

Cherokee Reservoir

Annual Report 2009

Prepared by:

Jim Negus
and
Douglas C. Peterson

Tennessee Wildlife Resources Agency
Region IV
3030 Wildlife Way
Morristown, Tennessee 37814

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Cherokee Reservoir - 2009

Description

Area: 30,300 acres

Shoreline: 393 miles

Counties: Jefferson, Grainger, Hamblen, and Hawkins

Total Fishing Effort in 2008: 407,675 hours

Total Value by Anglers in 2008: \$972,470.00

Black Bass

Angling Pressure	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
All Black Bass (hrs)	165,246	-	199,534	-	193,324	-	181,976	-	189,452	-	185,906
(hrs/acre)	5.45	-	6.59	-	6.38	-	6.01	-	6.25	-	6.14
Any Black Bass (hrs)	10,798	-	412	-	1,587	-	946	-	702	-	2,889
(hrs/acre)	0.36	-	0.01	-	0.05	-	0.03	-	0.02	-	0.10
Largemouth Bass (hrs)	143,082	-	188,015	-	188,043	-	177,852	-	188,140	-	177,026
(hrs/acre)	4.72	-	6.21	-	6.21	-	5.87	-	6.21	-	5.84
Smallmouth Bass (hrs)	11,366	-	10,317	-	3,694	-	3,178	-	610	-	5,833
(hrs/acre)	0.38	-	0.34	-	0.12	-	0.10	-	0.02	-	0.19
Spotted Bass (hrs)	0	-	790	-	0	-	0	-	0	-	158
(hrs/acre)	0.00	-	0.03	-	0.00	-	0.00	-	0.00	-	0.01
Tournaments (all black bass)											
Tournament Angler Hrs/Acre (creel)	-	-	-	-	-	-	-	-	-	-	-
Tournament Catch Rate (creel)	-	-	-	-	-	-	-	-	-	-	-
Non-Tournament Catch Rate (creel)	-	-	-	-	-	-	-	-	-	-	-
Value of Fishery (Trip Expenditures)											
All Black Bass	\$184,400	-	\$212,490	-	\$469,580	-	\$523,450	-	\$709,440	-	\$419,872
Any Black Bass	\$14,630	-	\$340	-	\$3,080	-	\$6,320	-	\$0	-	\$4,874
Largemouth Bass	\$156,350	-	\$201,950	-	\$459,720	-	\$509,540	-	\$707,520	-	\$407,016
Smallmouth Bass	\$13,420	-	\$10,050	-	\$6,780	-	\$7,590	-	\$1,920	-	\$7,952
Spotted Bass	\$0	-	\$150	-	\$0	-	\$0	-	\$0	-	\$30

Largemouth Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Recruitment (electrofishing)											
Substock CPUE	6.40	28.00	8.00	6.93	4.57	5.60	4.53	8.00	6.67	3.47	8.22
Density (electrofishing)											
PSD	68	72	60	77	63	84	72	79	68	86	73
RSD (preferred)	-	36	30	46	44	52	47	55	33	44	43
CPUE (total)	41.6	90.4	70.9	51.2	71.1	74.4	61.3	53.6	60.8	58.7	63.4
CPUE > Stock	35.2	62.4	62.9	44.3	66.6	68.8	56.8	45.6	54.1	55.2	55.2
CPUE ≥ MLL (15-inches)	-	22.4	18.3	20.5	29.1	36.0	26.7	25.1	17.6	24.5	24.5
Growth (electrofishing)											
Length Age-1	-	6.9	-	-	-	-	-	-	-	-	6.9
Length Age-3	-	14.8	-	-	-	-	-	-	-	-	14.8
Condition (spring electrofishing)											
Stock	85.9	84.6	82.5	85.9	88.3	87.3	89.5	88.9	89.1	87.6	87.0
Quality	91.5	93.8	86.9	95.6	90.1	93.1	89.7	93.6	93.6	93.3	92.1
Preferred	96.0	101.9	99.4	99.6	94.6	96.7	93.2	93.9	93.5	94.9	96.4
Memorable	100.0	104.2	97.9	107.0	86.7	89.6	88.2	94.3	91.7	84.1	94.4
Mortality (electrofishing)											
Total Mortality	-	41.0%	-	-	-	-	-	-	-	-	41.0%
Fishing Success (creel)											
Catch Rate (intended)	0.54	-	0.68	-	0.57	-	0.74	-	0.62	-	0.63
Harvest Rate (intended)	0.04	-	0.01	-	0.00	-	0.01	-	0.01	-	0.01
% Released	93.4%	-	98.1%	-	98.4%	-	98.7%	-	98.3%	-	97.4%
Mean Weight	2.60	-	2.29	-	2.45	-	2.37	-	2.34	-	2.41

Fishery Forecast: The quality of the largemouth fishery has improved since the 15-inch size restriction went into effect in 2001. Catch rates are good and a significant percentage of the population is available for harvest.

Management Recommendations: No changes in creel limits are necessary.

Smallmouth Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Recruitment (electrofishing)											
Substock CPUE	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.11
Density (electrofishing)											
PSD	-	60	42	-	65	88	60	71	100	100	73
RSD (preferred)	-	40	17	-	15	65	50	71	100	100	57
CPUE (preferred)	0.0	0.0	0.3	0.0	0.3	0.8	0.5	0.3	0.8	0.8	0.4
CPUE (memorable)	0.8	0.3	0.3	0.0	0.6	1.6	0.8	0.8	0.8	0.5	0.7
CPUE (trophy)	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.1
CPUE (total)	4.5	2.4	1.3	3.2	1.1	5.7	4.5	2.4	1.6	1.3	2.8
CPUE ≥ Stock	4.0	2.4	1.3	3.2	1.1	5.7	4.5	1.9	1.6	1.3	2.7
CPUE ≥ Preferred	0.8	0.6	0.6	0.0	0.9	2.9	1.3	1.4	1.6	1.3	1.1
CPUE ≥ MLL (18-inches)	0.5	0.3	0.3	0.0	0.6	1.6	0.8	1.1	0.8	0.3	0.6
Growth (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
Condition (spring electrofishing)											
Stock	81.0	80.4	78.7	85.9	82.7	88.3	92.1	81.0	-	-	83.8
Quality	82.8	83.4	74.2	-	84.2	87.4	77.4	-	-	-	81.6
Preferred	-	-	77.9	-	111.1	91.6	95.2	87.1	90.4	89.0	91.8
Memorable	97.9	92.7	-	-	84.1	87.9	90.4	84.8	86.3	91.6	89.5
Mortality (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Fishing Success (creel)											
Catch Rate (intended)	0.24	-	0.26	-	0.68	-	0.39	-	0.29	-	0.37
Harvest Rate (intended)	0.05	-	0.02	-	0.00	-	0.00	-	0.00	-	0.01
% Released	89.0%	-	94.5%	-	95.8%	-	98.6%	-	98.8%	-	95.3%
Mean Weight	2.46	-	1.97	-	2.77	-	3.19	-	1.74	-	2.43

Fishery Forecast: Cherokee's smallmouth fishery continues to make up only a small percentage of the black bass population.

Management Recommendations: No changes in creel limits are planned for the future.

Spotted Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Recruitment (electrofishing)											
Substock CPUE	0.53	0.53	0.53	0.53	0.00	0.00	0.00	0.00	0.80	0.27	0.32
Density (electrofishing)											
PSD	-	62	25	42	15	83	46	30	56	77	48
RSD (preferred)	-	15	25	16	8	17	8	4	9	19	13
CPUE (total)	2.1	4.0	3.7	5.6	3.7	8.0	3.5	7.2	9.3	8.5	5.6
CPUE \geq Stock	1.6	3.5	3.2	5.1	3.7	8.0	3.5	7.2	8.5	8.3	5.2
Growth (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
Condition (spring electrofishing)											
Stock	97.6	101.1	88.1	91.5	97.1	94.1	93.5	100.7	99.4	104.0	96.7
Quality	100.5	108.7	-	99.0	94.8	100.4	97.5	106.7	99.5	105.4	101.4
Preferred	101.4	100.9	99.2	107.5	89.4	102.9	100.0	110.2	100.7	102.8	101.5
Mortality (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Fishing Success (creel)											
Catch Rate (intended)	-	-	1.12	-	-	-	-	-	-	-	1.12
Harvest Rate (intended)	-	-	0.34	-	-	-	-	-	-	-	0.34
% Released	75.0%	-	87.3%	-	67.3%	-	88.8%	-	92%	-	82.1%
Mean Weight	1.60	-	0.63	-	0.88	-	1.05	-	1	-	1.07

Fishery Forecast: Anglers are encouraged to harvest this species for the table because they compete with the more desirable and larger growing largemouth and smallmouth bass.

Management Recommendations: Continue to encourage anglers to harvest spotted bass.

Black Crappie

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Recruitment (trap netting)											
Substock CPUE	0.10	0.50	0.30	2.70	1.10	0.20	0.20	0.50	0.10	0.09	0.58
Density (trap netting)											
PSD	76	93	58	82	66	80	90	83	85	89	80
RSD (preferred)	-	57	17	44	38	32	49	42	44	62	43
CPUE (total)	2.3	2.2	2.2	5.0	3.2	3.7	5.3	6.5	1.9	2.1	3.4
CPUE > Stock	2.2	1.7	1.9	2.3	2.1	3.5	5.1	6.0	1.8	2.0	2.9
CPUE ≥ MLL (10-inches)	-	1.0	0.3	1.1	0.8	1.3	2.5	2.5	0.8	1.2	1.3
Growth (trap netting)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
Condition (trap netting)											
Stock	93.3	91.1	92.4	86.7	93.0	92.3	100.3	97.8	102.5	94.2	94.4
Quality	97.6	92.1	91.6	92.9	100.7	99.7	97.9	98.5	99.0	103.3	97.3
Preferred	97.3	94.3	82.4	93.4	95.8	96.3	95.9	96.7	92.8	93.9	93.9
Memorable	93.5	95.5	87.8	91.7	93.2	93.7	94.0	97.6	94.3	92.0	93.3
Mortality (trap netting)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Stocking											
				WC			BC	BNBC	BNBC	BNBC	
#	0	0	0	38,740	0	0	56,071	72,775	62,582	139,068	36,924
#/Acre	0.0	0.0	0.0	1.3	0.0	0.0	1.9	2.4	2.1	4.6	1.2
Angling Pressure (creel)											
Angler Hours (all crappie)	70,005	-	74,223	-	96,689	-	66,884	-	83,486	-	78,257
Angler Hours/Acre	2.3	-	2.4	-	3.2	-	2.2	-	2.8	-	2.6
Fishing Success (creel)											
Catch Rate (any crappie)	1.91	-	1.06	-	1.03	-	1.58	-	1.17	-	1.35
Harvest Rate (any crappie)	0.53	-	0.37	-	0.41	-	0.51	-	0.52	-	0.47
% Released (black crappie)	76.6%	-	68.9%	-	60.3%	-	69.4%	-	55.5%	-	66.1%
Mean Weight (black crappie)	0.82	-	0.97	-	0.77	-	0.78	-	0.77	-	0.82
Value of Fishery (Trip Expenditures - creel)											
All Crappie	\$44,280	-	\$27,970	-	\$57,660	-	\$16,870	-	\$35,160	-	\$36,388

Fishery Forecast: Several years of excellent recruitment is needed to bring the fishery back to where it was in the mid-1990s. A high percentage of the population is available for harvest.

Management Recommendations: No changes in creel limits are proposed.

Striped Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Density (gill netting)											
PSD	-	-	-	-	-	79	86	-	69	83	79
RSD (preferred)	-	-	-	-	-	13	43	-	-	-	28
CPUE (total)	-	-	-	-	-	2.7	1.2	-	2.2	12.9	4.7
CPUE \geq Stock	-	-	-	-	-	2.7	1.2	-	2.2	12.9	4.7
CPUE \geq 15-inches	-	-	-	-	-	2.7	1.2	-	2.2	12.9	4.8
Growth (gill netting)											
Length Age-2	-	-	-	-	17.3	17.9	-	17.7	17.2	18.2	17.7
Length Age-3	-	-	-	-	23.8	23.8	-	22.0	23.2	23.2	23.2
Condition (gill netting)											
Stock	-	-	-	-	-	103.2	108.1	-	87.5	107.2	101.5
Quality	-	-	-	-	-	102.1	94.1	-	86.6	98.7	95.4
Preferred	-	-	-	-	-	93.6	74.6	-	-	-	84.1
Memorable	-	-	-	-	-	-	-	-	-	-	-
Mortality (gill netting)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Stocking											
#	0	150,935	97,857	103,423	81,285	133,646	168,434	151,818	0	0	88,740
#/Acre	0.0	5.0	3.2	3.4	2.7	4.4	5.6	5.0	0.0	0.0	2.9
Angling Pressure (creel)											
Angler Hours	135,125	-	75,660	-	108,442	-	44,587	-	23,301	-	77,423
Angler Hours/Acre	4.5	-	2.5	-	3.6	-	1.5	-	0.8	-	2.6
Fishing Success (creel)											
Catch Rate (intended)	0.40	-	0.18	-	0.18	-	0.11	-	0.11	-	0.20
Harvest Rate (intended)	0.17	-	0.10	-	0.08	-	0.05	-	0.05	-	0.09
% Released	60.8%	-	62.4%	-	60.4%	-	62.3%	-	76.0%	-	64.4%
Mean Weight	10.14	-	11.41	-	11.72	-	12.49	-	8.51	-	10.85
Value of Fishery (Trip Expenditures - creel)											
Striped Bass	\$288,710	-	\$230,360	-	\$357,800	-	\$165,590	-	\$73,040	-	\$223,100

Fishery Forecast: Although striped bass were the major Morone species stocked in the recent past, they have never been well suited for the water quality conditions present. Fewer stripers are now being stocked to reduce summer dies-offs and allow the more tolerant hybrids to dominate the Morone fishery without unnecessary competition.

Management Recommendations: No changes in creel limits are planned for the future.

Hybrid Striped Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Density (gill netting)											
PSD	-	-	-	-	-	100	100	-	100	100	100
RSD (preferred)	-	-	-	-	-	100	95	-	99	100	99
CPUE (total)	-	-	-	-	-	27.7	14.3	-	15.7	17.0	18.7
CPUE \geq Stock	-	-	-	-	-	27.7	14.3	-	15.7	17.0	18.7
CPUE \geq 15-inches	-	-	-	-	-	27.3	14.0	-	15.7	17.0	18.5
Growth (gill netting)											
Length Age-2	-	-	-	-	-	18.0	16.9	18.8	18.0	17.2	17.8
Length Age-3	-	-	-	-	-	20.5	21.1	20.0	20.7	20.7	20.6
Condition (gill netting)											
Stock	-	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	99.8	95.4	-	-	-	97.6
Preferred	-	-	-	-	-	100.3	96.3	-	101.8	102.5	100.2
Memorable	-	-	-	-	-	102.0	93.3	-	99.1	100.8	98.8
Mortality (gill netting)											
Total Mortality	-	-	-	-	-	-	-	-	32.0%	-	32.0%
Stocking											
#	150,000	48,613	58,934	51,708	117,952	31,950	56,882	55,006	85,382	85,741	74,217
#/Acre	5.0	1.6	1.9	1.7	3.9	1.1	1.9	1.8	2.8	2.8	2.4
Angling Pressure (creel)											
Angler Hours	-	-	549	-	18,090	-	40,713	-	44,202	-	25,889
Angler Hours/Acre	-	-	0.0	-	0.6	-	1.3	-	1.5	-	0.9
Fishing Success (creel)											
Catch Rate (intended)	-	-	0.32	-	0.43	-	0.48	-	0.61	-	0.46
Harvest Rate (intended)	-	-	0.32	-	0.14	-	0.18	-	0.21	-	0.21
% Released	-	-	69.9%	-	81.3%	-	67.7%	-	70.4%	-	72.3%
Mean Weight	-	-	4.32	-	6.36	-	5.18	-	6.63	-	5.62
Value of Fishery (Trip Expenditures - creel)											
Hybrid Striped Bass	-	-	\$450	-	\$54,590	-	\$107,330	-	\$114,290	-	\$69,165

Fishery Forecast: The survival rate of hybrids is so outstanding that stocking rates have recently been reduced to avoid over-populating the reservoir. Anglers from Tennessee and neighboring states are fishing heavily for hybrids. The 2008 creel and TWRA's gill net data indicates the fishery continues to improve.

Management Recommendations: No changes in creel limits are proposed.

Walleye

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Stocking											
#	0	0	0	149,810	156,792	60,089	75,629	146,959	168,535	79,420	83,723
#/Acre	0.0	0.0	0.0	4.9	5.2	2.0	2.5	4.9	5.6	2.6	2.8
Angling Pressure (creel)											
Angler Hours	5,303	-	794	-	656	-	6,805	-	3,390	-	3,390
Angler Hours/Acre	0.2	-	0.0	-	0.0	-	0.2	-	0.1	-	0.1
Fishing Success (creel)											
Catch Rate (intended)	0.37	-	0.00	-	0.44	-	0.78	-	0.27	-	0.37
Harvest Rate (intended)	0.18	-	0.00	-	0.13	-	0.32	-	0.07	-	0.14
% Released	50.7%	-	0.0%	-	85.4%	-	58.0%	-	89.1%	-	56.6%
Mean Weight	2.01	-	1.40	-	1.40	-	2.47	-	2.41	-	1.94
Value of Fishery (Trip Expenditures - creel)											
Walleye	\$3,780	-	\$1,140	-	\$1,640	-	\$7,670	-	-	-	\$3,558

Sunfish

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Angling Pressure (creel)											
Angler Hours (all sunfish)	5,393	-	5,376	-	4,223	-	4,069	-	4,361	-	4,684
Angler Hours/Acre	0.2	-	0.2	-	0.1	-	0.1	-	0.1	-	0.2
Fishing Success (creel)											
Catch Rate (any sunfish)	3.08	-	3.17	-	4.29	-	1.81	-	1.86	-	2.84
Harvest Rate (any sunfish)	1.83	-	1.71	-	2.46	-	0.87	-	0.75	-	1.52
% Released (bluegill)	56.5%	-	-	-	-	-	57.0%	-	52.9%	-	55.5%
Mean Weight (bluegill)	0.19	-	-	-	-	-	0.25	-	0.26	-	0.23
Value of Fishery (Trip Expenditures - creel)											
All Sunfish	\$4,510	-	\$770	-	\$3,760	-	\$2,750	-	\$3,170	-	\$2,992

Catfish

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Angling Pressure (creel)											
Angler Hours (all catfish)	36,277	-	36,990	-	20,832	-	36,195	-	39,978	-	34,054
Angler Hours/Acre	1.2	-	1.2	-	0.7	-	1.2	-	1.3	-	1.1
Fishing Success (creel)											
Catch Rate (any catfish)	0.99	-	0.86	-	0.78	-	0.78	-	0.64	-	0.81
Harvest Rate (any catfish)	0.77	-	0.62	-	0.52	-	0.52	-	0.41	-	0.57
% Released (channel)	28.9%	-	40.5%	-	40.4%	-	38.2%	-	44.1%	-	38.4%
Mean Weight (channel)	1.65	-	1.76	-	1.43	-	1.82	-	1.57	-	1.65
Value of Fishery (Trip Expenditures - creel)											
All Catfish	\$28,810	-	\$31,280	-	\$14,870	-	\$23,160	-	\$24,060	-	\$24,436

Shad

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
Density (Summer Shad Gill Netting) (geometric means)											
Alewife CPUE	-	-	16.2	67.3	5.3	0.1	0.4	0.4	0.4	1.5	11.5
Gizzard CPUE	-	-	14.1	67.7	9.3	1.7	3.3	3.3	1.7	4.1	13.2
Threadfin CPUE	-	-	17.1	1.9	9.7	1.6	3.0	2.0	4.7	2.3	5.3

Habitat Enhancement

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	Christmas trees with block	none	15 sites, 1075 units, 21.5 acres

Water Quality Monitoring

Parameter	Sampling Period	Water Quality
Temperature	July - September	Normal
Dissolved Oxygen	July - September	Normal
PH	July - September	Normal
Conductivity	July - September	Normal

Tables

Table 1. Cherokee Reservoir physical and chemical characteristics.

