

Cherokee Reservoir

Annual Report 2005

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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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## Cherokee Reservoir - 2005

### Largemouth Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Fair	Substock CPUE	Electrofishing	5.6/hr
Structure	Excellent	PSD	Electrofishing	84
Density	Excellent	CPUE $\geq$ Stock Size (203 mm)	Electrofishing	68.8/hr
	Excellent	CPUE $\geq$ Minimum Size Limit (381 mm)	Electrofishing	36.0/hr

Fishery Forecast: The quality of the fishery has improved since the 381 mm size restriction went into effect in 2001. Catch rates are good and 29 percent of the population is available for harvest.

Management Recommendations: No changes in creel limits are necessary.

### Black Crappie

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Substock CPUE (per net night)	Trap Net	0.2/net
Structure	Good	PSD	Trap Net	80
Density	Fair	CPUE $\geq$ Stock Size (127 mm)	Trap Net	3.5/net
	Poor	CPUE $\geq$ Minimum size Limit (254 mm)	Trap Net	1.1/net

Fishery Forecast: Several years of excellent recruitment is needed to bring the fishery back to where it was in the mid-1990s. The density of all size classes of crappie is fairly low.

Management Recommendations: No changes in creel limits are proposed.

### Hybrid Striped Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Density	Excellent	CPUE $\geq$ Minimum size Limit (381 mm)	Gill Net	27.3/net

Fishery Forecast: The survival rate of hybrids is so outstanding that stocking rates have recently been reduced to create a more balanced striped bass/hybrid fishery. Only 25% of the Moronidae stocked are hybrids. Anglers from Tennessee and neighboring states are fishing heavily for hybrids and it will be interesting to see the results of the 2006 creel survey now that the fishery is established.

Management Recommendations: No changes in creel limits are proposed.

### Walleye

Population Parameter	Annual Rating	Measure	Gear	Value
Density	Good	CPUE $\geq$ Stock Size (250 mm)	Gill Net	4.4/net
	Good	CPUE $\geq$ Minimum size Limit (380 mm)	Gill Net	4.4/net

Fishery Forecast: We began stocking walleye again beginning in 2003 after several years of trial stockings of sauger and saugeye. Anglers did not have much success catching sauger and expressed their preference for walleye. Although saugeye did well, that hybrid is no longer stocked due to the concern over impacting the genetics of the pure pikeperch strains downstream of Cherokee.

Walleye are abundant and growing well given the abundant forage base. It will be interesting to see the results of the 2006 creel survey now that the fishery has been re-established.

Management Recommendations: No changes in creel limits are proposed.

**Stocking and Stocking Evaluations**

Species	Number Stocked 2003	Mark	Evaluation	Value
Striped Bass	133,646	N/A	N/A	N/A
Hybrid Striped Bass	31,950	N/A	N/A	N/A
Walleye	60,089	N/A	N/A	N/A

**Habitat Enhancement and Monitoring**

Fish Attractors	Expanded	none
	Renovated	13 sites, 725 units, 13.5 acres
Water Quality	Temperature	July-September (normal)
	D.O.	July-September (normal)

## Tables

Table 1. Cherokee Reservoir physical and chemical characteristics.

Surface Area	30,000 acres	12,262 hectares
Drainage Area	3,428 sq. mi.	8,885 sq. km
Full Pool Elevation	1,073 feet-msl	327m-msl
Mean Annual Fluctuation	53 feet	16.2 m
Shoreline Distance	395 miles	636 km
Total Developed Shoreline	25%	
Maximum Depth	150 feet	45.7 m
Outlet Depth (upper)	116 feet	35.4 m
(lower)	135 feet	41.2 m
Thermocline Depth	15 feet	4.6 m
Trophic Status (Forebay)	Mesotrophic	
Mean Chlorophyll (Forebay)	6.8 mg/L	
Trophic Index Value Carlson (1977)	49.3	
Hydraulic Retention Time	165 days	
Reservoir Age	57 years	



Table 2. Cherokee Reservoir fish stockings 1993 - 2005.

<b>Species</b>	<b>Date</b>	<b>Rate (per acre)</b>	<b>Total Stocked</b>
Striped Bass	June-July 1993	3.5	105,298
	June-August 1994	5.4	163,826
	July 1995	3.2	98,026
	July-August 1996	2.3	70,348
	July-August 1997	4.2	126,494
	July 1998	4.9	147,574
	July-August 1999	3.6	108,944
	July-August 2001	5.0	150,935
	July 2002	3.2	97,854
	July 2003	3.4	103,423
	July 2004	2.7	81,285
	July 2005	4.4	133,646
	Hybrid striped bass	June 2000	5.0
July 2001		1.6	48,613
July 2002		1.9	58,934
July 2003		1.7	51,708
June 2004		3.9	117,952
June 2005		1.1	31,950
Walleye	May-June 1993	13.1	396,900
	May-June 1994	7.5	228,260
	May-June 1995	7.3	219,800
	May 1999	3.1	93,323
	May 2003	4.9	149,810
	May 2004	5.2	156,792
	May 2005	2.0	60,089
Sauger	May 1997	1.3	38,231
	May 1998	3.9	118,550
	May 2000	3.3	100,900
	May 2001	2.0	59,502
	May 2002	3.1	93,996
Saugeye	May 1996	0.8	25,328
Paddlefish	July-Aug. 1993	0.1	3,050
	June-Aug. 1994	0.3	7,598
	August 1995	0.1	2,120
Blue Catfish	July 1995	1.5	44,100
	November 1998	0.8	23,175
	June 2003	1.1	33,121
White Crappie	October 1994	1.5	44,126
	October 2003	1.3	38,740
Blacknose Black Crappie	October 1995	8.7	263,653
	Mar.-Dec. 1996	12.3	371,309
	July-Dec. 1997	6.1	185,990
	May-Dec. 1998	13.5	408,502
	November 1999	0.9	26,383





Table 4. Mean relative weight and standard error values by size class for Cherokee Reservoir largemouth bass collected during the 2005 electrofishing sample.

<b>Size Class</b>	<b>Mean Wr</b>	<b>Std. Error</b>	<b>N</b>
150	81.460		1
175	76.613	5.925	7
200	85.772	2.254	9
225	89.956	2.080	9
250	86.531	0.927	9
275	87.449	3.236	12
300	90.147	0.945	19
325	93.922	2.213	21
350	94.394	1.468	33
375	94.192	1.145	26
400	97.640	0.969	36
425	96.819	1.324	44
450	93.944	1.550	22
475	101.925	3.827	11
500	95.969	3.283	4
525	89.557	4.000	2

**Total Catch** 265

Table 5. Mean relative weight and standard error values by size class for Cherokee Reservoir black crappie collected during the 2005 trap net sample.

<b>Size Class</b>	<b>Mean Wr</b>	<b>Std. Error</b>	<b>N</b>
125	89.406	7.180	6
150	90.604	1.659	29
175	94.577	1.333	39
200	100.323	1.027	79
225	99.259	0.781	95
250	97.150	1.628	29
275	95.828	1.147	53
300	94.228	1.787	28
325	90.183	1.806	5
350	97.232		1
375	77.698		1

**Total Catch** 365

Table 6. Mean relative weight and standard error values by size class for Cherokee Reservoir hybrid striped bass bass collected in the 2005 winter gill net sample.

<b>Size Class</b>	<b>Mean Wr</b>	<b>Std. Error</b>	<b>N</b>
325	94.157		1
350	105.387		1
375	101.279	2.140	4
400	103.584	3.075	3
425	98.084	1.210	15
450	99.498	1.162	28
475	102.200	1.168	26
500	98.706	0.940	44
525	101.142	1.945	35
550	103.896	1.089	25
575	102.947	1.060	36
600	104.447	1.075	24
625	103.184	2.243	6
<b>Total Catch</b>			<b>248</b>

Table 7. Mean relative weight and standard error values by size class for Cherokee Reservoir striped bass bass collected in the 2005 winter gill net sample.

<b>Size Class</b>	<b>Mean Wr</b>	<b>Std. Error</b>	<b>N</b>
400	100.696		1
425	98.746		1
450	106.321	2.543	2
475	103.854		1
500			
525			
550	85.418		1
575	100.327	3.288	3
600	102.393	2.078	4
625	104.722	0.569	3
650	117.786		1
675			
700	98.038	4.822	2
725	110.777		1
750	95.751	2.465	2
775	100.652		1
800	86.915		1
<b>Total Catch</b>			<b>24</b>

Table 8. Geometric means of Region IV shad gill net catches in 2002.

	Alewife Geometric Mean	Threadfin Geometric Mean	Gizzard Geometric Mean
Norris	0.3	5.8	4.3
Cherokee	<b>16.2</b>	<b>17.1</b>	<b>14.1</b>
S Holston	3.5	29.7	3.2
Boone	4.6	22.2	32.7

Table 9. Geometric means of Region IV shad gill net catches in 2003.

	Alewife Geometric Mean	Threadfin Geometric Mean	Gizzard Geometric Mean
Norris	17.3	17.9	5.8
Cherokee	<b>67.3</b>	<b>1.9</b>	<b>67.7</b>
S Holston	8.2	5.5	4.0
Boone	107.3	0.0	14.4

Table 10. Geometric means of Region IV shad gill net catches in 2004.

	Alewife Geometric Mean	Threadfin Geometric Mean	Gizzard Geometric Mean
Norris	0.7	14.6	3.7
Cherokee	<b>5.3</b>	<b>9.7</b>	<b>9.3</b>
S Holston	1.8	4.0	2.2
Boone	3.0	1.5	42.3

Table 11. Geometric means of Region IV shad gill net catches in 2005.

	Alewife Geometric Mean	Threadfin Geometric Mean	Gizzard Geometric Mean
Norris	0.4	3.8	5.3
Cherokee	<b>0.1</b>	<b>1.6</b>	<b>1.7</b>
S Holston	0.2	3.9	3.1
Boone	2.4	15.9	26.1

Table 12. Summary of July 2005 Cherokee Reservoir water quality parameters within the aeration system by the dam.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	26.6	233	7.9	7.8	Dam	1.5	0845	7/14/2005
1	26.6	233	8.1	7.6				
2	26.5	233	8.1	7.0				
3	26.4	234	8.2	7.8				
4	26.3	234	8.2	6.4				
5	26.3	234	8.2	6.6				
6	25.5	242	8.1	6.1				
7	24.0	254	7.9	4.3				
8	23.3	259	7.7	3.4				
9	21.4	271	7.6	2.9				
10	20.9	269	7.6	3.7				
11	20.0	265	7.6	5.5				
12	19.6	267	7.5	4.2				
13	18.8	266	7.5	4.7				
14	17.9	268	7.5	5.4				
15	16.7	274	7.5	4.5				
16	16.1	277	7.4	4.0				
17	15.7	278	7.4	4.1				
18	15.4	279	7.4	3.9				
19	14.5	280	7.4	5.1				
20	14.2	279	7.4	4.6				
21	13.9	279	7.4	4.3				
22	13.8	280	7.3	4.2				
23	13.5	281	7.3	3.3				
24	13.4	283	7.3	2.5				
25	13.3	282	7.3	3.4				
26	12.9	283	7.3	3.4				
27	12.8	283	7.3	3.6				
28	12.7	283	7.3	3.7				
29	12.7	283	7.3	3.7				
30	12.6	284	7.3	3.4				

Table 13. Summary of July 2005 Cherokee Reservoir water quality parameters at Holston River Mile 55.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	26.8	231	8.5	7.6	h55	1.8	0930	7/14/2005
1	26.7	231	8.5	7.2				
2	26.7	231	8.5	6.6				
3	26.7	232	8.5	6.2				
4	26.7	232	8.5	6.6				
5	26.7	232	8.5	6.1				
6	26.4	235	8.4	6.5				
7	25.3	244	8.3	4.5				
8	22.3	265	7.9	1.6				
9	21.0	271	7.8	0.7				
10	20.2	275	7.7	0.3				
11	19.4	274	7.6	0.6				
12	18.7	271	7.6	1.8				
13	18.3	273	7.6	1.3				
14	17.8	274	7.5	1.7				
15	16.9	278	7.5	1.1				
16	16.5	279	7.5	1.0				
17	15.9	280	7.5	1.1				
18	15.7	280	7.4	1.1				
19	15.0	281	7.4	1.4				
20	14.5	281	7.4	1.8				
21	14.4	280	7.4	1.9				
22	14.2	283	7.4	1.5				
23	13.9	284	7.4	1.4				
24	13.7	284	7.4	1.4				
25	13.4	285	7.3	1.3				
26	13.3	285	7.3	1.4				
27	13.0	287	7.3	1.3				
28	12.9	287	7.3	1.2				
29	12.7	288	7.3	1.3				
30	12.6	287	7.3	1.5				

Table 14. Summary of July 2005 Cherokee Reservoir water quality parameters at Holston River Mile 66.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	26.0	242	8.4	7.0	h66	2.0	1035	7/14/2005
1	26.0	242	8.4	6.9				
2	26.0	242	8.4	6.6				
3	26.0	242	8.4	6.6				
4	26.0	242	8.3	6.5				
5	26.0	242	8.3	6.7				
6	26.0	241	8.3	6.6				
7	25.8	245	8.3	5.7				
8	25.5	249	8.2	4.9				
9	24.3	259	7.9	2.7				
10	20.9	277	7.8	1.0				
11	19.7	279	7.7	1.0				
12	19.1	280	7.7	1.0				
13	18.1	281	7.6	0.7				
14	16.7	283	7.6	0.7				
15	16.1	284	7.5	0.6				
16	15.7	285	7.5	0.6				
17	15.0	286	7.5	0.4				
18	14.9	283	7.5	0.3				
19	14.4	288	7.4	0.3				
20	14.1	289	7.4	0.3				
21	13.9	290	7.4	0.2				
22	13.5	292	7.4	0.2				
23	13.2	293	7.3	0.2				
24	13.1	293	7.3	0.2				
25	13.1	293	7.3	0.1				
26	13.0	293	7.3	0.1				
27	12.9	294	7.3	0.1				
28	12.7	295	7.3	0.1				
29	12.7	295	7.3	0.1				
30	12.6	296	7.3	0.1				

Table 15. Summary of July 2005 Cherokee Reservoir water quality parameters at Holston River Mile 75.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	26.8	268	8.4	6.8	h75	2.2	1137	7/14/2005
1	26.9	268	8.4	6.4				
2	26.8	268	8.4	6.7				
3	26.8	266	8.4	7.0				
4	26.8	267	8.3	7.4				
5	26.7	268	8.3	6.4				
6	26.5	268	8.2	6.0				
7	26.4	272	8.1	5.7				
8	25.3	284	7.9	3.5				
9	23.9	293	7.7	2.0				
10	22.6	297	7.6	2.3				
11	21.7	299	7.5	2.2				
12	21.0	294	7.5	1.2				
13	20.2	290	7.5	1.4				
14	19.0	290	7.5	1.5				
15	18.1	286	7.5	2.0				
16	17.1	283	7.5	2.0				
17	16.6	281	7.4	1.5				
18	16.2	279	7.4	1.4				
19	15.4	280	7.4	1.4				
20	14.8	281	7.4	1.3				
21	14.7	281	7.3	1.3				
22	14.4	283	7.3	0.5				
23	14.1	285	7.3	0.3				
24	13.9	287	7.3	0.2				
25	13.9	290	7.3	0.2				
26	13.6	292	7.3	0.2				



Table 16. Summary of July 2005 Cherokee Reservoir water quality parameters at Holston River Mile 83.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	27.1	284	8.5	6.8	h83	1.8	1236	7/14/2005
1	27.1	284	8.5	6.4				
2	27.1	284	8.5	6.2				
3	27.0	287	8.4	6.0				
4	26.9	291	8.3	6.0				
5	26.9	291	8.3	6.2				
6	26.9	291	8.3	6.1				
7	26.3	299	8.1	2.9				
8	25.1	305	7.9	2.8				
9	23.6	305	7.7	1.0				
10	23.1	306	7.6	0.6				
11	22.3	307	7.6	0.3				
12	20.8	300	7.6	0.2				
13	19.9	293	7.6	0.2				
14	18.9	288	7.5	0.2				
15	17.6	281	7.5	0.2				
16	17.1	282	7.5	0.1				
17	16.6	281	7.5	0.1				
18	15.9	283	7.4	0.1				
19	15.3	284	7.4	0.1				
20	14.7	286	7.4	0.1				
21	14.3	287	7.4	0.1				
22	13.9	290	7.4	0.1				

Table 17. Summary of August 2005 Cherokee Reservoir water quality parameters within the aeration system by the dam.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	29.5	232		7.3	Dam	3.0	0900	8/1/2005
1	29.5	232		6.7				
2	29.5	232		7.2				
3	29.5	232		7.3				
4	29.5	232		6.7				
5	29.4	232		6.9				
6	29.4	232		7.2				
7	29.4	232		7.5				
8	29.1	234		7.4				
9	24.9	269		1.9				
10	24.1	261		2.4				
11	23.2	260		3.7				
12	21.0	266		3.7				
13	19.9	271		2.7				
14	19.4	272		2.3				
15	18.8	275		1.7				
16	18.3	276		1.5				
17	17.7	278		1.2				
18	17.0	280		1.2				
19	16.6	281		1.1				
20	16.0	283		1.3				
21	15.5	284		1.2				
22	15.1	284		1.5				
23	14.8	285		1.5				
24	14.4	285		1.5				
25	14.2	285		1.5				
26	14.0	286		1.7				
27	13.9	287		1.7				
28	13.7	288		1.8				
29	13.4	288		2.1				
30	13.1	291		2.8				

Table 18. Summary of August 2005 Cherokee Reservoir water quality parameters at Holston River Mile 55.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	29.3	235		7.8	h55	2.5	1000	8/1/2005
1	29.2	234		7.8				
2	29.2	233		7.6				
3	29.1	232		7.9				
4	29.0	232		8.2				
5	29.0	232		7.0				
6	29.0	232		7.5				
7	29.0	232		7.7				
8	27.9	242		4.8				
9	25.4	254		1.7				
10	23.9	265		0.5				
11	22.5	272		0.9				
12	21.5	266		1.9				
13	20.3	270		1.9				
14	19.5	273		1.6				
15	18.9	274		1.4				
16	18.3	277		0.6				
17	17.9	279		0.3				
18	17.2	282		0.2				
19	16.5	283		0.2				
20	16.0	285		0.2				
21	15.4	285		0.2				
22	15.0	287		0.2				
23	14.5	287		0.1				
24	14.3	288		0.1				
25	14.0	288		0.1				
26	13.9	290		0.1				
27	13.7	290		0.1				
28	13.5	291		0.1				
29	13.4	291		0.1				
30	13.2	292		0.1				

Table 19. Summary of August 2005 Cherokee Reservoir water quality parameters at Holston River Mile 66.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	29.4	254		8.0	h66	1.7	1100	8/1/2005
1	29.4	254		8.0				
2	29.3	254		8.0				
3	29.2	254		8.5				
4	28.9	255		8.3				
5	28.3	252		7.4				
6	26.5	249		6.9				
7	26.0	251		5.9				
8	25.7	253		4.9				
9	25.3	258		2.9				
10	23.6	269		2.6				
11	22.5	274		2.7				
12	21.2	269		2.8				
13	20.0	279		2.7				
14	19.3	281		2.6				
15	18.9	281		2.8				
16	17.8	282		2.6				
17	17.4	283		2.5				
18	16.9	284		2.5				
19	16.2	286		2.8				
20	15.8	286		2.6				
21	15.5	287		2.8				
22	14.9	289		2.5				
23	14.8	290		2.3				
24	14.5	291		2.3				
25	14.3	293		2.2				
26	14.0	294		2.2				
27	13.8	295		2.4				
28	13.6	297		2.2				
29	13.4	298		2.1				
30	13.3	299		2.0				

Table 20. Summary of August 2005 Cherokee Reservoir water quality parameters at Holston River Mile 75.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	29.9	273		7.7	h75	1.8	1200	8/1/2005
1	29.7	273		8.3				
2	29.6	273		8.5				
3	29.6	272		8.6				
4	29.3	274		9.2				
5	26.9	303		1.8				
6	26.7	301		1.4				
7	26.2	299		0.2				
8	25.9	300		0.2				
9	25.3	307		0.2				
10	23.9	304		0.1				
11	22.4	300		0.2				
12	21.8	295		0.1				
13	20.3	287		0.1				
14	19.6	285		0.1				
15	19.2	286		0.1				
16	18.3	288		0.1				
17	17.7	286		0.1				
18	17.2	286		0.1				
19	16.6	284		0.1				
20	16.2	284		0.1				
21	15.7	289		0.1				
22	15.4	301		0.2				
23	15.1	293		0.1				
24	14.9	296		0.1				
25	14.6	292		0.1				
26	14.3	293		0.1				
27	14.0	296		0.1				

Table 21. Summary of August 2005 Cherokee Reservoir water quality parameters at Holston River Mile 83.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	30.2	283		8.4	h83	1.4	1240	8/1/2005
1	29.6	291		8.5				
2	29.4	288		7.5				
3	29.2	293		6.9				
4	29.1	292		5.9				
5	29.1	291		5.9				
6	28.4	300		1.8				
7	26.9	309		0.5				
8	25.6	313		0.2				
9	25.2	313		0.1				
10	23.1	311		0.1				
11	21.7	304		0.1				
12	20.9	302		0.1				
13	20.0	296		0.1				
14	19.1	291		0.1				
15	18.6	290		0.1				
16	17.9	293		0.1				
17	17.5	294		0.1				
18	17.2	298		0.1				
19	16.8	294		0.1				
20	16.2	299		0.1				
21	15.7	301		0.1				
22	14.9	307		0.1				

Table 22. Summary of September 2005 Cherokee Reservoir water quality parameters within the areation system by the dam.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	26.8	249	8.3	7.8	Dam	2.5	1000	9/2/2005
1	26.7	149	8.3	6.3				
2	26.7	149	8.3	6.0				
3	26.6	149	8.3	5.8				
4	26.6	148	8.3	5.6				
5	26.6	148	8.3	5.5				
6	26.6	149	8.3	5.3				
7	26.5	250	8.3	5.4				
8	26.5	252	8.2	5.1				
9	26.4	252	8.2	4.6				
10	25.9	258	8.0	4.0				
11	25.7	257	7.9	3.8				
12	24.5	261	7.8	2.4				
13	23.0	267	7.8	1.4				
14	22.5	267	7.7	1.2				
15	21.9	269	7.6	0.9				
16	21.4	270	7.6	0.9				
17	21.1	271	7.6	0.7				
18	20.6	271	7.6	0.7				
19	20.3	273	7.5	0.6				
20	19.9	275	7.5	0.3				
21	19.5	274	7.5	0.3				
22	19.2	276	7.5	0.3				
23	18.8	277	7.5	0.5				
24	18.4	278	7.5	0.2				
25	18.0	280	7.4	0.2				
26	17.7	281	7.4	0.2				
27	17.5	281	7.4	0.2				
28	17.2	281	7.4	0.3				
29	16.9	282	7.4	0.2				
30	16.5	283	7.4	0.2				

Table 23. Summary of September 2005 Cherokee Reservoir water quality parameters at Holston River Mile 55.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	27.2	243	8.7	6.8	h55	2.5	1045	9/2/2005
1	27.1	248	8.6	6.5				
2	27.0	248	8.6	6.4				
3	27.0	249	8.5	7.0				
4	26.9	248	8.5	7.1				
5	26.9	249	8.5	7.0				
6	26.7	252	8.4	6.7				
7	26.6	253	8.3	6.7				
8	26.5	253	8.3	6.7				
9	26.0	257	8.1	5.4				
10	25.8	258	8.0	5.2				
11	25.2	259	7.9	4.2				
12	24.6	262	7.9	3.0				
13	23.9	265	7.8	1.9				
14	22.9	257	7.7	0.9				
15	22.0	269	7.7	0.7				
16	21.3	271	7.6	0.5				
17	20.9	271	7.6	0.2				
18	20.6	272	7.5	0.2				
19	20.2	274	7.5	0.2				
20	19.8	274	7.5	0.2				
21	19.3	276	7.5	0.2				
22	19.0	277	7.5	0.2				
23	18.9	278	7.5	0.2				
24	18.6	278	7.5	0.2				
25	18.1	280	7.5	0.1				
26	17.7	281	7.5	0.1				
27	17.4	282	7.5	0.1				
28	17.3	282	7.4	0.1				
29	17.1	283	7.4	0.1				
30	16.7	285	7.4	0.1				

Table 24. Summary of September 2005 Cherokee Reservoir water quality parameters at Holston River Mile 66.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	27.6	259	8.6	6.7	h66	2.1	1140	9/2/2005
1	27.1	259	8.6	6.2				
2	27.0	260	8.5	5.8				
3	26.8	262	8.4	5.8				
4	26.8	262	8.4	5.7				
5	26.8	263	8.4	5.5				
6	26.7	264	8.3	5.4				
7	26.7	266	8.2	5.0				
8	26.6	267	8.2	4.4				
9	26.6	267	8.1	4.4				
10	26.5	268	8.1	4.3				
11	26.3	268	8.1	3.7				
12	24.7	274	7.9	1.2				
13	23.4	277	7.8	0.3				
14	22.6	281	7.7	0.2				
15	21.9	279	7.7	0.2				
16	21.3	280	7.7	0.2				
17	20.7	280	7.6	0.2				
18	20.5	279	7.6	0.2				
19	19.9	280	7.6	0.2				
20	19.7	280	7.6	0.2				
21	19.3	282	7.6	0.1				
22	19.1	284	7.6	0.1				
23	18.8	285	7.5	0.1				
24	18.3	287	7.5	0.1				
25	18.1	288	7.5	0.1				
26	17.6	288	7.5	0.1				
27	17.4	291	7.5	0.1				
28	17.7	291	7.5	0.1				
29	17.0	291	7.5	0.1				
30	16.8	293	7.4	0.1				

Table 25. Summary of September 2005 Cherokee Reservoir water quality parameters at Holston River Mile 75.

