

Lake Jacomo - 2001 Data

Osage Plains Region

Lake Jacomo is managed by the Jackson County Parks and Recreation Department and is located in Fleming Park. Most of this 1,068-acre lake's watershed is urban (56%) with forest, grassland and row crop comprising the rest. Prairie Lee Lake is located directly upstream and acts as a buffer between Lake Jacomo and much of the watershed.

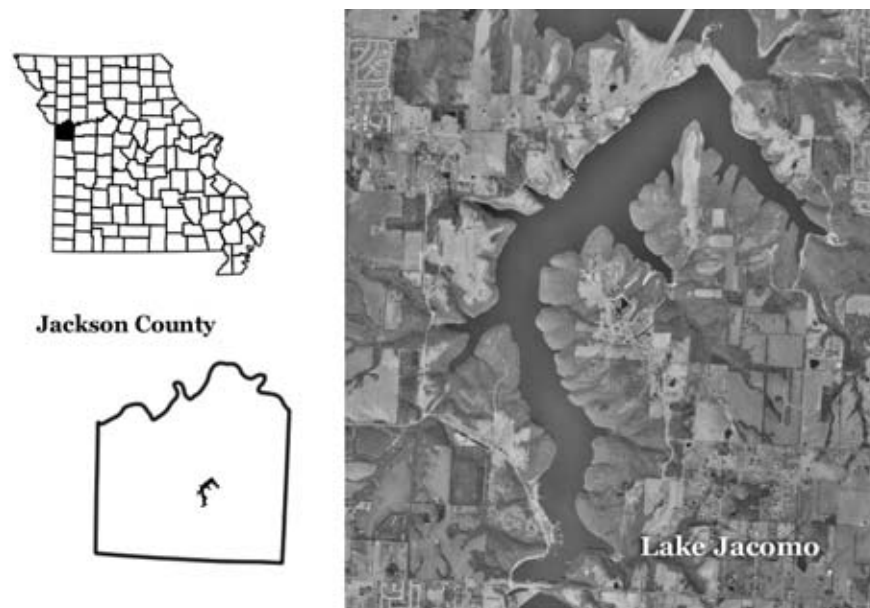


Figure 26. Location of Lake Jacomo.

2001 Results

Figure 27 shows how the parameters phosphorus, nitrogen, algal chlorophyll, inorganic suspended solids and Secchi transparency varied in Lake Jacomo during the 2001 sampling season. The descriptive statistics appear in Table 13. A brief description of these results:

- Eight samples were collected from April 24 to September 25.
- There is a slight trend toward lower phosphorus and nitrogen values mid-season.
- There was low to moderate variability for all parameters in 2001.
- Lake Jacomo typically had lower nutrient, chlorophyll and ISS values, and higher Secchi values than Blue Springs Lake, which is located “downstream” of Jacomo.
- Based on geometric means, Lake Jacomo is oligotrophic, mesotrophic and eutrophic for the parameters phosphorus, nitrogen and chlorophyll, respectively.

Table 13. Descriptive statistics for Lake Jacomo - 2001.

Parameters	# of Samples	Geometric			
		Mean	Minimum	Maximum	Median
Secchi Transparency (inches)	8	53	37	70	60
Phosphorus ($\mu\text{g/L}$)	8	25	19	35	24
Nitrogen ($\mu\text{g/L}$)	8	397	310	620	385
Chlorophyll ($\mu\text{g/L}$)	8	10.4	6.2	17.9	10.8
ISS (mg/L)	8	1.3	0.5	3.8	1.3

ISS=Inorganic Suspended Solids

Samples were collected between April 24 and September 25

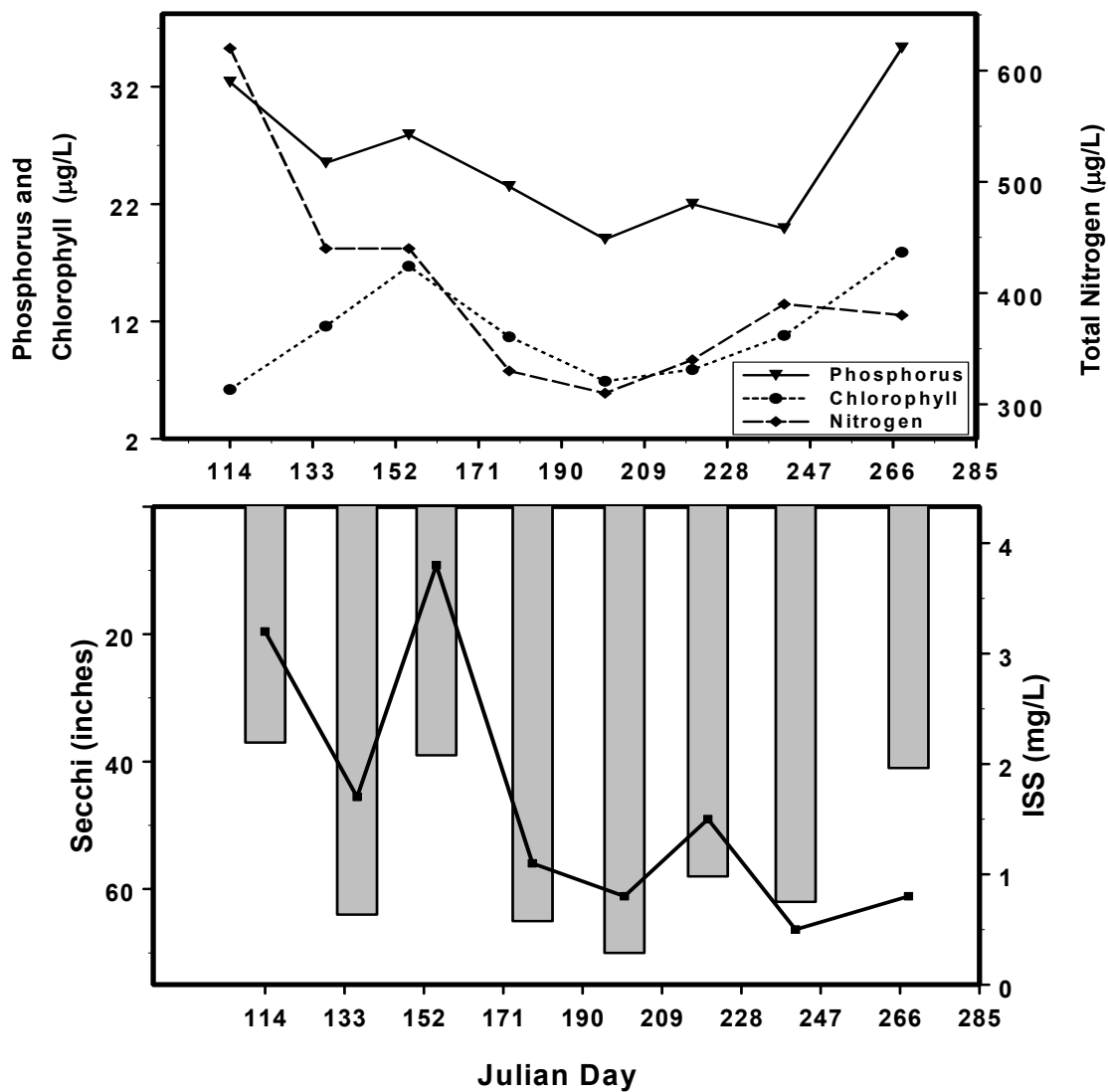


Figure 27. Seasonal fluctuations of parameters in Lake Jacomo– 2001. Bars represent Secchi, line represents ISS.