

Blue Springs Lake

Region - Osage Plains

Blue Springs Lake, located in Fleming Park, is managed by the Jackson County Parks and Recreation Department. This 727 acre lake has a watershed that is approximately 20,659 acres in size, 50% of which is urban. Another 6% of Blue Springs Lake's watershed consists of water (Lake Jacomo and Prairie Lee Lake), the remaining area is divided between forest, grassland and row cropping. Being the third lake in a series of three, Blue Springs Lake is buffered from a large portion of its watershed

2000 Results

Figure 11 shows how the parameters phosphorus, nitrogen, algal chlorophyll, inorganic suspended solids, and Secchi transparency varied in Blue Springs Lake during the 2000 sampling season. A brief description of these results are:

1. Seven samples were taken, the first on 4-21 and last on 10-3.
2. Parameters displayed low to moderate variability throughout the season with the nutrients following similar patterns.
3. There was an increase in the phosphorus and nitrogen values at the end of the season. This is possibly related to the lake turnover process. (See page 12 for further explanation.)
4. Average values measured for phosphorus, nitrogen and chlorophyll were in the eutrophic range.
5. See page 68 for long term trend analysis.

Table 4. Descriptive statistics for Blue Springs - 2000.

Parameters	Average	Median	Minimum	Maximum
Chlorophyll ($\mu\text{g/L}$)	11.0	11.7	8.4	13.4
Nitrogen ($\mu\text{g/L}$)	413	390	350	510
Phosphorus ($\mu\text{g/L}$)	31	29	24	44
ISS (mg/L)	5.0	3.9	2.7	8.3
Secchi Transparency (inches)	38	38	27	53

ISS= Inorganic Suspended Solids. (See Table 2 on page 10 for comparison of regional values)

Figure 10. Location of Blue Springs Lake.

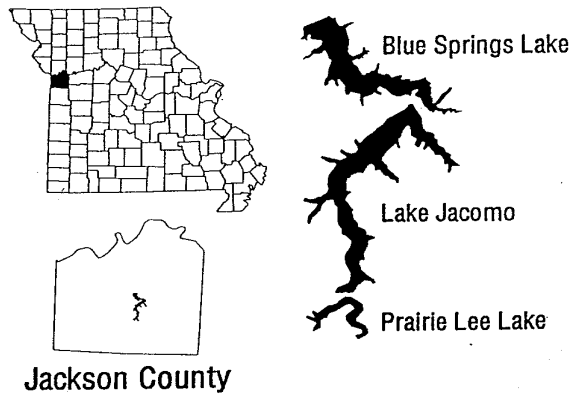


Figure 11. Seasonal fluctuations of parameters for Blue Springs Lake - 2000