Depth (m)	Temp ©	Cond	PH	DO	Site	Secchi (m)	Time	Date
0	27.9	287	8.4	6.7	h75	2.2	1220	9/2/2005
1	27.7	288	8.4	5.9				
2	27.3	287	8.4	6.0				
3	27.3	288	8.3	6.0				
4	27.2	288	8.3	5.5				
5	27.2	287	8.2	5.6				
6	27.2	287	8.2	4.4				
7	27.1	285	8.1	4.2				
8	27.0	288	8.0	3.3				
9	26.9	289	7.9	3.1				
10	26.6	296	7.9	2.2				
11	26.0	302	7.8	0.7				
12	25.4	305	7.7	0.3				
13	24.1	308	7.6	0.2				
14	23.1	308	7.6	0.2				
15	22.2	307	7.6	0.2				
16	21.4	310	7.5	0.2				
17	20.1	308	7.5	0.2				
18	19.8	307	7.5	0.1				
19	19.5	308	7.5	0.1				
20	19.4	307	7.4	0.1				
21	19.2	315	7.4	0.1				
22	18.9	323	7.4	0.1				
23	18.5	314	7.4	0.1				
24	18.1	312	7.4	0.1				
25	17.9	314	7.4	0.1				

Table 26. Length range and weighted mean length by age of hybrids from Cherokee Reservoir  
2005 summer shad gill net sample.

AGE	Minimum length at capture	Weighted mean length at capture	Maximum length at capture	N
1	233	<b>322</b>	399	19
2	409	<b>447</b>	483	3
3				
4	393	<b>493</b>	592	2

Table 27. Length range and weighted mean length by age of hybrids from Cherokee Reservoir  
2005 winter gill net sample.

AGE	Minimum length at capture	Weighted mean length at capture	Maximum length at capture	N
2	335	<b>457</b>	492	76
3	497	<b>521</b>	544	77
4	535	<b>576</b>	614	29
5	550	<b>592</b>	630	65

Table 28. Length range and weighted mean length by age of striped bass from Cherokee Reservoir  
2005 winter gill net sample.

AGE	Minimum length at capture	Weighted mean length at capture	Maximum length at capture	N
2	412	<b>456</b>	490	5
3	570	<b>606</b>	635	11
4	656	<b>716</b>	760	5
11	736	<b>768</b>	800	2
12	776	<b>776</b>	776	1

Table 29. Length range and weighted mean length by age of walleye from Cherokee Reservoir  
2005 summer shad gill net sample.

AGE	Minimum length at capture	Weighted mean length at capture	Maximum length at capture	N
1	273	<b>377</b>	406	10
2	460	<b>505</b>	553	26

Table 30. Length range and weighted mean length by age of walleye from Cherokee Reservoir  
2005 winter gill net sample.

AGE	Minimum length at capture	Weighted mean length at capture	Maximum length at capture	N
2	435	<b>459</b>	506	39

Table 31. Cherokee Reservoir water levels for 2005. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
1045.53	JANUARY	1	1045.41	FEBRUARY	24	1058.74	APRIL	19
1045.46	JANUARY	2	1045.29	FEBRUARY	25	1058.93	APRIL	20
1044.76	JANUARY	3	1045.30	FEBRUARY	26	1059.13	APRIL	21
1044.33	JANUARY	4	1045.30	FEBRUARY	27	1059.49	APRIL	22
1044.17	JANUARY	5	1045.21	FEBRUARY	28	1059.70	APRIL	23
1044.11	JANUARY	6	1044.79	MARCH	1	1059.86	APRIL	24
1044.03	JANUARY	7	1044.62	MARCH	2	1060.12	APRIL	25
1044.72	JANUARY	8	1044.84	MARCH	3	1060.36	APRIL	26
1045.11	JANUARY	9	1044.97	MARCH	4	1060.57	APRIL	27
1044.65	JANUARY	10	1045.11	MARCH	5	1060.84	APRIL	28
1045.01	JANUARY	11	1045.21	MARCH	6	1061.69	APRIL	29
1045.31	JANUARY	12	1045.06	MARCH	7	1062.52	APRIL	30
1045.62	JANUARY	13	1045.16	MARCH	8	1063.27	MAY	1
1046.05	JANUARY	14	1045.00	MARCH	9	1063.96	MAY	2
1046.18	JANUARY	15	1045.11	MARCH	10	1064.69	MAY	3
1046.14	JANUARY	16	1045.16	MARCH	11	1065.33	MAY	4
1046.12	JANUARY	17	1045.86	MARCH	12	1065.79	MAY	5
1046.12	JANUARY	18	1046.20	MARCH	13	1066.26	MAY	6
1046.24	JANUARY	19	1046.12	MARCH	14	1066.59	MAY	7
1046.20	JANUARY	20	1046.25	MARCH	15	1066.77	MAY	8
1046.20	JANUARY	21	1046.06	MARCH	16	1067.01	MAY	9
1045.94	JANUARY	22	1046.09	MARCH	17	1067.21	MAY	10
1045.35	JANUARY	23	1046.13	MARCH	18	1067.52	MAY	11
1044.59	JANUARY	24	1046.52	MARCH	19	1067.90	MAY	12
1044.45	JANUARY	25	1046.83	MARCH	20	1068.14	MAY	13
1044.46	JANUARY	26	1047.09	MARCH	21	1068.40	MAY	14
1044.10	JANUARY	27	1047.53	MARCH	22	1068.57	MAY	15
1043.66	JANUARY	28	1047.94	MARCH	23	1068.67	MAY	16
1043.26	JANUARY	29	1048.33	MARCH	24	1068.80	MAY	17
1043.02	JANUARY	30	1048.63	MARCH	25	1069.11	MAY	18
1042.98	JANUARY	31	1048.95	MARCH	26	1069.57	MAY	19
1043.06	FEBRUARY	1	1049.26	MARCH	27	1070.11	MAY	20
1043.29	FEBRUARY	2	1049.53	MARCH	28	1070.56	MAY	21
1043.56	FEBRUARY	3	1049.93	MARCH	29	1070.82	MAY	22
1043.98	FEBRUARY	4	1050.39	MARCH	30	1070.82	MAY	23
1044.88	FEBRUARY	5	1050.80	MARCH	31	1070.86	MAY	24
1045.23	FEBRUARY	6	1051.23	APRIL	1	1070.92	MAY	25
1044.96	FEBRUARY	7	1051.96	APRIL	2	1070.87	MAY	26
1044.92	FEBRUARY	8	1052.88	APRIL	3	1070.98	MAY	27
1044.83	FEBRUARY	9	1053.72	APRIL	4	1071.08	MAY	28
1044.57	FEBRUARY	10	1054.49	APRIL	5	1071.18	MAY	29
1044.32	FEBRUARY	11	1054.95	APRIL	6	1071.26	MAY	30
1044.46	FEBRUARY	12	1055.37	APRIL	7	1071.12	MAY	31
1044.66	FEBRUARY	13	1055.62	APRIL	8	1071.11	JUNE	1
1044.68	FEBRUARY	14	1055.70	APRIL	9	1071.01	JUNE	2
1045.02	FEBRUARY	15	1056.08	APRIL	10	1071.01	JUNE	3
1045.04	FEBRUARY	16	1055.89	APRIL	11	1070.85	JUNE	4
1044.78	FEBRUARY	17	1056.13	APRIL	12	1070.75	JUNE	5
1044.69	FEBRUARY	18	1056.52	APRIL	13	1070.98	JUNE	6
1044.74	FEBRUARY	19	1056.85	APRIL	14	1070.80	JUNE	7
1044.69	FEBRUARY	20	1057.48	APRIL	15	1070.72	JUNE	8
1044.80	FEBRUARY	21	1057.90	APRIL	16	1070.52	JUNE	9
1045.09	FEBRUARY	22	1058.24	APRIL	17	1070.30	JUNE	10
1045.30	FEBRUARY	23	1058.55	APRIL	18	1070.28	JUNE	11



Table 32. Cherokee Reservoir water levels for 2005. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
1070.18	JUNE	12	1067.50	AUGUST	5	1052.08	SEPTEMBER	28
1070.18	JUNE	13	1067.62	AUGUST	6	1052.31	SEPTEMBER	29
1070.10	JUNE	14	1067.72	AUGUST	7	1052.43	SEPTEMBER	30
1070.07	JUNE	15	1067.32	AUGUST	8	1052.16	OCTOBER	1
1070.05	JUNE	16	1067.04	AUGUST	9	1052.31	OCTOBER	2
1070.14	JUNE	17	1066.83	AUGUST	10	1051.79	OCTOBER	3
1070.06	JUNE	18	1066.59	AUGUST	11	1050.93	OCTOBER	4
1069.96	JUNE	19	1066.69	AUGUST	12	1050.14	OCTOBER	5
1069.90	JUNE	20	1066.83	AUGUST	13	1049.65	OCTOBER	6
1069.76	JUNE	21	1066.71	AUGUST	14	1050.09	OCTOBER	7
1069.65	JUNE	22	1066.42	AUGUST	15	1050.25	OCTOBER	8
1069.53	JUNE	23	1066.13	AUGUST	16	1050.38	OCTOBER	9
1069.44	JUNE	24	1066.01	AUGUST	17	1050.08	OCTOBER	10
1069.44	JUNE	25	1065.97	AUGUST	18	1049.46	OCTOBER	11
1069.38	JUNE	26	1066.07	AUGUST	19	1048.82	OCTOBER	12
1069.38	JUNE	27	1066.06	AUGUST	20	1048.55	OCTOBER	13
1069.31	JUNE	28	1066.18	AUGUST	21	1048.00	OCTOBER	14
1069.21	JUNE	29	1065.87	AUGUST	22	1048.15	OCTOBER	15
1069.04	JUNE	30	1065.80	AUGUST	23	1048.25	OCTOBER	16
1069.03	JULY	1	1065.66	AUGUST	24	1048.07	OCTOBER	17
1069.19	JULY	2	1065.43	AUGUST	25	1048.21	OCTOBER	18
1069.30	JULY	3	1065.17	AUGUST	26	1047.68	OCTOBER	19
1069.31	JULY	4	1065.08	AUGUST	27	1047.41	OCTOBER	20
1069.28	JULY	5	1065.10	AUGUST	28	1047.10	OCTOBER	21
1069.38	JULY	6	1065.03	AUGUST	29	1047.23	OCTOBER	22
1069.42	JULY	7	1064.67	AUGUST	30	1047.34	OCTOBER	23
1069.63	JULY	8	1064.46	AUGUST	31	1047.26	OCTOBER	24
1069.74	JULY	9	1064.34	SEPTEMBER	1	1046.38	OCTOBER	25
1069.89	JULY	10	1064.20	SEPTEMBER	2	1045.86	OCTOBER	26
1069.64	JULY	11	1064.18	SEPTEMBER	3	1045.27	OCTOBER	27
1069.46	JULY	12	1064.21	SEPTEMBER	4	1044.69	OCTOBER	28
1069.55	JULY	13	1064.06	SEPTEMBER	5	1044.80	OCTOBER	29
1069.66	JULY	14	1063.89	SEPTEMBER	6	1044.90	OCTOBER	30
1069.72	JULY	15	1063.69	SEPTEMBER	7	1044.67	OCTOBER	31
1069.85	JULY	16	1063.32	SEPTEMBER	8	1044.28	NOVEMBER	1
1069.98	JULY	17	1062.79	SEPTEMBER	9	1044.03	NOVEMBER	2
1069.87	JULY	18	1062.37	SEPTEMBER	10	1044.05	NOVEMBER	3
1069.74	JULY	19	1062.05	SEPTEMBER	11	1044.15	NOVEMBER	4
1069.71	JULY	20	1061.54	SEPTEMBER	12	1044.26	NOVEMBER	5
1069.66	JULY	21	1061.30	SEPTEMBER	13	1044.35	NOVEMBER	6
1069.35	JULY	22	1060.84	SEPTEMBER	14	1044.45	NOVEMBER	7
1069.13	JULY	23	1060.30	SEPTEMBER	15	1044.54	NOVEMBER	8
1068.90	JULY	24	1059.62	SEPTEMBER	16	1043.80	NOVEMBER	9
1068.76	JULY	25	1059.11	SEPTEMBER	17	1043.75	NOVEMBER	10
1068.56	JULY	26	1058.33	SEPTEMBER	18	1043.50	NOVEMBER	11
1068.47	JULY	27	1057.57	SEPTEMBER	19	1043.59	NOVEMBER	12
1068.63	JULY	28	1056.81	SEPTEMBER	20	1043.68	NOVEMBER	13
1068.77	JULY	29	1056.16	SEPTEMBER	21	1043.80	NOVEMBER	14
1068.89	JULY	30	1055.52	SEPTEMBER	22	1043.89	NOVEMBER	15
1069.01	JULY	31	1054.89	SEPTEMBER	23	1044.01	NOVEMBER	16
1068.60	AUGUST	1	1054.28	SEPTEMBER	24	1044.13	NOVEMBER	17
1068.32	AUGUST	2	1053.75	SEPTEMBER	25	1043.85	NOVEMBER	18
1068.00	AUGUST	3	1053.07	SEPTEMBER	26	1043.85	NOVEMBER	19
1067.64	AUGUST	4	1052.52	SEPTEMBER	27	1043.81	NOVEMBER	20

Table 33. Cherokee Reservoir water levels for 2005. (TVA)

ELEVATION	MONTH	DAY
1042.81	NOVEMBER	21
1042.61	NOVEMBER	22
1042.36	NOVEMBER	23
1042.49	NOVEMBER	24
1042.59	NOVEMBER	25
1042.71	NOVEMBER	26
1042.81	NOVEMBER	27
1042.49	NOVEMBER	28
1042.29	NOVEMBER	29
1042.43	NOVEMBER	30
1041.81	DECEMBER	1
1041.28	DECEMBER	2
1041.28	DECEMBER	3
1041.65	DECEMBER	4
1041.81	DECEMBER	5
1041.86	DECEMBER	6
1041.94	DECEMBER	7
1041.18	DECEMBER	8
1040.76	DECEMBER	9
1041.11	DECEMBER	10
1041.40	DECEMBER	11
1041.54	DECEMBER	12
1041.67	DECEMBER	13
1040.58	DECEMBER	14
1040.09	DECEMBER	15
1039.48	DECEMBER	16
1039.76	DECEMBER	17
1039.90	DECEMBER	18
1039.60	DECEMBER	19
1038.51	DECEMBER	20
1038.17	DECEMBER	21
1037.96	DECEMBER	22
1037.78	DECEMBER	23
1037.83	DECEMBER	24
1037.94	DECEMBER	25
1037.68	DECEMBER	26
1037.55	DECEMBER	27
1037.93	DECEMBER	28
1038.07	DECEMBER	29
1038.25	DECEMBER	30
1038.39	DECEMBER	31

Table 34. Cherokee Reservoir fish habitat enhancement summary for 2005.

LOCATION	NEW SITES			RENOVATED SITES			EXPANDED SITES		
	NUMBER	UNITS	ACRES	NUMBER	UNITS	ACRES	NUMBER	UNITS	ACRES
HRM 74.75 R*				1	50	1.00			
HRM 74.95 R*				1	25	0.50			
HRM 75.15 R*				1	100	2.00			
HRM 75.25 R*				1	50	1.00			
HRM 75.4 R*				1	50	1.00			
HRM 74.1 L*				1	50	1.00			
HRM 74.2 R*				1	50	1.00			
HRM 75.15 R*				1	50	1.00			
HRM 75.05 R*				1	50	1.00			
HRM 75.75 R*				1	50	1.00			
HRM 75.5 R*				1	50	1.00			
HRM 75.2 L*				1	25	0.50			
HRM 78.5 L*				1	125	1.50			
TOTAL				13	725	13.50			

\*Christmas trees

Table 35. Summary of creel results for Cherokee Reservoir 1998-2005.

Cherokee Species	YEAR	Intended % Effort	Intended Angler Hrs	Intended Angler Trips	Intended Trip Expeniture	Intended Caught	Intended Caught per hr	Intended Harvested	Intended Harvested per hr	Intended Interviews	(Total) Caught	(Total) Harvest	Ave Weight lb	(#) Fish Rec.	% Released	% Harvest Composition	Total Res Intend Effort Hrs	
Any Species	1998	4.5	21,705	4,635														
	1999	4.6	16,564	3,404			0.90		0.59	48								
	2000	8.9	41,461	8,105	\$28,050		1.25		0.70	92								
	2002	7.0	30,438	5,576	\$21,480		1.64		1.05	61								
	2004	6.3	29,846	5,156	\$7,650		1.23		0.63	48								
Any(All) Blackbass	1998	42.1	204,865	43,750							157,447	20,145		319				
	1999	37.2	133,874	27,514		93,534	0.63	11,397	0.08	586	98,628	12,838		332				
	2000	2.3	10,798	2,068	\$14,630	108,850	0.53	7,062	0.01	47	135,218	9,946		171				
	2002	0.1	412	72	\$340	158,686	2.00	2,931	0.00	2	196,789	5,159		130				
	2004	0.3	1,587	262	\$3,080	120,189	0.33	1,109	0.00	4	153,639	4,622		86				
Any(All) Crappie	1998	10.9	52,991	11,316							82,802	19,035		341				
	1999	13.5	48,438	9,956		104,608	2.24	33,704	0.78	205	106,676	33,980		837				
	2000	15.0	70,005	12,975	\$44,280	124,399	1.91	30,577	0.53	260	126,371	30,815		642				
	2002	17.1	74,223	13,715	\$27,970	62,258	1.06	17,043	0.37	241	64,080	17,368		375				
	2004	20.4	96,689	16,832	\$57,660	68,262	1.03	25,148	0.41	259	70,180	25,544		518				
Any(All) Sunfish	1998	1.8	8,558	1,828							36,973	20,268		433				
	1999	1.1	3,958	813		12,902	3.18	9,228	2.32	13	23,673	12,723		324				
	2000	1.2	5,393	1,094	\$4,510	36,286	3.08	21,884	1.83	12	74,346	32,299		521				
	2002	1.2	5,376	1,008	\$770		3.17		1.71	12	17,042	9,193						
	2004	0.9	4,223	752	\$3,760		4.29		2.46	11	18,117	10,388						
Any(All) Catfish	1998	5.9	28,686	6,127							37,134	13,977		221				
	1999	8.1	29,209	6,004		24,557	0.76	18,952	0.58	92	25,849	19,950		493				
	2000	7.8	36,277	7,196	\$28,810	51,168	0.99	37,822	0.77	102	52,045	38,190		627				
	2002	8.5	36,990	6,759	\$31,280	42,551	0.86	27,174	0.62	93	47,674	29,993		649				
	2004	4.4	20,832	3,621	\$14,870	25,825	0.78	16,294	0.52	43	33,673	20,472		335				
Any(All) Temperate Bass	1998		see STRB								87,220	33,287		688				
	1999		see STRB			46,109		18,305			52,833	19,791		526				
	2000	0.0	0	0	\$0	74,574	0.00	29,880	0.00	0	81,875	31,367		482				
	2002	0.1	273	36	\$780	48,755	0.46	22,263	0.15	1	59,434	23,769		580				
	2004	0.2	794	140	\$3,090	34,535	0.99	13,194	0.32	2	78,594	20,819		419				
Large-mouth Bass	1998		not separated prior to 2000 and is the reason lumped into all black bass category									140,246	17,513	2.9	270			
	1999	0.3	996	205		79,167	1.42	9,786	0.50	5	82,777	10,933	2.08	286	86.8	10.2		
	2000	30.7	143,082	26,754	\$156,350	103,203	0.54	6,232	0.04	483	115,572	7,623	2.60	126	93.4	5.2		
	2002	43.3	188,015	34,586	\$201,950	153,091	0.68	2,300	0.01	655	168,754	3,195	2.29	75	98.1	3.2		
	2004	39.7	188,043	32,501	\$459,720	115,622	0.57	958	0.00	566	128,598	2,075	2.45	39	98.4	2.3		
Small-mouth Bass	1998		not separated prior to 2000 and is the reason lumped into all black bass category									15,551	2,549	2.32	48			
	1999	0.2	856	176		14,127	0.46	1,555	0.12	3	15,611	1,849	2.63	44	88.2	1.7		
	2000	2.4	11,366	2,223	\$13,420	5,048	0.24	830	0.05	41	18,448	2,024	2.46	39	89.0	1.4		
	2002	2.4	10,317	1,888	\$10,050	3,942	0.26	244	0.02	35	22,171	1,219	1.97	30	94.5	1.2		
	2004	0.8	3,694	658	\$6,780	4,408	0.68	0	0.00	11	19,810	839	2.77	13	95.8	0.9		
Spotted Bass	1998		not separated prior to 2000 and is the reason lumped into all black bass category									83	83	0.30	1			
	1999	0.0	0	0		240	0.00	56	0.00	0	240	56	0.90	2	76.7	0.1		
	2000	0.0	0	0	\$0	599	0.00	0	0.00	0	1,198	299	1.60	6	75.0	0.2		
	2002	0.2	790	153	\$150	1,653	1.12	387	0.34	3	5,864	745	0.63	25	87.3	0.7		
	2004	0.0	0	0	\$0	159	0.00	151	0.00	0	5,231	1,708	0.88	34	67.3	1.9		
Striped Bass	1998	30.8	149,598	31,948							73,388	25,331	11.49	478				
	1999	28.0	100,551	20,664		31,162	0.32	14,452	0.16	386	32,900	14,783	12.51	400	55.1	13.8		
	2000	29.0	135,125	26,077	\$288,710	66,736	0.40	26,899	0.17	355	69,586	27,289	10.14	420	60.8	18.6		
	2002	17.4	75,660	13,709	\$230,360	20,789	0.18	8,425	0.10	217	22,613	8,513	11.41	193	62.4	8.5		
	2004	22.9	108,442	18,541	\$357,800	22,523	0.18	9,551	0.08	256	25,533	10,113	11.72	198	60.4	11.0		
Cherokee Bass	1998	0.0	0	0							276	90	7.03	3				
	1999	0.0	0	0		0	0.00	0	0.00	0	41	41	7.20	1	0.0	0.0		
	2000	0.0	0	0	\$0	0	0.00	0	0.00	0	169	169	9.68	3	0.0	0.1		
	2002	0.1	549	105	\$450	226	0.32	184	0.32	2	3,503	1,056	4.32	23	69.9	1.1		
	2004	3.8	18,090	3,113	\$54,590	10,207	0.43	2,909	0.14	42	43,727	8,184	6.36	166	81.3	8.9		

Table 36. Summary of creel results for Cherokee Reservoir 1998-2005.