Surface Area	30,000 acres
Drainage Area	3,428 sq. mi.
Full Pool Elevation	1,073 feet-msl
Mean Annual Fluctuation	53 feet
Shoreline Distance	395 miles
Total Developed Shoreline	25%
Maximum Depth	150 feet
Outlet Depth (lower, upper)	116 ft, 135 ft
Thermocline Depth	30 ft (Aug 2007)
Trophic Status (Forebay)	Mesotrophic
Mean Chlorophyll (Forebay)	6.8 mg/L
Trophic Index Value	49.3
Hydraulic Retention Time	165 days
Year Impounded	1941

Table 2. Cherokee Reservoir fish stockings 1998 - 2009.

Species	Date	Rate (per acre)	Total Stocked
Striped Bass	1998	4.9	147,574
	1999	3.6	108,944
	2001	5.0	150,935
	2002	3.2	97,854
	2003	3.4	103,423
	2004	2.7	81,285
	2005	4.4	133,646
	2006	5.6	168,434
	2007	5.0	151,818
Hybrid Striped Bass	2000	5.0	150,000
	2001	1.6	48,613
	2002	1.9	58,934
	2003	1.7	51,708
	2004	3.9	117,952
	2005	1.1	31,950
	2006	1.9	56,882
	2007	1.8	55,006
	2008	2.8	85,382
	2009	2.8	85,741
Walleye	1999	3.1	93,323
	2003	4.9	149,810
	2004	5.2	156,792
	2005	2.0	60,089
	2006	2.5	75,629
	2007	4.9	146,959
	2008	5.6	168,535
	2009	2.6	79,420
Sauger	1998	3.9	118,550
	2000	3.3	100,900
	2001	2.0	59,502
	2002	3.1	93,996
Paddlefish	2006	0.0	450
	2008	0.0	1,002
Blue Catfish	1998	0.8	23,175
	2003	1.1	33,121
White Crappie	2003	1.3	38,740
Black Crappie	2006	1.9	56,071
Blacknose Black Crappie	1998	13.5	408,502
	1999	0.9	26,383
	2007	2.4	72,775
	2008	2.1	62,582
	2009	4.6	139,068

Table 3. Relative stock density, mean relative weight, and catch per unit effort by RSD category for target species collected in Cherokee Reservoir during 1998-2009.

Species	Year	Gear	Samples	Substock			RSD-stock			RSD-quality			RSD-preferred			RSD-memorabile			RSD-trophy			Total		PSD					
				No.	CPE	Pct.	No.	CPE	Pct.	Wr	No.	CPE	Pct.	Wr	No.	CPE	Pct.	Wr	No.	CPE	Pct.	Wr	No.		CPE	Pct.			
Largemouth Bass	1998	Electro	15	9	2.4	5.3	39	10.4	23.1	85.3	60	16.0	35.5	89.8	56	14.9	33.1	91.7	5	1.3	3.0	90.1	0	0.0	0.0	0.0	169	45.1	76
	1999	Electro	15	29	7.7	14.5	51	13.6	25.5	87.9	48	12.8	24.0	90.9	69	18.4	34.5	95.8	3	0.8	1.5	102.8	0	0.0	0.0	0.0	200	53.2	70
	2000	Electro	15	24	6.4	15.4	42	11.2	26.9	85.9	40	10.7	25.6	91.5	47	12.5	30.1	96.0	3	0.8	1.9	100.0	0	0.0	0.0	0.0	156	41.6	68
	2001	Electro	15	105	28.0	31.0	65	17.3	19.2	84.6	85	22.7	25.1	93.8	82	21.9	24.2	101.9	2	0.5	0.6	104.2	0	0.0	0.0	0.0	339	90.4	72
	2002	Electro	15	30	8.0	11.3	94	25.1	35.3	82.5	71	18.9	26.7	86.9	69	18.4	25.9	99.4	2	0.5	0.8	97.9	0	0.0	0.0	0.0	266	70.9	60
	2003	Electro	15	26	6.9	13.5	39	10.4	20.3	85.9	50	13.3	26.0	95.6	75	20.0	39.1	99.6	2	0.5	1.0	107.0	0	0.0	0.0	0.0	192	51.2	77
	2004	Electro	14	16	4.6	6.4	87	24.9	34.9	88.3	44	12.6	17.7	90.1	100	28.6	40.2	94.6	2	0.6	0.8	86.7	0	0.0	0.0	0.0	249	71.1	63
	2005	Electro	15	21	5.6	7.5	40	10.7	14.3	87.3	83	22.1	29.7	93.1	133	35.5	47.7	96.7	2	0.5	0.1	89.6	0	0.0	0.0	0.0	279	74.4	84
	2006	Electro	15	17	4.5	7.4	60	16.0	26.1	89.5	53	14.1	23.0	89.7	97	25.9	42.2	93.2	3	0.8	1.3	88.2	0	0.0	0.0	0.0	230	61.3	72
	2007	Electro	15	30	8.0	14.9	36	9.6	17.9	88.9	41	10.9	20.4	93.6	89	23.7	44.3	93.9	5	1.3	2.5	94.3	0	0.0	0.0	0.0	201	53.6	79
2008	Electro	15	25	6.7	11.0	65	17.3	28.5	89.1	72	19.2	31.6	93.6	63	16.8	27.6	93.5	3	0.8	1.3	91.7	0	0.0	0.0	0.0	228	60.8	68	
2009	Electro	15	13	3.5	5.9	29	7.7	13.2	87.6	86	22.9	39.1	93.3	90	24.0	40.9	94.9	2	0.5	1.0	84.1	0	0.0	0.0	0.0	220	58.7	86	
Smallmouth Bass	1998	Electro	15	6	1.6	46.2	4	1.1	30.8	75.9	0	0.0	0.0	0.0	2	0.5	15.4	90.7	1	0.3	7.7	84.9	0	0.0	0.0	0.0	13	3.5	
	1999	Electro	15	2	0.5	11.8	5	1.3	29.4	77.2	3	0.8	17.6	90.7	3	0.8	17.6	98.7	4	1.1	23.5	100.6	0	0.0	0.0	0.0	17	4.5	67
	2000	Electro	15	2	0.5	22.2	1	0.3	11.1	81.0	3	0.8	33.3	82.8	0	0.0	0.0	0.0	3	0.8	33.3	97.9	0	0.0	0.0	0.0	9	2.4	
	2001	Electro	15	0	0.0	0.0	2	0.5	40.0	80.4	1	0.3	20.0	84.2	0	0.0	0.0	0.0	1	0.3	20.0	92.7	1	0.3	20.0	0.0	5	1.3	60
	2002	Electro	15	0	0.0	0.0	7	1.9	58.3	78.7	3	0.8	25.0	73.4	1	0.3	8.3	77.9	1	0.3	8.3	0.0	0	0.0	0.0	0.0	12	3.2	42
	2003	Electro	15	0	0.0	0.0	4	1.1	100.0	85.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	4	1.1	
	2004	Electro	14	0	0.0	0.0	7	2.0	35.0	82.7	10	2.9	50.0	84.2	1	0.3	5.0	111.1	2	0.6	10.0	84.1	0	0.0	0.0	0.0	20	5.7	65
	2005	Electro	15	0	0.0	0.0	2	0.5	11.8	88.3	4	1.1	23.5	87.4	3	0.8	17.7	91.6	6	1.6	35.3	87.9	2	0.5	11.8	0.0	17	4.5	88
	2006	Electro	15	0	0.0	0.0	4	1.1	40.0	92.1	1	0.3	10.0	77.4	2	0.5	20.0	95.2	3	0.8	30.0	90.4	0	0.0	0.0	0.0	10	2.7	60
	2007	Electro	15	2	0.5	22.2	2	0.5	22.2	81.0	0	0.0	0.0	0.0	1	0.3	11.1	87.1	3	0.8	33.3	84.8	1	0.3	11.1	0.0	9	2.4	71
2008	Electro	15	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	3	0.8	50.0	90.4	3	0.8	50.0	86.3	0	0.0	0.0	0.0	6	1.6	100	
2009	Electro	15	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	3	0.8	60.0	89.0	2	0.5	40.0	91.6	0	0.0	0.0	0.0	5	1.3	100	
Spotted Bass	1998	Electro	15	3	0.8	20.0	8	2.1	53.3	86.8	4	1.1	26.7	96.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	15	4.0	33
	1999	Electro	15	0	0.0	0.0	2	0.5	25.0	87.4	5	1.3	62.5	96.7	1	0.3	12.5	106.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	8	2.1	
	2000	Electro	15	2	0.5	25.0	2	0.5	25.0	97.6	2	0.5	25.0	100.5	2	0.5	25.0	101.4	0	0.0	0.0	0.0	0	0.0	0.0	0.0	8	2.1	
	2001	Electro	15	2	0.5	13.3	5	1.3	33.3	101.1	6	1.6	40.0	108.7	2	0.5	13.3	100.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	15	4.0	62
	2002	Electro	15	2	0.5	14.3	9	2.4	64.3	88.1	0	0.0	0.0	0.0	3	0.8	21.4	99.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	14	3.7	25
	2003	Electro	15	2	0.5	9.5	11	2.9	52.4	91.5	5	1.3	23.8	99.0	3	0.8	14.3	107.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	21	5.6	42
	2004	Electro	14	0	0.0	0.0	11	3.1	84.6	97.1	1	0.3	7.7	94.8	1	0.3	7.7	89.4	0	0.0	0.0	0.0	0	0.0	0.0	0.0	13	3.7	15
	2005	Electro	15	0	0.0	0.0	5	1.3	16.7	94.1	20	5.3	66.7	100.4	5	1.3	16.7	102.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	30	8.0	83
	2006	Electro	15	0	0.0	0.0	7	1.9	53.8	93.5	5	1.3	38.5	97.5	1	0.3	7.7	100.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	13	3.5	46
	2007	Electro	15	0	0.0	0.0	19	5.1	70.4	100.7	7	1.9	25.9	106.7	1	0.3	3.7	110.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	27	7.2	30
2008	Electro	15	3	0.8	8.6	14	3.7	40.0	99.4	15	4.0	42.9	99.5	3	0.8	8.6	100.7	0	0.0	0.0	0.0	0	0.0	0.0	0.0	35	9.3	56	
2009	Electro	15	1	0.3	3.1	7	1.9	21.9	104.0	18	4.8	56.3	105.4	6	1.6	18.8	102.8	0	0.0	0.0	0.0	0	0.0	0.0	0.0	32	8.5	77	
White Crappie	1998	Trap	106	41	0.4	75.9	0	0.0	0.0	0.0	6	0.1	11.1	102.9	7	0.1	13.0	98.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	54	0.5	100
	1999	Trap	106	2	0.0	40.0	1	0.0	20.0	92.0	2	0.0	40.0	108.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	5	0.1	
	2000	Trap	101	1	0.0	25.0	0	0.0	0.0	0.0	1	0.0	25.0	100.1	2	0.0	50.0	102.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	4	0.0	
	2001	Trap	106	54	0.5	98.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.0	1.8	111.0	0	0.0	0.0	0.0	55	0.5	100
	2002	Trap	106	7	0.1	13.2	9	0.1	17.0	82.9	29	0.3	54.7	96.2	7	0.1	13.2	98.3	1	0.0	1.9	0.0	0	0.0	0.0	0.0	53	0.5	80
	2003	Trap	106	114	1.1	98.3	1	0.0	0.9	77.2	0	0.0	0.0	0.0	1	0.0	0.9	82.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	116	1.1	50
	2004	Trap	104	17	0.2	94.4	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.0	5.6	119.8	0	0.0	0.0	0.0	0	0.0	0.0	0.0	18	0.2	100
	2005	Trap	104	3	0.0	60.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.0	20.0	104.6	1	0.0	20.0	108.8	0	0.0	0.0	0.0	5	0.0	100
2006	Trap	106	15	0.1	75.0	2	0.0	10.0	112.4	2	0.0	10.0	98.8	1	0.0	5.0	100.3	0	0.0	0.0	0.0	0	0.0	0.0	0.0	20	0.2	60	
Black Crappie	1998	Electro	15	0	0.0	0.0	3	0.8	27.3	100.7	5	1.3																	

Table 4. Relative stock density, mean relative weight, and catch per unit effort by RSD category for target species collected in Cherokee Reservoir during 1998-2009.

Species	Year	Gear	Samples	Substock			RSD-stock				RSD-quality				RSD-preferred				RSD-memorable				RSD-trophy				Total		PSD	
				No.	CPE	Pct.	No.	CPE	Pct.	Wr	No.	CPE	Pct.	Wr	No.	CPE	Pct.	Wr	No.	CPE	Pct.	Wr	No.	CPE	Pct.	Wr	No.	CPE	Pct.	
Striped Bass	1998	Exp Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	24	4.0	96.0	96.5	1	0.2	4.0	89.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	25	4.2	100	
	1999	Exp Gill	15	0	0.0	0.0	9	0.6	50.0	98.1	6	0.4	33.3	100.9	3	0.2	16.7	98.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	18	1.2	50	
	2000	Exp Gill	14	8	0.6	25.0	13	0.9	40.6	103.6	10	0.7	31.2	100.6	1	0.1	3.1	83.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	32	2.3	50	
	2001	Exp Gill	5	0	0.0	0.0	15	3.0	65.2	97.5	8	1.6	34.7	103.7	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	23	4.6	35	
	2002	Exp Gill	6	1	0.2	100.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2		
	2003	Exp Gill	10	1	0.1	100.0	1	0.1	6.3	104.3	7	0.7	43.8	102.1	7	0.7	43.8	103.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	16	1.6	93	
	2004	Exp Gill	10	0	0.0	0.0	8	0.8	88.9	102.4	1	0.1	11.1	103.3	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	9	0.9		
	2005	SB Gill	9	0	0.0	0.0	5	0.6	20.8	103.2	16	1.8	66.7	102.1	3	0.3	12.5	93.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	24	2.7	79	
	2006	SB Gill	6	0	0.0	0.0	1	0.2	14.3	108.1	3	0.5	42.9	94.1	3	0.5	42.9	74.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	7	1.2	86	
	2008	SB Gill	6	0	0.0	0.0	4	0.7	30.8	87.5	9	1.5	69.2	86.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	13	2.2	69	
2009	SB Gill	8	0	0.0	0.0	18	2.3	17.5	107.2	85	10.6	82.5	98.7	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	103	12.9	83		
White Bass	2000	Exp Gill	14	0	0.0	0.0	0	0.0	0.0	0.0	4	0.3	9.3	100.2	24	1.7	55.8	102.8	15	1.1	34.9	107.7	0	0.0	0.0	0.0	43	3.1	100	
	2001	Exp Gill	5	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	3	0.6	42.9	101.6	4	0.8	57.1	98.2	0	0.0	0.0	0.0	7	1.4	100	
	2002	Exp Gill	6	0	0.0	0.0	12	2.0	22.6	89.2	38	6.3	71.7	98.2	3	0.5	5.7	95.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	53	8.8	77	
	2003	Exp Gill	10	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	4	0.4	100.0	105.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	4	0.4	100	
	2005	SB Gill	9	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	28	3.1	73.7	104.2	10	1.1	26.3	102.5	0	0.0	0.0	0.0	38	4.2	100	
	2006	SB Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	100.0	92.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	100	
	2008	SB Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	100.0	97.0	0	0.0	0.0	0.0	2	0.3	100	
	2009	SB Gill	8	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	22.2	107.6	7	0.9	77.8	103.1	0	0.0	0.0	0.0	9	1.1	100	
	2009	SB Gill	8	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	22.2	107.6	7	0.9	77.8	103.1	0	0.0	0.0	0.0	9	1.1	100	
Hybrid Striped Bass	2001	Exp Gill	5	3	0.6	3.1	88	17.6	89.8	90.0	6	1.2	6.1	102.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	1.0	90.9	98	19.6	7	
	2002	Exp Gill	6	4	0.7	3.9	18	3.0	17.3	93.1	4	0.7	3.9	92.6	77	12.8	74.0	98.3	1	0.2	1.0	72.6	0	0.0	0.0	0.0	104	17.3	82	
	2003	Exp Gill	10	0	0.0	0.0	2	0.2	3.1	98.7	3	0.3	4.7	112.2	29	2.9	45.3	103.4	28	2.8	43.8	106.6	2	0.2	3.1	0.0	64	6.4	97	
	2004	Exp Gill	10	0	0.0	0.0	0	0.0	0.0	0.0	1	0.1	4.5	91.9	4	0.4	18.2	95.2	17	1.7	77.3	99.3	0	0.0	0.0	0.0	22	2.2		
	2005	SB Gill	9	0	0.0	0.0	0	0.0	0.0	0.0	2	0.2	0.8	99.8	90	10.0	36.1	100.3	154	17.1	61.8	102.0	3	0.3	1.2	0.0	249	27.7	100	
	2006	SB Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	2.3	95.4	12	2.0	14.0	96.3	69	11.5	80.2	93.3	3	0.5	3.5	nr	86	14.3	100	
	2008	SB Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	22	3.7	23.4	101.8	69	11.5	73.4	99.1	3	0.5	3.2	nr	94	15.7	100	
	2009	SB Gill	8	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	38	4.8	27.9	102.5	91	11.4	66.9	100.8	7	0.9	5.2	nr	136	17.0	100	
	2009	SB Gill	8	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	38	4.8	27.9	102.5	91	11.4	66.9	100.8	7	0.9	5.2	nr	136	17.0	100	
Walleye	1998	Exp Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	6	1.0	100.0	103.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	6	1.0		
	1999	Exp Gill	15	0	0.0	0.0	0	0.0	0.0	0.0	4	0.3	25.0	101.0	10	0.7	62.5	106.7	2	0.1	12.5	94.0	0	0.0	0.0	0.0	16	1.1	100	
	2000	Exp Gill	14	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	5	0.4	83.3	98.7	1	0.1	16.7	102.7	0	0.0	0.0	0.0	6	0.4		
	2001	Exp Gill	5	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	100.0	113.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	100	
	2002	Exp Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	100.0	104.4	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2		
	2003	Exp Gill	10	0	0.0	0.0	0	0.0	0.0	0.0	1	0.1	100.0	93.1	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.1	100	
	2004	Exp Gill	10	0	0.0	0.0	15	1.5	100.0	97.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	15	1.5		
	2005	SB Gill	9	0	0.0	0.0	0	0.0	0.0	0.0	40	4.4	100.0	98.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	40	4.4	100	
	2006	SB Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	7	1.2	35.0	103.9	13	2.2	65.0	98.7	0	0.0	0.0	0.0	0	0.0	0.0	0.0	20	3.3	100	
	2008	SB Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	33.3	96.3	2	0.3	66.7	96.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	3	0.5	100	
2009	SB Gill	8	0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	100.0	93.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	100		
2009	SB Gill	8	0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	100.0	93.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.3	100		
Sauger	1998	Exp Gill	6	0	0.0	0.0	2	0.3	100.0	102.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.3		
	1999	Exp Gill	15	0	0.0	0.0	11	0.7	15.7	89.4	44	2.9	62.9	89.7	15	1.0	21.4	92.7	0	0.0	0.0	0.0	0	0.0	0.0	0.0	70	4.7	84	
	2000	Exp Gill	14	0	0.0	0.0	0	0.0	0.0	0.0	27	1.9	28.1	100.4	69	4.9	71.9	100.4	0	0.0	0.0	0.0	0	0.0	0.0	0.0	96	6.8	100	
	2001	Exp Gill	5	0	0.0	0.0	5	1.0	26.3	96.1	14	2.8	73.7	110.7	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	19	3.8	74	
	2002	Exp Gill	6	0	0.0	0.0	0	0.0	0.0	0.0	10	1.7	31.3	92.2	22	3.7	68.8	98.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	32	5.3	100	

