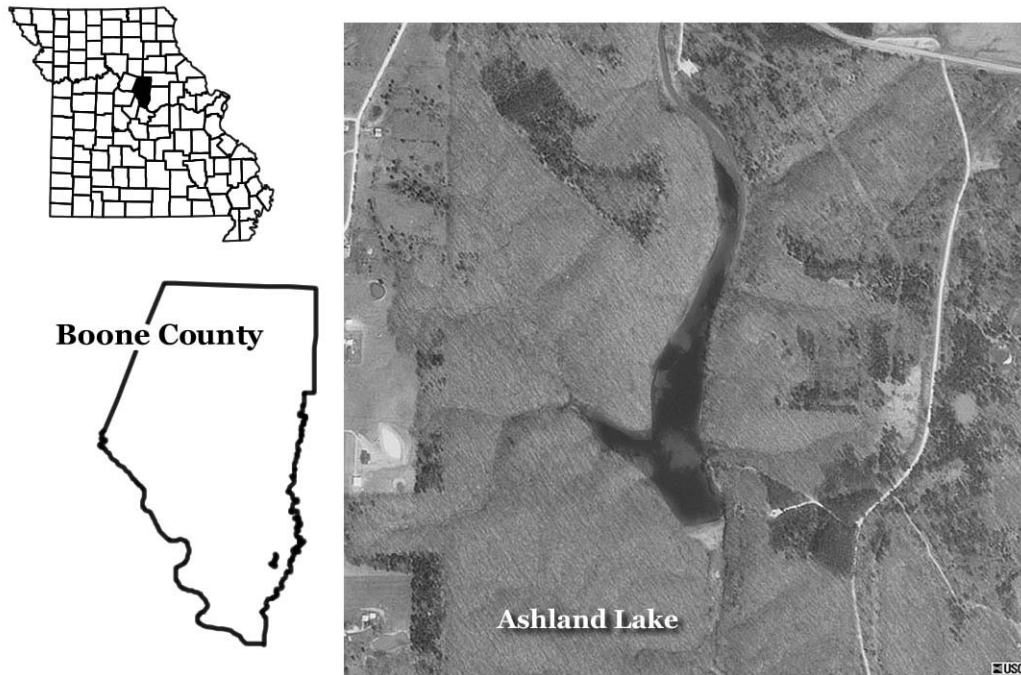


Figure 10. Location of Ashland Lake.

2001 Results

Figure 11 shows how the parameters nitrogen, phosphorus algal chlorophyll, inorganic suspended solids and Secchi transparency varied in Ashland Lake during 2001. The descriptive statistics appear in Table 4. A brief description of the results:

- 5 samples were collected (4 ISS and Secchi) between April 18 and September 7.
- There was no apparent trend across time for any parameter except phosphorus, which decreased as the sampling season progressed.
- Ashland Lake was in the hypereutrophic range for all parameters based on geometric mean values.
- Nutrient and chlorophyll concentrations were among the highest in the program, and varied by more than 3-fold within the sampling season.

Table 4. Descriptive statistics for Ashland Lake – 2001.

Parameters	# of Samples	Geometric Mean	Minimum	Maximum	Median
Secchi Transparency (inches)	4	23	17	29	24
Phosphorus ($\mu\text{g/L}$)	5	151	82	313	164
Nitrogen ($\mu\text{g/L}$)	5	1660	900	2820	1820
Chlorophyll ($\mu\text{g/L}$)	5	73.4	35.2	168.4	70.1
ISS (mg/L)	4	2.2	0.9	5.1	2.2

ISS=Inorganic Suspended Solids

Samples were collected between April 18 and September 7

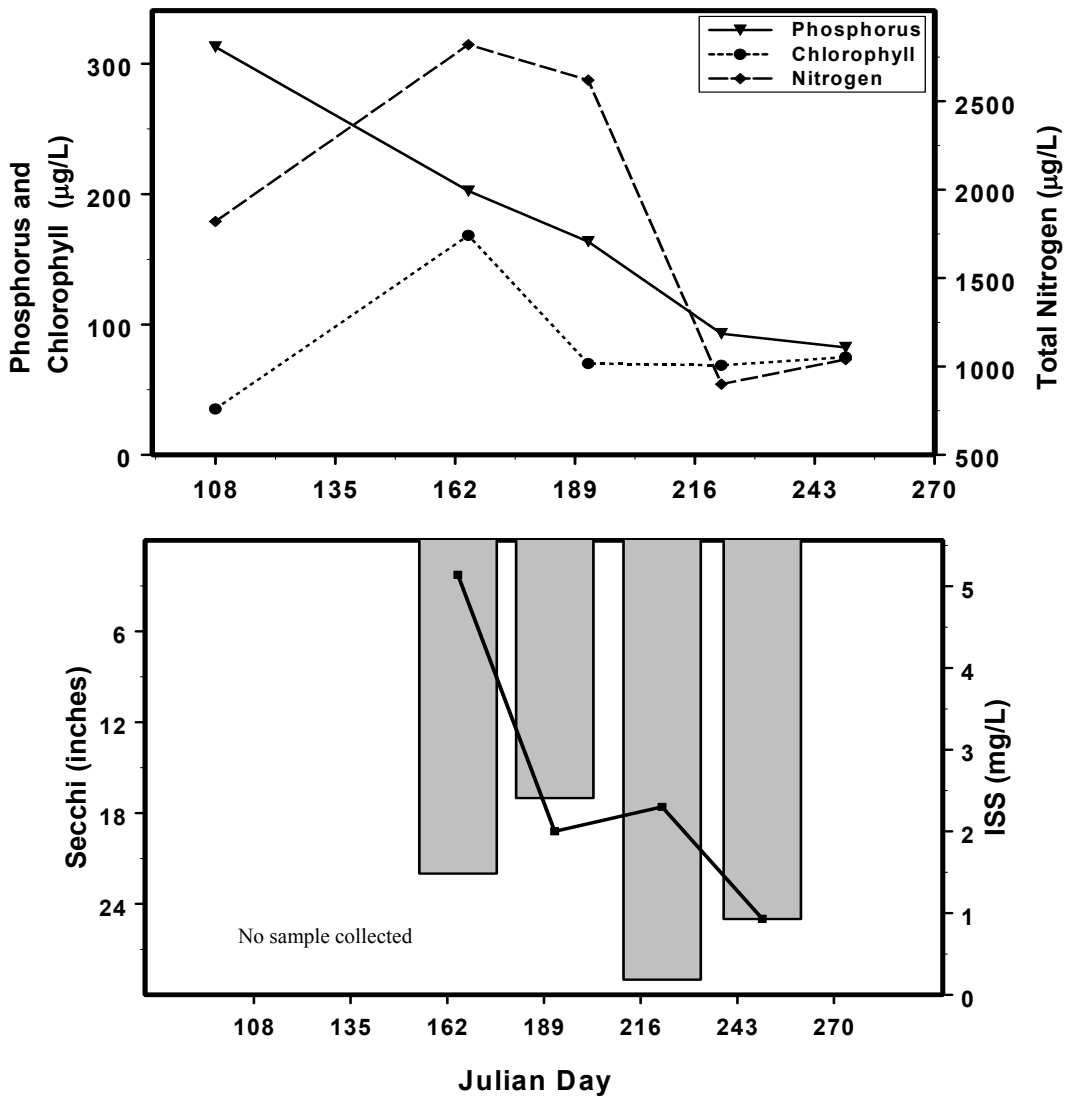


Figure 11. Seasonal fluctuations of parameters for Ashland Lake – 2001. Bars represent Secchi, line represents ISS.