Cherokee Species	YEAR	Intended % Effort	Intended Angler Hrs	Intended Angler Trips	Intended Trip Expeniture	Intended Caught	Intended Caught per hr	Intended Harvested	Intended Harvested per hr	Intended Interviews	(Total) Caught	(Total) Harvest	Ave Weight lb	(#) Fish Rec.	% Released	% Harvest Composition	Total Res Intend Effort Hrs
White Bass	1998	1.3	6,339	1,354							13,556	7,866	1.34	207			
	1999	3	10,896	2,240		14,834	1.92	3,780	0.57	25	19,779	4,894	1.85	123	75.3	4.6	
	2000	1.6	7,463	1,314	\$6,450	7,838	1.29	2,981	0.53	17	12,120	3,909	0.98	59	67.7	2.7	
	2002	2.5	10,743	1,870	\$11,300	27,740	1.90	13,654	1.12	2	33,318	14,200	0.46	364	57.4	14.2	
	2004	0.3	1,277	225	\$1,390	1,805	1.73	734	0.80	4	9,334	2,522	2.35	55	73.0	2.7	
Walleye	1998	2.3	11,166	2,383							12,105	2,360	2.11	63			
	1999	3.3	12,036	2,475		5,642	0.54	2,344	0.24	36	7,437	3,033	1.87	66	59.2	2.8	
	2000	1.1	5,303	943	\$3,780	2,044	0.37	935	0.18	21	2,743	1,351	2.01	26	50.7	0.9	
	2002	0.2	794	140	\$1,140	0	0.00	0	0.00	2	118	118	1.40	3	0.0	0.1	
	2004	0.1	656	120	\$1,640	415	0.44	104	0.13	2	711	104	1.40	2	85.4	0.1	
Sauger	1998										0	0	na	0	na		
	1999					0		0			1,026	407	1.28	10	60.3	0.4	
	2000					56		0			1,169	477	2.04	8	59.2	0.3	
	2002					0		0			114	0	na	0	100.0	0.0	
	2004					0		0			185	0	na	0	100.0	0.0	
White Crappie	1998										16,758	3,708	1.18	71			
	1999					19,762		6,738			20,312	6,851	1.17	182	66.3	6.4	
	2000					18,020		4,683			18,509	4,793	0.89	87	74.1	3.3	
	2002					28,556		6,528			29,824	6,713	0.79	145	77.5	6.7	
	2004					9,840		1,954			10,625	1,954	0.65	38	81.6	2.1	
Black Crappie	1998										55,878	12,526	0.56	229			
	1999					69,653		23,731			70,944	23,857	0.81	567	66.4	22.3	
	2000					86,477		20,514			87,769	20,563	0.82	416	76.6	14.0	
	2002					27,048		8,410			27,380	8,502	0.97	185	68.9	8.5	
	2004					55,343		22,029			56,429	22,425	0.77	453	60.3	24.4	
Black-nose Crappie	1998										10,166	2,801	0.65	41			
	1999					15,193		3,235			15,420	3,272	1.20	88	78.8	3.1	
	2000					19,902		5,380			20,093	5,459	0.93	139	72.8	3.7	
	2002					6,654		2,105			6,876	2,153	1.11	45	68.7	2.2	
	2004					3,079		1,165			3,126	1,165	0.83	27	62.7	1.3	
Bluegill	1998										36,973	20,268	0.39	433			
	1999					12,902		9,228			23,673	12,723	0.50	324	46.3	11.9	
	2000					36,286		21,884			74,219	32,299	0.19	521	56.5	22.0	
	2002										17,042	9,193					
	2004										18,117	10,388					
Channel Catfish	1998										26,625	11,556	2.20	181			
	1999					22,935		17,365			23,694	17,865	3.37	429	24.6	16.7	
	2000					46,507		33,297			47,038	33,424	1.65	526	28.9	22.8	
	2002					37,418		22,551			42,292	25,180	1.76	546	40.5	25.3	
	2004					24,264		14,941			31,966	19,067	1.43	305	40.4	20.8	
Flathead Catfish	1998										8,200	1,203	4.22	18			
	1999					1,137		1,102			1,585	1,515	9.33	44	4.4	1.4	
	2000					3,877		3,770			4,066	3,910	6.49	84	3.8	2.7	
	2002					4,242		3,740			4,380	3,875	4.71	86	11.5	3.9	
	2004					1,414		1,249			1,414	1,249	5.85	27	11.7	1.4	
Blue Catfish	1998										1,600	509	6.14	9			
	1999					485		485			570	570	21.45	20	0.0	0.5	
	2000					784		755			941	856	6.68	17	9.0	0.6	
	2002					891		883			1,002	938	9.39	17	6.4	0.9	
	2004					147		104			293	156	6.55	3	46.8	0.2	
TOTAL	1998		486,350	103,862							426,320	113,827		2,131			486,350
	1999		359,495	73,885		290,439		95,643		1,405	323,766	106,115		2,676			359,495
	2000		466,273	88,749	\$588,990	398,538		129,056		1,430	477,150	146,621		2,504			466,273
	2002		434,580	79,617	\$538,020	313,842		70,137		1,346	372,171	77,886		1,764			434,580
	2004		474,173	81,921	\$972,030	250,342		56,701		1,248	340,824	73,869		1,399			474,173

## Figures

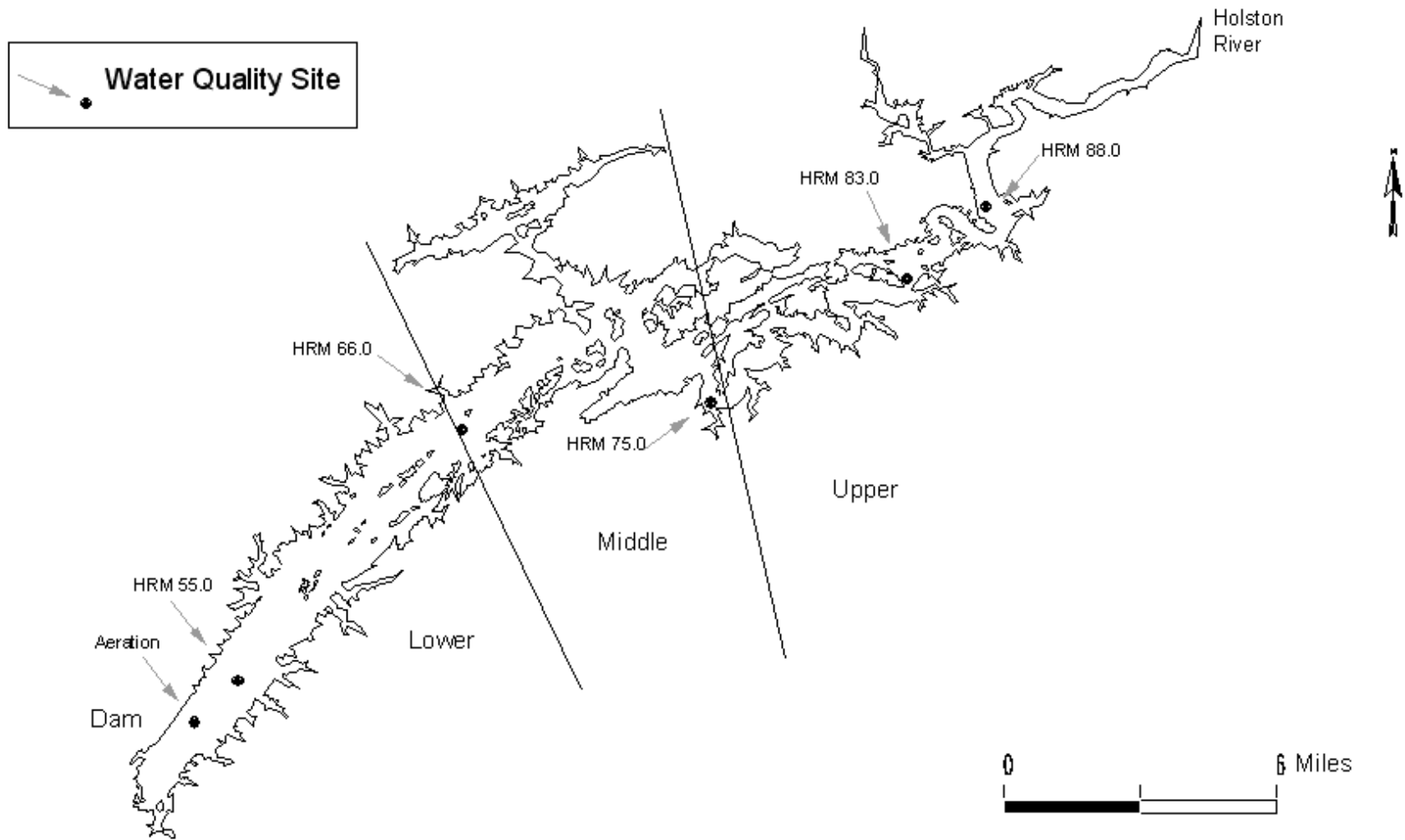


Figure 1. Water quality sites and the upper, middle, and lower section boundaries of Cherokee Reservoir in 2005.

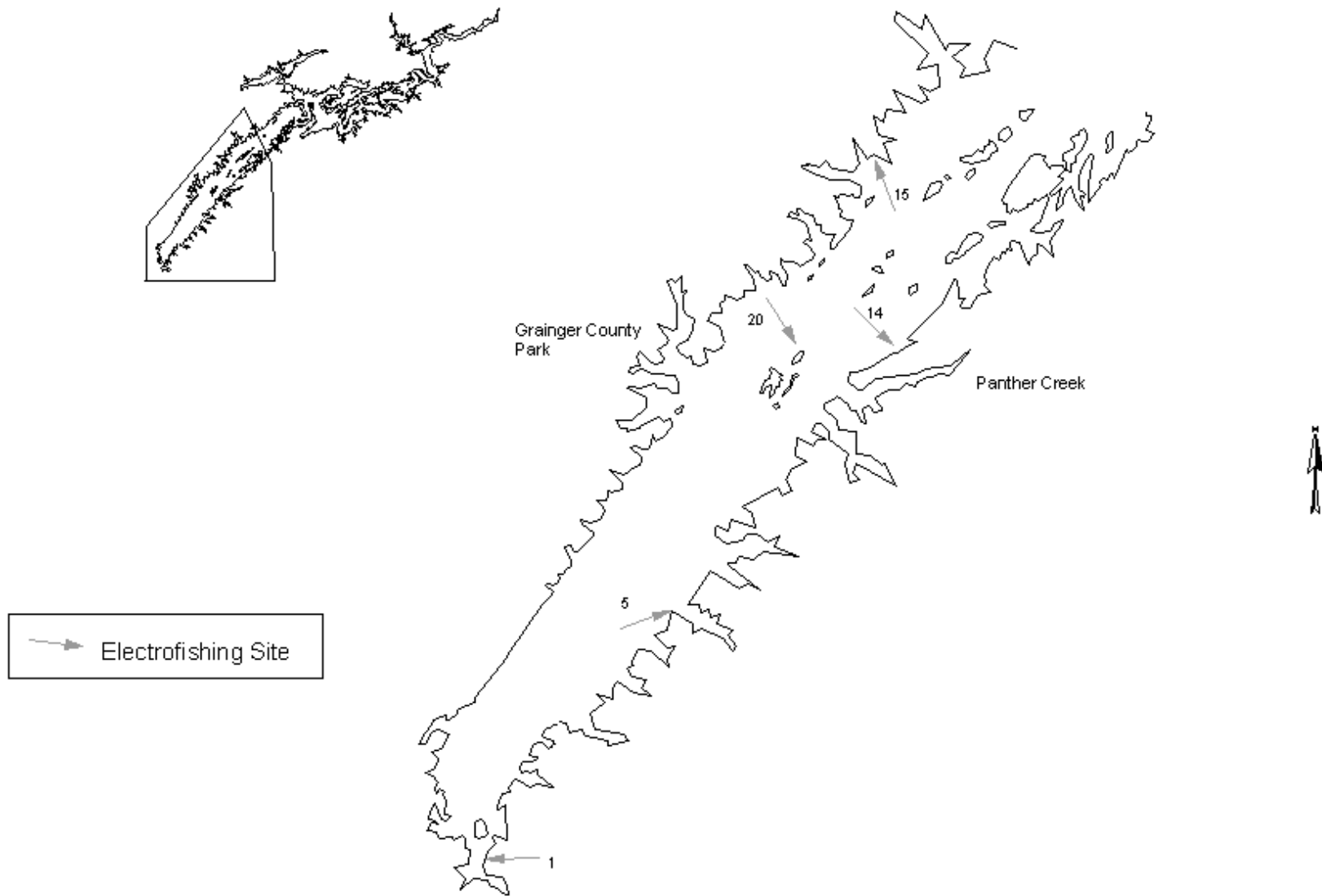


Figure 2. Electrofishing sites in the lower section of Cherokee Reservoir in 2005



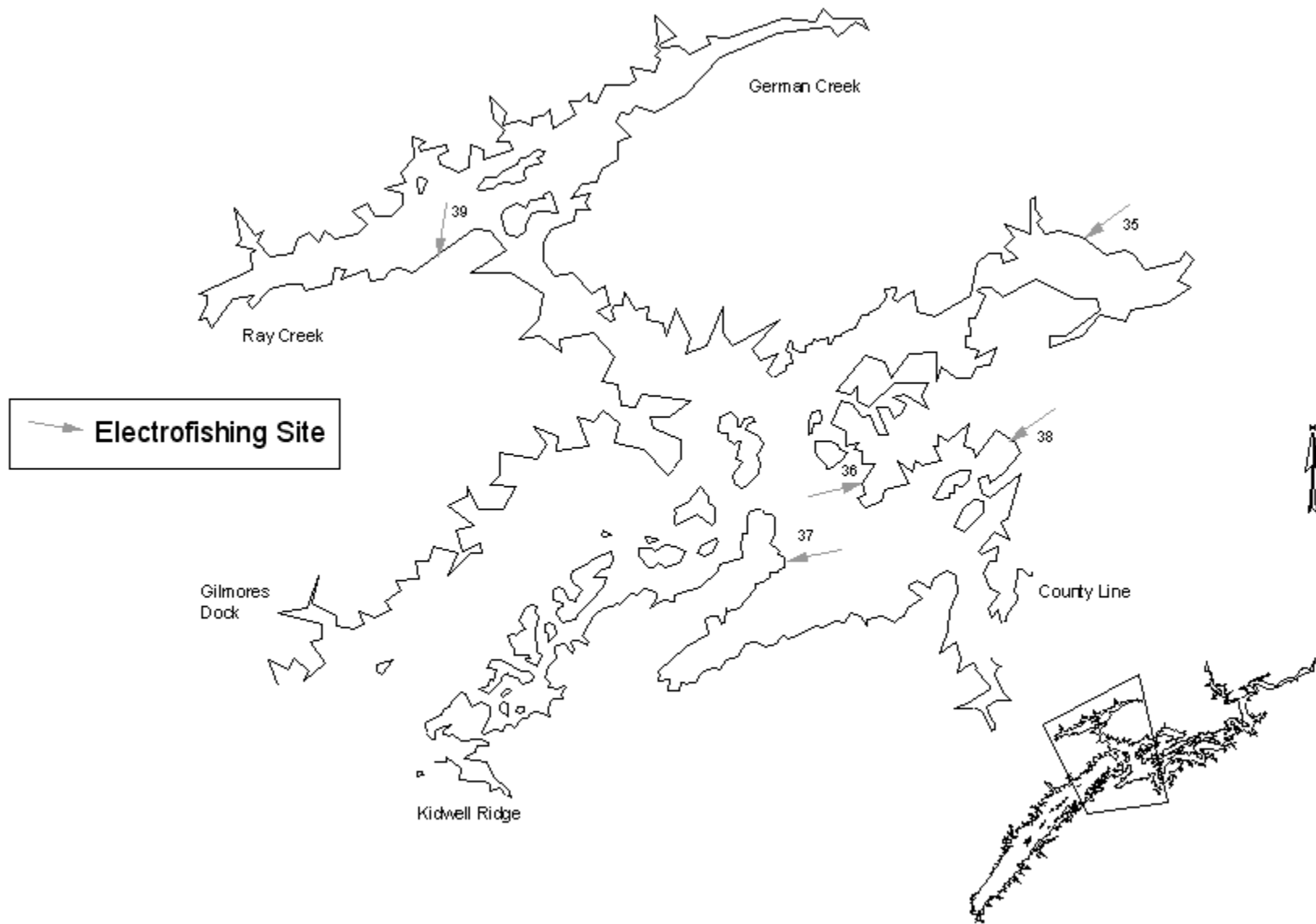


Figure 3. Electrofishing sites in the middle section of Cherokee Reservoir in 2005.

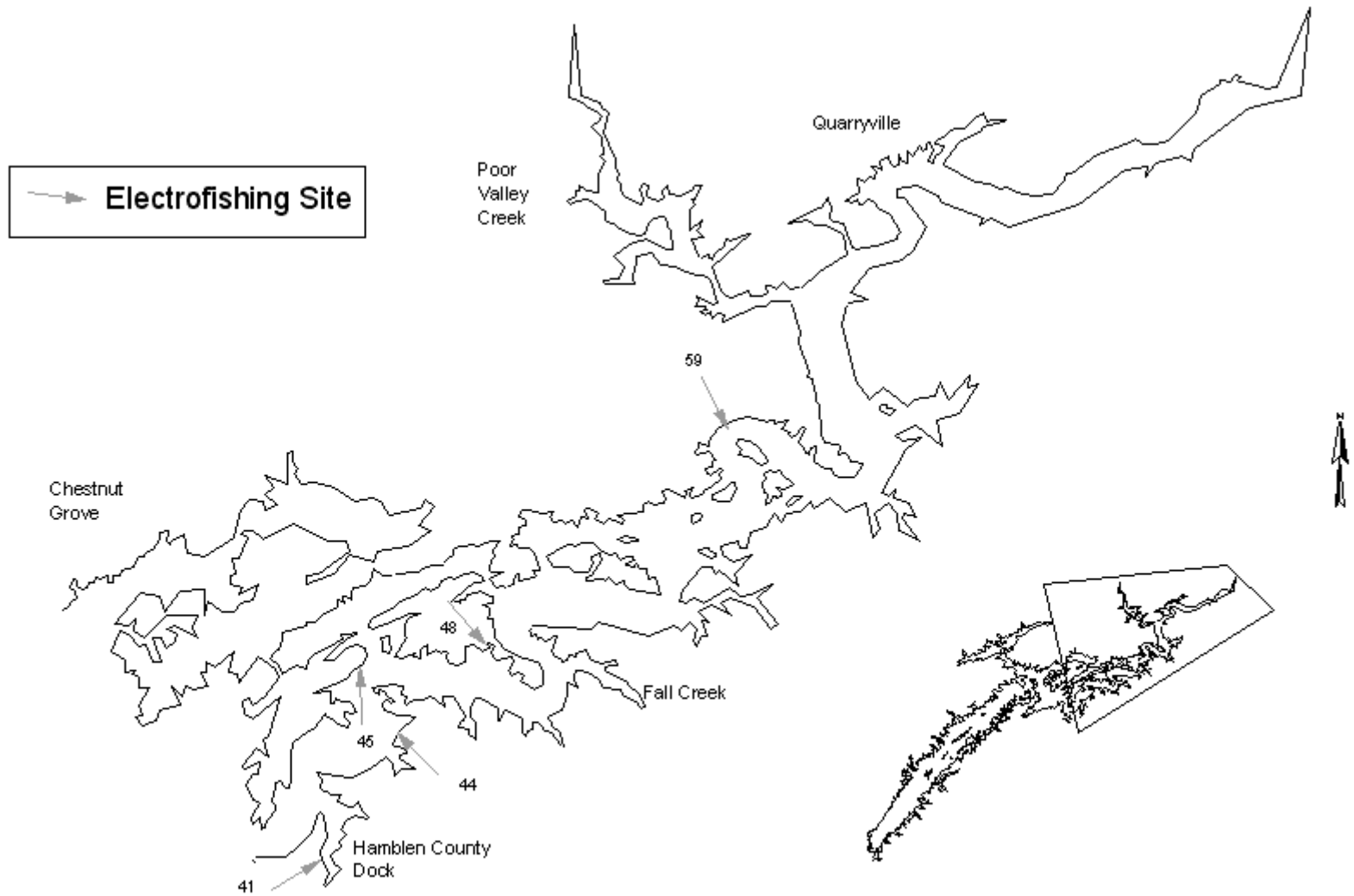


Figure 4. Electrofishing sites in the upper section of Cherokee Reservoir in 2005

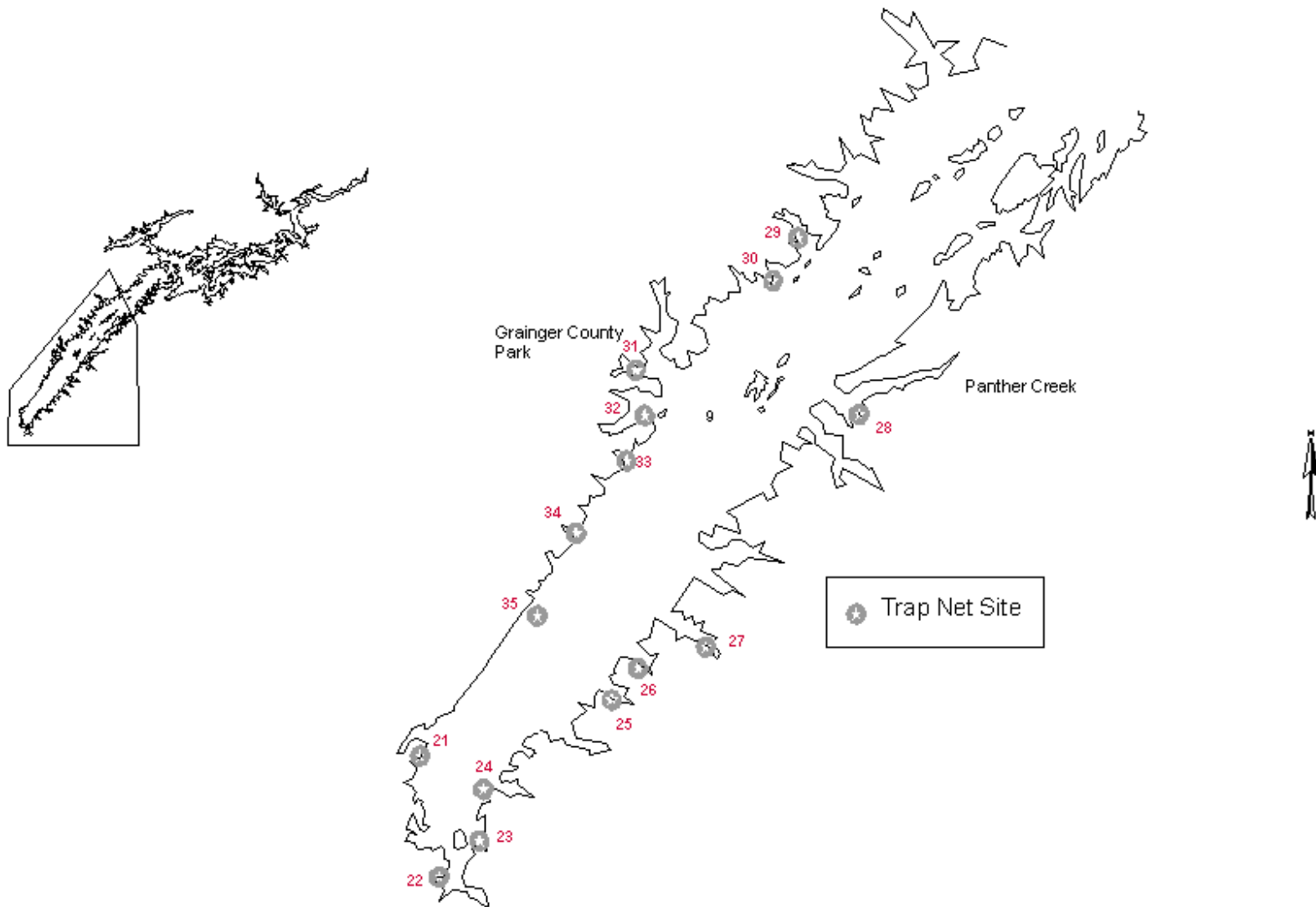


Figure 5. Trap net sites in the lower section of Cherokee Reservoir in 2005.