Table 5. Mean relative weight and standard error values by size class for Cherokee Reservoir black crappie collected during the 2009 electrofishing sample.

Size Class	Mean Wr	Std. Error	N
8	100.0		1
9	103.5	2.1	2
10	103.3		1
11	104.5	2.7	7
12	100.9	3.2	13
13	96.1	2.4	7
14	89.8	5.2	2
Total Catch			33

Table 6. Mean relative weight and standard error values by size class for Cherokee Reservoir black crappie collected during the 2009 trap net sample.

Size Class	Mean Wr	Std. Error	N
6	103.6	5.4	4
7	99.5	1.0	24
8	106.1	1.5	28
9	101.4	1.1	27
10	93.7	0.7	53
11	93.3	0.9	39
12	91.4	0.9	28
13	94.1	3.9	3
14	86.7		1
Total Catch			207

Table 7. Mean relative weight and standard error values by size class for Cherokee Reservoir hybrid striped bass collected in the 2009 winter gill net sample.

Size Class	Mean Wr	Std. Error	N
15	105.060		1
16	100.483	2.116	5
17	102.318	0.867	17
18	100.020	0.595	3
19	104.263	1.671	8
20	105.418	2.057	23
21	102.870	0.991	23
22	98.958	2.355	13
23	96.564	2.309	22
24	98.008	1.255	17
25	100.793	3.919	3
26	90.579		1

Total Catch 136

Table 8. Mean relative weight and standard error values by size class for Cherokee Reservoir largemouth bass collected during the 2009 electrofishing sample.

Size Class	Mean Wr	Std. Error	N
7	92.6		1
8	89.7	1.5	3
9	81.4	2.8	4
10	87.0	1.5	7
11	88.8	2.5	18
12	91.7	1.1	28
13	93.2	1.6	27
14	95.2	1.2	29
15	97.3	1.3	25
16	94.6	1.2	22
17	93.3	1.6	20
18	93.6	2.3	15
19	96.8	4.6	6
20	84.1	10.8	2

Total Catch 207

Table 9. Mean relative weight and standard error values by size class for Cherokee Reservoir striped bass collected in the 2009 winter gill net sample.

Size Class	Mean Wr	Std. Error	N
16	116.119	2.111	2
17	107.345	1.076	9
18	103.606	1.998	6
19	109.339		1
20			
21	103.646	4.270	3
22	99.489	1.332	18
23	98.847	1.396	19
24	99.119	1.125	16
25	97.503	1.254	7
26	98.044	1.536	10
27	96.981	1.516	12
Total Catch			103

Table 10. Geometric means of Region IV's shad gill net catches from 2003 to 2009.

Reservoir	Year	Alewife	Threadfin	Gizzard
Norris	2003	17.3	17.9	5.8
Cherokee	2003	67.3	1.9	67.7
S. Holston	2003	8.2	5.5	4.0
Boone	2003	107.3	0.0	14.4
Norris	2004	0.7	14.6	3.7
Cherokee	2004	5.3	9.7	9.3
S. Holston	2004	1.8	4.0	2.2
Boone	2004	3.0	1.5	42.3
Norris	2005	0.4	3.8	5.3
Cherokee	2005	0.1	1.6	1.7
S. Holston	2005	0.2	3.9	3.1
Boone	2005	2.4	15.9	26.1
Norris	2006	0.1	1.1	0.9
Cherokee	2006	0.4	3.0	3.3
S. Holston	2006	0.2	2.7	1.3
Boone	2006	2.4	11.2	25.9
Norris	2007	1.6	6.2	1.7
Cherokee	2007	0.4	2.0	3.3
Douglas	2007	0.0	91.4	19.5
Boone	2007	3.3	40.2	23.9
Norris	2008	1.6	3.2	1.3
Cherokee	2008	0.4	4.7	1.7
Douglas	2008	0.0	42.2	19.5
Boone	2008	7.3	5.0	8.9
Norris	2009	1.2	1.3	1.2
Cherokee	2009	1.5	2.3	4.1
Douglas	2009	0.0	10.7	7.7
Boone	2009	3.2	1.3	9.0

Table 11. Length range and weighted mean length by age of hybrid striped bass from Cherokee Reservoir's 2009 winter gill net sample.

AGE	Minimum length at capture	Weighted mean length at capture	Maximum length at capture	N
2	16.0	17.2	18.4	26
3	19.2	20.7	23.3	42
4	21.5	22.3	23.0	4
5	20.6	21.8	22.7	21
6	23.1	23.9	25.0	25
7	23.5	24.1	24.6	4
8	22.4	23.6	25.0	4
9	23.1	24.4	26.9	12

Table 12. Length range and weighted mean length by age of striped bass from Cherokee Reservoir's 2009 winter gill net sample.

AGE	Minimum length at capture	Weighted mean length at capture	Maximum length at capture	N
2	16.7	18.2	21.9	20
3	22.0	23.2	24.6	44
4	21.8	25.8	28.0	40
5	26.5	26.5	26.5	1

Table 13. Cherokee Reservoir fish habitat enhancement summary for 2009.

LOCATION	NEW SITES			RENOVATED SITES			EXPANDED SITES		
	NUMBER	UNITS	ACRES	NUMBER	UNITS	ACRES	NUMBER	UNITS	ACRES
HRM 52.50 R*				1	110	2.20			
HRM 52.50 R*				1	50	1.00			
HRM 52.50 R*				1	50	1.00			
HRM 52.50 R*				1	60	1.20			
HRM 52.50 R*				1	130	2.60			
HRM 52.50 R*				1	65	1.30			
HRM 52.50 R*				1	70	1.40			
HRM 52.50 R*				1	110	2.20			
HRM 52.50 R*				1	50	1.00			
HRM 52.50 R*				1	50	1.00			
HRM 52.50 R*				1	60	1.20			
HRM 52.50 R*				1	130	2.60			
HRM 52.50 R*				1	65	1.30			
HRM 52.50 R*				1	70	1.40			
HRM 89.20 R*				1	5	0.10			
				15	1075	21.50			

*Christmas trees with cable drives

Table 14. Summary of July 2009 Cherokee Reservoir water quality parameters at Holston River Mile 55.

Depth (ft)	Temp (F)	Cond	PH	DO	Site	Secchi (ft)	Time	Date
0	80.1	268	8.6	8.1	H55	4.9	640	7/7/2009
3	79.0	268	8.6	8.0				
7	79.0	267	8.6	8.0				
10	79.0	267	8.6	8.1				
13	79.0	267	8.7	8.1				
16	79.0	268	8.7	8.3				
20	78.8	270	8.7	6.9				
23	76.8	296	8.5	2.7				
26	73.2	322	8.3	0.3				
30	71.2	328	8.3	0.2				
33	69.8	334	8.3	0.2				
36	68.5	337	8.2	0.2				
39	67.3	342	8.2	0.2				
43	66.6	340	8.2	0.3				
46	65.8	338	8.2	0.5				
49	65.1	335	8.1	0.8				
52	64.6	341	8.1	0.2				
56	63.7	342	8.1	0.2				
59	63.0	341	8.1	0.2				
62	62.6	340	8.1	0.2				
66	61.5	340	8.1	0.2				
69	60.6	340	8.1	0.2				
72	59.9	341	8.1	0.2				
75	59.2	341	8.1	0.2				
79	57.9	342	8.0	0.2				
82	56.7	342	8.0	0.2				
85	56.1	342	8.0	0.2				
89	55.4	344	8.0	0.2				
92	54.7	345	8.0	0.2				
95	54.1	345	8.0	0.2				
98	53.8	347	8.0	0.2				

Table 15. Summary of September 2009 Cherokee Reservoir water quality parameters at Holston River Mile 55.

Depth (ft)	Temp (F)	Cond	PH	DO	Site	Secchi (ft)	Time	Date
0	78.3	281	8.6	6.9	H55	7.2	715	9/3/2009
3	78.3	281	8.6	6.7				
7	78.3	281	8.6	6.6				
10	78.3	282	8.6	6.6				
13	78.3	282	8.6	6.6				
16	78.4	282	8.6	6.6				
20	78.4	282	8.6	6.4				
23	78.3	282	8.6	6.5				
26	78.3	282	8.6	6.6				
30	78.3	282	8.5	6.7				
33	78.3	282	8.5	6.5				
36	78.3	283	8.5	6.2				
39	75.6	309	8.3	0.3				
43	74.8	309	8.3	0.3				
46	73.9	311	8.2	0.2				
49	73.2	312	8.2	0.2				
52	72.7	314	8.1	0.2				
56	72.0	316	8.1	0.2				
59	71.2	318	8.1	0.2				
62	70.7	318	8.1	0.2				
66	70.0	320	8.1	0.2				
69	69.1	323	8.0	0.2				
72	68.5	326	8.0	0.2				
75	68.0	328	8.0	0.2				
79	67.5	329	8.0	0.2				
82	66.9	330	8.0	0.2				
85	66.4	331	8.0	0.2				
89	66.2	331	8.0	0.2				
92	65.8	331	8.0	0.2				
95	65.5	331	8.0	0.2				
98	64.8	332	8.0	0.1				

Table 16. Summary of July 2009 Cherokee Reservoir water quality parameters at Holston River Mile 66.

Depth (ft)	Temp (F)	Cond	PH	DO	Site	Secchi (ft)	Time	Date
0	79.5	260	8.7	8.2	H66	4.9	730	7/7/2009
3	79.5	262	8.7	8.5				
7	79.5	262	8.7	8.5				
10	79.5	262	8.7	9.2				
13	79.5	263	8.7	9.0				
16	79.5	262	8.8	9.2				
20	79.3	264	8.8	9.1				
23	74.1	297	8.5	6.2				
26	72.3	299	8.4	6.1				
30	71.1	311	8.3	5.5				
33	70.0	312	8.3	5.8				
36	68.2	328	8.2	6.4				
39	66.6	333	8.2	6.0				
43	65.5	332	8.2	6.3				
46	64.8	332	8.1	6.2				
49	63.9	333	8.1	6.1				
52	63.0	332	8.1	6.3				
56	61.7	332	8.1	6.0				
59	61.0	333	8.1	6.0				
62	60.4	333	8.1	5.9				
66	60.1	333	8.1	6.2				
69	58.8	335	8.0	6.2				
72	57.7	338	8.0	6.4				
75	56.8	340	8.0	6.7				
79	56.1	344	8.0	6.5				
82	55.4	347	8.0	6.1				
85	54.7	349	8.0	6.3				
89	53.8	352	8.0	6.3				
92	53.1	354	8.0	6.3				
95	52.7	355	8.0	6.3				
98	52.3	354	7.9	6.3				

Table 17. Summary of September 2009 Cherokee Reservoir water quality parameters at Holston River Mile 66.

Depth (ft)	Temp (F)	Cond	PH	DO	Site	Secchi (ft)	Time	Date
0	77.9	285	8.5	6.5	H66	6.6	800	9/3/2009
3	77.9	285	8.6	6.3				
7	77.9	285	8.5	6.5				
10	77.9	285	8.5	6.4				
13	77.9	285	8.5	6.3				
16	77.9	285	8.5	6.4				
20	77.9	286	8.5	6.1				
23	77.9	286	8.5	6.2				
26	77.9	286	8.5	6.0				
30	77.9	286	8.5	5.9				
33	75.9	309	8.3	0.3				
36	75.4	311	8.2	0.2				
39	75.0	311	8.2	0.2				
43	74.8	312	8.1	0.2				
46	74.1	312	8.1	0.2				
49	73.8	312	8.1	0.2				
52	72.5	313	8.1	0.2				
56	72.0	314	8.0	0.2				
59	71.2	315	8.0	0.2				
62	70.7	318	8.0	0.2				
66	70.0	320	8.0	0.2				
69	69.3	322	8.0	0.2				
72	68.2	325	8.0	0.2				
75	67.8	325	8.0	0.2				
79	67.5	325	7.9	0.1				
82	67.1	326	7.9	0.1				
85	66.6	328	7.9	0.1				
89	66.2	329	7.9	0.1				
92	65.8	330	7.9	0.1				
95	65.5	332	7.9	0.1				
98	64.9	334	7.9	0.1				

Table 18. Summary of July 2009 Cherokee Reservoir water quality parameters at Holston River Mile 75.

Depth (ft)	Temp (F)	Cond	PH	DO	Site	Secchi (ft)	Time	Date
0	80.1	261	8.8	7.8	H75	4.9	830	7/7/2009
3	80.1	261	8.8	7.9				
7	80.1	261	8.8	8.0				
10	79.9	262	8.8	7.3				
13	79.9	263	8.8	7.5				
16	79.5	267	8.7	6.5				
20	78.4	281	8.5	4.2				
23	75.7	311	8.4	2.8				
26	72.5	280	8.4	2.9				
30	72.1	280	8.3	2.6				
33	70.9	288	8.3	1.8				
36	68.9	308	8.2	1.6				
39	67.5	315	8.2	1.5				
43	66.0	321	8.2	1.6				
46	64.8	322	8.1	1.4				
49	63.7	323	8.1	1.3				
52	62.4	323	8.1	1.3				
56	61.9	324	8.1	1.2				
59	61.2	324	8.1	1.2				
62	60.3	327	8.1	1.2				
66	59.4	334	8.0	1.1				
69	58.6	343	8.0	1.1				
72	57.9	343	8.0	1.0				
75	57.2	346	8.0	0.9				
79	56.1	350	8.0	0.9				
82	55.6	357	7.9	0.9				

Table 19. Summary of September 2009 Cherokee Reservoir water quality parameters at Holston River Mile 75.

Depth (ft)	Temp (F)	Cond	PH	DO	Site	Secchi (ft)	Time	Date
0	78.4	274	8.4	7.6	H75	5.6	900	9/3/2009
3	78.4	274	8.6	7.6				
7	78.4	274	8.6	7.6				
10	78.4	274	8.6	7.7				
13	78.3	274	8.6	7.4				
16	78.3	275	8.6	7.5				
20	78.1	276	8.6	7.4				
23	76.5	301	8.4	2.8				
26	76.1	301	8.3	2.5				
30	75.9	301	8.2	2.5				
33	75.6	302	8.2	2.2				
36	75.2	313	8.1	1.8				
39	75.0	314	8.1	1.4				
43	74.7	320	8.0	1.3				
46	74.5	318	8.0	1.2				
49	73.6	313	8.0	1.2				
52	72.7	316	8.0	1.1				
56	71.6	315	8.0	1.1				
59	70.9	315	8.0	1.0				
62	70.2	316	7.9	1.0				
66	69.4	317	7.9	1.0				
69	69.1	319	7.9	0.9				
72	68.5	323	7.9	0.9				
75	67.6	334	7.8	0.8				
79	66.7	344	7.8	0.8				

Table 20. Summary of September 2009 Cherokee Reservoir water quality parameters at Holston River Mile 83.

