Forest Lake, Site 1

Adair County

2006 DATA

Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
4/26	108	12	510	4.3	1.9
5/19	73	13	350	7.6	1.8
6/16	47	14	460	4.9	2.9
7/3	52	19	480	10.3	2.7
7/28	60	12	380	7.4	1.9
Mean	**65**	**14**	**432**	**6.6**	**2.2**

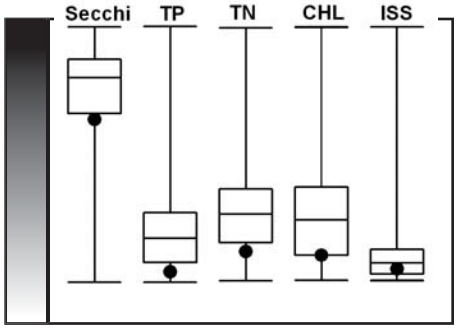
2006 SUMMARY

Forest Lake, located in Thousand Hills State Park, was sampled 5 times in 2006.

Secchi transparency was very high in April, reaching 9 feet. The values decreased to the 5 foot range for the remainder of the season. The overall mean of 65 inches is higher than observed in 75% of Missouri lakes.

Nutrient concentrations were very stable throughout the sampling season. Mean nutrient and chlorophyll concentrations were lower than observed in 75% of Missouri lakes, thanks to Forest Lake's largely undisturbed watershed.

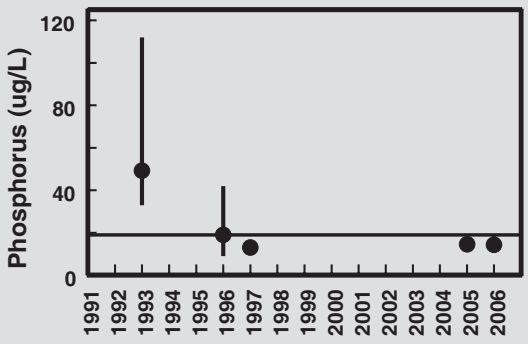
The average suspended sediment concentration was lower than found in most Missouri lakes and varied little throughout the season.

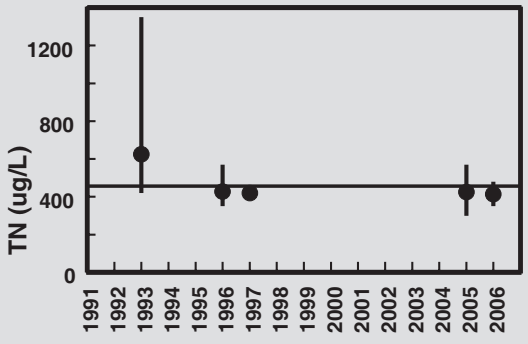


Relative Rank Graph
See page 11 for details

TRENDS

The dam site at Forest Lake has been monitored for a total of 5 years, though not consecutively. Nutrient concentrations were quite high in 1993, which was a year of exceptional rainfall and flooding so high values are not surprising. Data from the four other years suggest that conditions in this lake vary little from year to year.

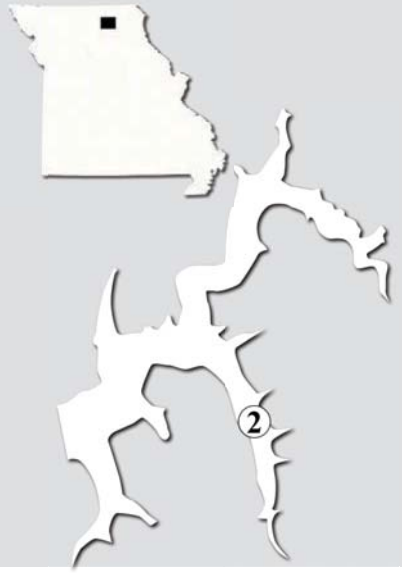




Forest Lake, Site 2

Adair County

2006 DATA



Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
4/26	28	22	520	8.5	7.7
5/19	28	28	460	12.0	8.3
6/16	40	20	440	8.1	4.5
7/3	26	29	480	18.2	6.5
7/28	27	28	360	23.0	6.5
Mean	**29**	**25**	**449**	**12.8**	**6.6**

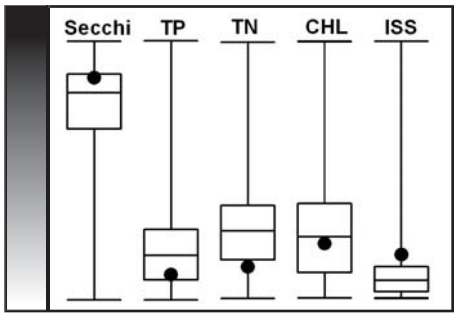
2006 SUMMARY

Site 2 at Forest Lake was also monitored 5 times in 2006.

Secchi transparency in this arm is quite different from the transparency observed at the dam, averaging a full 3 feet less. As a result, this site has less water clarity than observed in nearly 75% of Missouri lakes.

While the site 2 nitrogen concentrations are nearly indistinguishable from the dam site, phosphorus and chlorophyll concentrations are roughly double. Regardless, there are still fewer nutrients and less chlorophyll at this site than found in most Missouri lakes.

The mean suspended sediment concentration was a full three times that observed at the dam. This increase pushed site 2 to be among the 25% of suspended sediment concentrations observed in Missouri lakes.



Relative Rank Graph
See page 11 for details

TRENDS

There are less than three years worth of data for site 2, so a trends graph is not displayed.

Maximum water clarity was observed in June, when minimal concentrations of chlorophyll and suspended sediments were recorded.