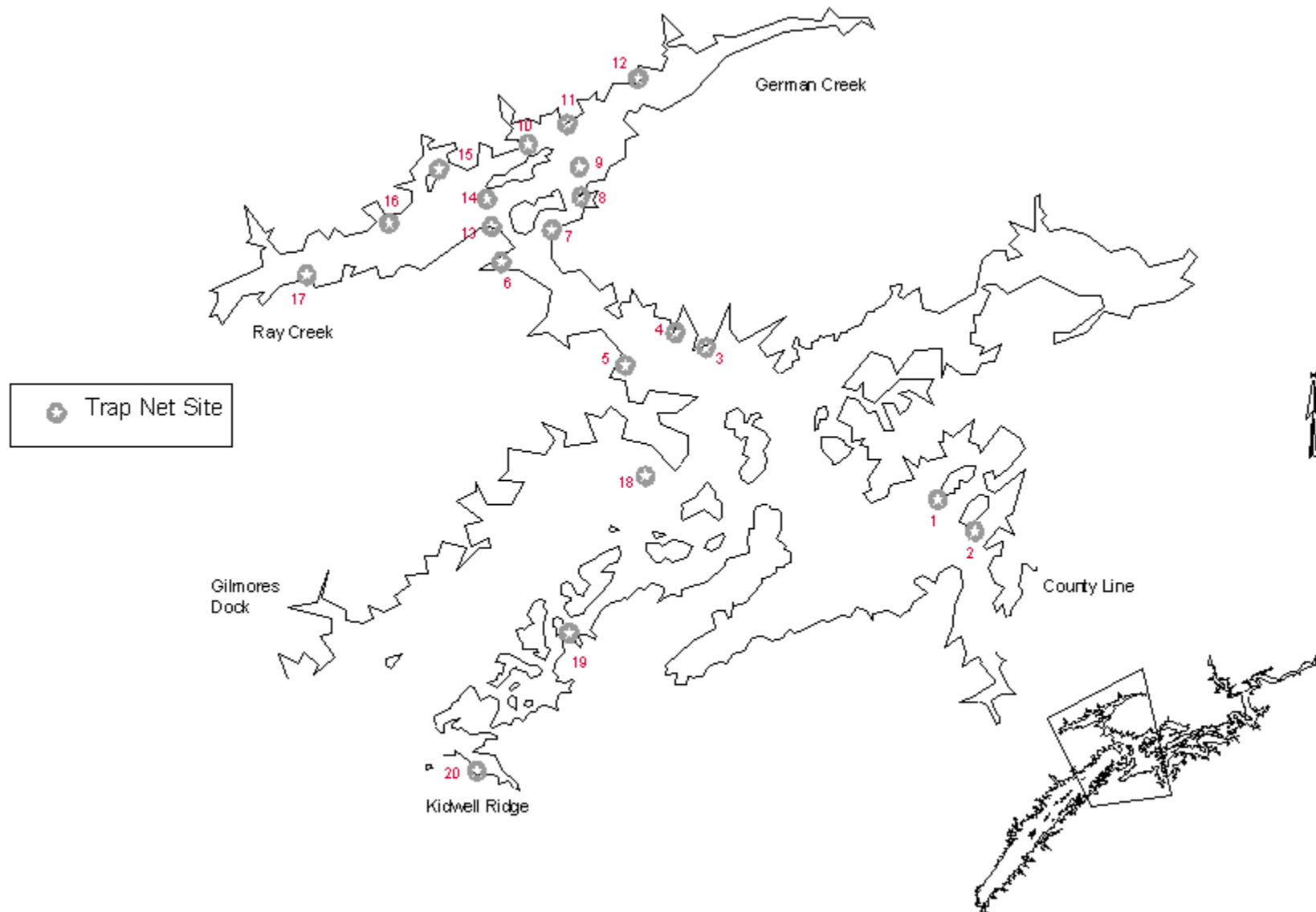


Figure 6. Trap net sites in the middle section of Cherokee Reservoir in 2005.

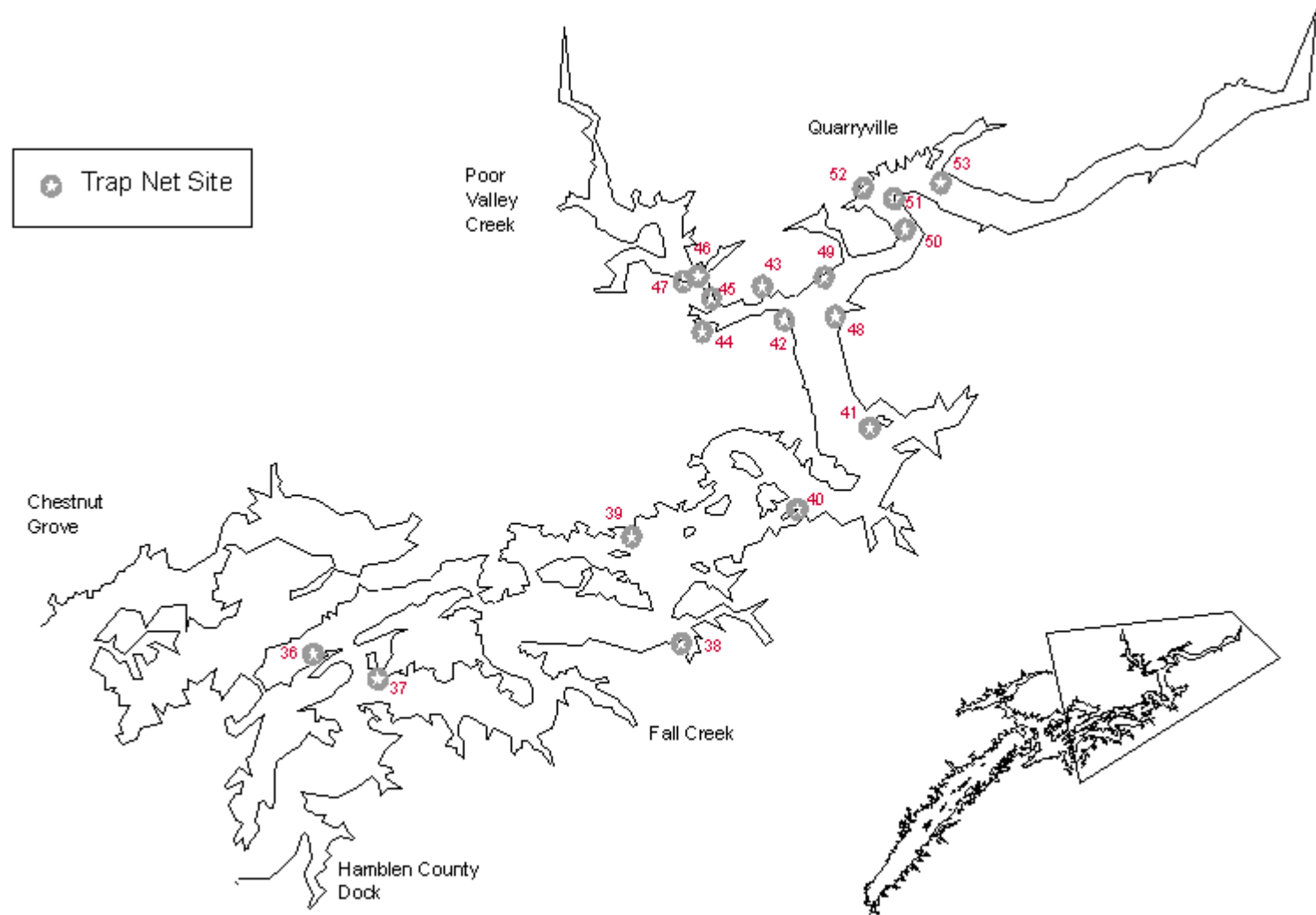


Figure 7. Trap net sites in the upper section of Cherokee Reservoir in 2005.

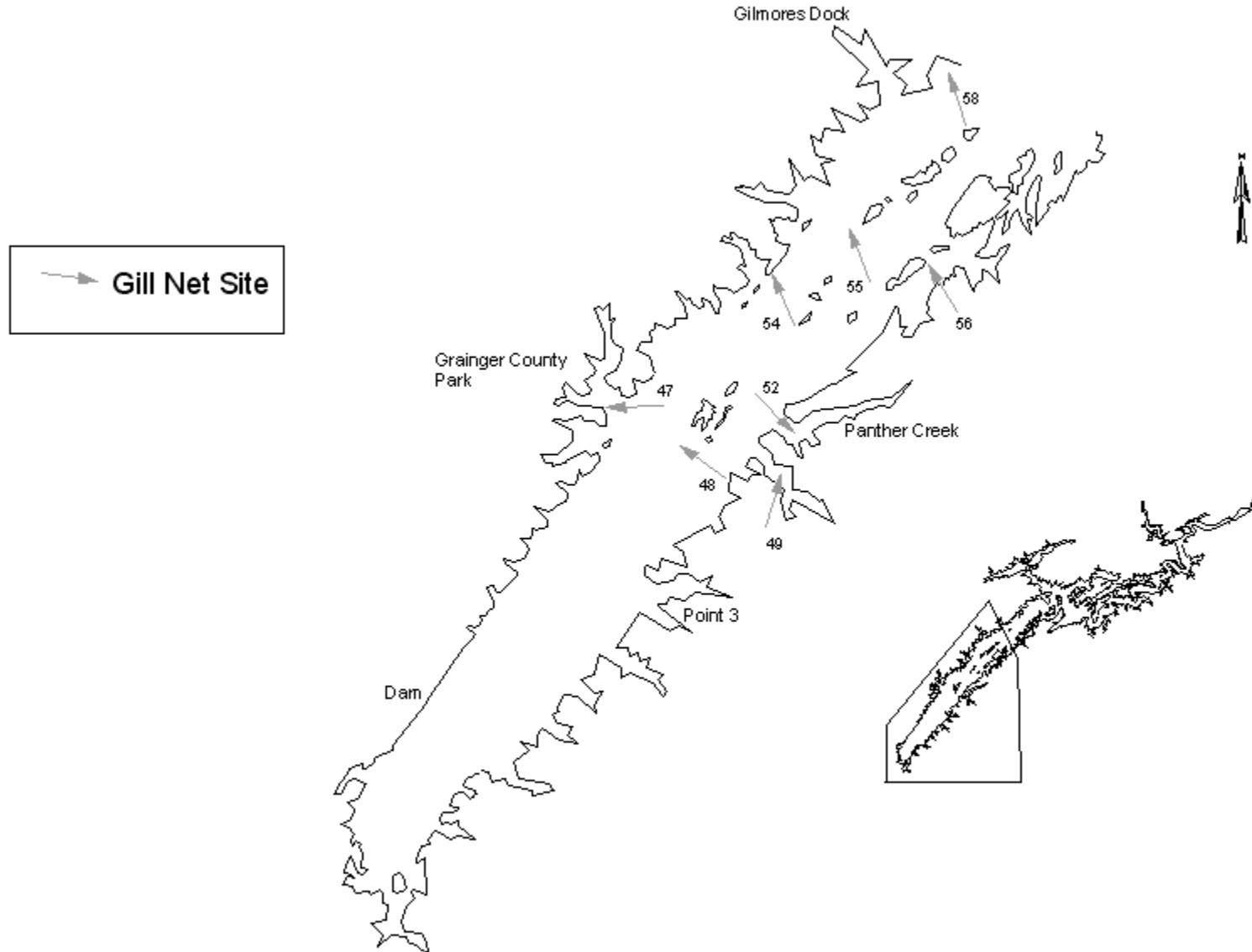


Figure 8. Summer shad gill net sites in the lower section of Cherokee Reservoir in 2005.

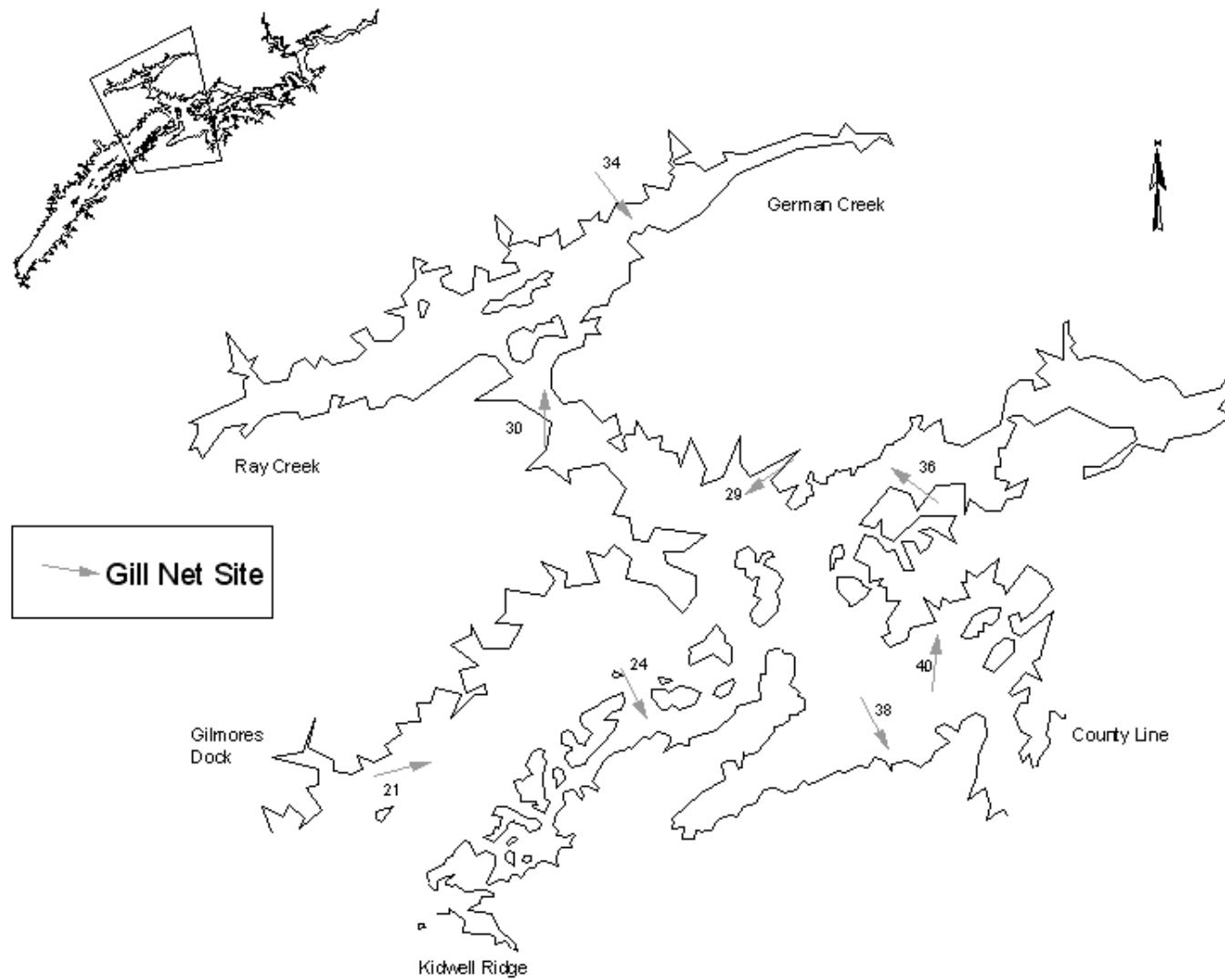


Figure 9. Summer shad gill net sites in the middle section of Cherokee Reservoir in 2005.

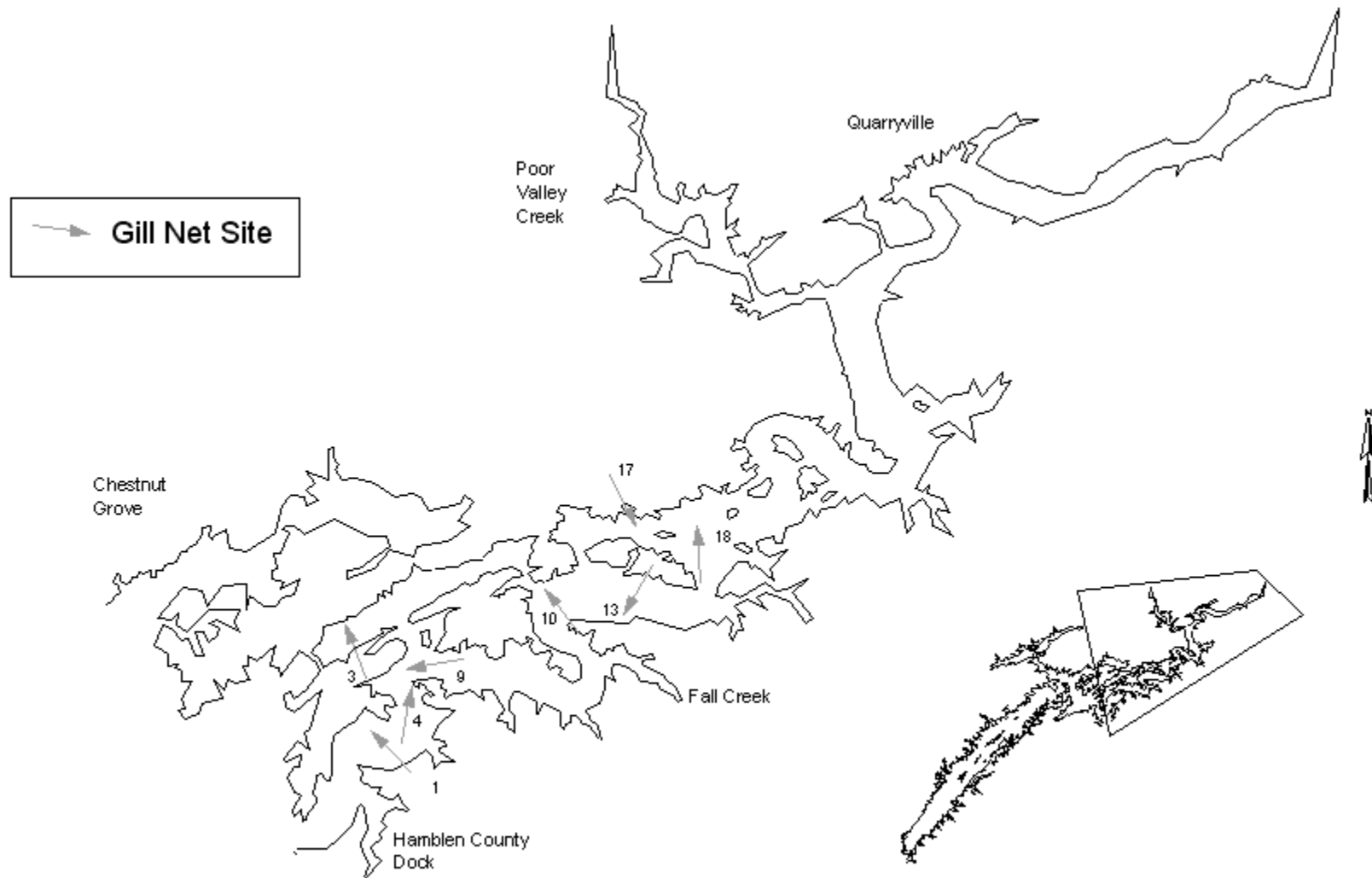


Figure 10. Summer shad gill netting sites in the upper section of Cherokee Reservoir in 2005.



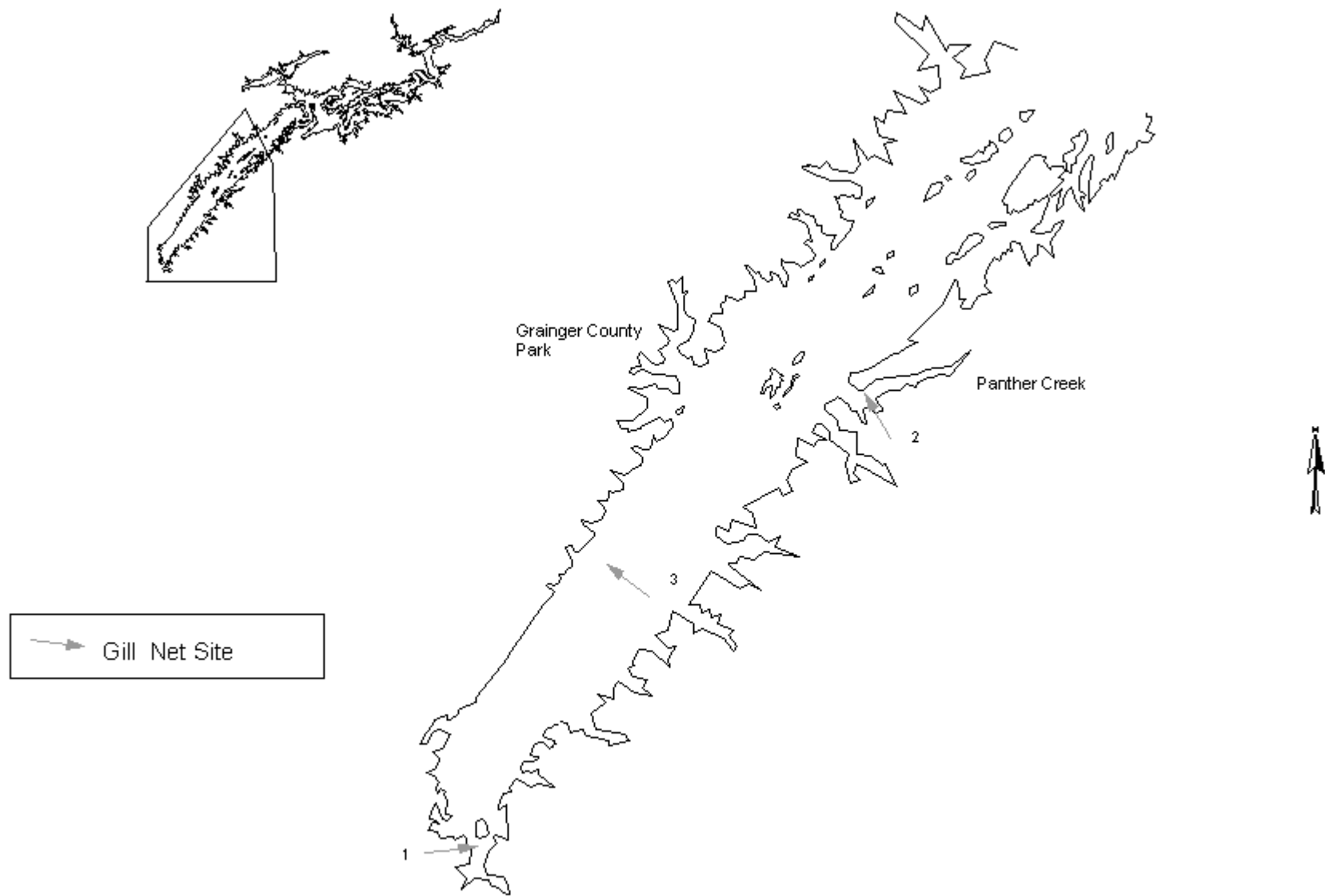


Figure 11. Winter gill net sites in the lower section of Cherokee Reservoir in 2005

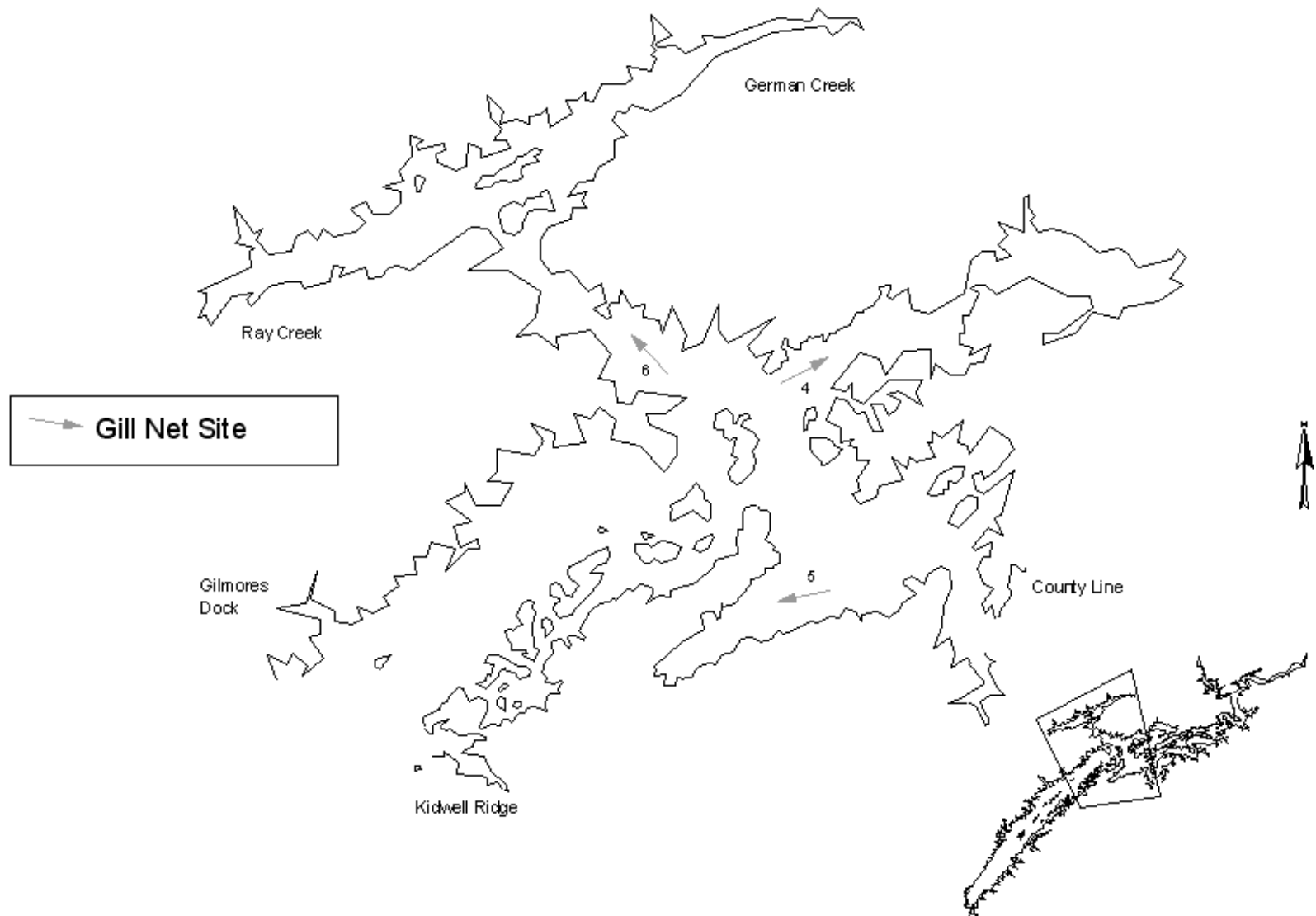


Figure 12. Winter gill net sites in the middle section of Cherokee Reservoir in 2005.

