

## Ashland Lake

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.

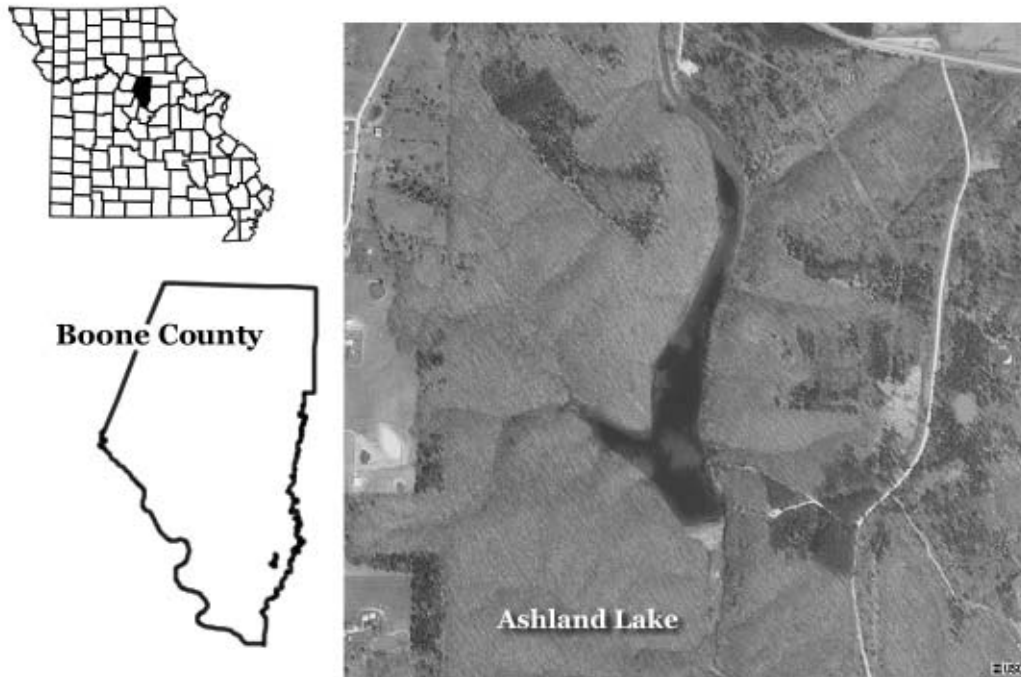


Figure 10. Location of Ashland Lake.

### 2002 Results

Figure 11 shows how the parameters nitrogen, phosphorus, algal chlorophyll, inorganic suspended solids and Secchi transparency varied in Ashland Lake during 2002. The descriptive statistics appear in Table 4. A brief description of the results:

- Four Samples were collected between May 5 and August 28.
- The geometric mean for chlorophyll in 2002 is about 70% less than the geometric mean of 2001.
- Both nutrients displayed extremely large ranges.
- Ashland lake was eutrophic based on the chlorophyll geometric mean, and hypereutrophic based on nitrogen and phosphorus geometric mean.

Table 4. Descriptive statistics for Ashland Lake – 2002.

Parameters	# of Samples	Geometric Mean	Minimum	Maximum	Median
Secchi Transparency (inches)	3	22	20	24	21
Phosphorus ( $\mu\text{g/L}$ )	4	119	63	266	118
Nitrogen ( $\mu\text{g/L}$ )	4	1487	940	2420	1475
Chlorophyll ( $\mu\text{g/L}$ )	4	22.7	10.1	43.3	24.7
ISS (mg/L)	4	3.0	1.5	4.9	3.4

ISS=Inorganic Suspended Solids

Samples were collected between May 5 and August 28

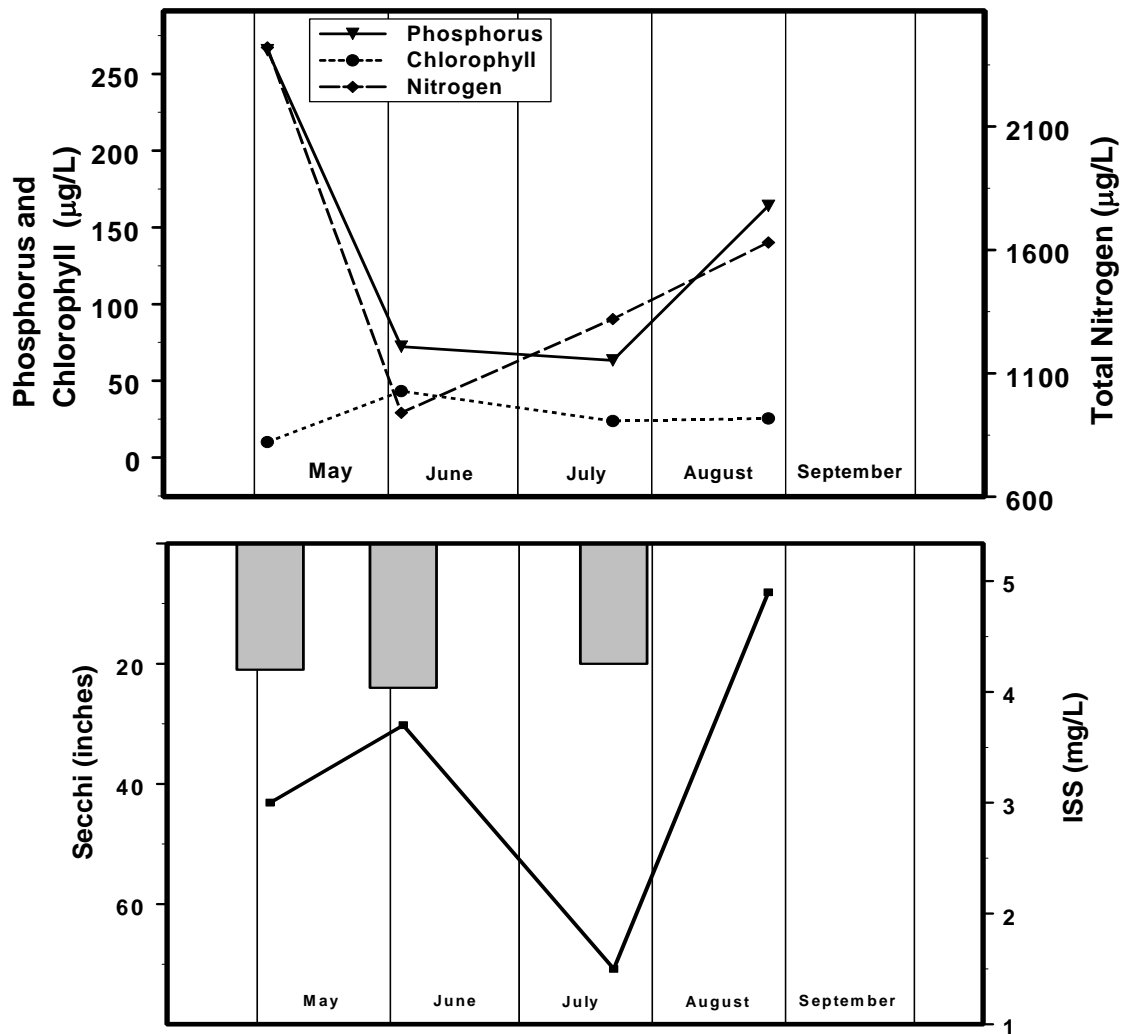


Figure 11. Seasonal fluctuations of parameters for Ashland Lake – 2002. Bars represent Secchi, line represents ISS.