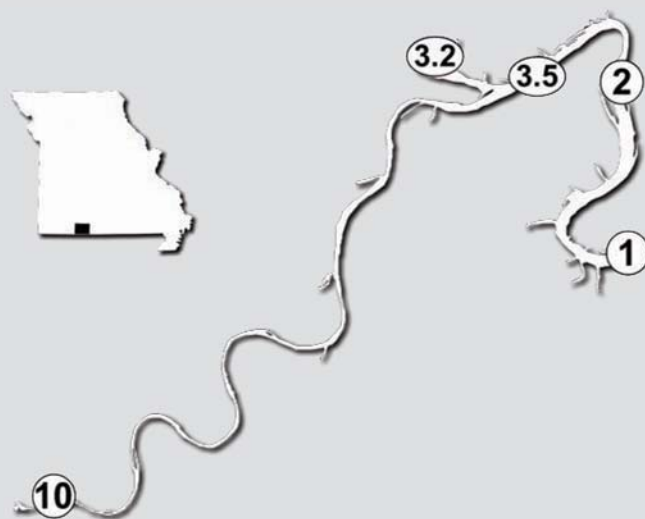


Lake Taneycomo

Taney County

SITES AND SUMMARY

Five sample sites were monitored on Lake Taneycomo during 2006. Four sites were in the main lake channel and the fifth was located in Bull Creek. The most up-lake site (Site 10) was sampled on six occasions, while other sites were only sampled twice during 2006. The low number of samples at these sites does limit how much we can say about water quality during the sample season.



Phosphorus values were similar for all sites, with averages ranging from 15 to 20 $\mu\text{g/L}$. Site 10 phosphorus values were stable, only ranging by 9 $\mu\text{g/L}$ April through September. Average nitrogen values at lake sites were between 500-600 $\mu\text{g/L}$, while Bull Creek has a little less nitrogen, with an average of 360 $\mu\text{g/L}$. Individual chlorophyll values at sites 2 and 3.5 were all between 6 and 9

$\mu\text{g/L}$. Chlorophyll levels at Site 1 were 3.7 and 13.7 $\mu\text{g/L}$, leading to a similar average as seen at sites 2 and 3.5, even though the range is larger. Secchi readings improved as site location moved down-lake towards Power Site Dam. Inorganic suspended sediments were measured at sites 10 and 3.2; levels were minimal at Site 10 and moderate at Site 3.2.

2006 DATA

Parameter		1	2	3.5	10	3.2
# of samples		2	2	2	6	2
Secchi (inches)	Mean	62	52	42		43
	Minimum	50	48	38		27
	Maximum	78	56	46		67
Phosphorus ($\mu\text{g/L}$)	Mean	18	17	20	15	16
	Minimum	14	17	20	10	8
	Maximum	24	18	20	19	34
Nitrogen ($\mu\text{g/L}$)	Mean	550	492	564	603	359
	Minimum	530	440	530	500	330
	Maximum	570	550	600	750	390
Chlorophyll ($\mu\text{g/L}$)	Mean	7.1	8.2	7.2	1.5	
	Minimum	3.7	7.7	6.1	0.7	
	Maximum	13.7	8.7	8.6	2.6	
Suspended Sediments (mg/L)	Mean				0.1	4.1
	Minimum				0.1	2.5
	Maximum				0.3	6.8

Lake Taneycomo

Taney County

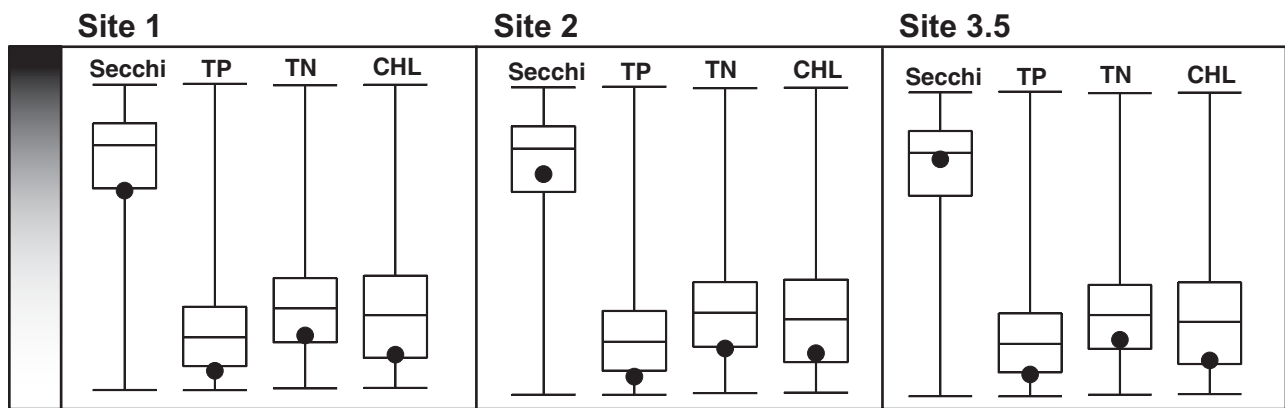
RELATIVE RANK

Sites 1 and 2 had nutrients and chlorophyll concentrations among the lowest 25% of Missouri lakes and Secchi transparency values among the highest 25% of Missouri lakes. Similar results were found at Site 3.5, with the exception of Secchi which was nearer the median of Missouri lakes.