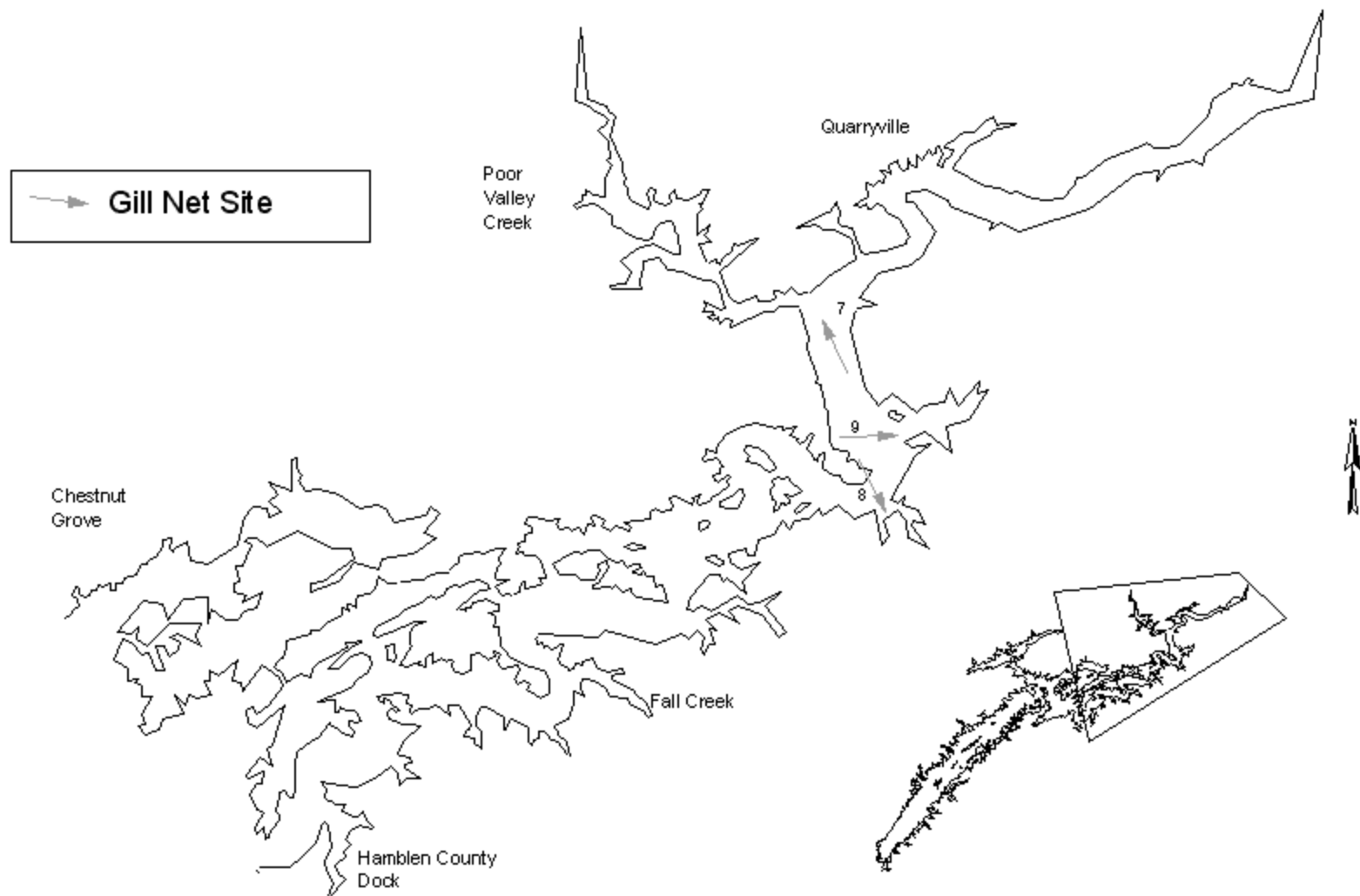


Figure 13. Winter gill net sites in the upper section of Cherokee Reservoir in 2005

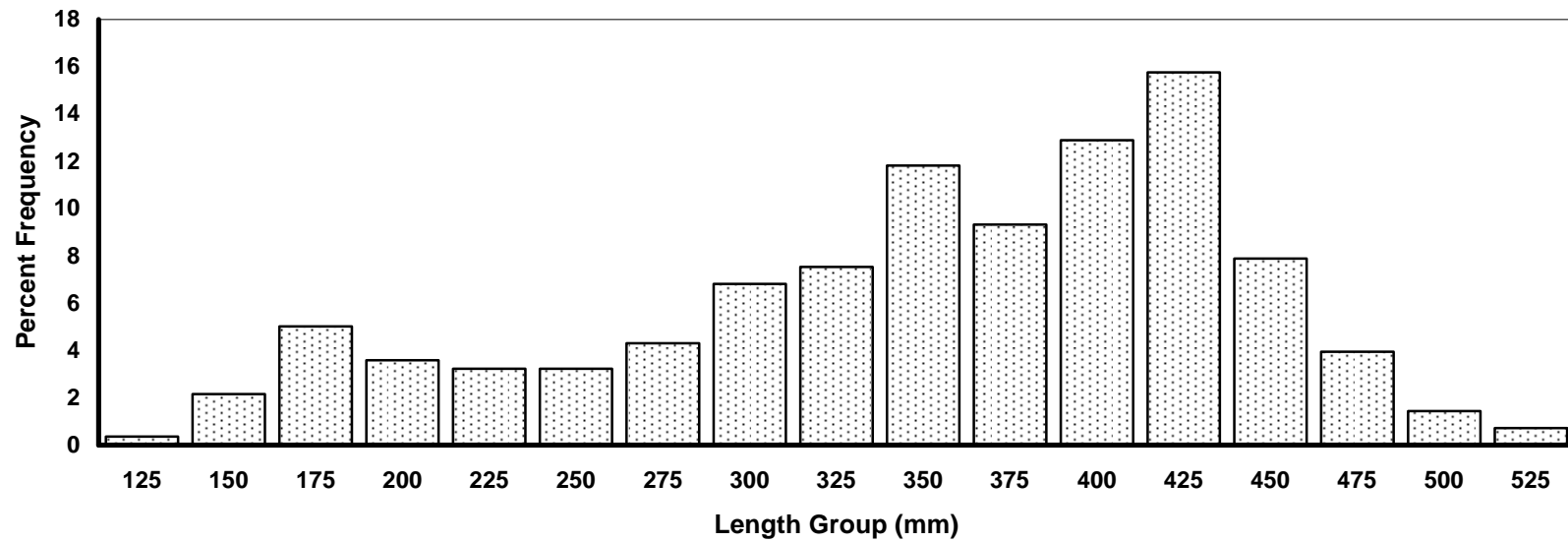


Figure 14. Cherokee Reservoir largemouth bass length frequency by percent for 2005 electrofishing sample (n=279).

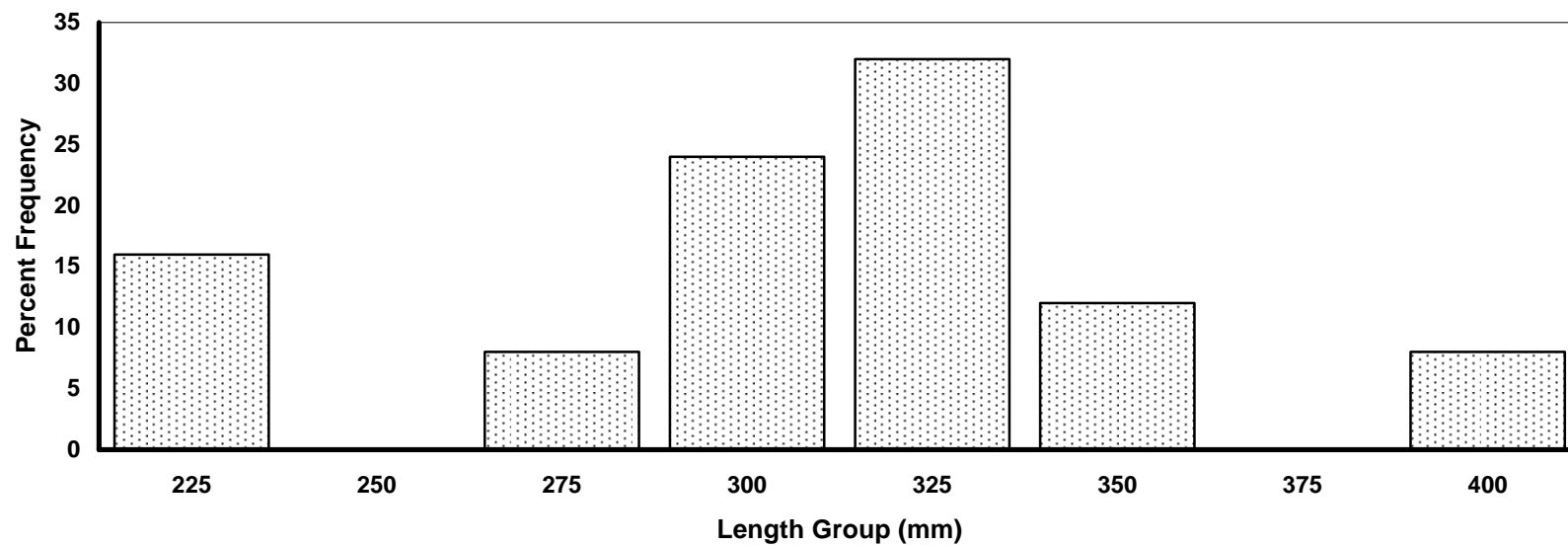


Figure 15. Cherokee Reservoir black crappie length frequency by percent for 2005 electrofishing sample (n=25).

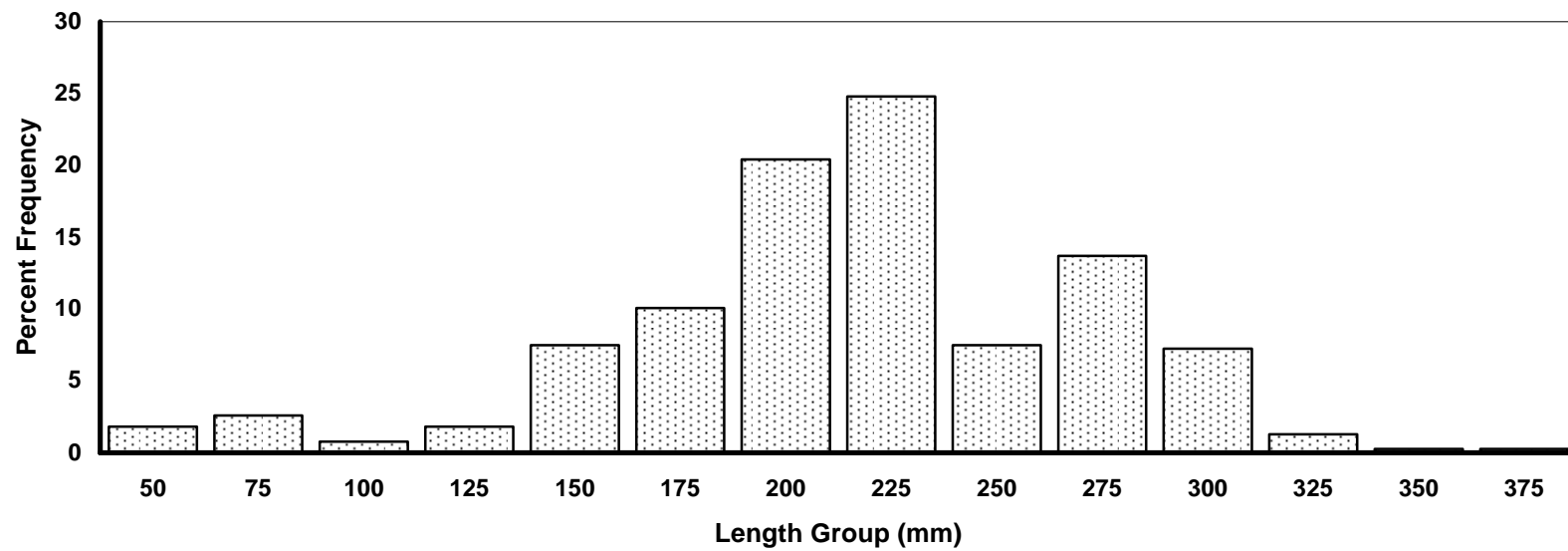


Figure 16. Cherokee Reservoir black crappie length frequency by percent for 2005 trap netting sample (n=387).

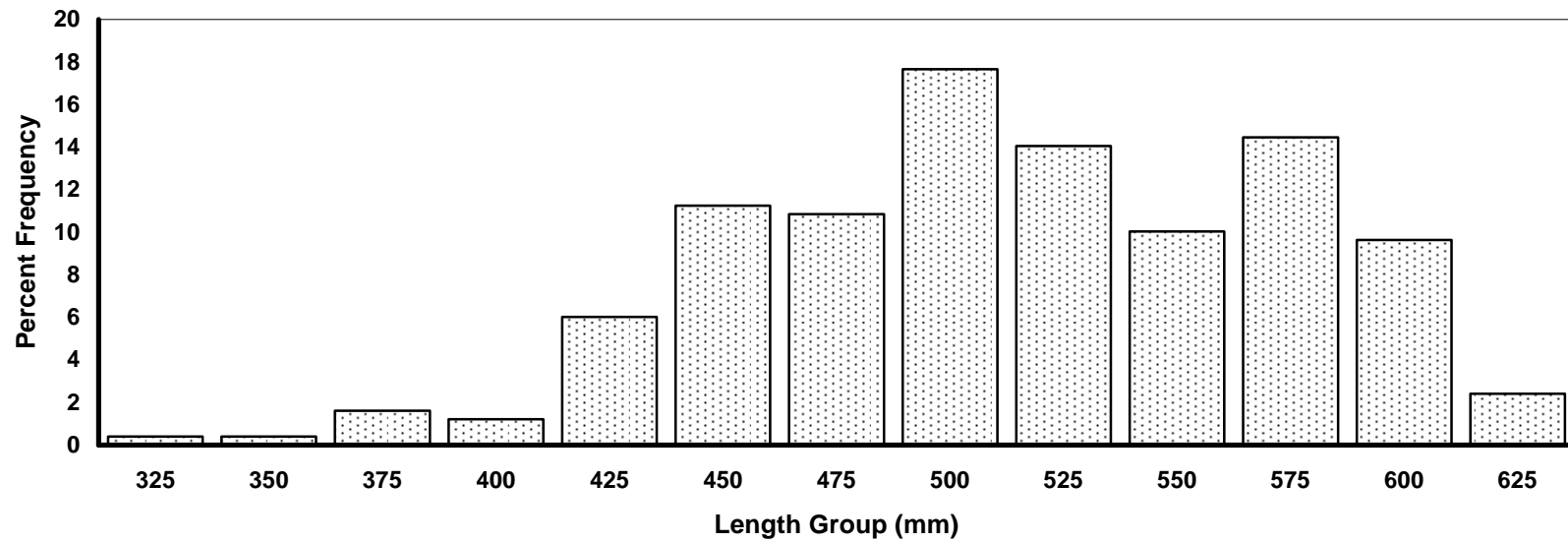


Figure 17. Cherokee Reservoir hybrid striped bass length frequency by percent for 2005 winter gill net sample (n=249).

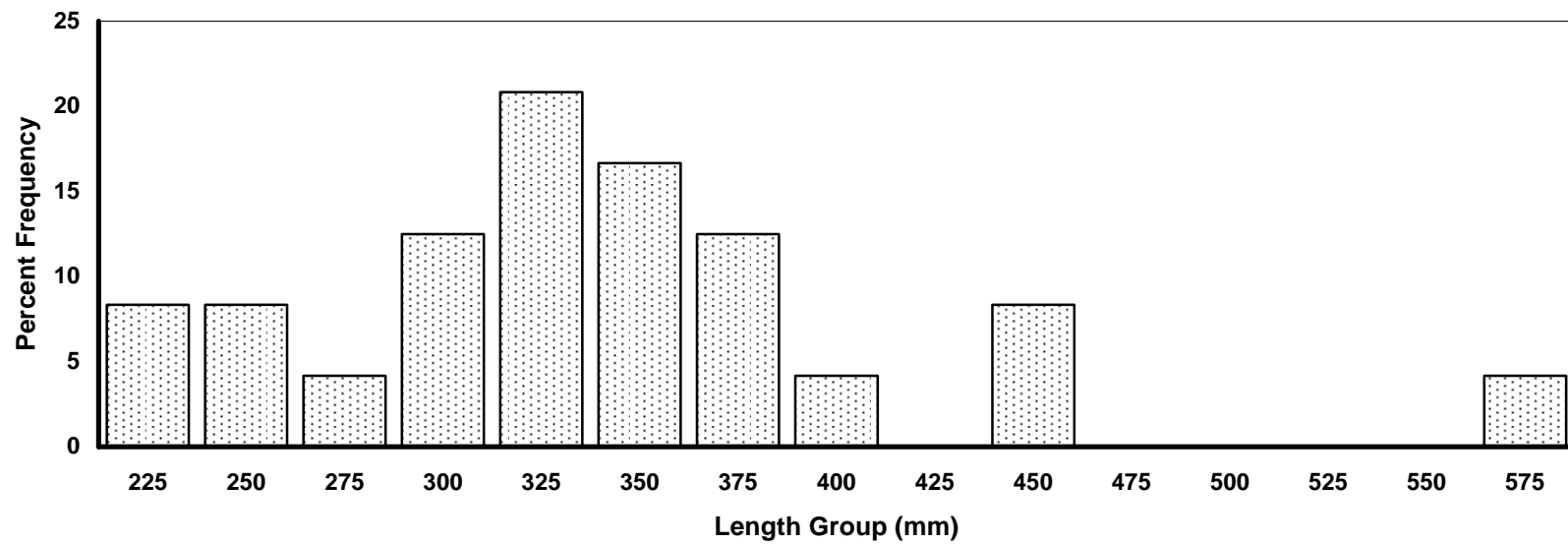


Figure 18. Cherokee Reservoir hybrid striped bass length frequency by percent for 2005 shad gill netting sample (n=24).



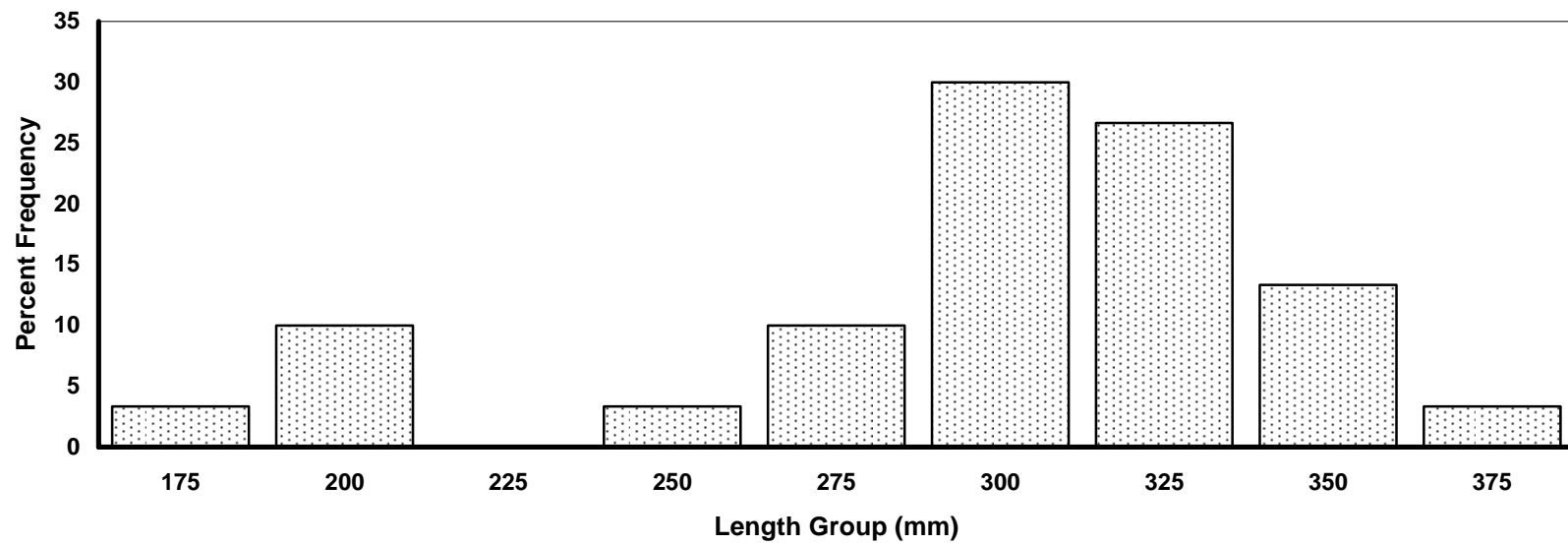


Figure 19. Cherokee Reservoir spotted bass length frequency by percent for 2005 electrofishing sample (n=30).

