

Rothwell Lake

Randolph County

2007 DATA



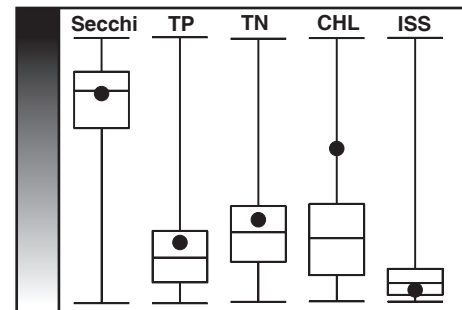
Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
4/27	28	57	790	39.9	4.9
5/16	38	46	930	52.1	2.1
6/5	59	35	820	27.0	1.5
6/26	35	58	960	61.5	2.1
7/23	46	49	690	21.8	2.6
8/9	39	61	710	19.6	1.8
8/30	47	49	750	25.4	1.4
9/21	36	53	990	37.6	2.0
Mean	40	50	820	33.0	2.1

2007 SUMMARY

Rothwell lake was sampled 8 times between April 27 and September 21, 2007.

Nutrient concentrations were higher than the median statewide values but did not exceed the 75th percentile. Chlorophyll concentrations, however, were higher than found in 75% of Missouri lakes. Ratios of chlorophyll to phosphorus (chlorophyll ÷ phosphorus) averaged 0.7, implying efficient algae throughout the season. The statewide average chlorophyll to phosphorus ratio is roughly half that found in Rothwell Lake.

Secchi transparency values were right at the statewide median, and sediment concentrations (ISS) were just below the statewide median.



Relative Rank Graph
See page 11 for details

TRENDS

While 2007 chlorophyll concentrations at Rothwell Lake were higher than expected based on the nutrient concentrations, the 2006 values were still considerably higher. The long-term chlorophyll concentration exceeds the limit proposed by nutrient criteria for the state of Missouri. Nutrient concentrations (not shown) do not exceed the proposed criteria values.

Suspended sediment concentrations (ISS) are typically low in Rothwell Lake, and have varied little from year to year.

