

Blue Springs Lake



2010 DATA

Jackson County
Latitude: 39.0164 Longitude: -94.3375

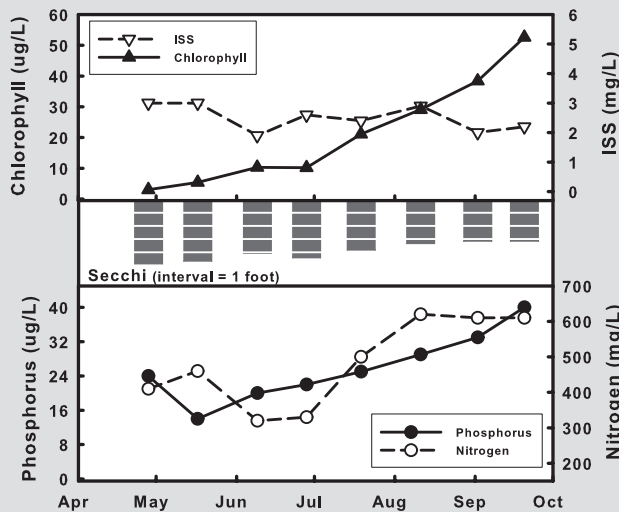
Date	4/28	5/17	6/9	6/28	7/19	8/11	9/2	9/20	Mean
Secchi (inches)	59	56	49	53	46	40	38	38	47
TP (µg/L)	24	14	20	22	25	29	33	40	25
TN (µg/L)	410	460	320	330	500	620	610	610	468
CHL (µg/L)	3.0	5.4	10.3	10.2	21.1	29.1	38.4	52.6	14.6
ISS (mg/L)	3.0	3.0	1.9	2.6	2.4	2.9	2.0	2.2	2.5

The pattern of increasing nutrient levels through the season is opposite that found in most Missouri lakes, where nutrient concentrations tend to peak during spring samples. Inorganic suspended sediment values remained fairly stable through the season, suggesting increased nutrients were not associated with erosional runoff from the watershed. The increase in algal chlorophyll concentrations during the sample season can only be partially attributed to the higher nutrient levels. The ratio of chlorophyll to phosphorus increased from 0.1 in April to >1.0 at the end of the season. These higher ratios indicate the algae were more efficient

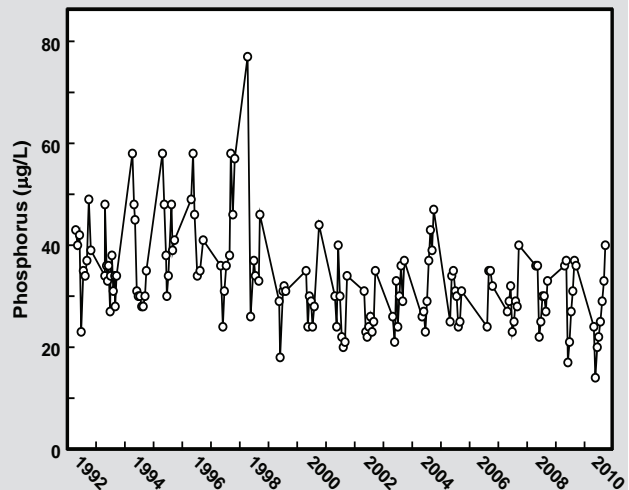
at using available phosphorus, possibly a result of shifts in the algal community or in grazing pressure.

There has been a shift in phosphorus concentrations in Blue Springs Lake overtime. Phosphorus values during 1992-1998 ranged from 30-58µg/L, with a predictable peak occurring most springs. Since 1999 the range has been lower, 20-40µg/L. Also, the predictable nature of the spring peak seemed to disappear, with many annual peaks occurring in the fall.

2010 GRAPHS



TREND GRAPHS



See pages 10-11 for help interpreting graphs