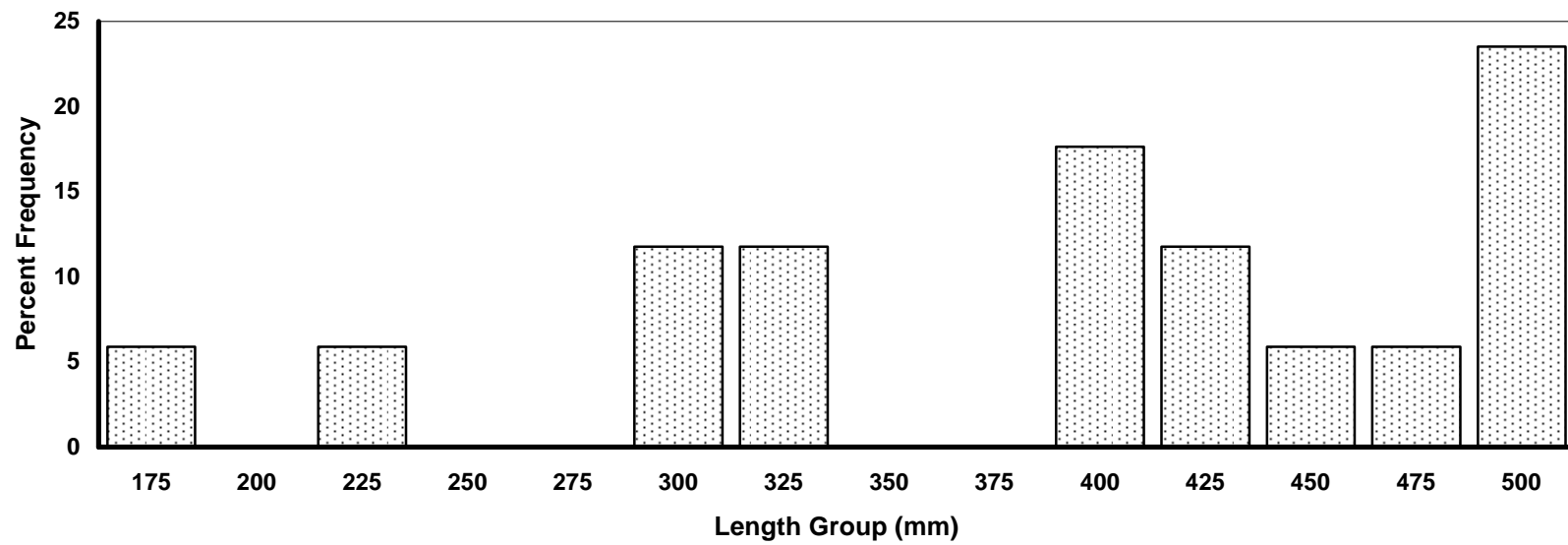


Figure 20. Cherokee Reservoir smallmouth bass length frequency by percent for 2005 electrofishing sample (n=17).

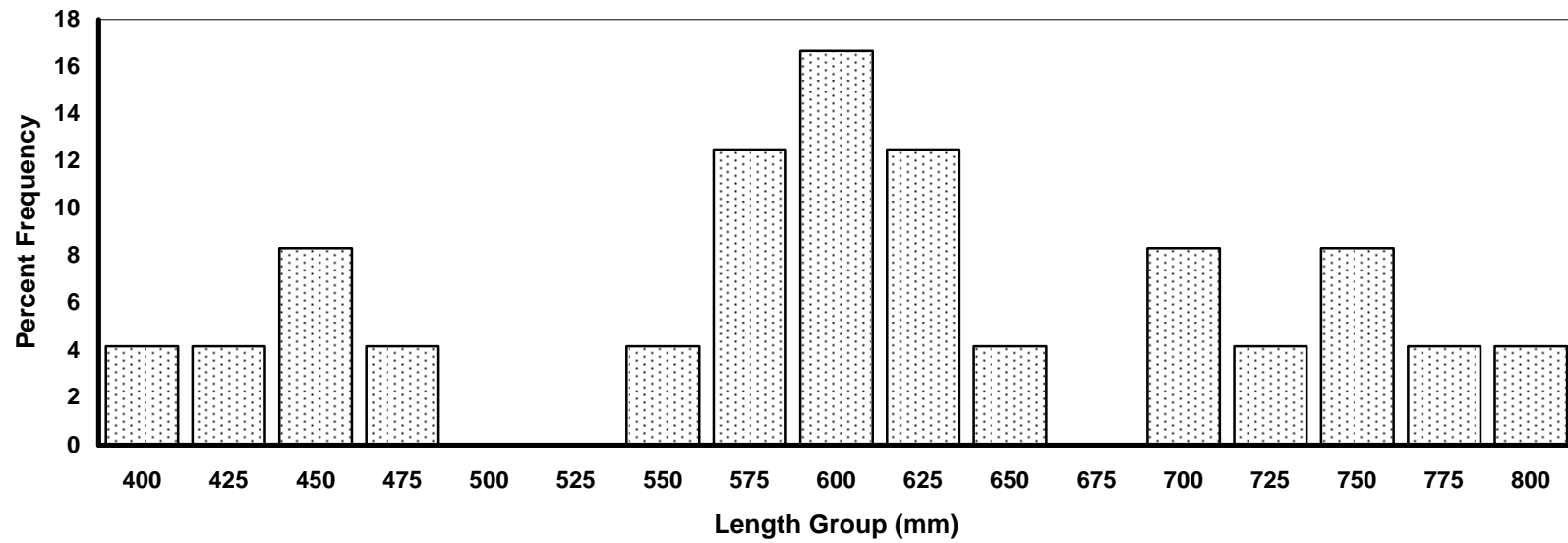


Figure 21. Cherokee Reservoir striped bass length frequency by percent for 2005 winter gill net sample (n=24).

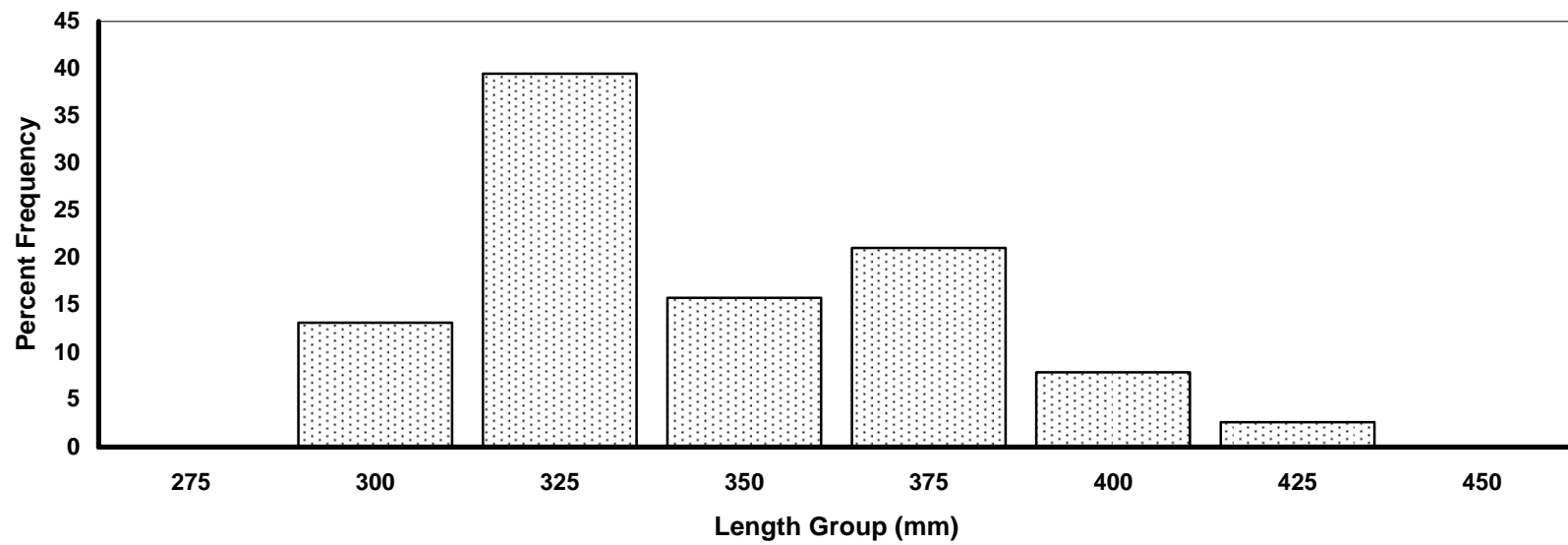


Figure 22. Cherokee Reservoir white bass length frequency by percent for 2005 winter gill net sample (n=38).

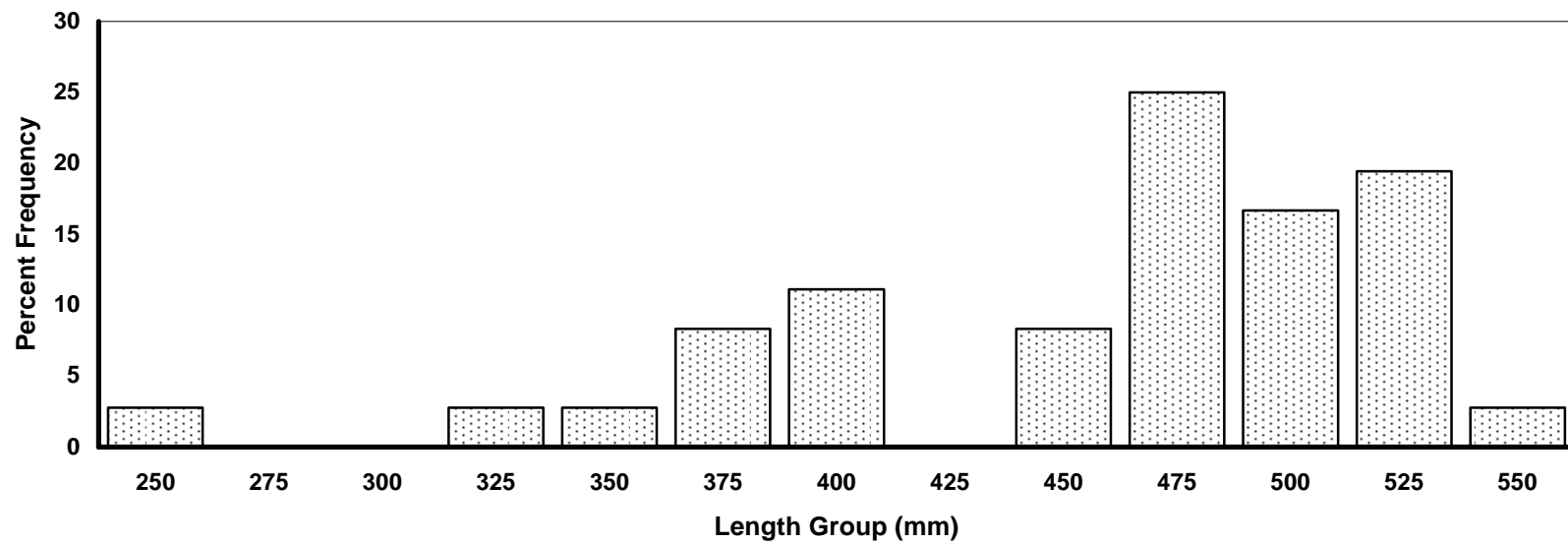


Figure 23. Cherokee Reservoir walleye length frequency by percent for 2005 shad gill netting sample (n=36).

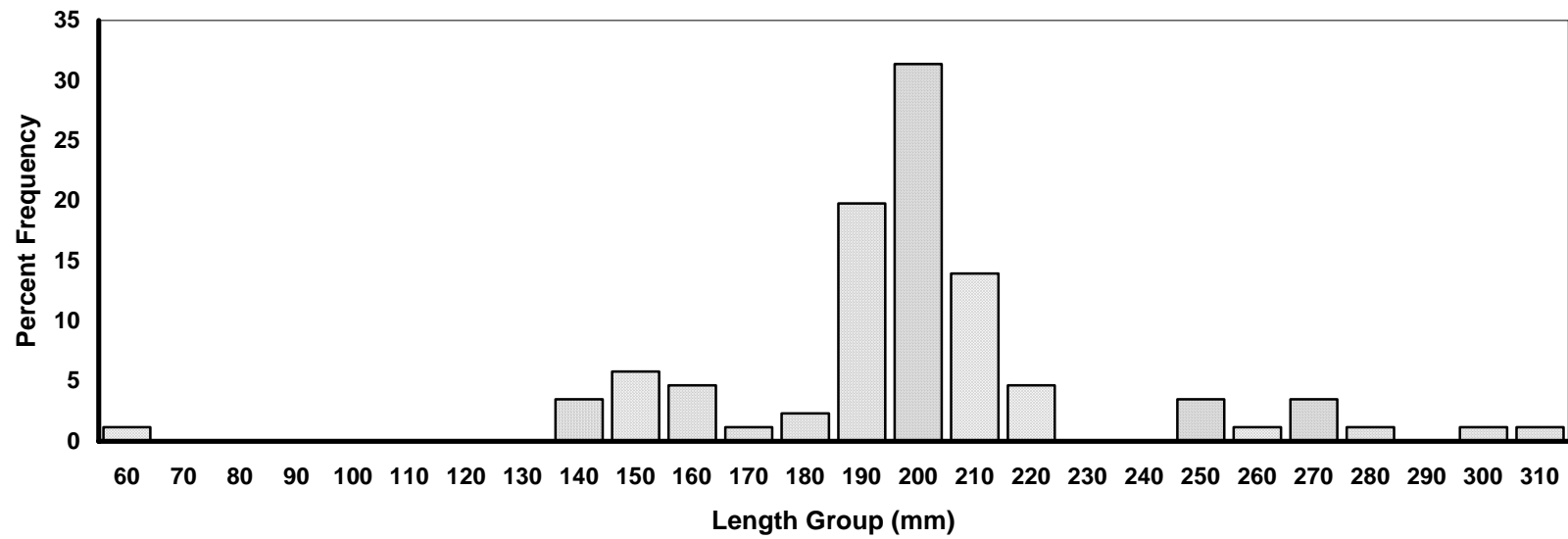


Figure 24. Cherokee Reservoir gizzard shad length frequency by percent for 2005 shad gillnetting sample (n=86).

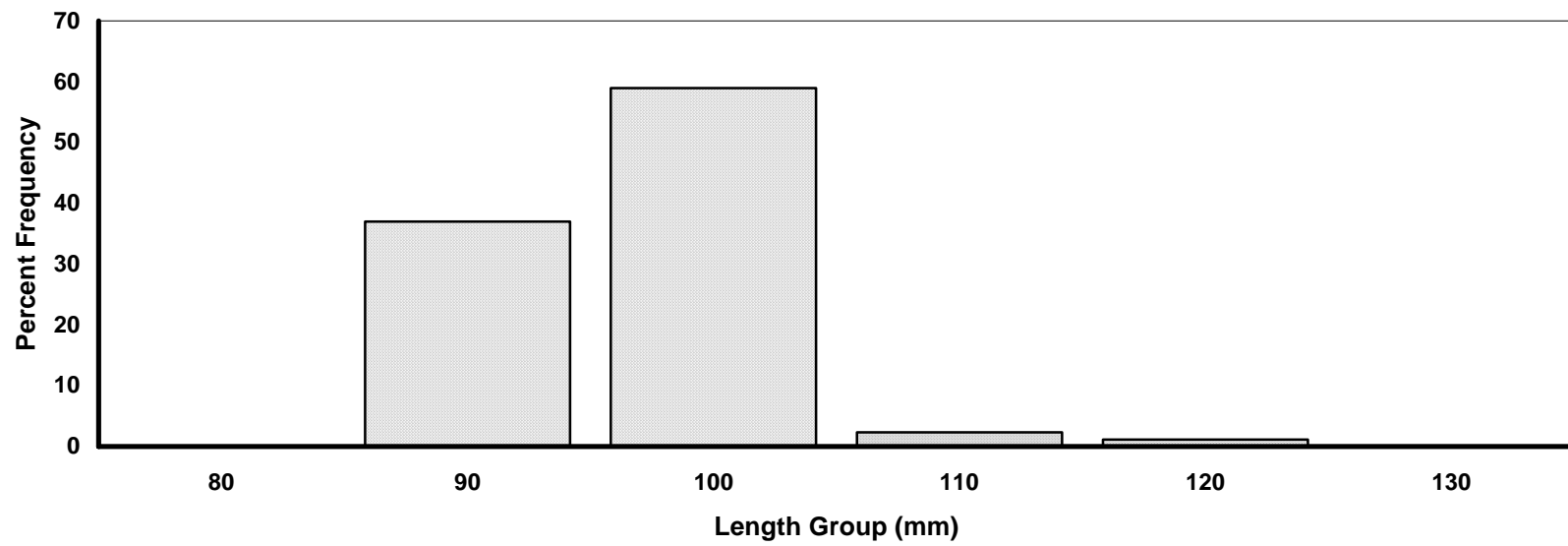


Figure 25. Cherokee Reservoir threadfin shad length frequency by percent for 2005 shad gillnetting sample (n=173).

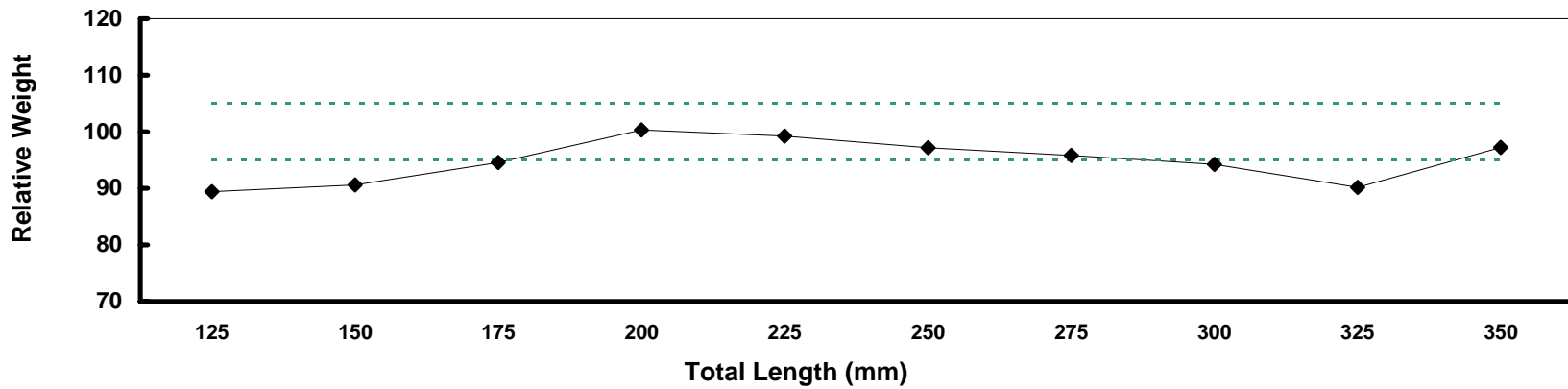


Figure 26. Cherokee Reservoir black crappie mean relative weight values from the 2005 trap net sample (n=365).



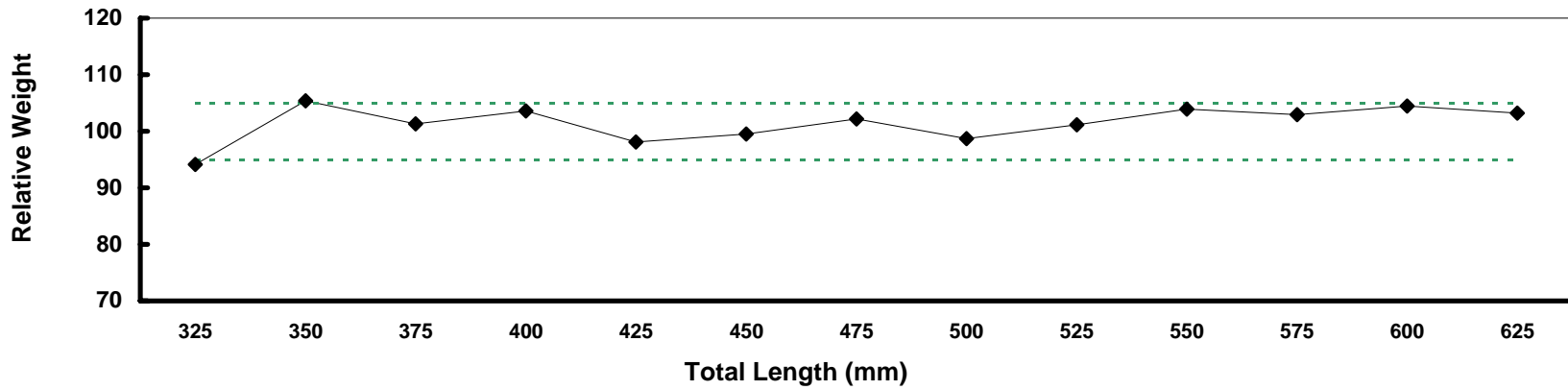


Figure 27. Cherokee Reservoir hybrid striped bass mean relative weight values from the 2005 winter gill net sample (n=248).

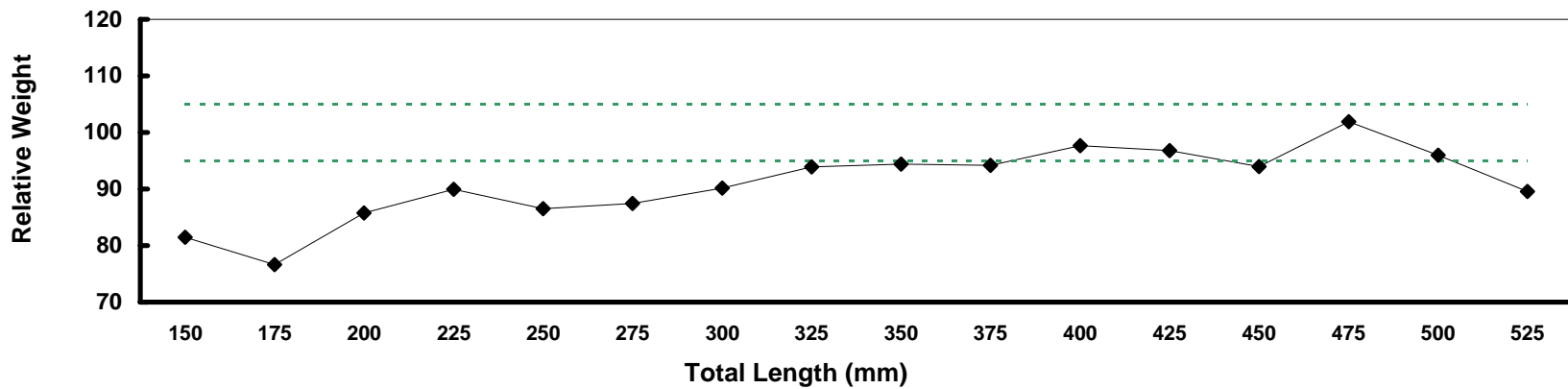


Figure 28. Cherokee Reservoir largemouth bass mean relative weight values from the 2005 electrofishing sample (n=265).

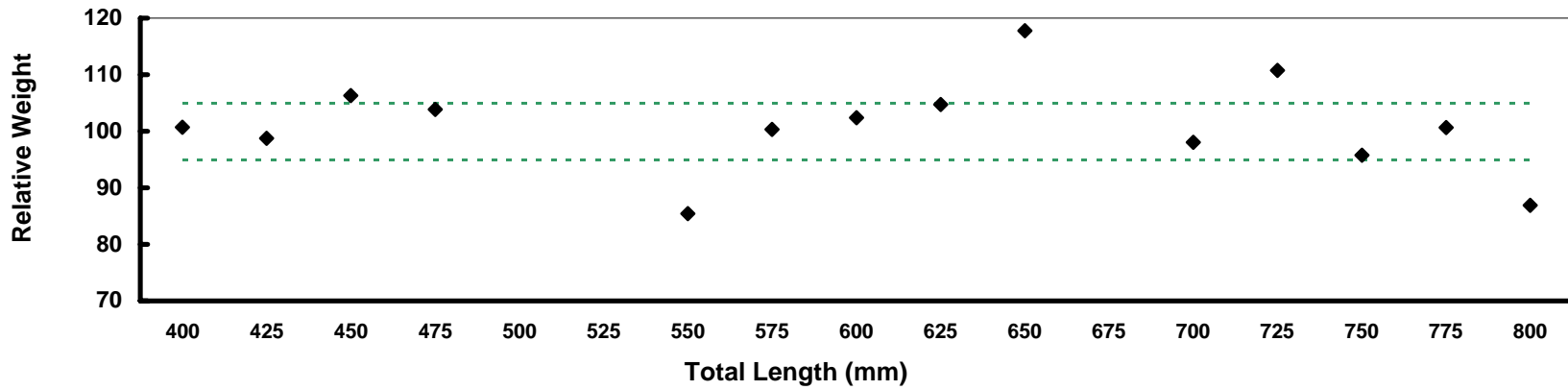


Figure 29. Cherokee Reservoir striped bass mean relative weight values from the 2005 winter gill net sample (n=24).