Depth (ft)	Temp (F)	Cond	PH	DO	Site	Secchi (ft)	Time	Date
0	77.9	267	8.5	8.7	H83	4.9	945	9/3/2009
3	77.9	266	8.6	8.0				
7	77.9	266	8.6	8.1				
10	77.9	266	8.6	8.2				
13	77.9	266	8.6	8.1				
16	77.7	269	8.6	7.4				
20	77.2	290	8.5	6.3				
23	76.8	299	8.4	3.4				
26	76.1	307	8.3	2.4				
30	75.7	307	8.2	2.3				
33	75.6	307	8.2	1.9				
36	75.4	306	8.1	1.5				
39	75.0	302	8.1	0.6				
43	74.7	301	8.1	0.2				
46	73.9	299	8.0	0.2				
49	72.9	308	8.0	0.2				
52	71.2	316	8.0	0.2				
56	70.5	320	7.9	0.2				
59	68.9	325	7.9	0.1				
62	68.0	339	7.9	0.1				

Table 21. Cherokee Reservoir water levels for 2009. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
1045.51	JANUARY	1	1046.91	FEBRUARY	24	1057.54	APRIL	19
1045.49	JANUARY	2	1046.75	FEBRUARY	25	1057.71	APRIL	20
1045.53	JANUARY	3	1046.45	FEBRUARY	26	1057.86	APRIL	21
1045.51	JANUARY	4	1046.24	FEBRUARY	27	1058.05	APRIL	22
1045.43	JANUARY	5	1046.31	FEBRUARY	28	1058.21	APRIL	23
1045.97	JANUARY	6	1046.59	MARCH	1	1058.36	APRIL	24
1047.91	JANUARY	7	1046.48	MARCH	2	1058.49	APRIL	25
1049.53	JANUARY	8	1046.53	MARCH	3	1058.63	APRIL	26
1049.41	JANUARY	9	1046.45	MARCH	4	1058.74	APRIL	27
1049.14	JANUARY	10	1046.24	MARCH	5	1058.84	APRIL	28
1049.06	JANUARY	11	1045.98	MARCH	6	1058.96	APRIL	29
1049.09	JANUARY	12	1046.15	MARCH	7	1059.06	APRIL	30
1048.73	JANUARY	13	1046.26	MARCH	8	1059.16	MAY	1
1048.26	JANUARY	14	1046.33	MARCH	9	1059.31	MAY	2
1047.88	JANUARY	15	1046.33	MARCH	10	1059.47	MAY	3
1047.48	JANUARY	16	1046.42	MARCH	11	1059.79	MAY	4
1047.30	JANUARY	17	1046.45	MARCH	12	1060.03	MAY	5
1047.02	JANUARY	18	1046.55	MARCH	13	1060.46	MAY	6
1046.79	JANUARY	19	1046.71	MARCH	14	1061.10	MAY	7
1046.52	JANUARY	20	1047.13	MARCH	15	1062.38	MAY	8
1046.27	JANUARY	21	1047.79	MARCH	16	1063.60	MAY	9
1045.95	JANUARY	22	1048.41	MARCH	17	1064.41	MAY	10
1045.75	JANUARY	23	1048.85	MARCH	18	1064.93	MAY	11
1045.63	JANUARY	24	1049.20	MARCH	19	1065.54	MAY	12
1045.53	JANUARY	25	1049.50	MARCH	20	1066.05	MAY	13
1045.43	JANUARY	26	1049.73	MARCH	21	1066.66	MAY	14
1045.25	JANUARY	27	1049.95	MARCH	22	1067.21	MAY	15
1045.21	JANUARY	28	1050.15	MARCH	23	1067.71	MAY	16
1045.56	JANUARY	29	1050.38	MARCH	24	1068.16	MAY	17
1045.78	JANUARY	30	1050.62	MARCH	25	1068.48	MAY	18
1045.95	JANUARY	31	1050.85	MARCH	26	1068.94	MAY	19
1045.91	FEBRUARY	1	1051.07	MARCH	27	1069.35	MAY	20
1046.01	FEBRUARY	2	1051.30	MARCH	28	1069.70	MAY	21
1045.94	FEBRUARY	3	1051.63	MARCH	29	1070.00	MAY	22
1045.88	FEBRUARY	4	1051.98	MARCH	30	1070.23	MAY	23
1045.86	FEBRUARY	5	1052.26	MARCH	31	1070.31	MAY	24
1045.74	FEBRUARY	6	1052.57	APRIL	1	1070.43	MAY	25
1045.65	FEBRUARY	7	1052.82	APRIL	2	1070.36	MAY	26
1045.75	FEBRUARY	8	1053.12	APRIL	3	1070.47	MAY	27
1045.69	FEBRUARY	9	1053.44	APRIL	4	1070.67	MAY	28
1045.66	FEBRUARY	10	1053.69	APRIL	5	1070.89	MAY	29
1045.59	FEBRUARY	11	1053.97	APRIL	6	1071.07	MAY	30
1045.44	FEBRUARY	12	1054.24	APRIL	7	1071.21	MAY	31
1045.27	FEBRUARY	13	1054.50	APRIL	8	1071.27	JUNE	1
1045.26	FEBRUARY	14	1054.76	APRIL	9	1071.30	JUNE	2
1045.30	FEBRUARY	15	1055.09	APRIL	10	1071.13	JUNE	3
1045.31	FEBRUARY	16	1055.50	APRIL	11	1071.10	JUNE	4
1045.24	FEBRUARY	17	1055.85	APRIL	12	1071.10	JUNE	5
1045.47	FEBRUARY	18	1056.17	APRIL	13	1071.05	JUNE	6
1045.77	FEBRUARY	19	1056.45	APRIL	14	1071.02	JUNE	7
1046.07	FEBRUARY	20	1056.70	APRIL	15	1070.89	JUNE	8
1046.32	FEBRUARY	21	1056.92	APRIL	16	1070.76	JUNE	9
1046.51	FEBRUARY	22	1057.11	APRIL	17	1070.58	JUNE	10
1046.76	FEBRUARY	23	1057.29	APRIL	18	1070.43	JUNE	11

Table 22. Cherokee Reservoir water levels for 2009. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
1070.27	JUNE	12	1067.83	AUGUST	5	1062.75	SEPTEMBER	28
1070.25	JUNE	13	1067.59	AUGUST	6	1062.77	SEPTEMBER	29
1070.30	JUNE	14	1067.40	AUGUST	7	1062.64	SEPTEMBER	30
1070.33	JUNE	15	1067.41	AUGUST	8	1062.45	OCTOBER	1
1070.28	JUNE	16	1067.35	AUGUST	9	1062.31	OCTOBER	2
1070.36	JUNE	17	1067.11	AUGUST	10	1062.09	OCTOBER	3
1070.21	JUNE	18	1066.95	AUGUST	11	1061.80	OCTOBER	4
1070.41	JUNE	19	1066.76	AUGUST	12	1061.79	OCTOBER	5
1070.44	JUNE	20	1066.58	AUGUST	13	1061.84	OCTOBER	6
1070.38	JUNE	21	1066.41	AUGUST	14	1062.00	OCTOBER	7
1070.28	JUNE	22	1066.08	AUGUST	15	1062.08	OCTOBER	8
1070.16	JUNE	23	1065.83	AUGUST	16	1062.06	OCTOBER	9
1069.96	JUNE	24	1065.41	AUGUST	17	1062.16	OCTOBER	10
1069.76	JUNE	25	1065.05	AUGUST	18	1062.04	OCTOBER	11
1069.70	JUNE	26	1064.75	AUGUST	19	1061.50	OCTOBER	12
1069.52	JUNE	27	1064.40	AUGUST	20	1061.08	OCTOBER	13
1069.31	JUNE	28	1064.24	AUGUST	21	1060.75	OCTOBER	14
1069.17	JUNE	29	1064.24	AUGUST	22	1060.30	OCTOBER	15
1069.04	JUNE	30	1064.19	AUGUST	23	1060.15	OCTOBER	16
1068.87	JULY	1	1063.86	AUGUST	24	1060.04	OCTOBER	17
1068.78	JULY	2	1063.56	AUGUST	25	1059.80	OCTOBER	18
1068.61	JULY	3	1063.25	AUGUST	26	1059.32	OCTOBER	19
1068.56	JULY	4	1062.98	AUGUST	27	1058.85	OCTOBER	20
1068.69	JULY	5	1062.62	AUGUST	28	1058.60	OCTOBER	21
1068.63	JULY	6	1062.69	AUGUST	29	1058.26	OCTOBER	22
1068.40	JULY	7	1062.80	AUGUST	30	1057.94	OCTOBER	23
1068.20	JULY	8	1062.56	AUGUST	31	1057.75	OCTOBER	24
1068.11	JULY	9	1062.36	SEPTEMBER	1	1057.68	OCTOBER	25
1068.09	JULY	10	1062.12	SEPTEMBER	2	1057.42	OCTOBER	26
1068.12	JULY	11	1061.56	SEPTEMBER	3	1057.05	OCTOBER	27
1068.15	JULY	12	1061.11	SEPTEMBER	4	1056.92	OCTOBER	28
1068.12	JULY	13	1060.85	SEPTEMBER	5	1056.65	OCTOBER	29
1068.12	JULY	14	1060.59	SEPTEMBER	6	1056.42	OCTOBER	30
1068.02	JULY	15	1060.27	SEPTEMBER	7	1056.45	OCTOBER	31
1068.04	JULY	16	1060.06	SEPTEMBER	8	1056.57	NOVEMBER	1
1068.00	JULY	17	1060.04	SEPTEMBER	9	1056.52	NOVEMBER	2
1067.78	JULY	18	1060.26	SEPTEMBER	10	1056.53	NOVEMBER	3
1067.63	JULY	19	1060.42	SEPTEMBER	11	1056.57	NOVEMBER	4
1067.65	JULY	20	1060.64	SEPTEMBER	12	1056.58	NOVEMBER	5
1067.66	JULY	21	1060.82	SEPTEMBER	13	1056.65	NOVEMBER	6
1067.35	JULY	22	1060.83	SEPTEMBER	14	1056.63	NOVEMBER	7
1067.09	JULY	23	1060.80	SEPTEMBER	15	1056.61	NOVEMBER	8
1066.79	JULY	24	1060.71	SEPTEMBER	16	1056.23	NOVEMBER	9
1066.94	JULY	25	1060.60	SEPTEMBER	17	1056.02	NOVEMBER	10
1067.03	JULY	26	1060.54	SEPTEMBER	18	1056.14	NOVEMBER	11
1066.99	JULY	27	1060.65	SEPTEMBER	19	1056.30	NOVEMBER	12
1066.94	JULY	28	1060.76	SEPTEMBER	20	1056.62	NOVEMBER	13
1066.84	JULY	29	1060.70	SEPTEMBER	21	1056.31	NOVEMBER	14
1067.01	JULY	30	1060.88	SEPTEMBER	22	1055.95	NOVEMBER	15
1067.41	JULY	31	1061.05	SEPTEMBER	23	1055.49	NOVEMBER	16
1067.79	AUGUST	1	1061.21	SEPTEMBER	24	1054.88	NOVEMBER	17
1068.25	AUGUST	2	1061.43	SEPTEMBER	25	1054.30	NOVEMBER	18
1068.11	AUGUST	3	1061.84	SEPTEMBER	26	1053.75	NOVEMBER	19
1067.98	AUGUST	4	1062.52	SEPTEMBER	27	1053.13	NOVEMBER	20

Table 23. Cherokee Reservoir water levels for 2009. (TVA)

ELEVATION	MONTH	DAY
1053.14	NOVEMBER	21
1052.87	NOVEMBER	22
1052.08	NOVEMBER	23
1051.32	NOVEMBER	24
1050.40	NOVEMBER	25
1049.84	NOVEMBER	26
1049.32	NOVEMBER	27
1049.16	NOVEMBER	28
1048.93	NOVEMBER	29
1048.62	NOVEMBER	30
1048.12	DECEMBER	1
1047.64	DECEMBER	2
1047.34	DECEMBER	3
1047.15	DECEMBER	4
1047.01	DECEMBER	5
1046.94	DECEMBER	6
1046.61	DECEMBER	7
1046.64	DECEMBER	8
1047.86	DECEMBER	9
1048.55	DECEMBER	10
1048.34	DECEMBER	11
1047.83	DECEMBER	12
1047.59	DECEMBER	13
1047.47	DECEMBER	14
1047.03	DECEMBER	15
1046.33	DECEMBER	16
1045.52	DECEMBER	17
1045.26	DECEMBER	18
1045.07	DECEMBER	19
1044.71	DECEMBER	20
1044.63	DECEMBER	21
1044.66	DECEMBER	22
1044.73	DECEMBER	23
1044.88	DECEMBER	24
1045.19	DECEMBER	25
1045.34	DECEMBER	26
1045.68	DECEMBER	27
1045.19	DECEMBER	28
1044.79	DECEMBER	29
1044.38	DECEMBER	30
1043.85	DECEMBER	31

Table 24. Summary of creel results for Cherokee Reservoir 1998-2009.

Cherokee Species	YEAR	Intended % Effort	Intended Angler Hrs	Intended Angler Trips	Intended Trip Expenditure	Intended Caught	Intended Caught per hr	Intended Harvested	Intended Harvested per hr	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									
	2006	5.0	20,425	3,739	\$4,410		1.25		0.73	43									
2008	4.6	18,608	3,611	\$12,250		0.55		0.25	37										
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					
	2006	0.2	946	169	\$6,320	160,959	0.97	1,867	0.00	3	194,423	2,870		51					
2008	0.2	702	136	\$0	125,247	0.63	1,873	0.42	1	158,397	3,249		71						
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					
	2006	16.5	66,884	12,284	\$16,870	73,591	1.58	22,895	0.51	229	75,453	22,895		474					
2008	20.5	83,486	15,851	\$35,160	63,926	1.17	29,571	0.52	289	66,143	30,065		610						
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							
	2006	1.0	4,069	754	\$2,750	12,684	1.81	6,917	0.87	10	30,337	13,060		263					
2008	1.1	4,361	857	\$3,170	5,271	1.86	1,834	0.75	9	27,242	12,837		217						
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					
	2006	8.9	36,195	6,726	\$23,160	34,272	0.78	21,808	0.52	93	38,474	24,560		437					
2008	9.8	39,978	8,008	\$24,060	25,761	0.64	15,334	0.41	86	31,989	18,247		321						
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					
	2006	0.2	634	112	\$930	25,224	0.00	8,875	0.00	1	51,438	16,192		312					
2008					32,044		11,089				56,617	15,619		301					
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			
	2006	43.9	177,852	32,513	\$509,540	159,620	0.74	1,867	0.01	641	169,254	2,159	2.37	37	98.7	2.6			
2008	46.1	188,140	36,066	\$707,520	124,971	0.62	1,873	0.01	696	132,930	2,267	2.34	46	98.3	2.8				
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			
	2006	0.8	3,178	569	\$7,590	1,339	0.39	0	0.00	11	21,605	313	3.19	7	98.6	0.4			
2008	0.1	610	118	\$1,920	276	0.29	0	0.00	4	15,594	192	1.74	5	98.8	0.2				
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	\$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			
	2006	0.0	0	0	\$0	0	0.00	0	0.00	0	3,564	398	1.05	7	88.8	0.5			
2008	0.0	0	0	\$0	0	0.00	0	0.00	0	9,873	790	1.18	20	92.0	1.0				
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			
	2006	11.0	44,587	8,114	\$165,590	4,544	0.11	1,736	0.05	141	5,875	2,213	12.49	51	62.3	2.6			
2008	5.7	23,301	4,427	\$73,040	3,159	0.11	1,265	0.05	66	9,936	2,384	8.51	49	76.0	2.9				
Cherokee Bass	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			
	2006	10.0	40,713	7,534	\$107,330	18,380	0.48	6,844	0.18	115	41,076	13,271	5.18	249	67.7	15.8			
	2008	10.8	44,202	8,513	\$114,290	5,271	0.61	9,574	0.21	117	41,298	12,236	6.63	236	70.4	15.0			

Table 25. Summary of creel results for Cherokee Reservoir 1998-2009.

Cherokee Species	YEAR	Intended % Effort	Intended Angler Hrs	Intended Angler Trips	Intended Trip Expenditure	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	
	2006	0.8	3,078	562	\$590	2,300	1.41	295	0.05	9	4,487	708	3.95	12	84.2	0.8	
	2008	0.2	895	168	\$1,060	266	0.47	250	0.47	2	5,383	999	2.89	16	81.4	1.2	
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	
	2006	1.7	6,805	1,301	\$7,670	5,966	0.78	2,520	0.32	18	7,504	3,150	2.47	55	58.0	3.7	
	2008	0.8	3,390	686	\$0	623	0.27	140	0.07	7	2,549	279	2.41	6	89.1	0.3	
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	
	2006					3,362		751			3,708	751	0.61	16	79.7	0.9	
	2008					2,682		1,443			2,892	1,443	0.64	28	50.1	1.8	
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	
	2006					69,825		21,827			71,341	21,827	0.78	450	69.4	26.0	
	2008					60,057		27,107			62,064	27,601	0.77	559	55.5	33.9	
Blacknose 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	
	2006					404		317			404	317	1.16	8	21.5	0.4	
	2008					1,187		1,021			1,187	1,021	1.02	23	14.0	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					
	2006					12,684		6,917			30,337	13,060	0.25	263	57.0	15.5	
	2008					5,271		1,834			27,242	12,837	0.26	217	52.9	15.7	
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	
	2006					28,646		17,560			32,848	20,312	1.82	369	38.2	24.2	
	2008					23,807		13,695			29,558	16,514	1.57	287	44.1	20.3	
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	
	2006					5,090		3,947			5,090	3,947	3.51	61	22.5	4.7	
	2008					1,739		1,424			1,739	1,424	3.19	27	18.1	1.7	
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	
	2006					536		301			536	301	4.17	7	43.6	0.4	
	2008					0		0			477	94	7.40	3	80.3	0.1	
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
	2006		405,366	74,377	\$852,750	312,825		65,001		1,314	400,720	83,853		1,611			405,366
	2008		407,673	78,461	\$972,470	253,611		60,312		1,314	347,690	81,533		1,547			407,673

Figures

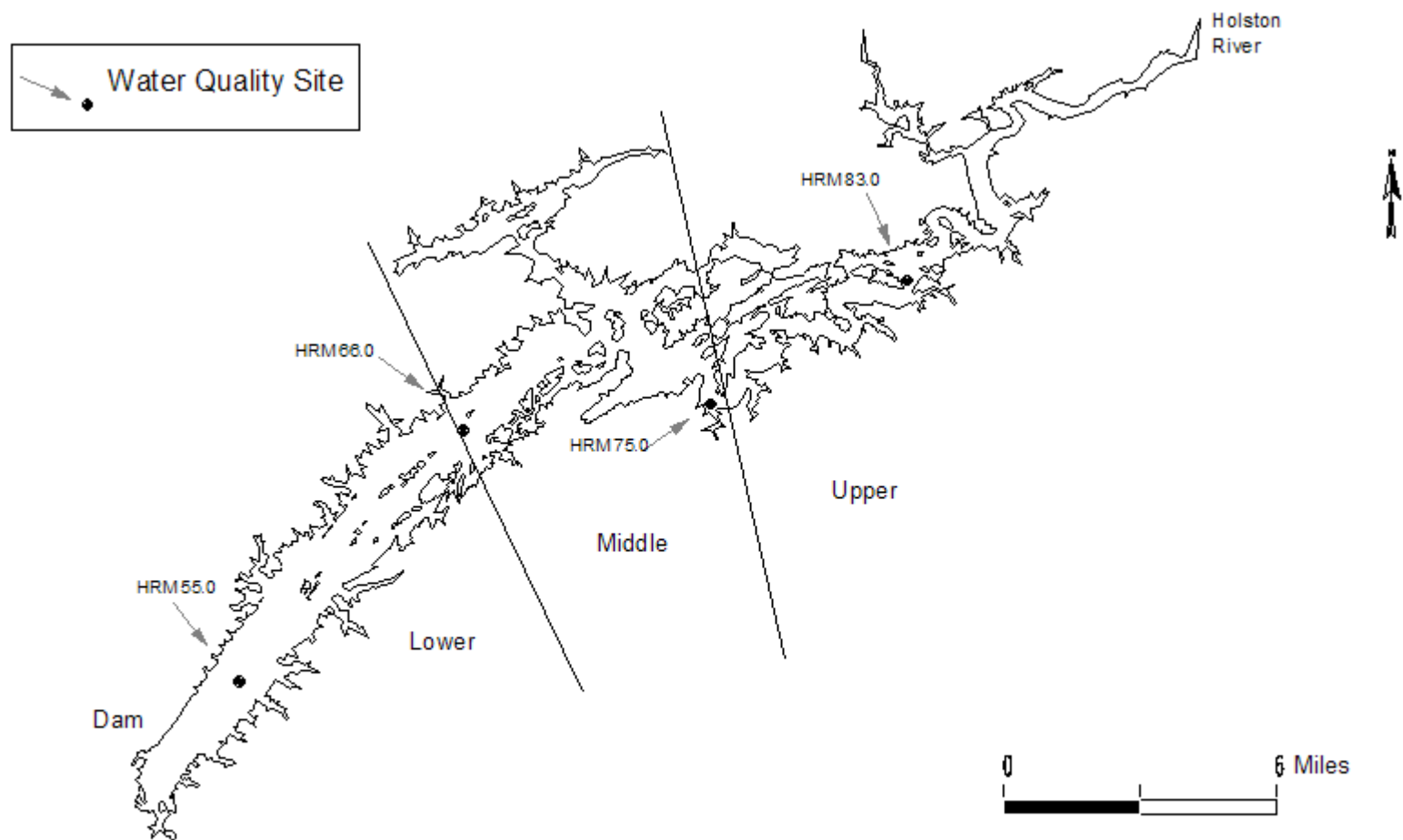


Figure 1. Water quality sites and the upper, middle, and lower section boundaries of Cherokee Reservoir in 2009.

