

Chilhowee Reservoir

Annual Report 2006

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All activities covered in this report were conducted under the following TWRA cost centers: 4311, 4312, and 4313. Development of this report was financed in part by funds from Federal Aid in Fish and Wildlife Restoration (Public Law 91-503) as documented in Federal Aid Project FW-6.

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Chilhowee Reservoir - 2006

Largemouth Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Fair	Substock CPUE	Electrofishing	3.5/hr
Structure	Good	PSD	Electrofishing	60
Density	Good	CPUE \geq Stock Size (203 mm)	Electrofishing	29.4/hr

Fishery Forecast: Chilhowee does not contain a great deal of largemouth bass habitat and the cool water limits the successfulness of this fishery.

Management Recommendations: Investigate the possibility of a 14-inch minimum length limit.

Smallmouth Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Good	Substock CPUE	Electrofishing	11.2/hr
Structure	Fair	PSD	Electrofishing	41
Density	Fair	CPUE \geq Stock Size (178 mm)	Electrofishing	11.8/hr

Fishery Forecast: There are a good number of smallmouth present in the reservoir and most were collected in the upper, riverine section. Slow growth and substantial fishing pressure leads one to assume a minimum length limit is in order.

Management Recommendations: Investigate the possibility of a 14-inch minimum length limit.

Stocking and Stocking Evaluations

Species	Number Stocked	Mark	Evaluation	Value
Rainbow Trout	49,777	N/A	N/A	N/A

Tables

Table 1. Chilhowee Reservoir fish stockings 2000 - 2006.

Species	Date	Total Stocked
Lake Trout	2000	17,999
	2001	22,000
	2002	10,139
	2003	15,048
	2004	64,862
	2005	29,962
Rainbow Trout	2000	18,681
	2001	11,043
	2002	73,811
	2003	79,151
	2004	44,544
	2005	20,372
	2006	49,777

Table 2. Mean relative weight and standard error values by size class for Chilhowee Reservoir largemouth bass collected during the 2006 electrofishing sample.

Size Class	Mean Wr	Std. Error	N
175	88.114		1
200	75.345		1
225	82.525	2.099	6
250	90.704	1.117	2
275	84.345	2.202	9
300	82.604	2.811	6
325	78.568	4.422	3
350	84.591	4.751	4
375	87.477	2.202	5
400	86.003		1
425	82.917	1.628	5
450	97.839		1
475	94.360		1
500			
525	102.610		1

Total Catch 46

Table 3. Mean relative weight and standard error values by size class for Chilhowee Reservoir smallmouth bass collected during the 2006 electrofishing sample.

Size Class	Mean Wr	Std. Error	N
175	91.135	3.857	5
200	90.332	3.645	4
225	89.239	2.460	6
250	89.628	2.900	3
275	91.455		1
300			
325	83.056		1
350	80.328	1.460	3
375	80.995	2.649	3
400			
425	86.873	3.551	2
450	85.892		1
475	77.167		1