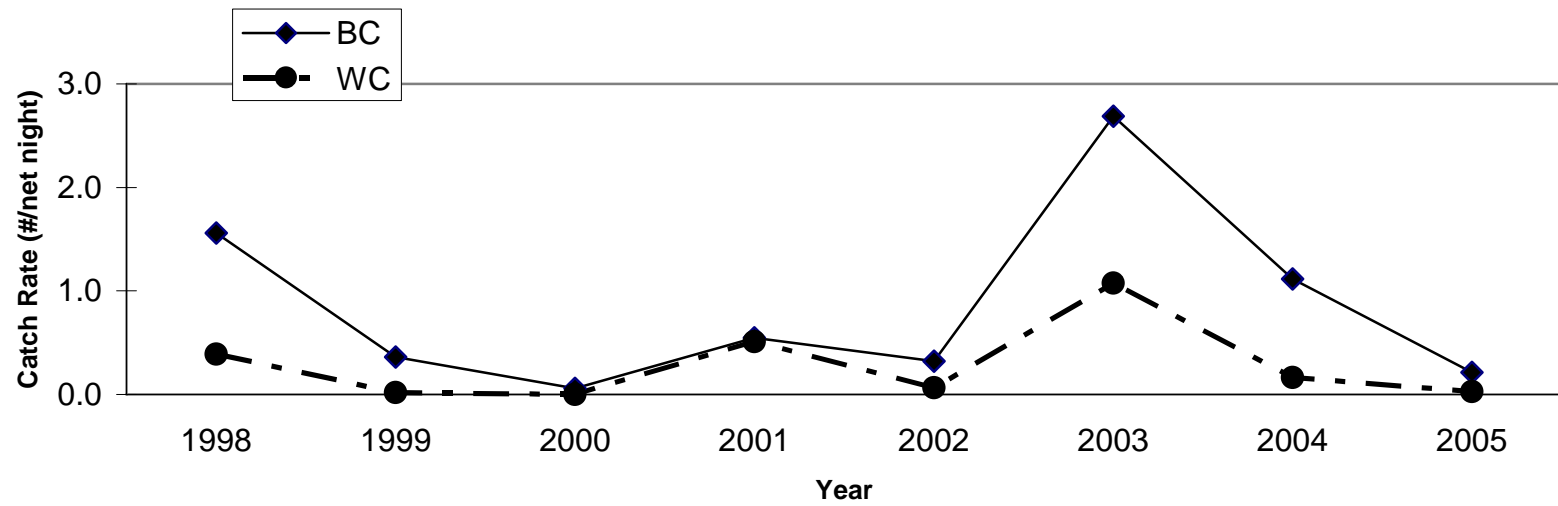


Figure 30. Catch rate of young-of-the-year crappie from Cherokee Reservoir trap netting 1998-2005.