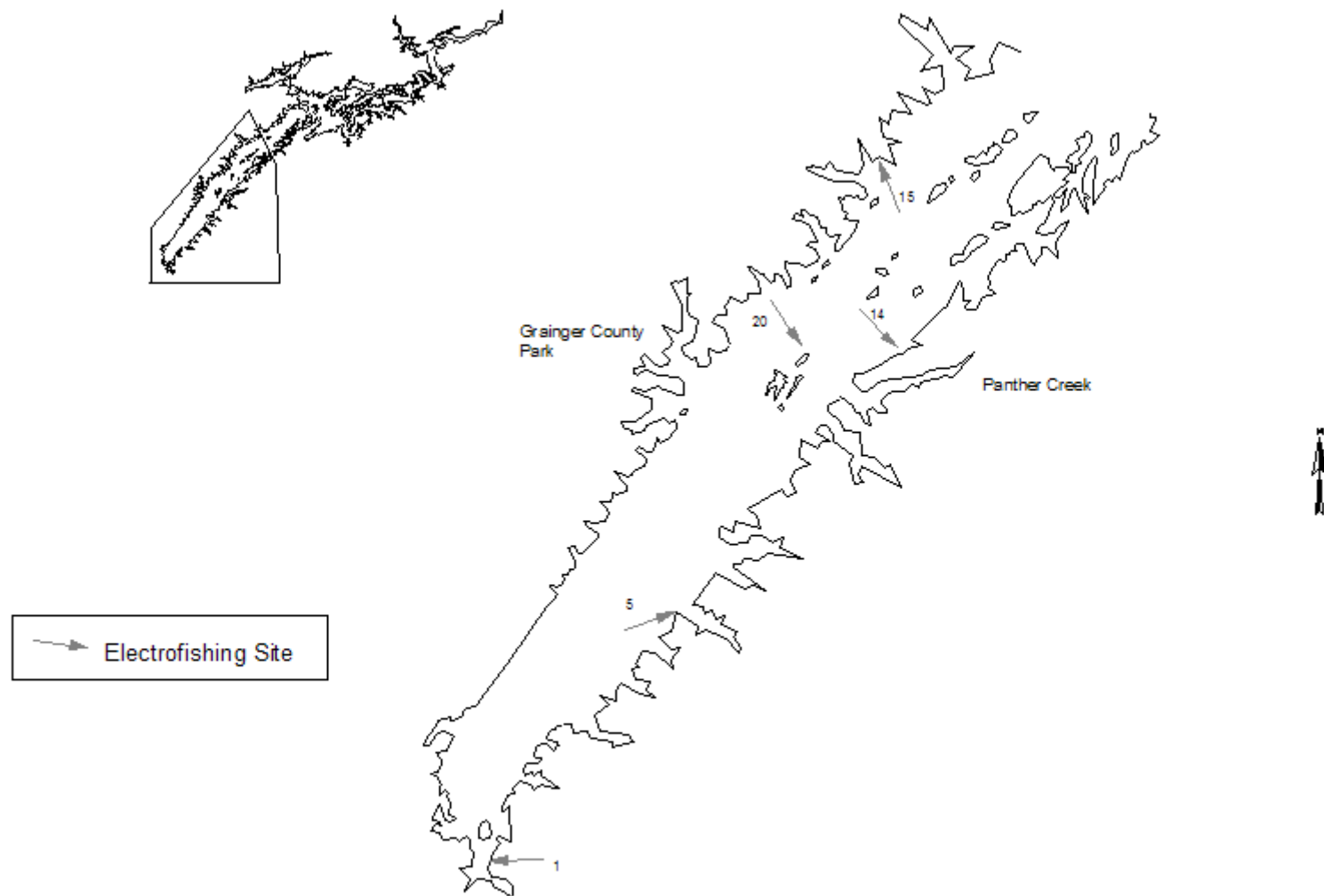


Figure 2. Electrofishing sites in the lower section of Cherokee Reservoir in 2009.

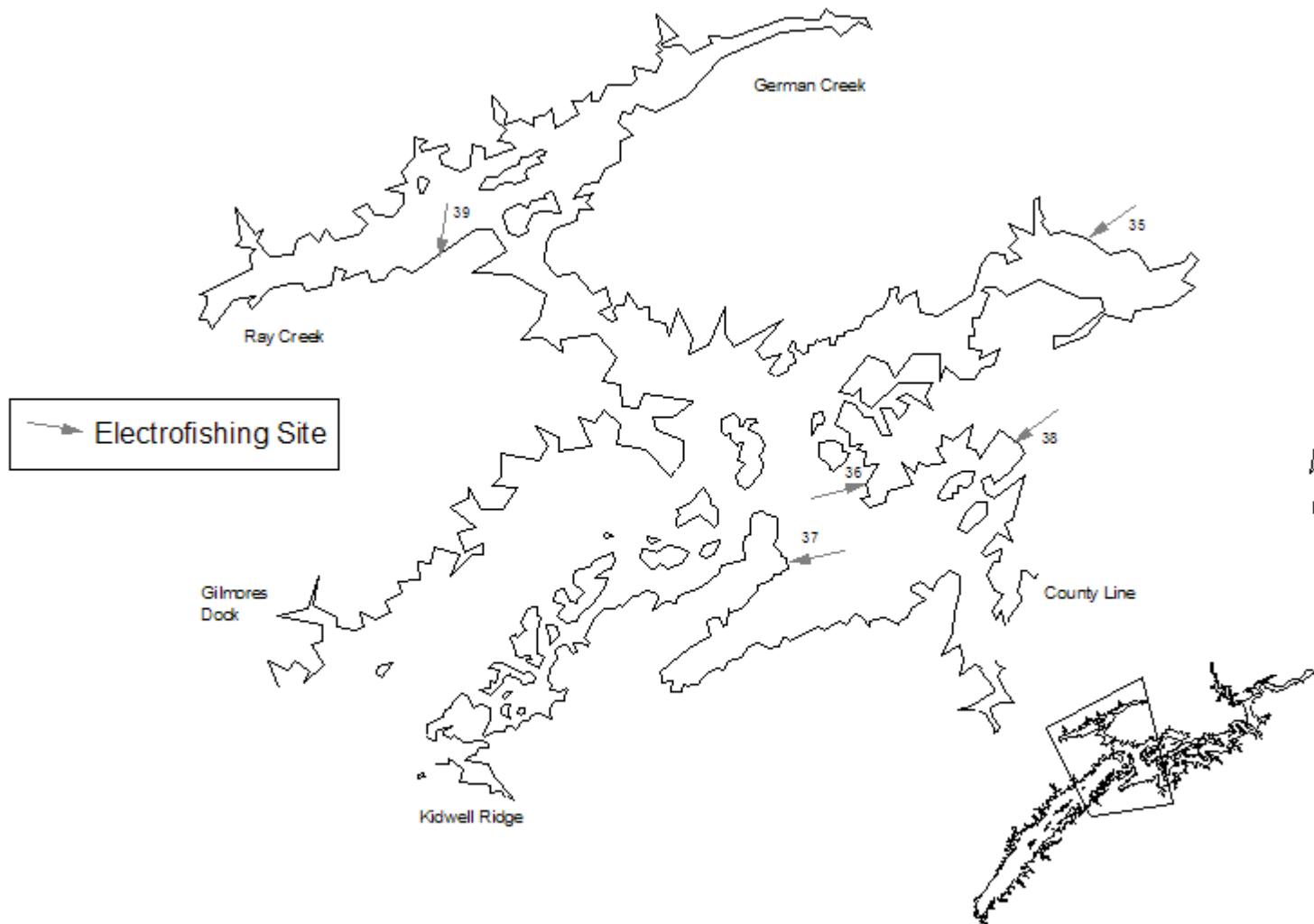


Figure 3. Electrofishing sites in the middle section of Cherokee Reservoir in 2009.

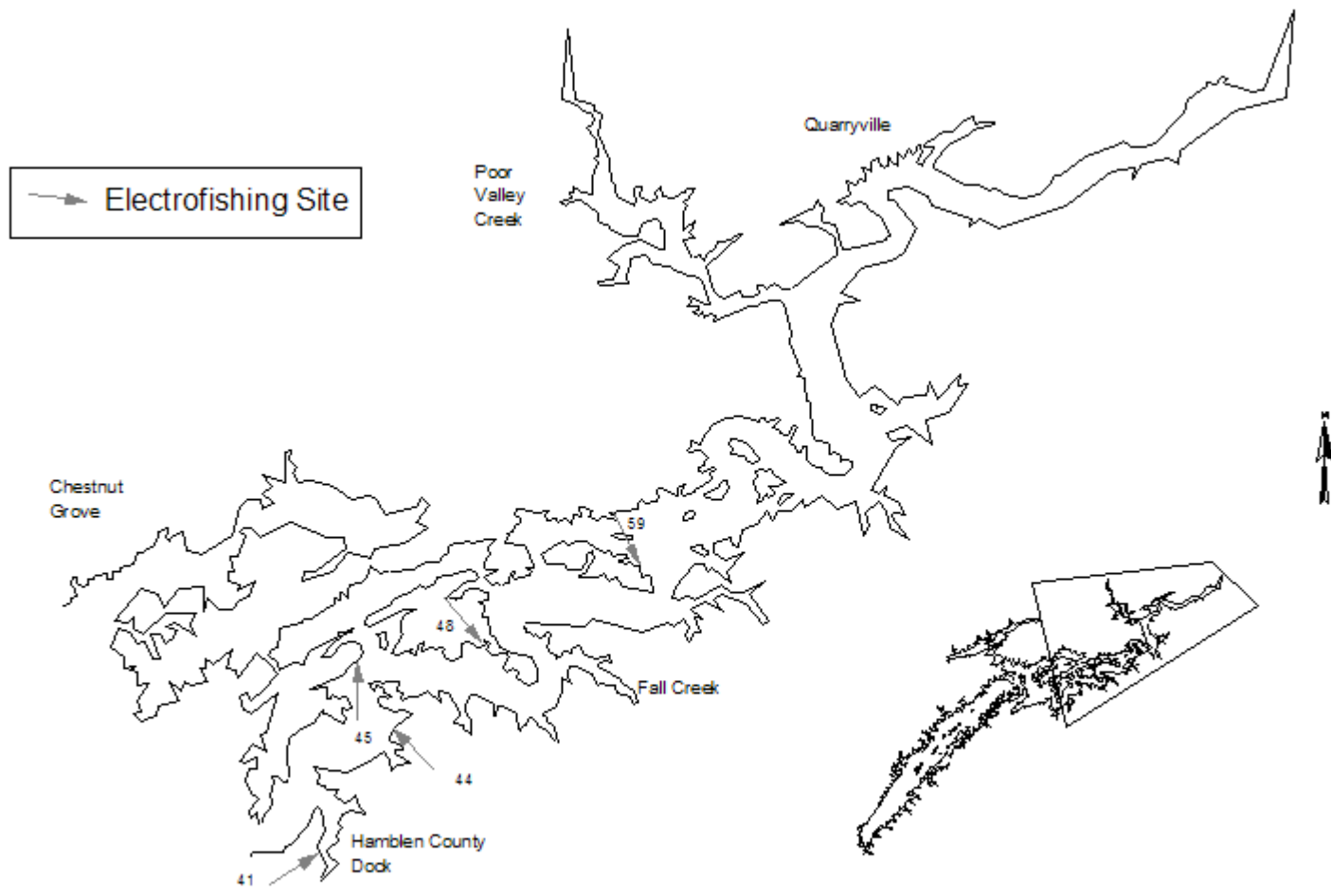


Figure 4. Electrofishing sites in the upper section of Cherokee Reservoir in 2009.

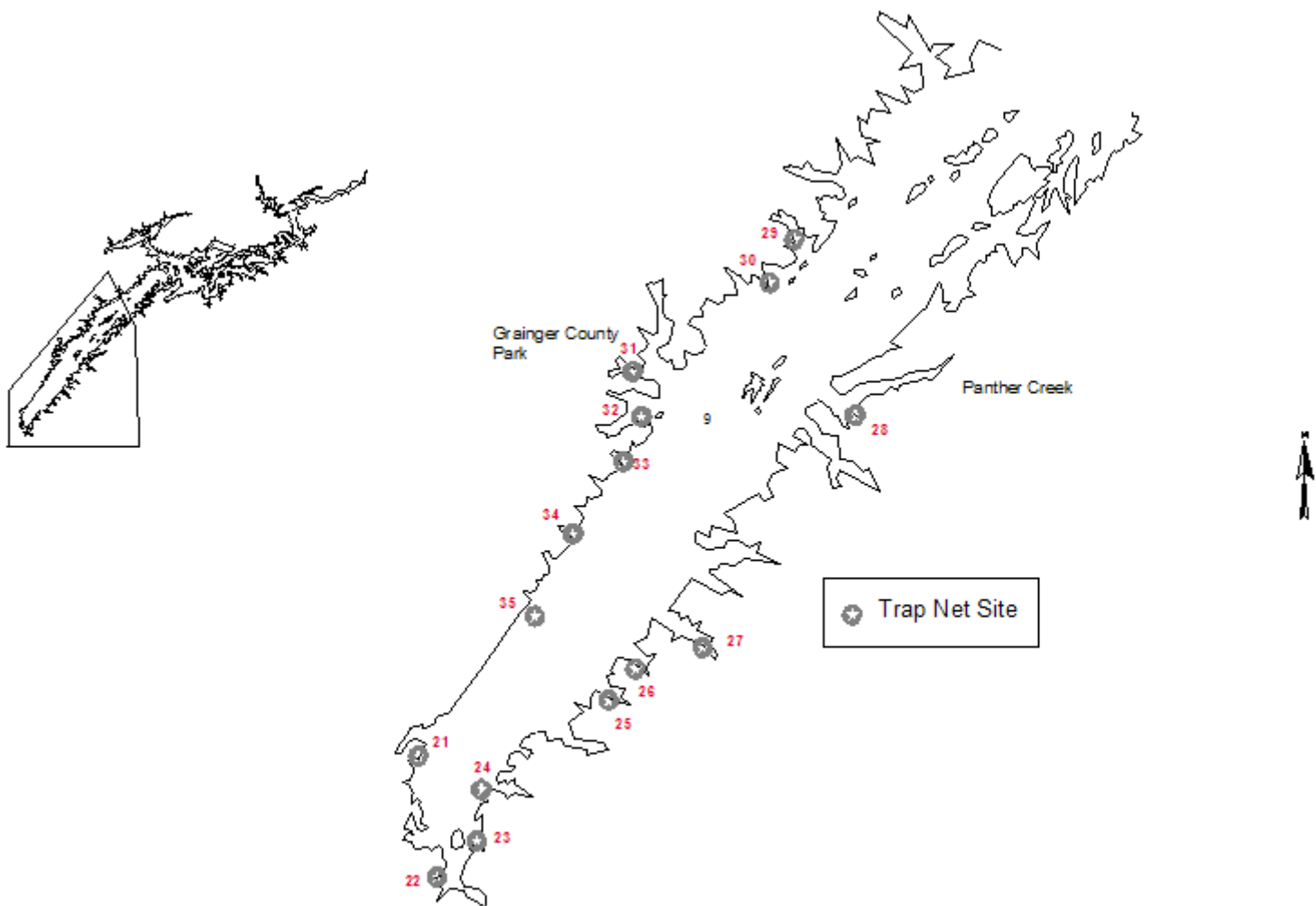


Figure 5. Trap net sites in the lower section of Cherokee Reservoir in 2009.