Total Catch 30

Figures

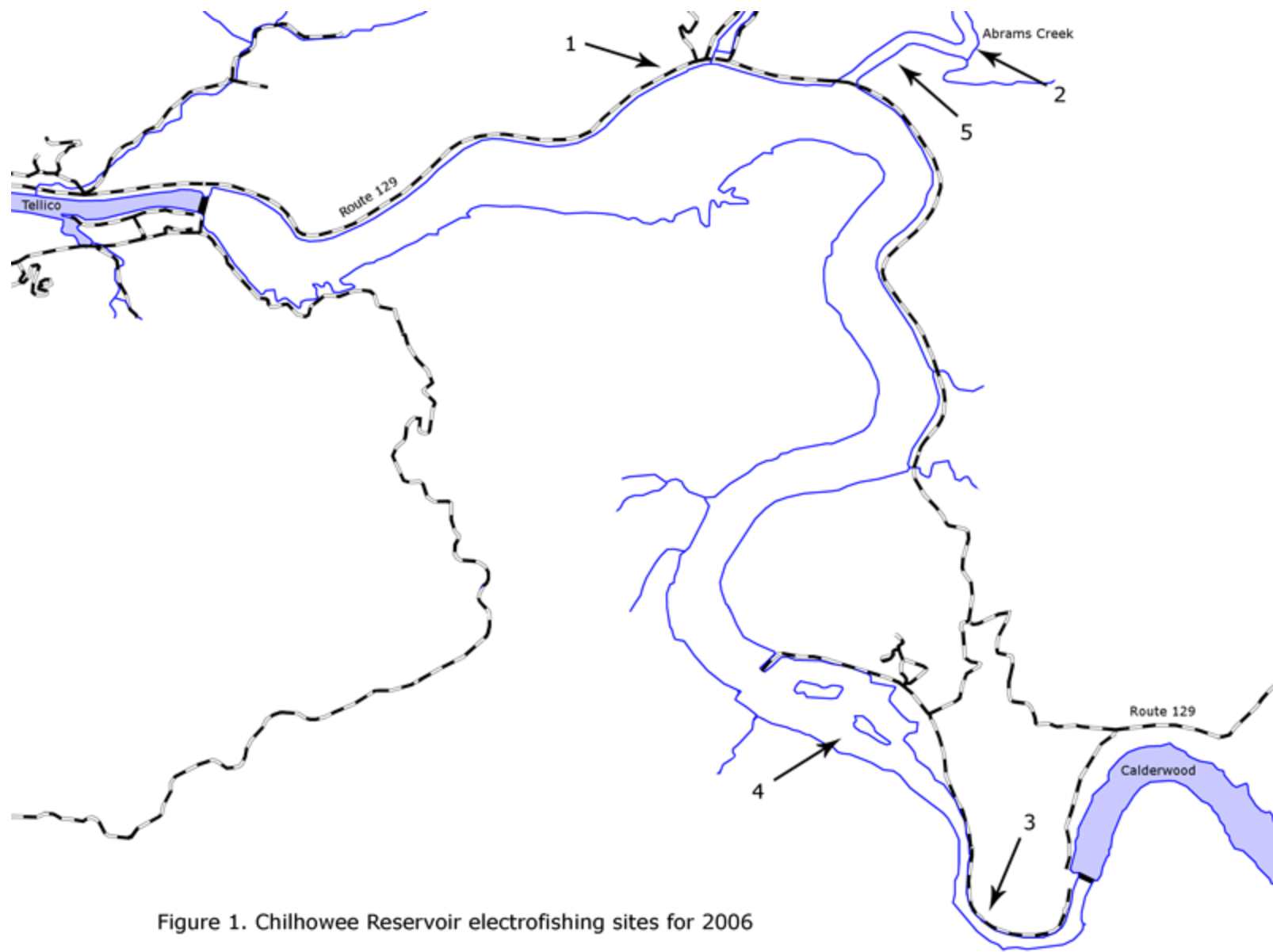


Figure 1. Chilhowee Reservoir electrofishing sites for 2006

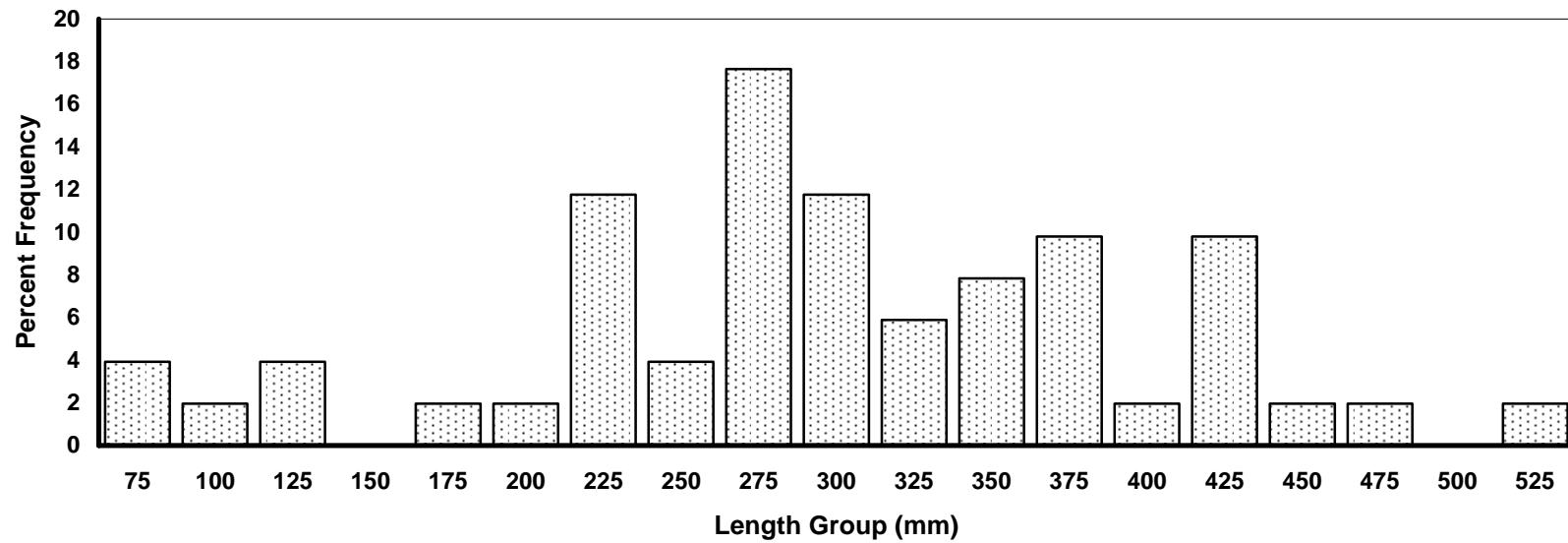


Figure 2. Chilhowee Reservoir largemouth bass