Figure 31. DO - Cherokee - aerators - July 14, 2005

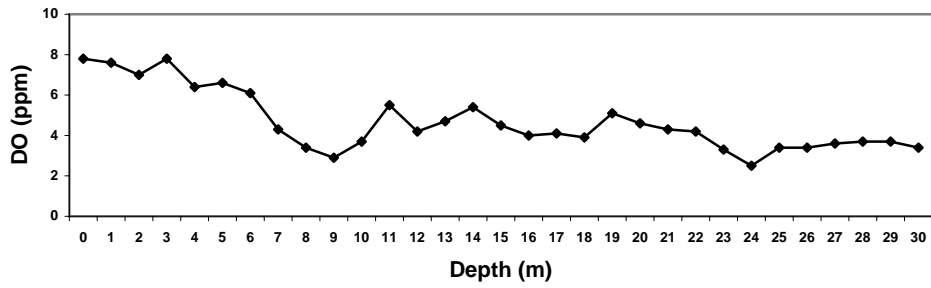


Figure 32. Temp - Cherokee - aerators - July 14, 2005

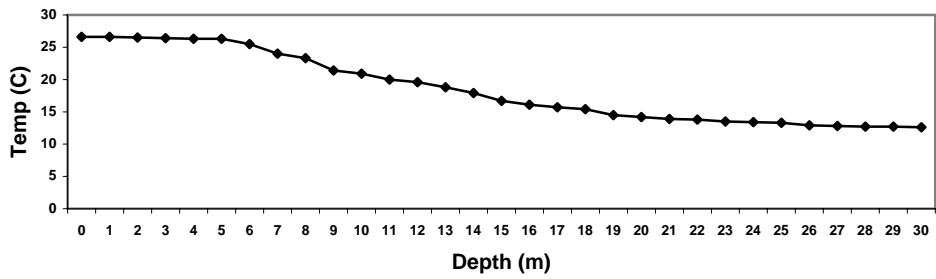


Figure 33. DO - Cherokee - RM 55 - July 14, 2005

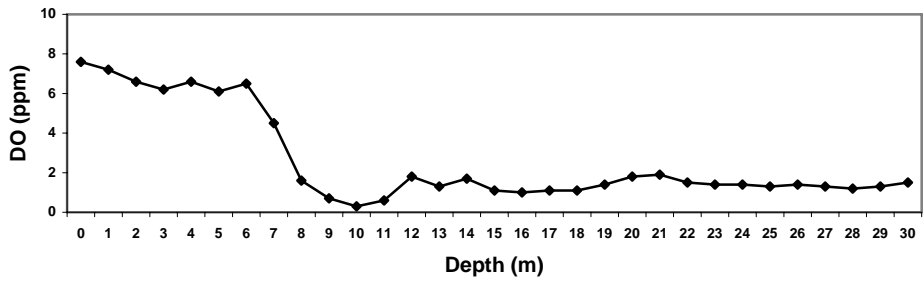


Figure 34. Temp - Cherokee - RM 55 - July 14, 2005

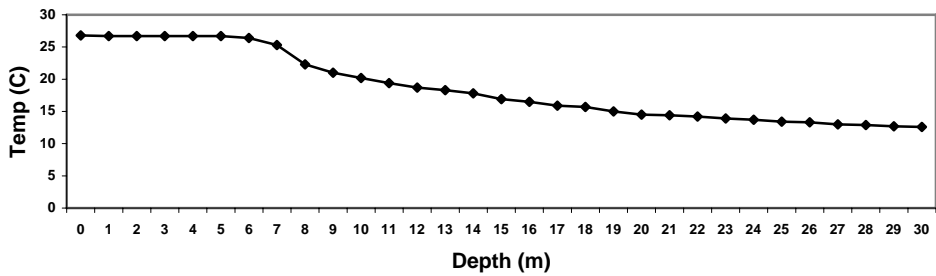


Figure 35. DO - Cherokee - RM 66 - July 14, 2005

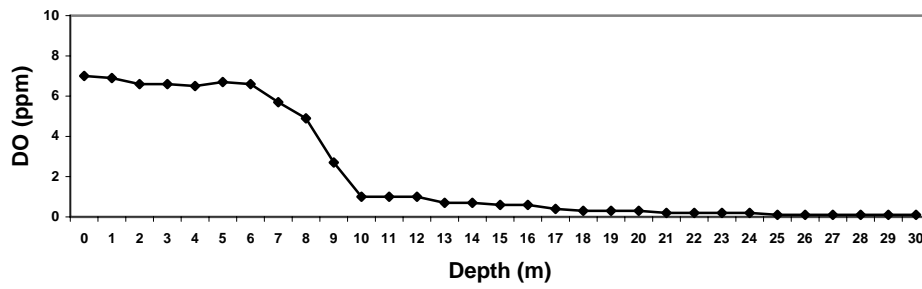


Figure 36. Temp - Cherokee - RM 66 - July 14, 2005

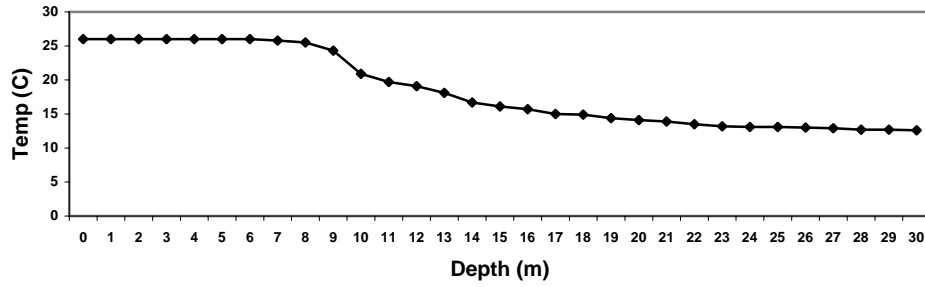


Figure 37. DO - Cherokee - RM 75 - July 14, 2005

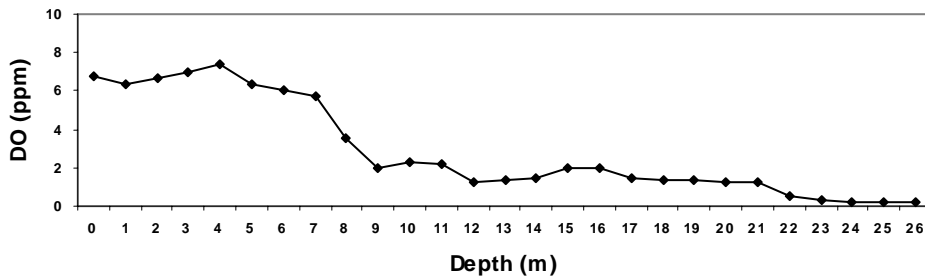


Figure 38. Temp - Cherokee - RM 75 - July 14, 2005

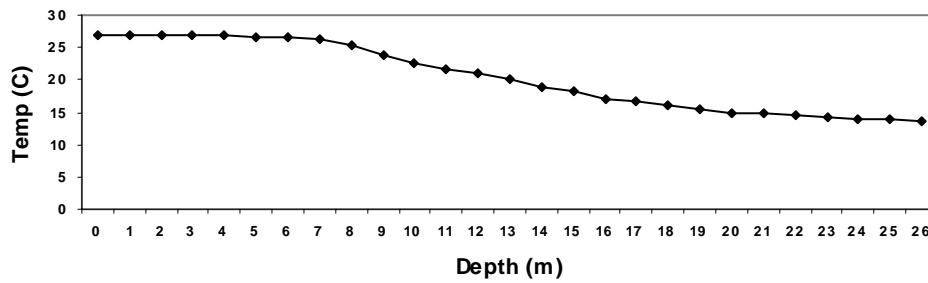


Figure 39. DO - Cherokee - RM 83 - July 14, 2005

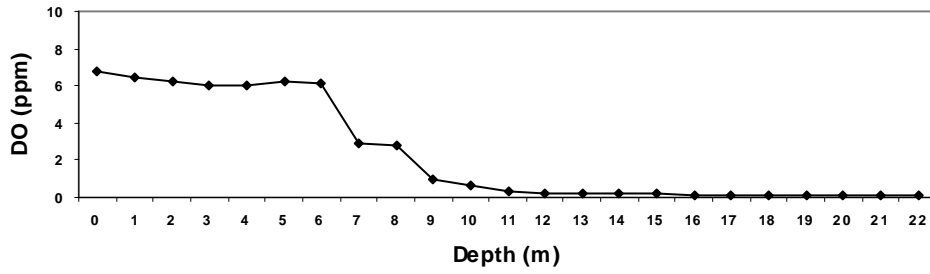


Figure 40. Temp - Cherokee - RM 83 - July 14, 2005

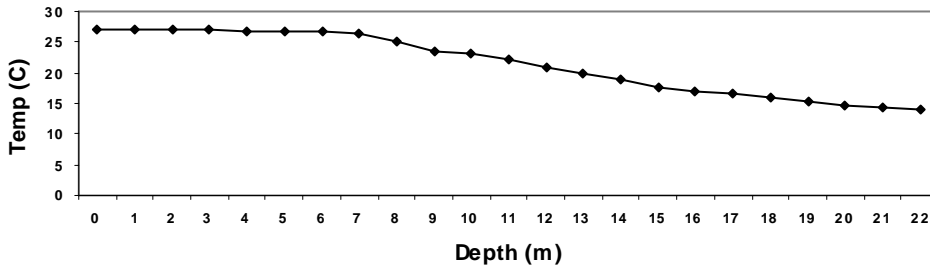


Figure 41. DO - Cherokee - aerators - Aug 1, 2005

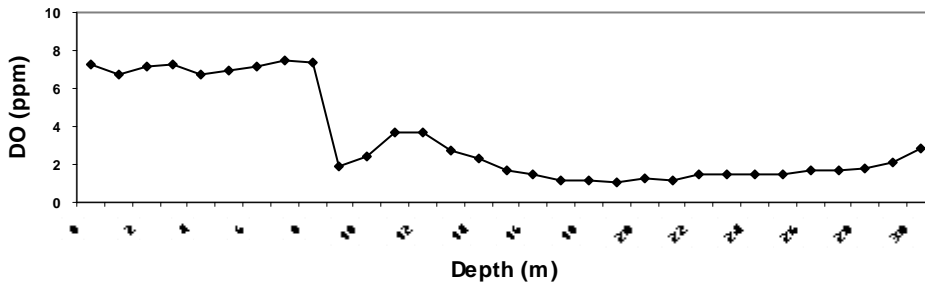


Figure 42. Temp - Cherokee - aerators - Aug 1, 2005

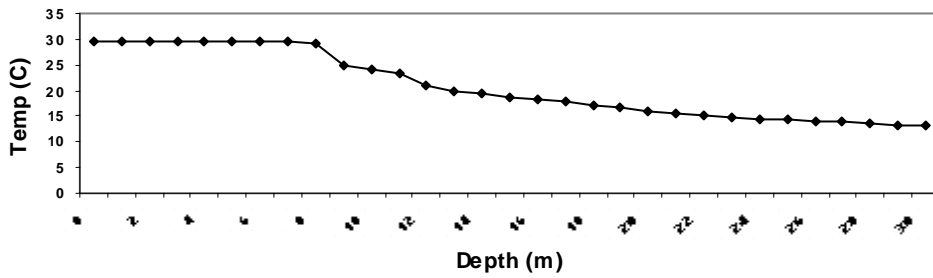


Figure 43. DO - Cherokee - RM 55 - Aug 1, 2005

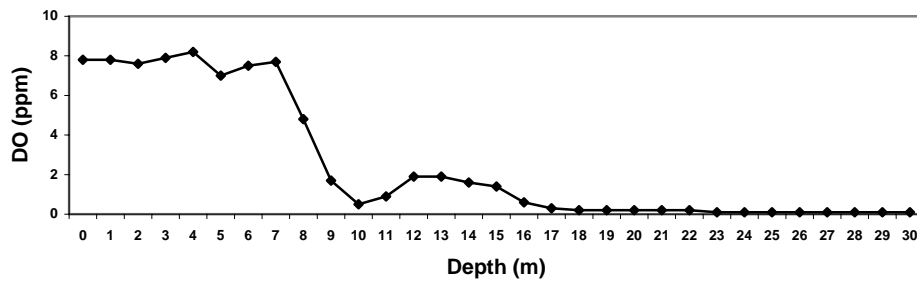


Figure 44. Temp - Cherokee - RM 55 - Aug 1, 2005

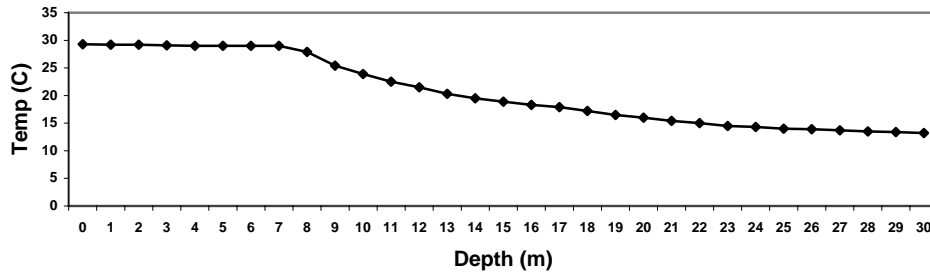


Figure 45. DO - Cherokee - RM 66 - Aug 1, 2005

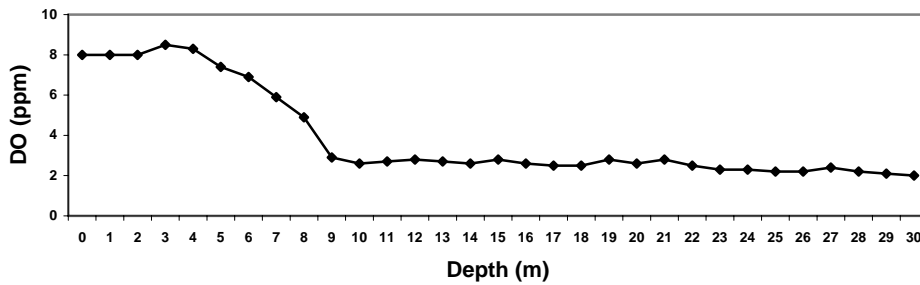


Figure 46. Temp - Cherokee - RM 66 - Aug 1, 2005

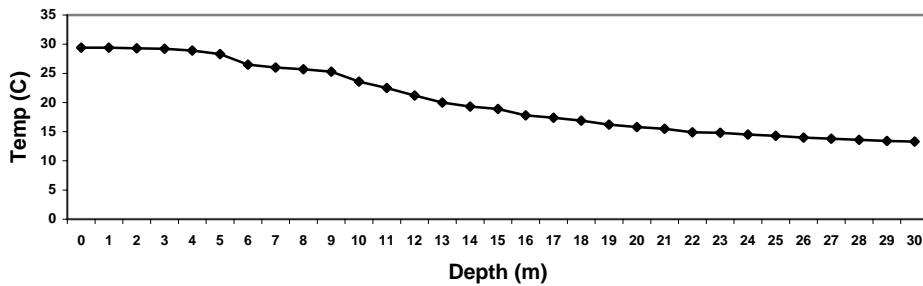




Figure 47. DO - Cherokee - RM 75 - Aug 1, 2005

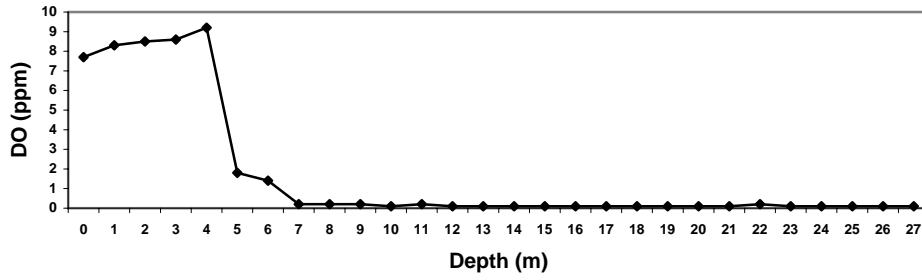


Figure 48. Temp - Cherokee - RM 75 - Aug 1, 2005

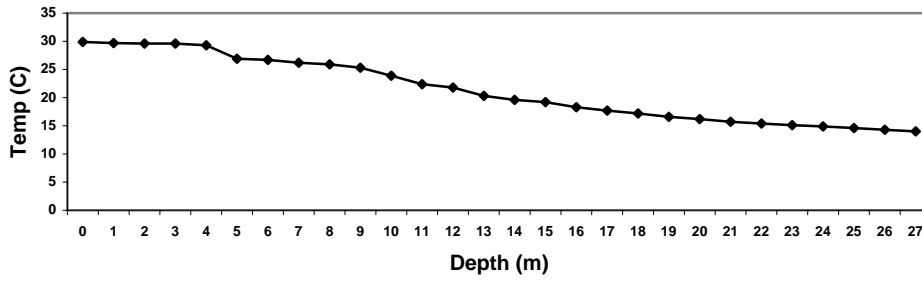


Figure 49. DO - Cherokee - RM 83 - Aug 1, 2005

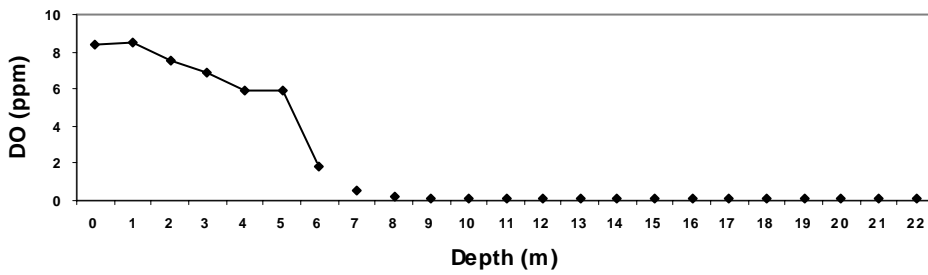


Figure 50. Temp - Cherokee - RM 83 - Aug 1, 2005

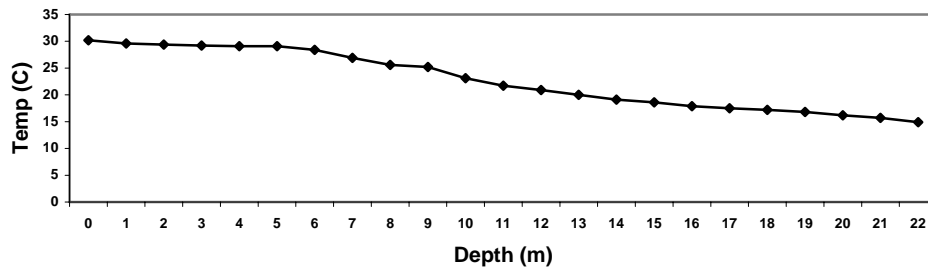


Figure 51. DO - Cherokee - aerators - Sept 2, 2005

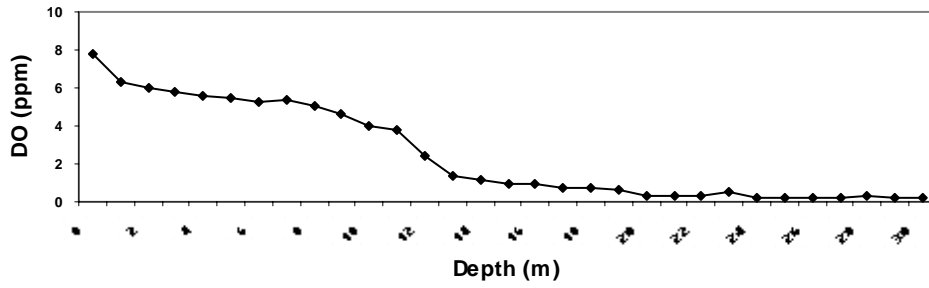


Figure 52. Temp - Cherokee - aerators - Sept 2, 2005

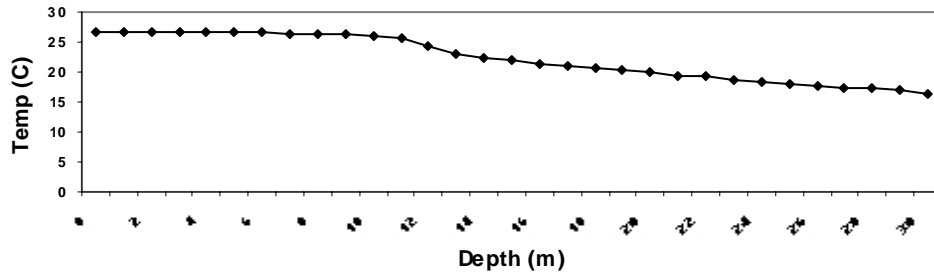


Figure 53. DO - Cherokee - RM 55 - Sept 2, 2005

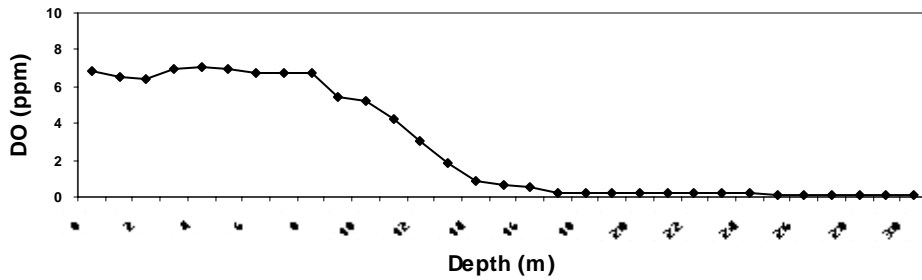


Figure 54. Temp - Cherokee - RM 55 - Sept 2, 2005

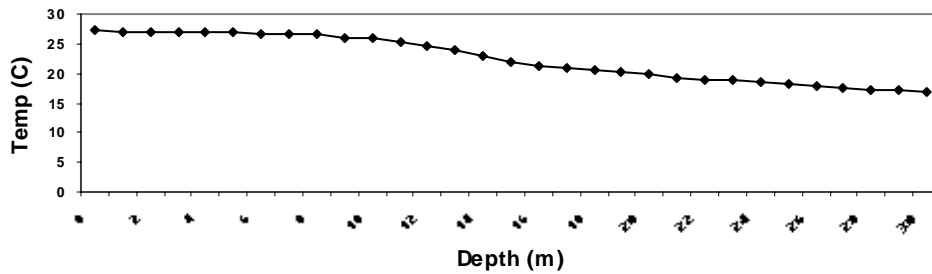


Figure 55. DO - Cherokee - RM 66 - Sept 2, 2005

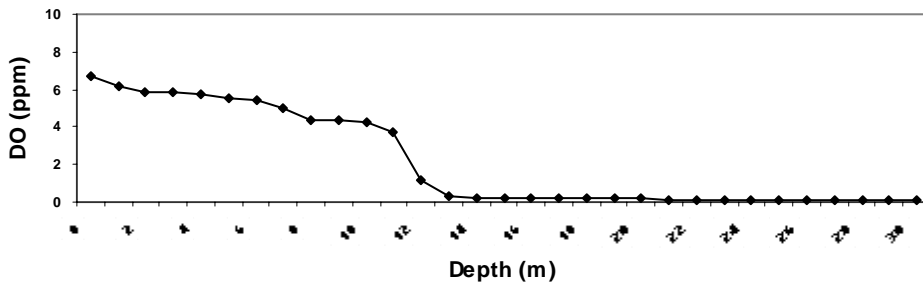


Figure 56. Temp - Cherokee - RM 66 - Sept 2, 2005

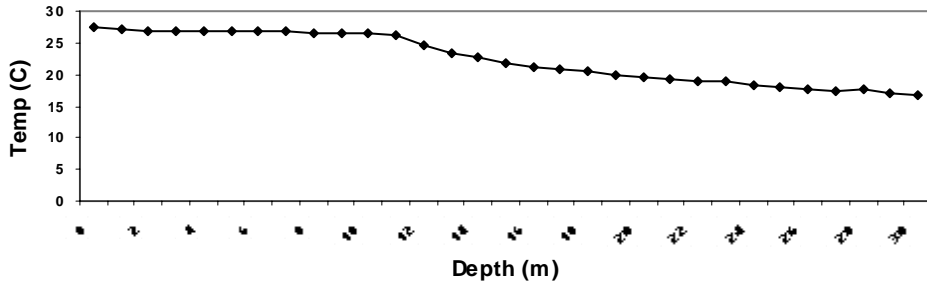


Figure 57. DO - Cherokee - RM 75 - Sept 2, 2005

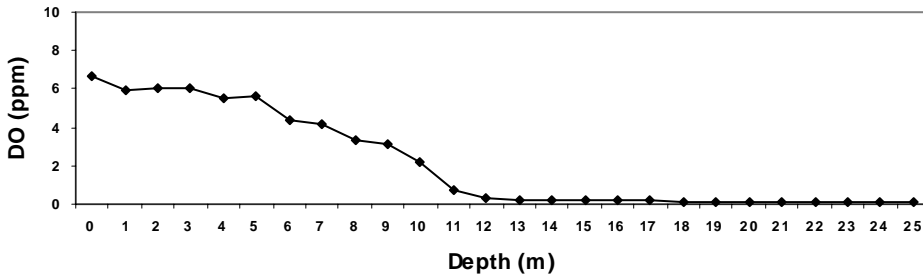
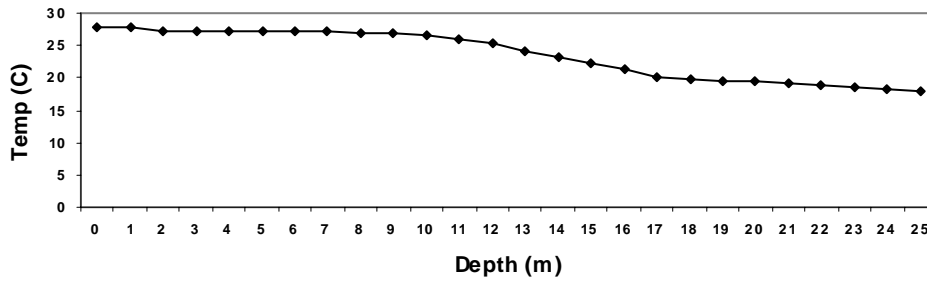


Figure 58. Temp - Cherokee - RM 75 - Sept 2, 2005



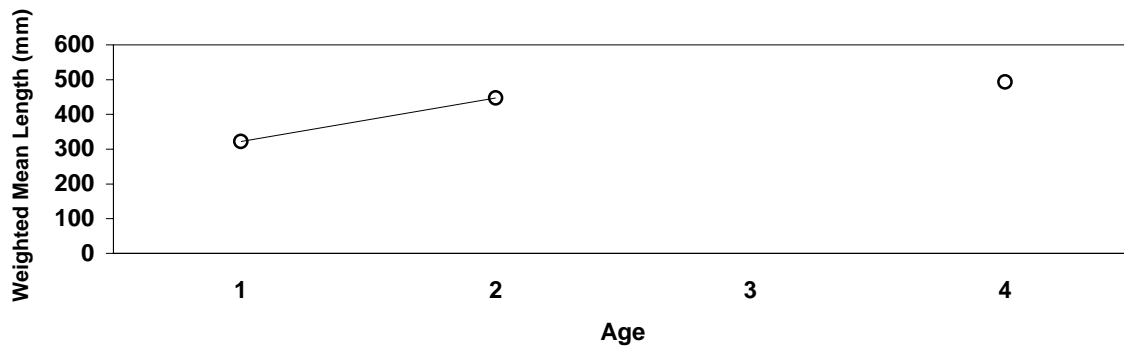


Figure 59. Weighted mean length at age of hybrids from Cherokee Reservoir 2005 summer shad gill net sample.

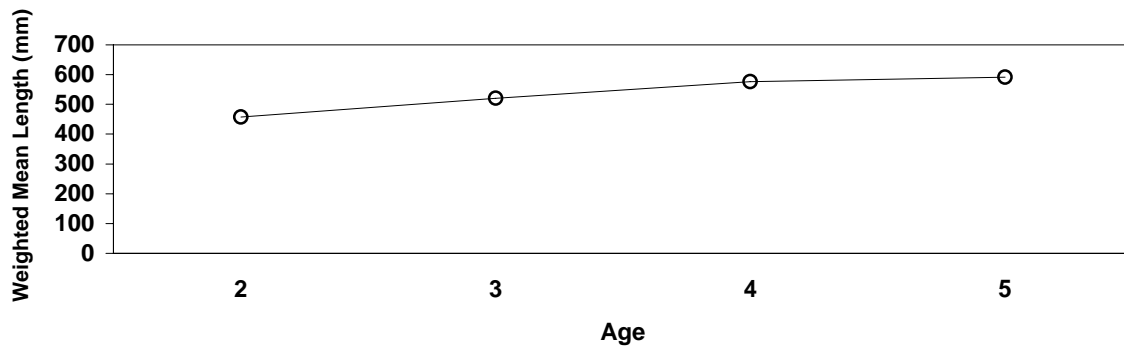


Figure 60. Weighted mean length at age of hybrids from Cherokee Reservoir 2005 winter gill net sample.

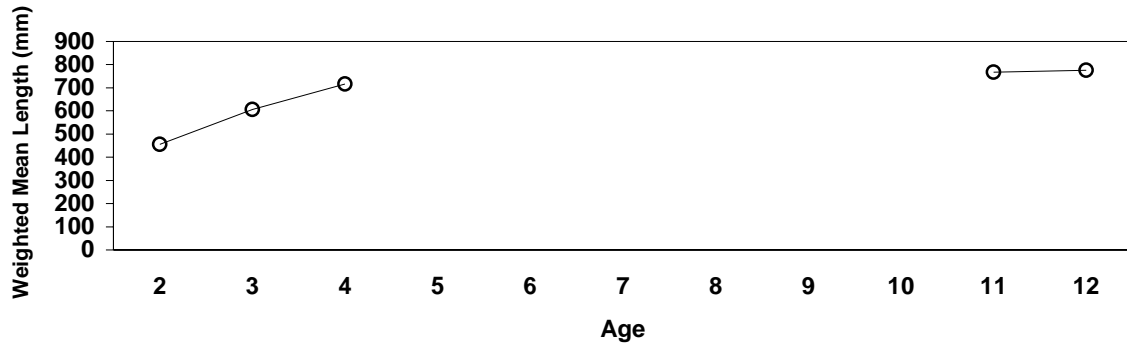


Figure 61. Weighted mean length at age of striped bass from Cherokee Reservoir 2005 winter gill net sample.

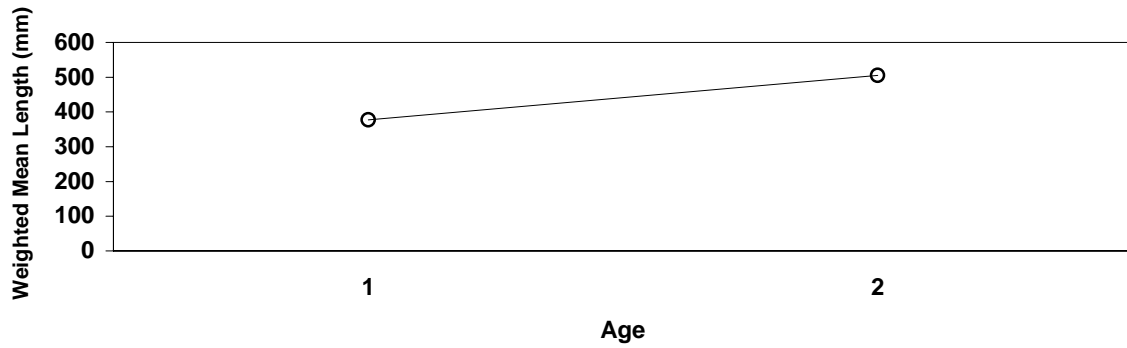


Figure 62. Weighted mean length at age of walleye from Cherokee Reservoir 2005 summer shad gill net sample.

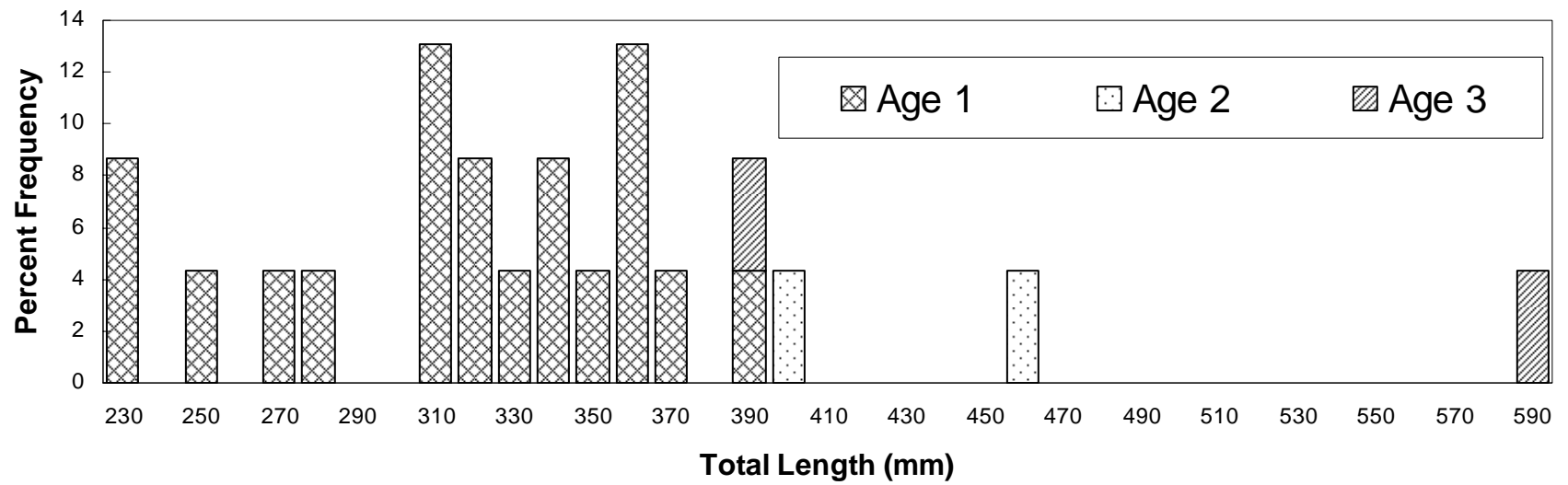


Figure 63. Length frequency at age of Cherokee Reservoir hybrids from the 2005 summer shad gill net sample.

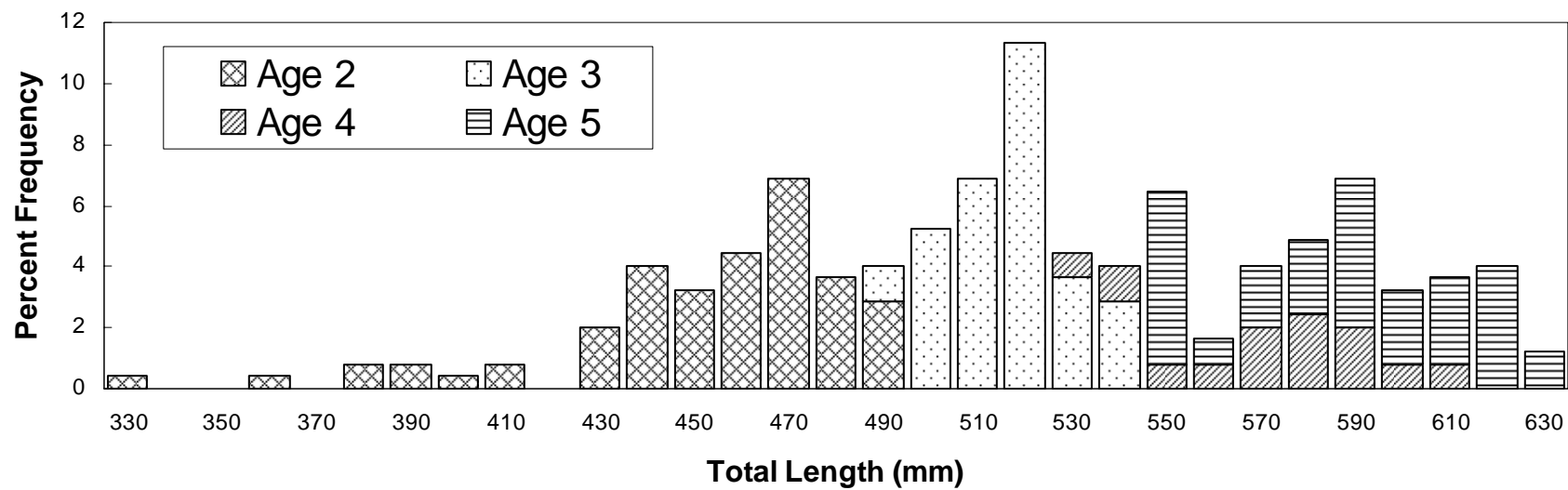


Figure 64. Length frequency at age of Cherokee Reservoir hybrids from the 2005 winter shad gill net sample.

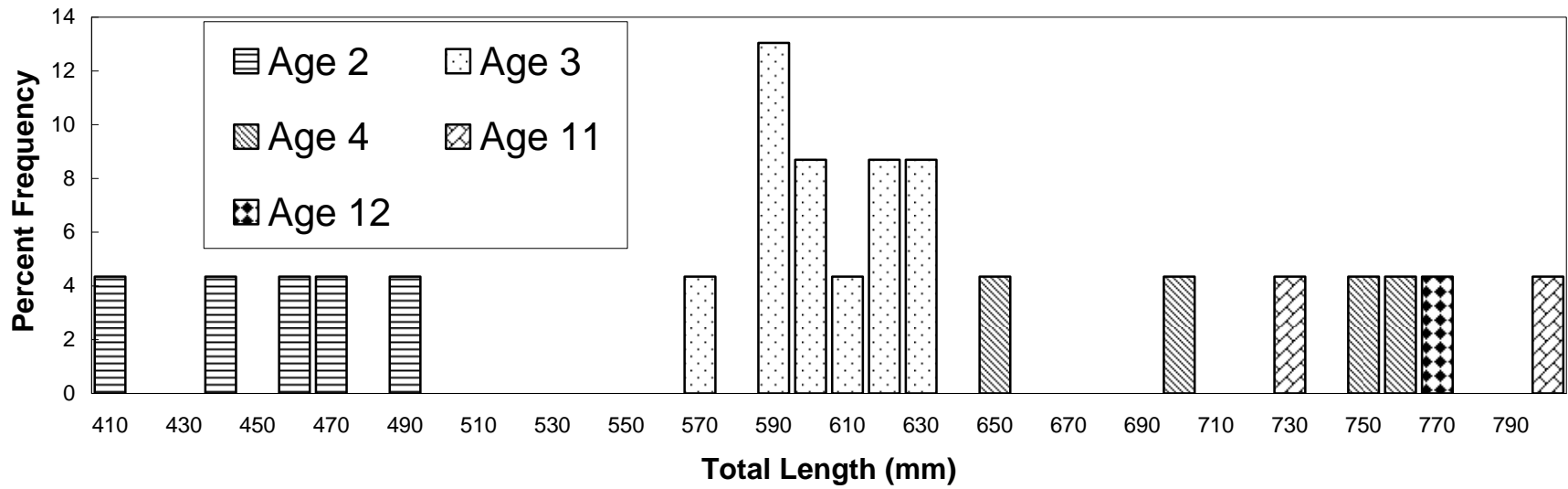


Figure 65. Length frequency at age of Cherokee Reservoir striped bass from the 2005 winter gill net sample.



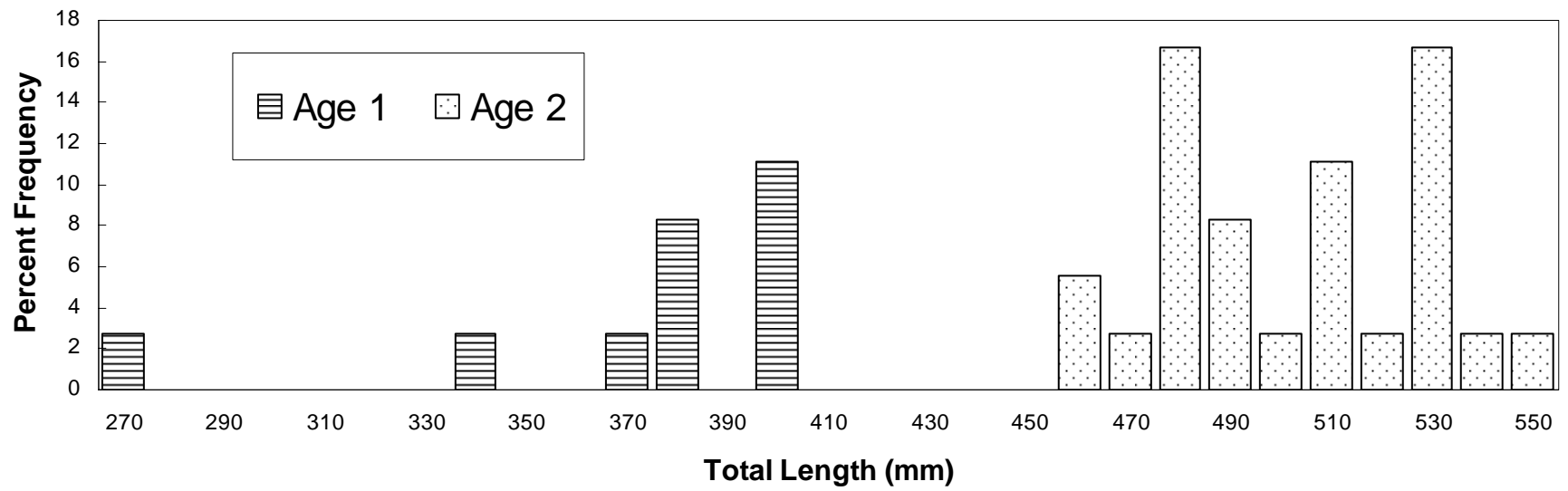


Figure 66. Length frequency at age of Cherokee Reservoir walleye from the 2005 shad gill net sample.

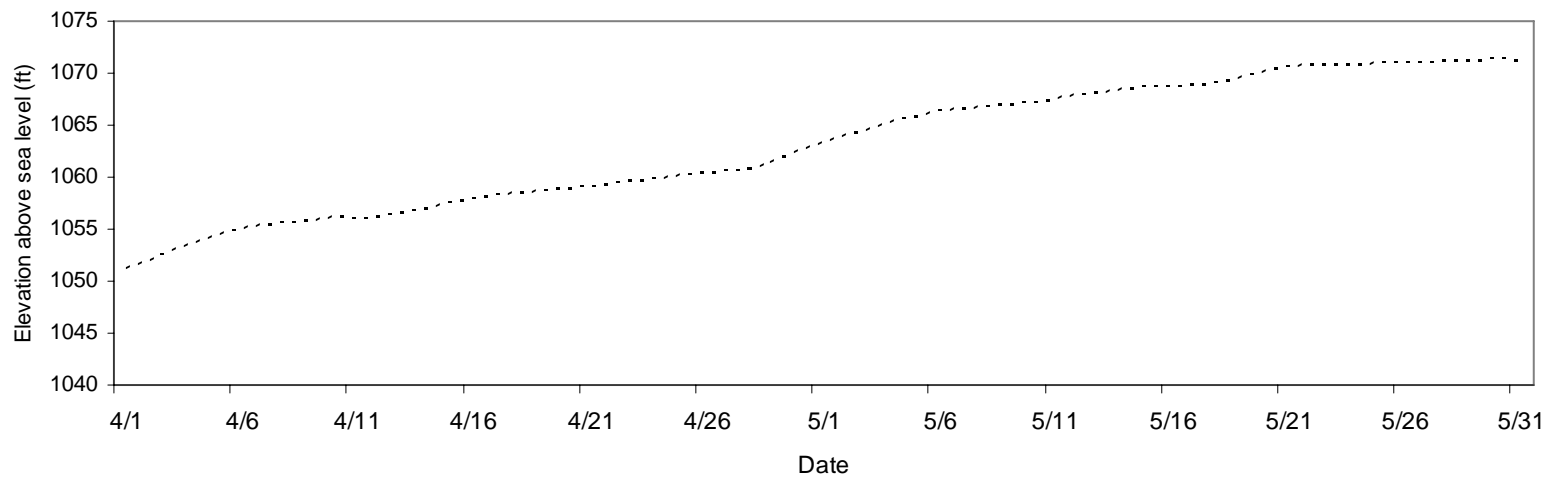


Figure 67. April and May water levels in Cherokee Reservoir in 2005 (TVA data).