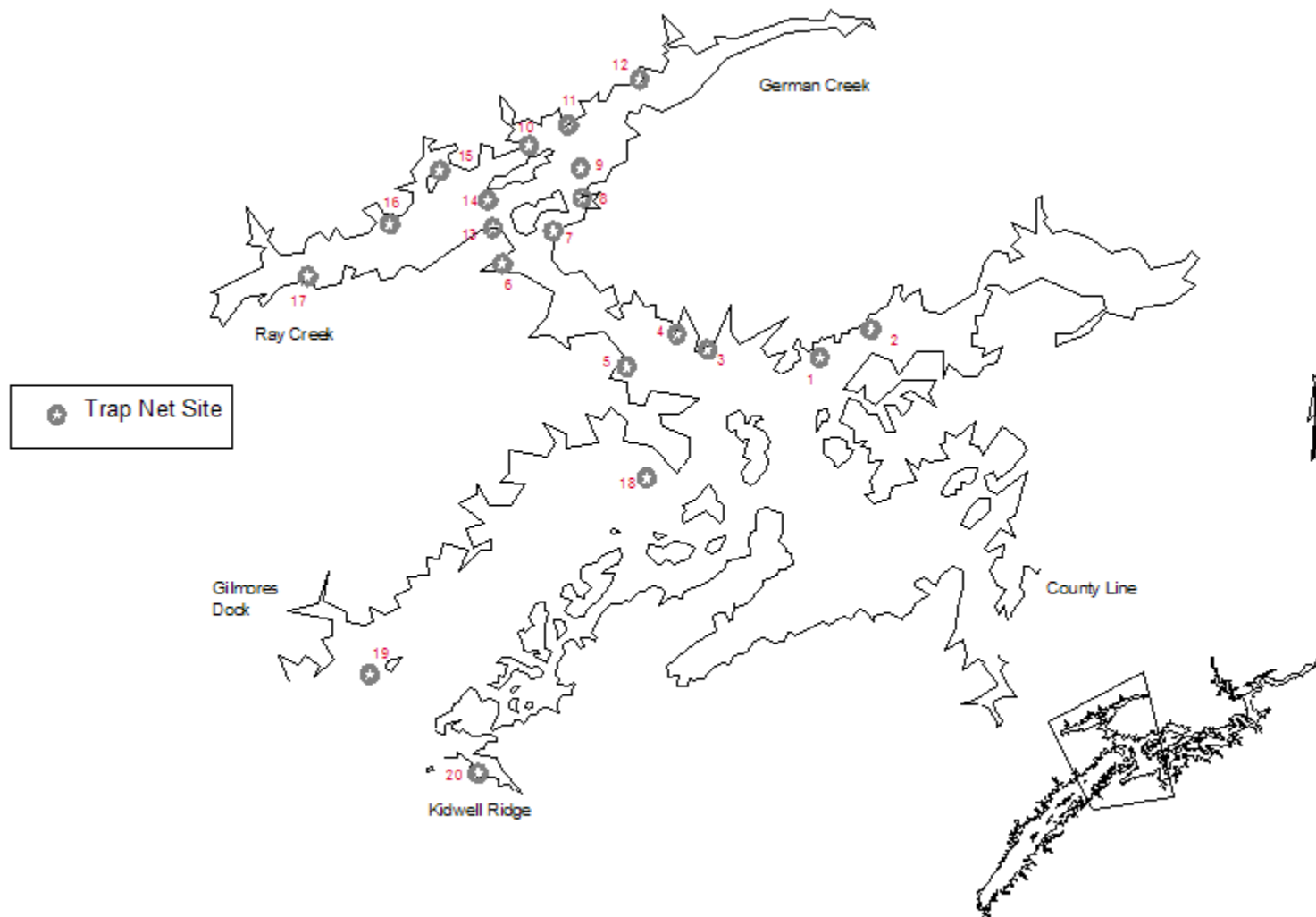


Figure 6. Trap net sites in the middle section of Cherokee Reservoir in 2009.

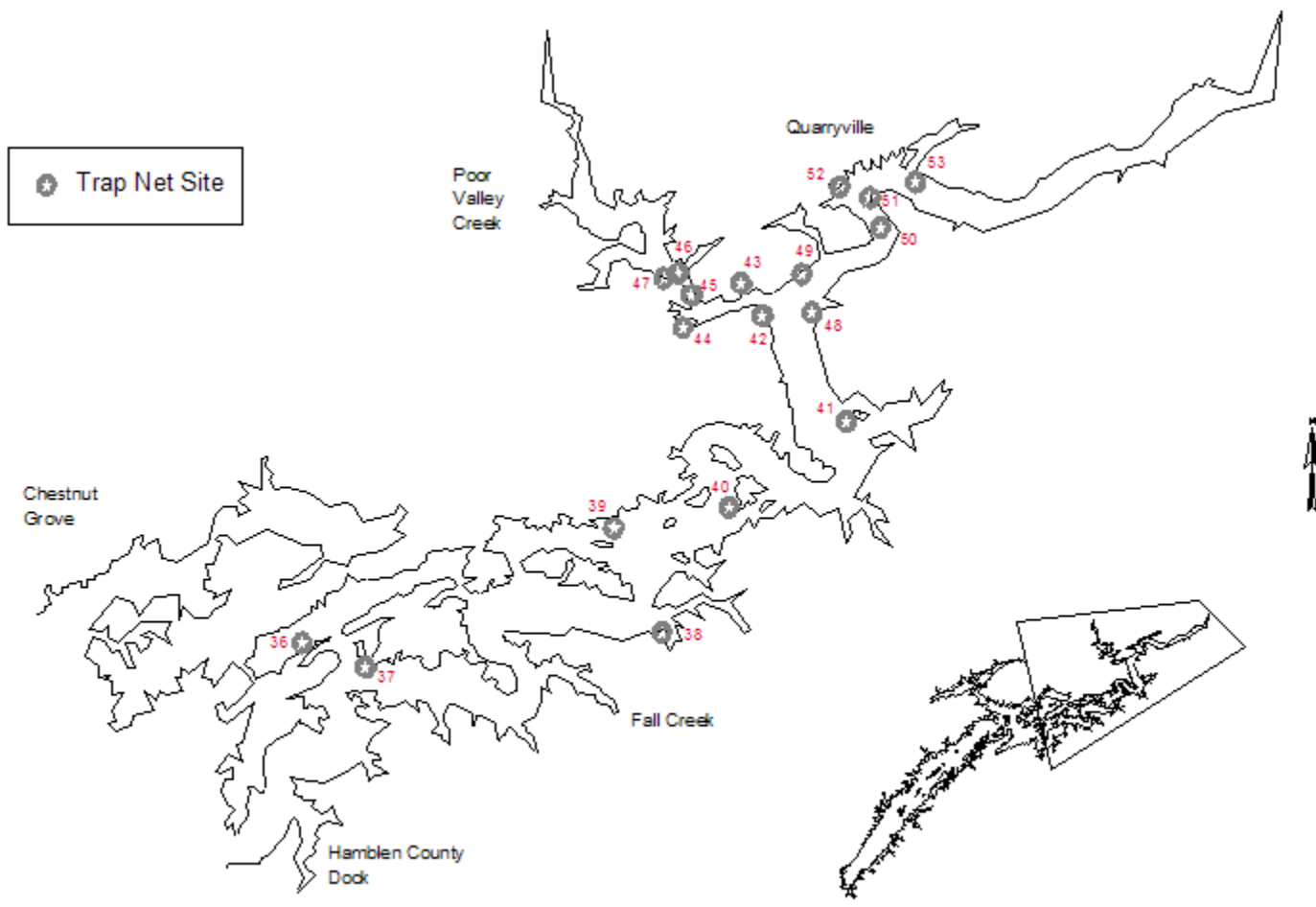


Figure 7. Trap net sites in the upper section of Cherokee Reservoir in 2009.

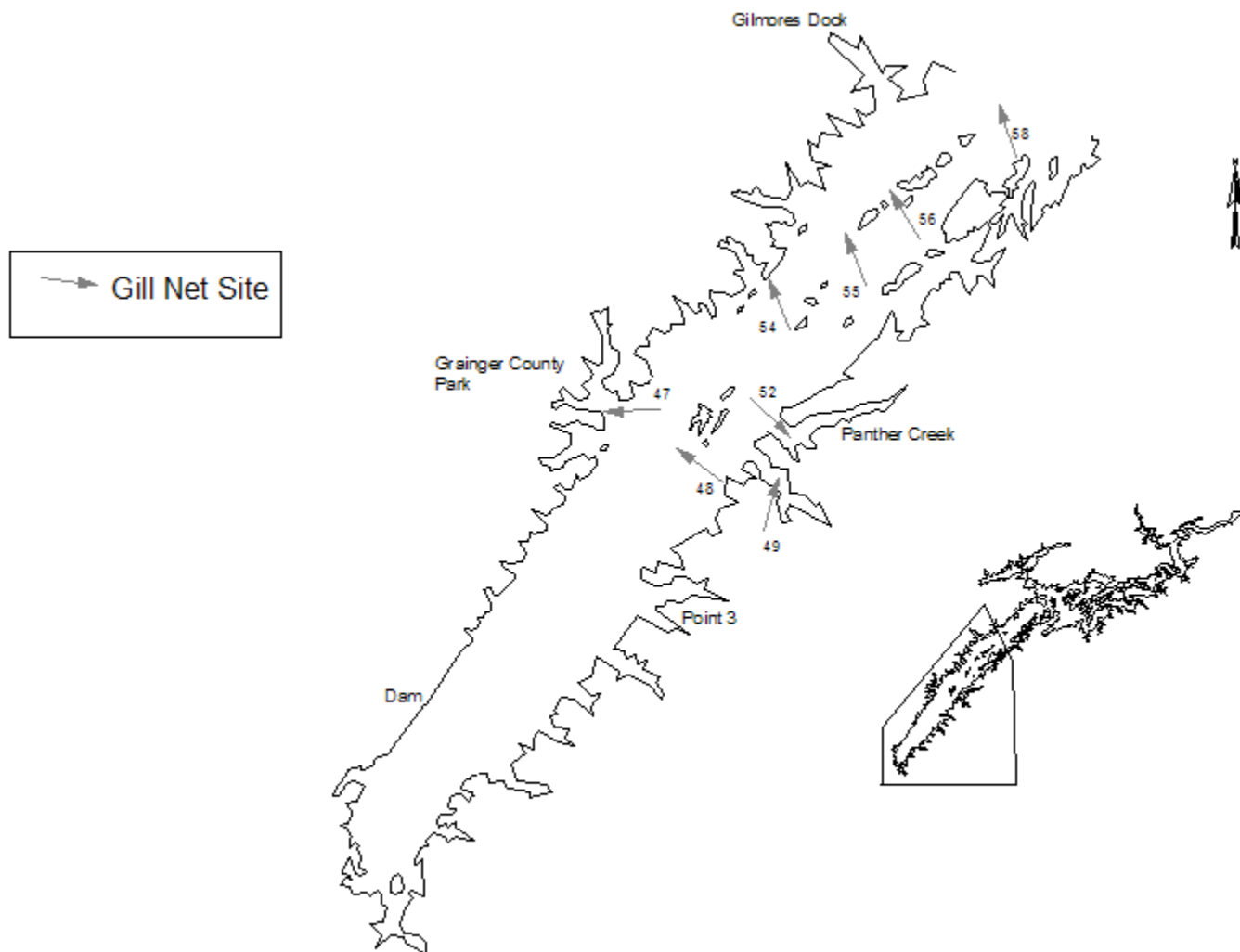


Figure 8. Summer shad gill net sites in the lower section of Cherokee Reservoir in 2009.

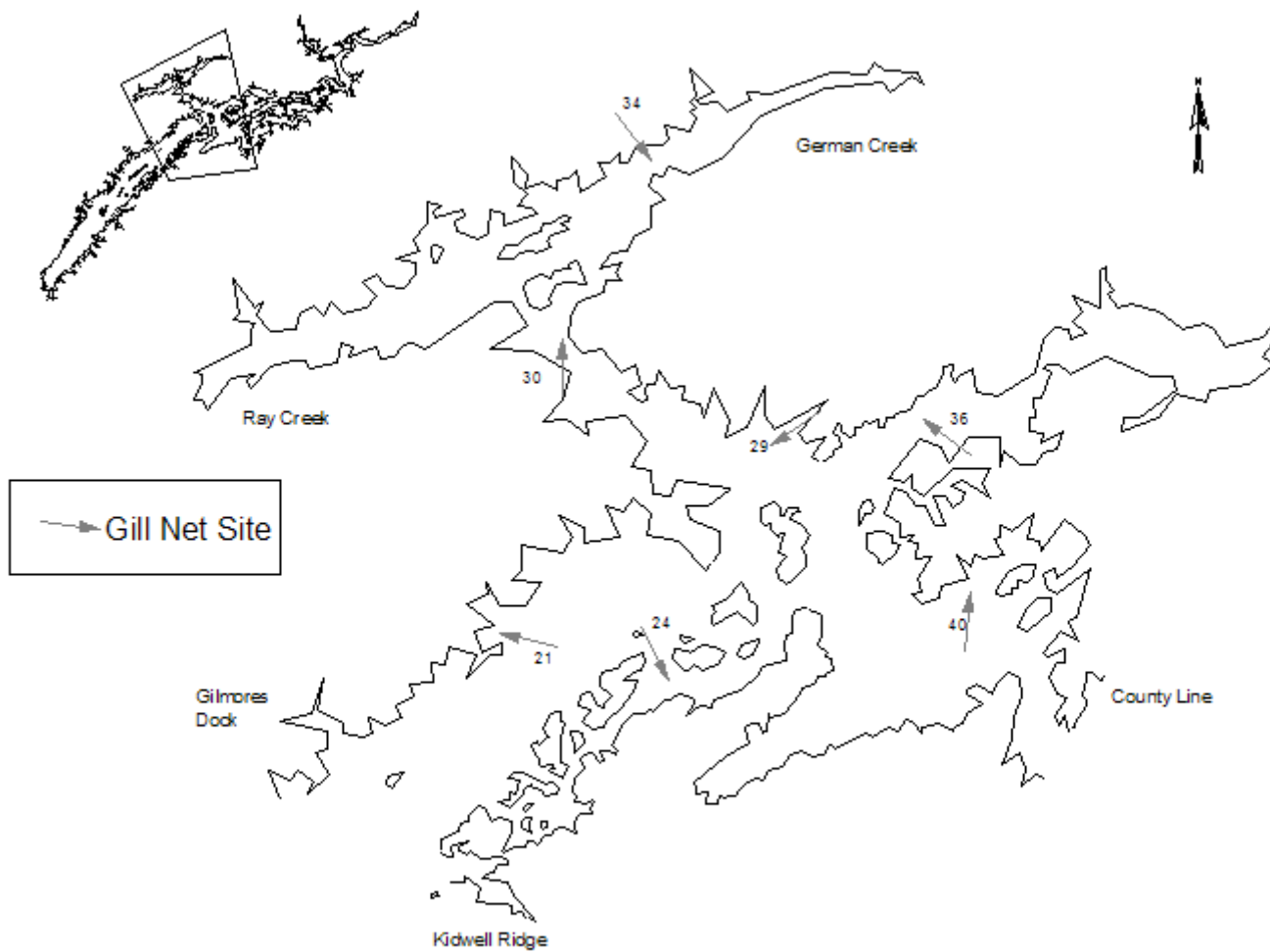


Figure 9. Summer shad gill net sites in the middle section of Cherokee Reservoir in 2009.

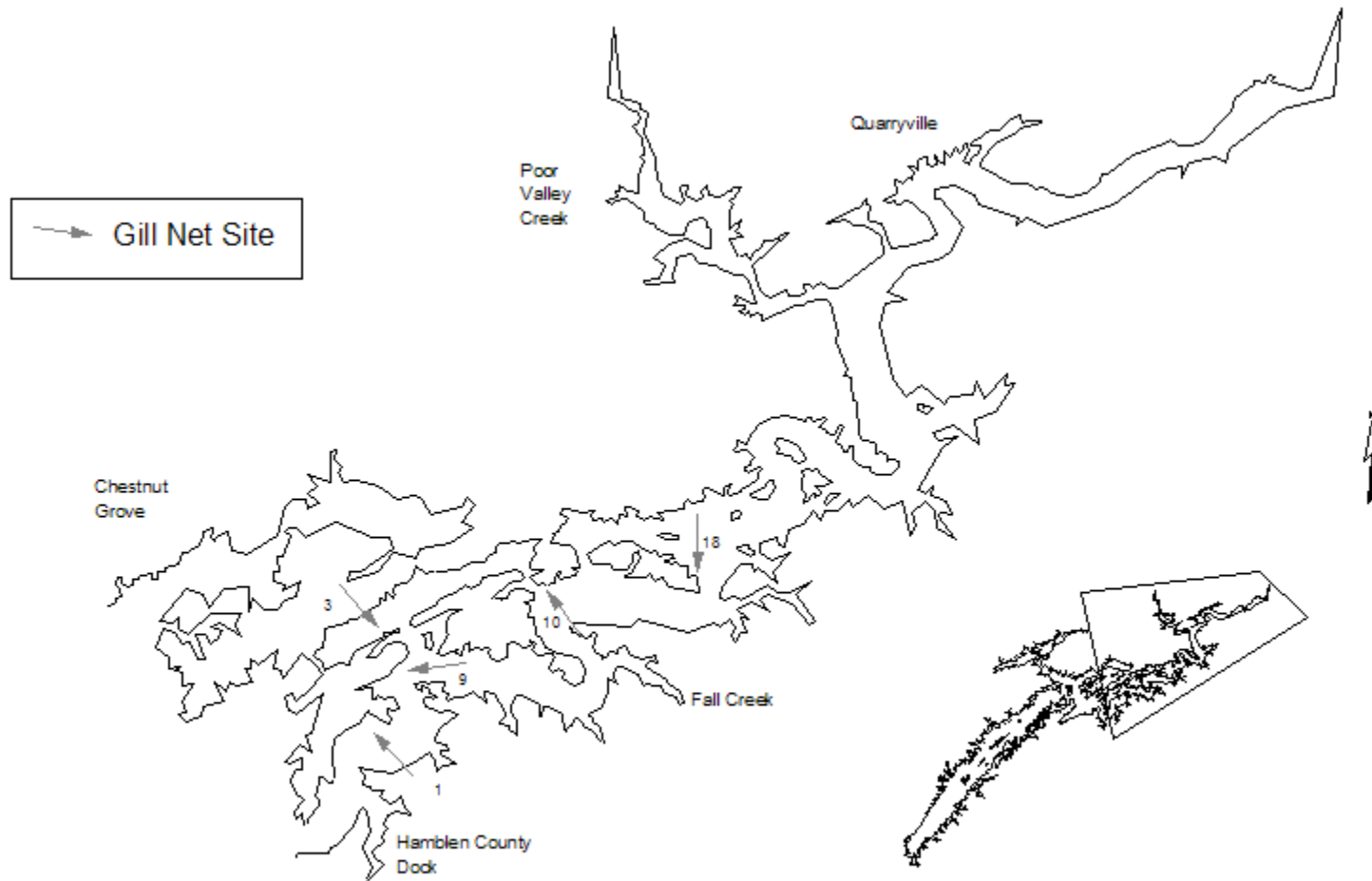


Figure 10. Summer shad gill netting sites in the upper section of Cherokee Reservoir in 2009.