length frequency by percent for 2006 electrofishing sample (n=51).

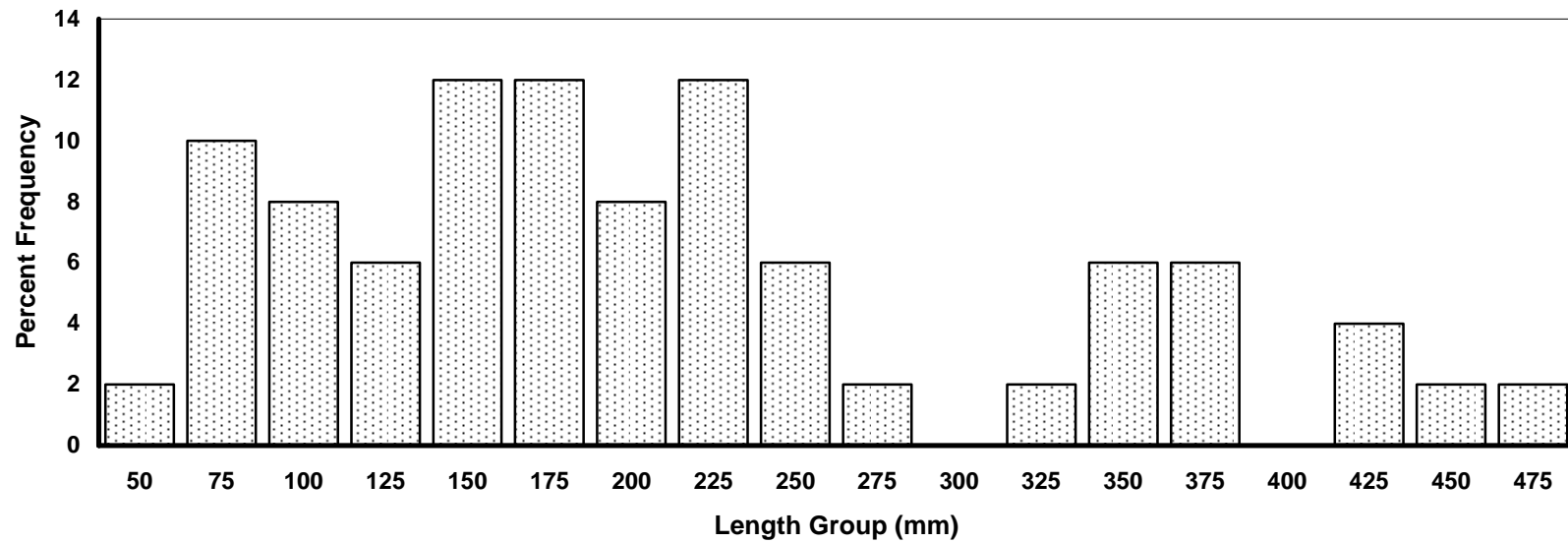


Figure 3. Chilhowee Reservoir smallmouth bass length frequency by percent for 2006 electrofishing sample (n=50).