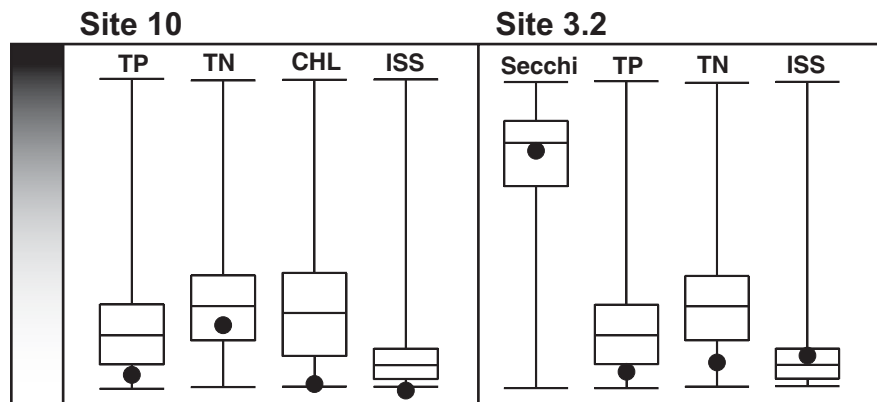
Site 10 had very low levels of phosphorus, chlorophyll and inorganic suspended sedi-

ments relative to most Missouri lakes, with nitrogen concentrations being a bit higher.

Site 3.2, located in Bull Creek had nutrient levels that were among the lowest 25% of Missouri lakes. Inorganic suspended sediments were above the median at site 3.2, but somewhat turbid conditions are generally expected at a site in close proximity to an inflowing stream.



See page 11 for help interpreting the Relative Rank Graphs



Lake Taneycomo

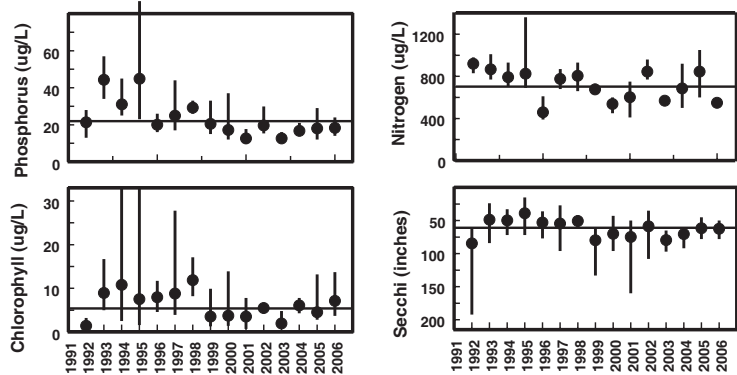
Taney County

TANEYCOMO TRENDS

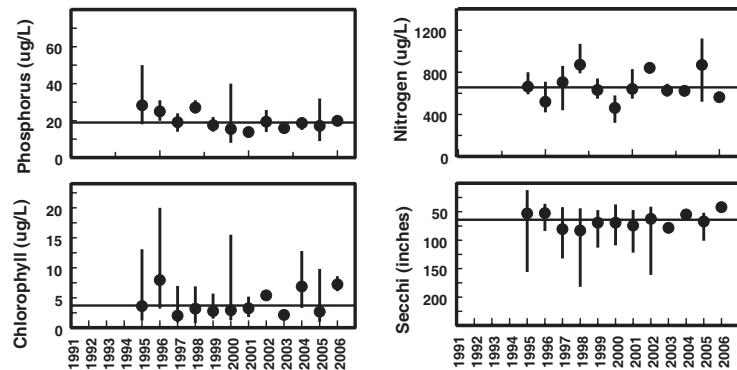
Values for 2006 at sites 1, 2, 3.2 and 3.5 were generally in the range of past data. In cases where 2006 data do seem to differ from past values (ex. Secchi at Site 3.5), please note that only two samples were collected at these sites in 2006. The small number of samples limits our ability to make comparisons with past years when a full assemblage of samples were collected.

The trend of lower phosphorus at Site 10 continues, with 2006 values being comparable to those collected the last six years. Chlorophyll levels in 2006 also mimicked recent findings, with a low median value and low variability. Nitrogen levels in 2006 were some of the lowest measured at Site 10, as were inorganic suspended sediments concentrations.

Site 1



Site 3.5



Site 10