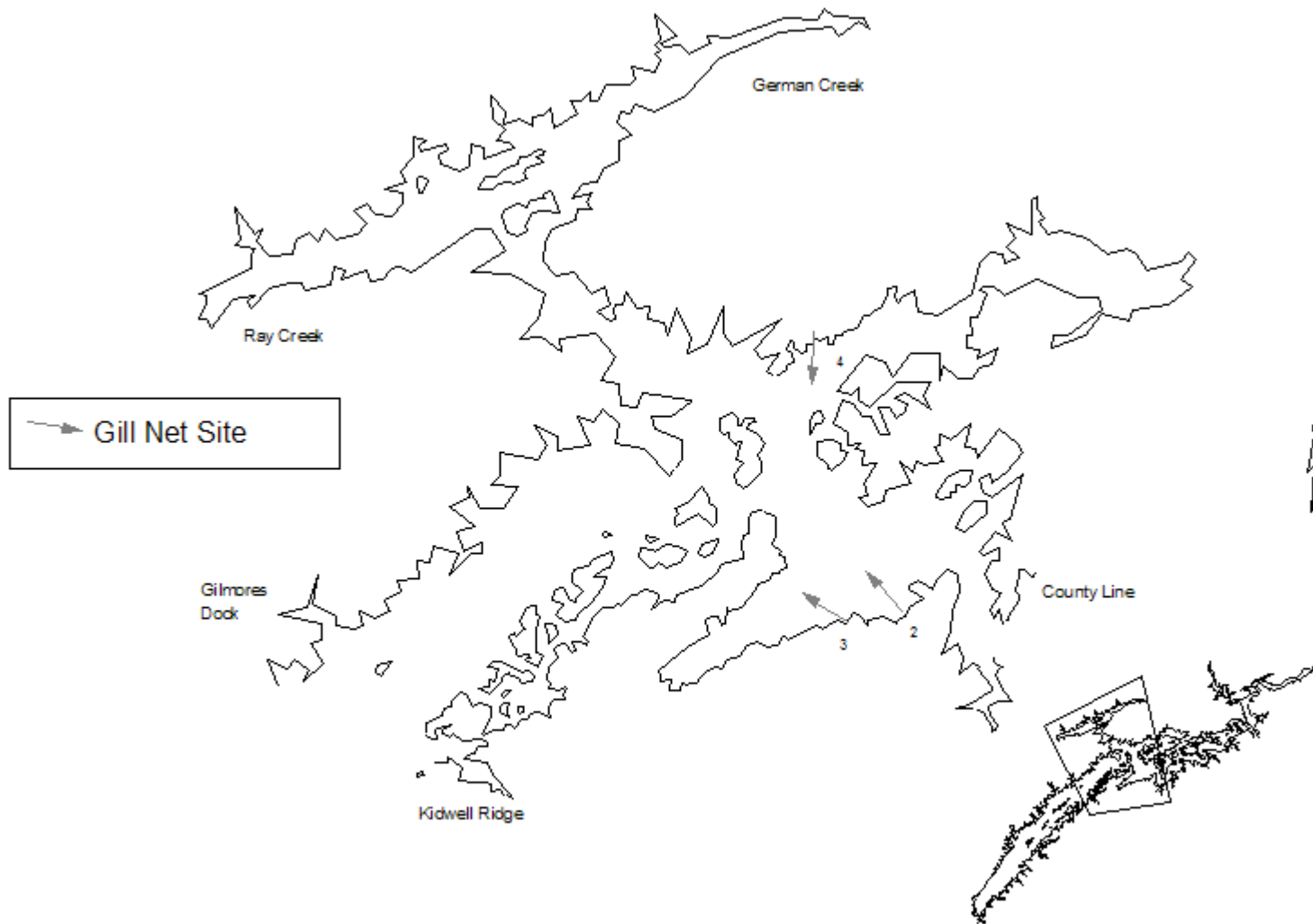


Figure 11. Winter gill net sites in the middle section of Cherokee Reservoir in 2009.

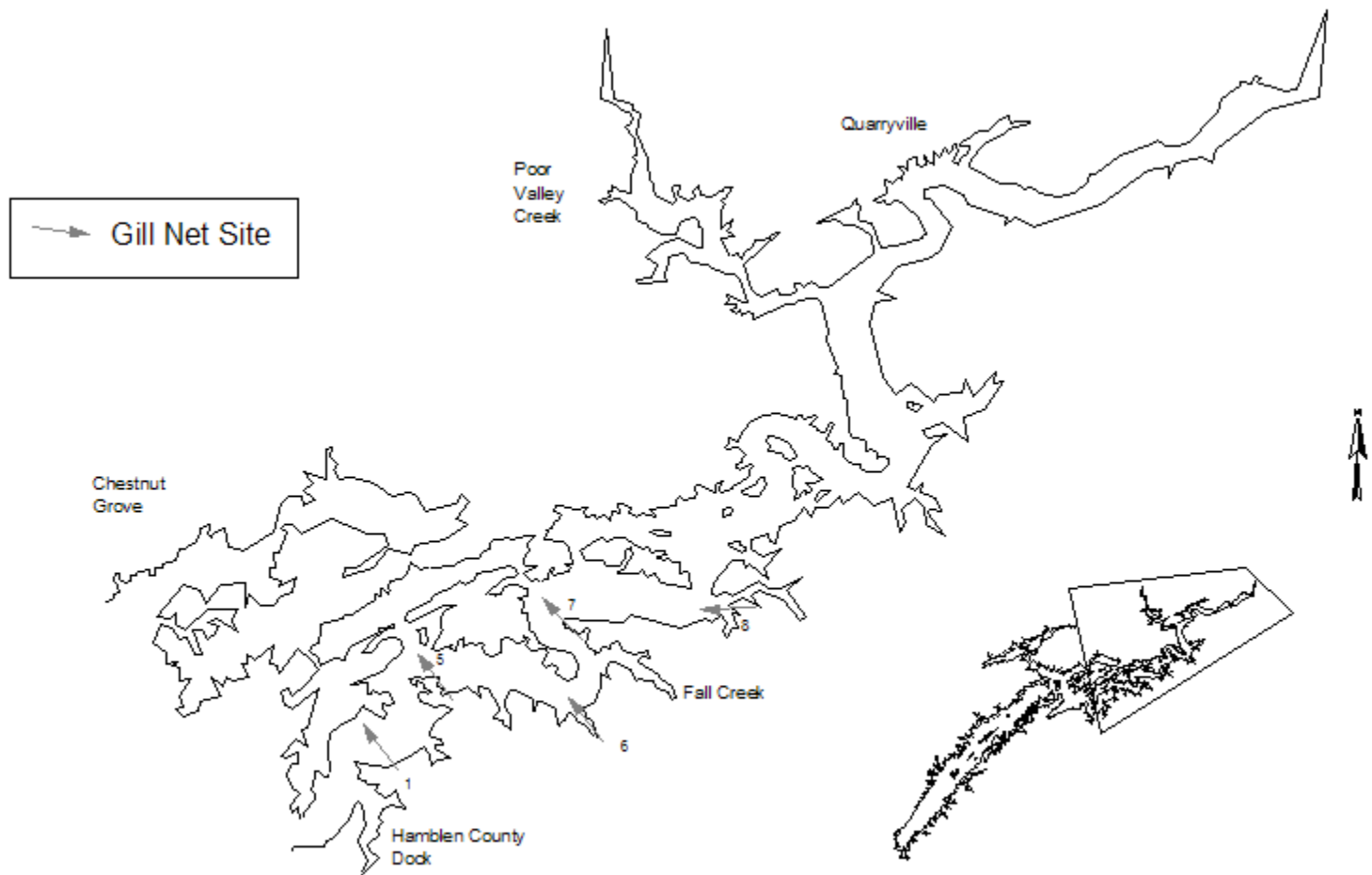


Figure 12. Winer gill netting sites in the upper section of Cherokee Reservoir in 2009.

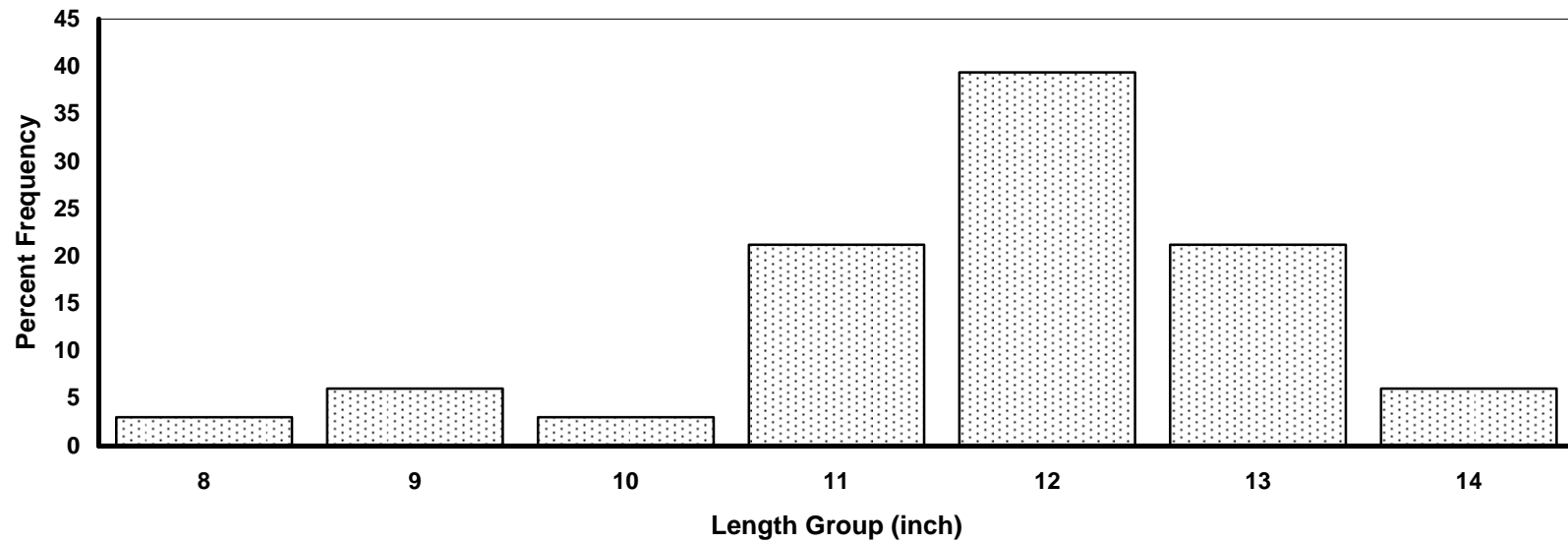


Figure 13. Cherokee Reservoir black crappie length frequency by percent for the 2009 electrofishing sample (n=33).

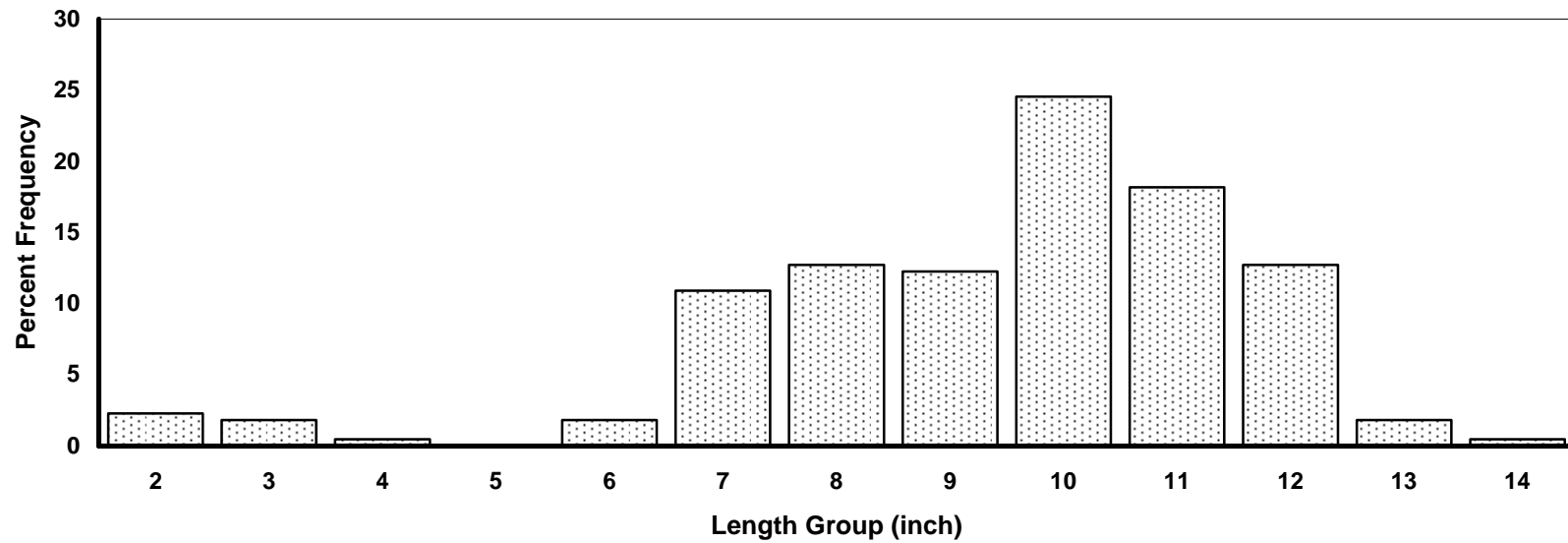


Figure 14. Cherokee Reservoir black crappie length frequency by percent for the 2009 trap net sample (n=220).

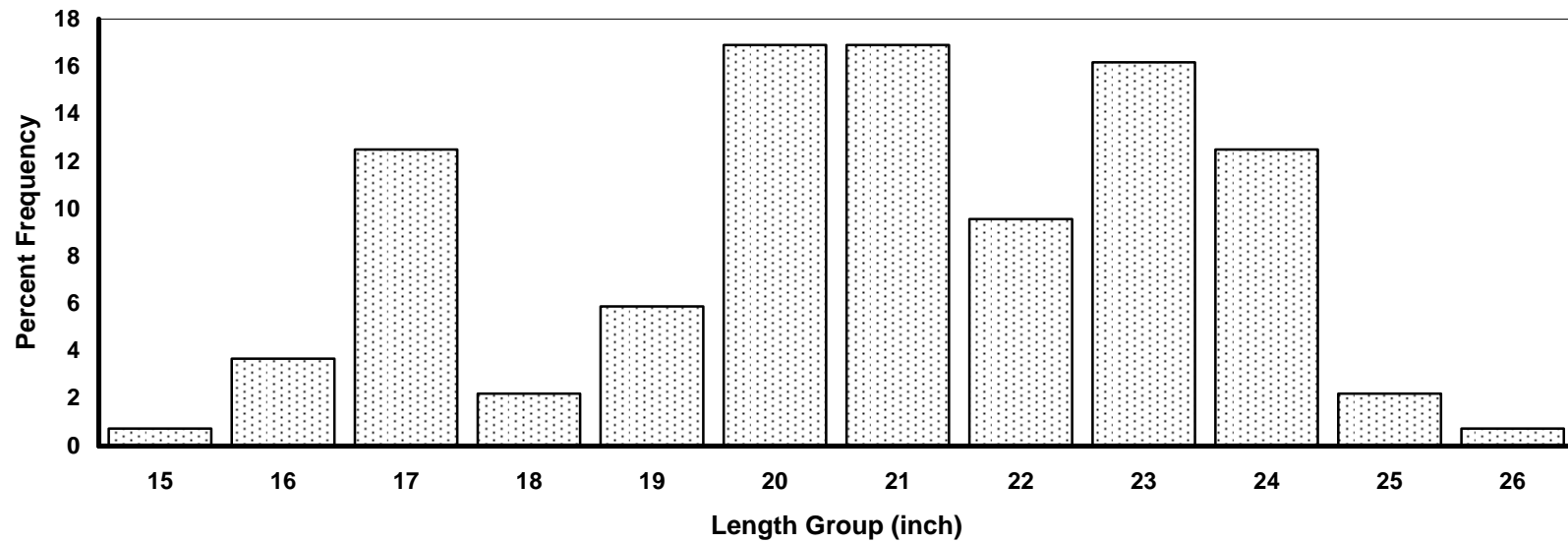


Figure 15. Cherokee Reservoir hybrid striped bass length frequency by percent for 2009 winter gill net sample (n=136).

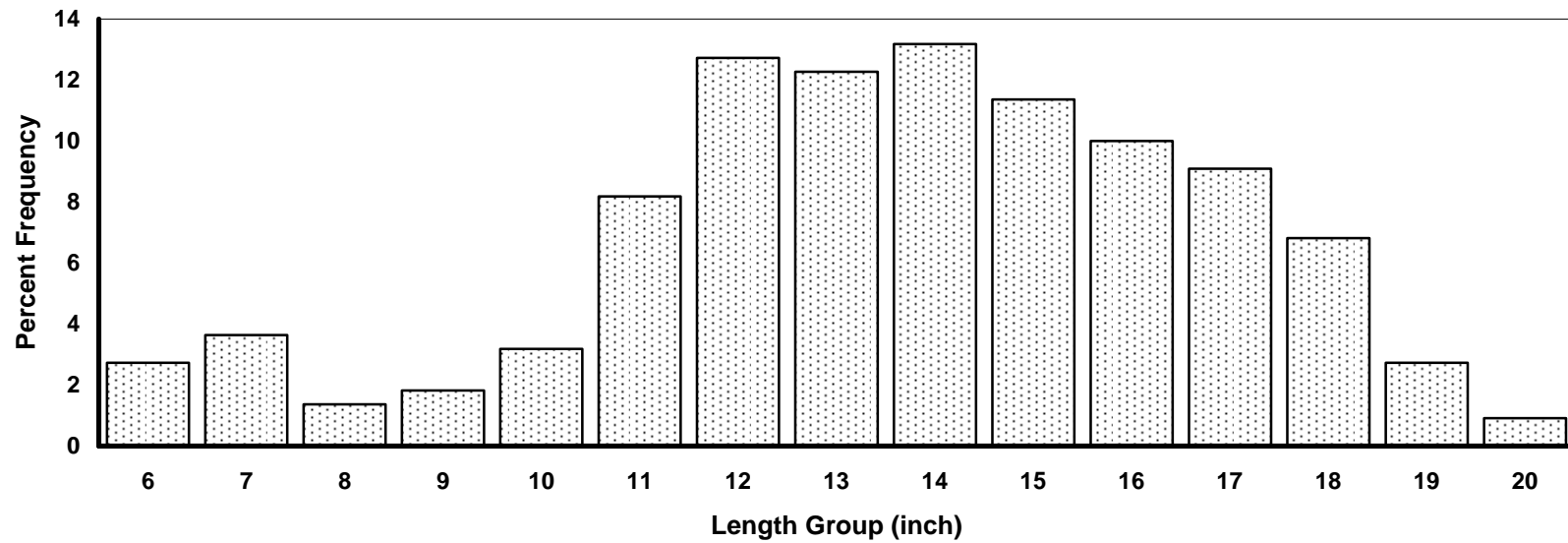


Figure 16. Cherokee Reservoir largemouth bass length frequency by percent for the 2009 electrofishing sample (n=220).