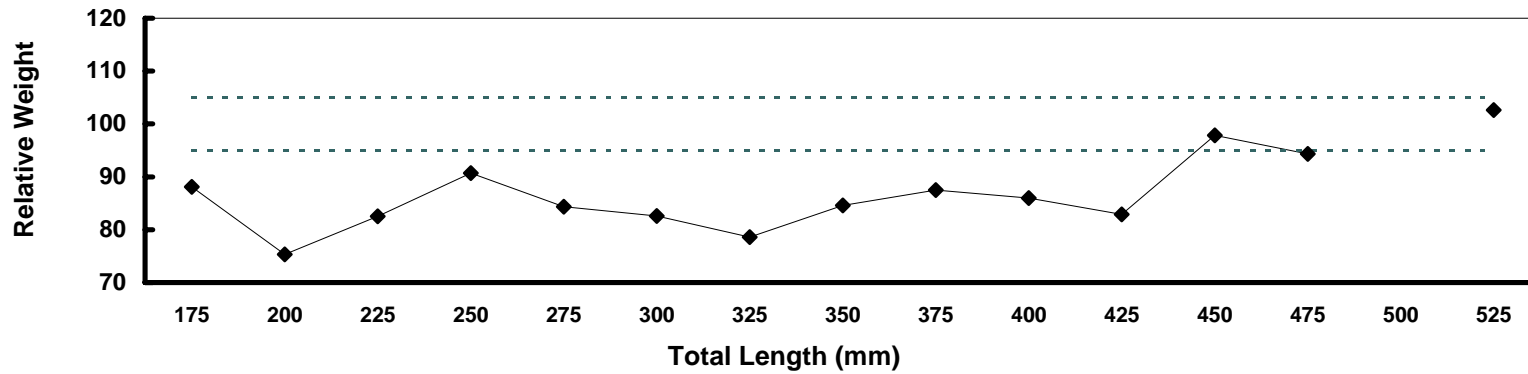


Figure 4. Chilhowee Reservoir largemouth bass mean relative weight values from the 2006 electrofishing sample (n=46).

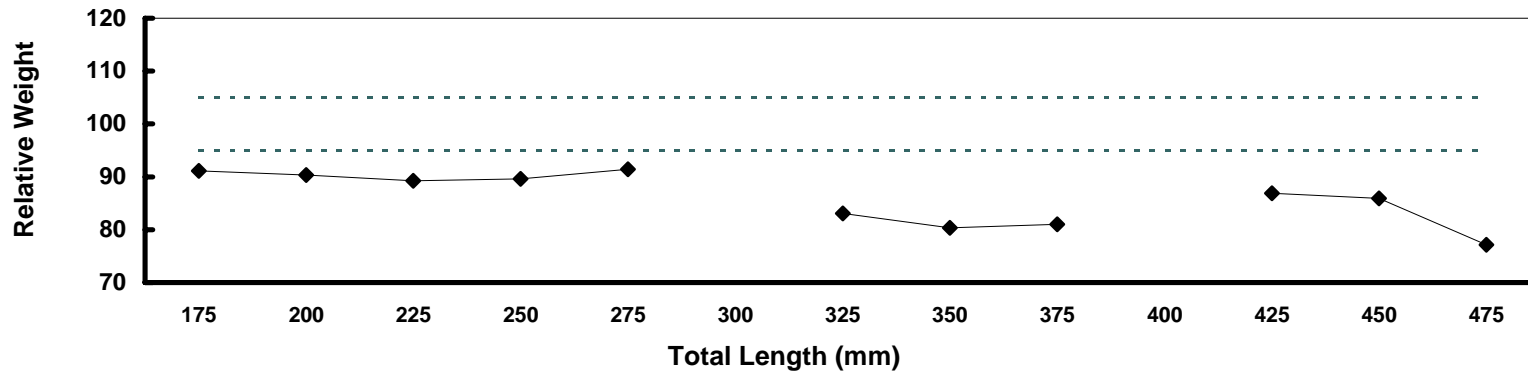


Figure 5. Chilhowee Reservoir smallmouth bass mean relative weight values from the 2006 electrofishing sample (n=30).