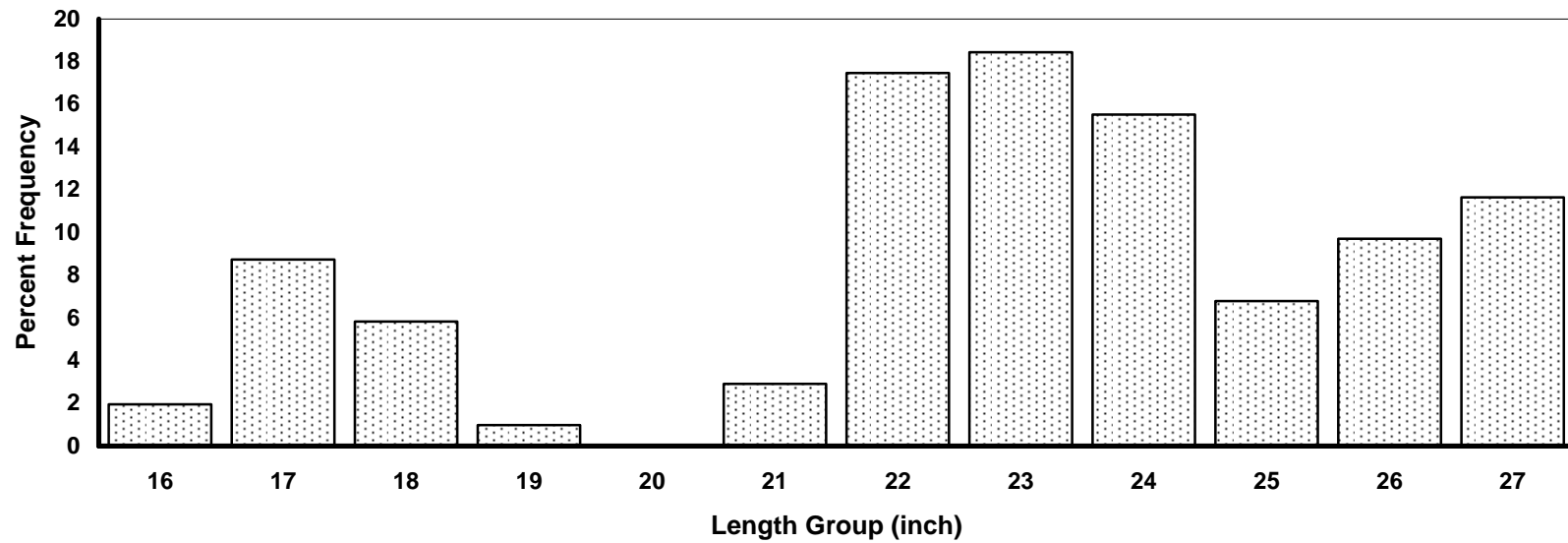


Figure 17. Cherokee Reservoir striped bass length frequency by percent for 2009 winter gill net sample (n=103).

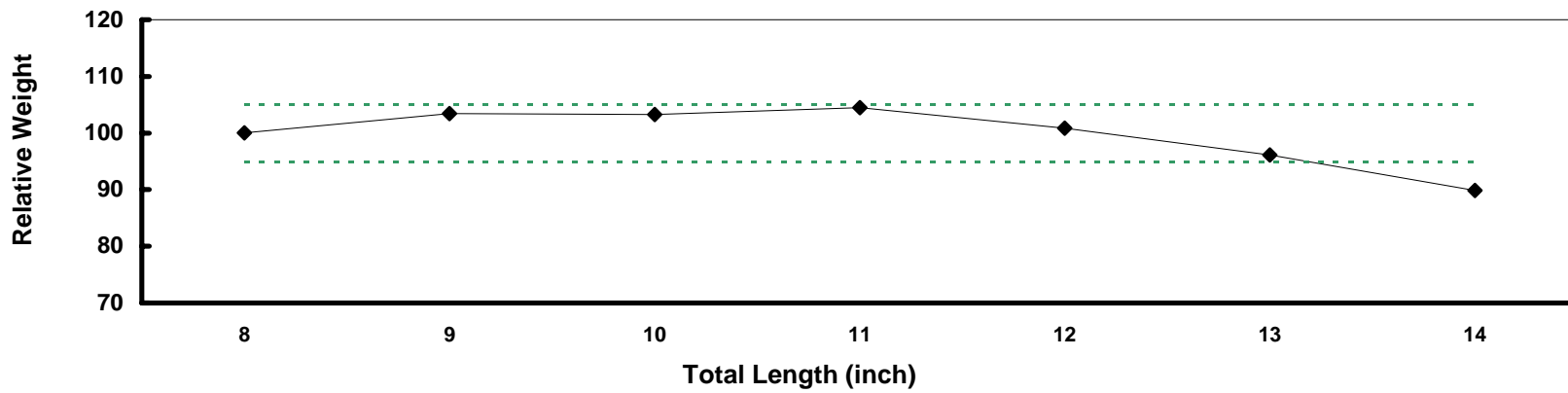


Figure 18. Cherokee Reservoir black crappie mean relative weight values from the 2009 electrofishing sample (n=33).

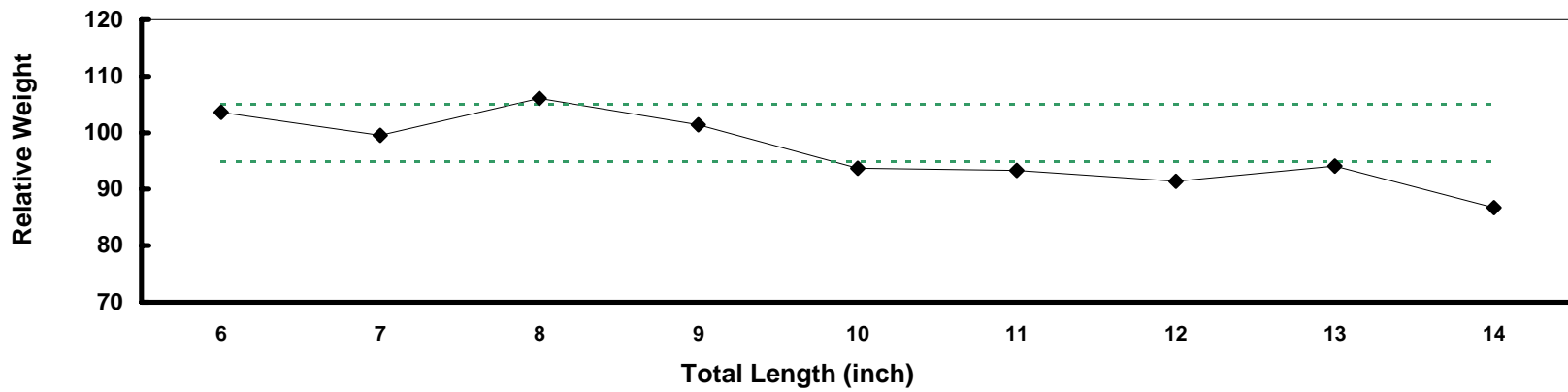


Figure 19. Cherokee Reservoir black crappie mean relative weight values from the 2009 trap net sample (n=207).

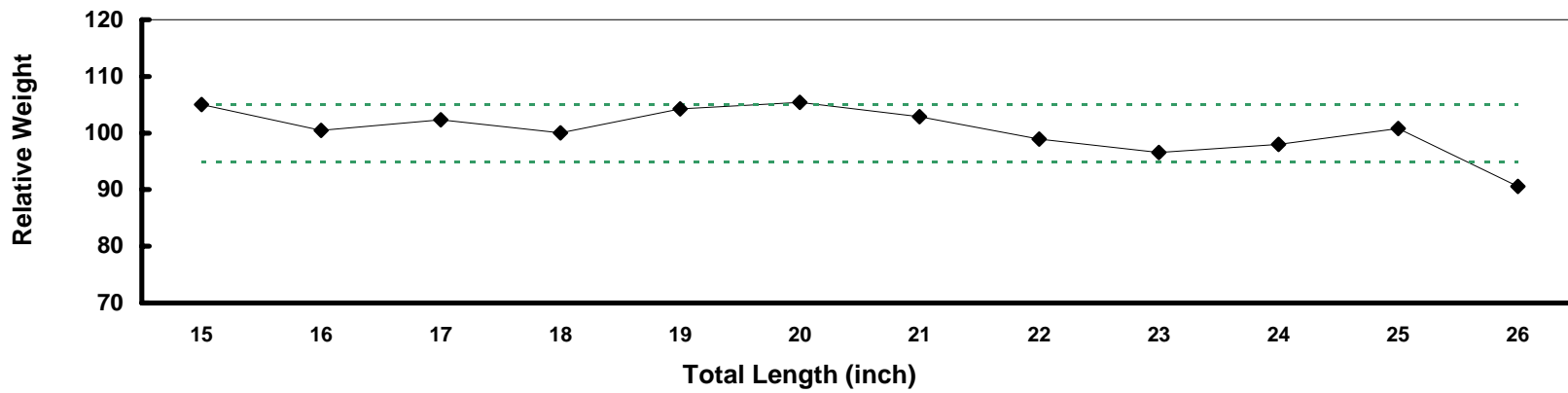


Figure 20. Cherokee Reservoir hybrid striped bass mean relative weight values from the 2009 winter gill net sample (n=136).

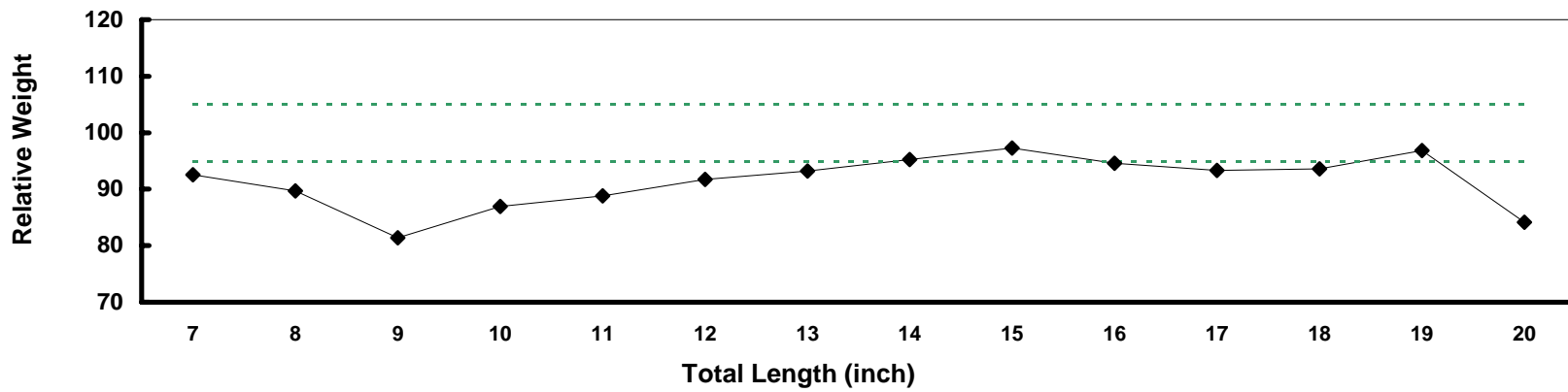


Figure 21. Cherokee Reservoir largemouth bass mean relative weight values from the 2009 electrofishing sample (n=207).

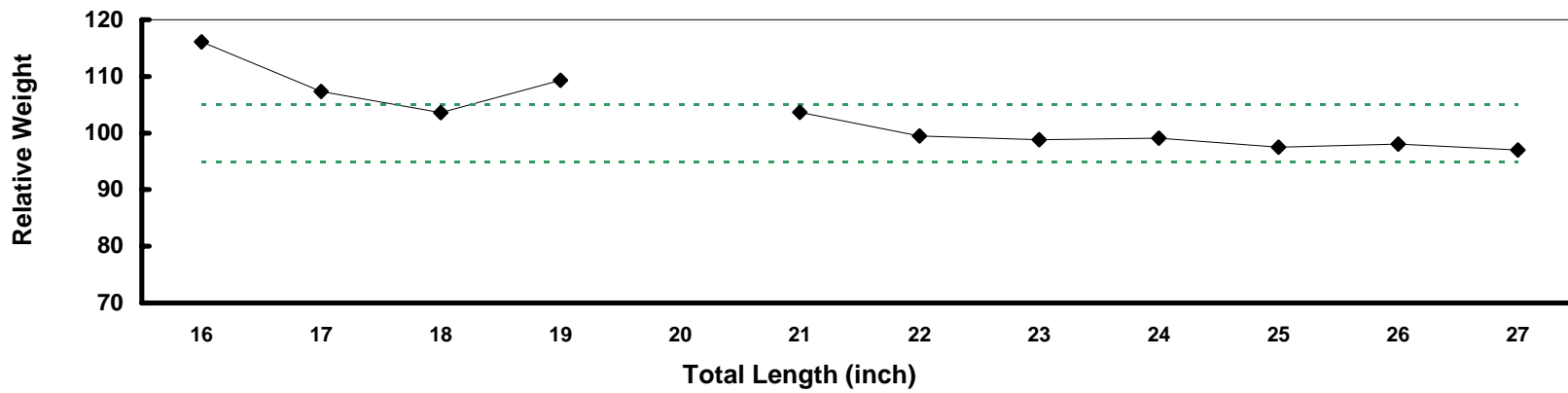


Figure 22. Cherokee Reservoir striped bass mean relative weight values from the 2009 winter gill net sample (n=103).

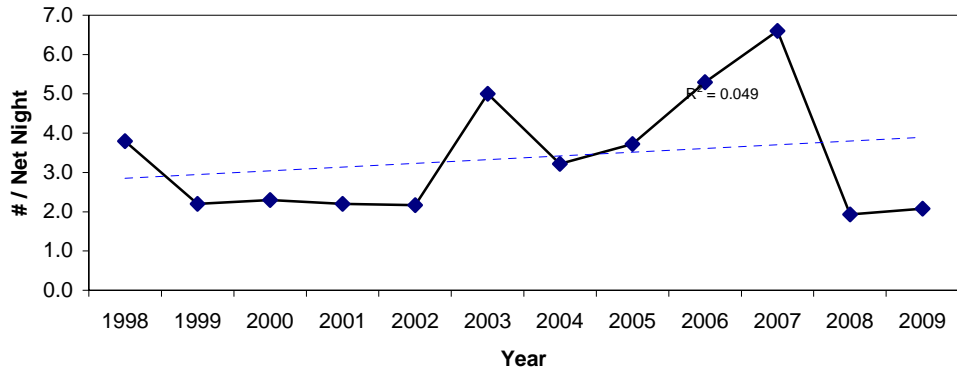


Figure 23. Cherokee Reservoir black crappie trap netting catch rates from 1998 to 2009.

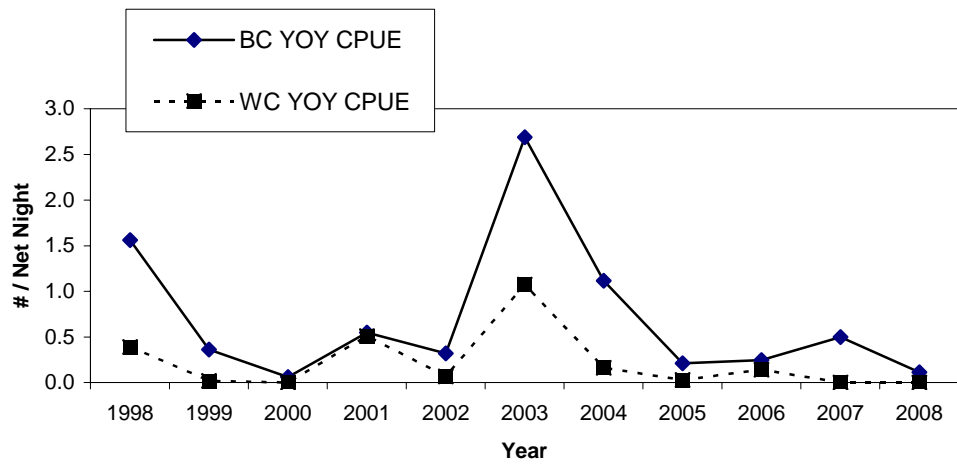


Figure 24. Cherokee Reservoir YOY crappie trap netting catch rates from 1998 to 2009.

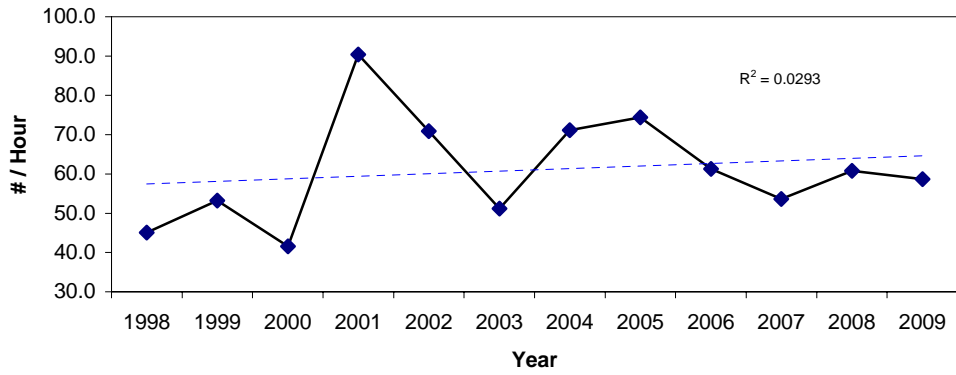


Figure 25. Cherokee Reservoir largemouth bass electrofishing catch rates from 1998 to 2009.

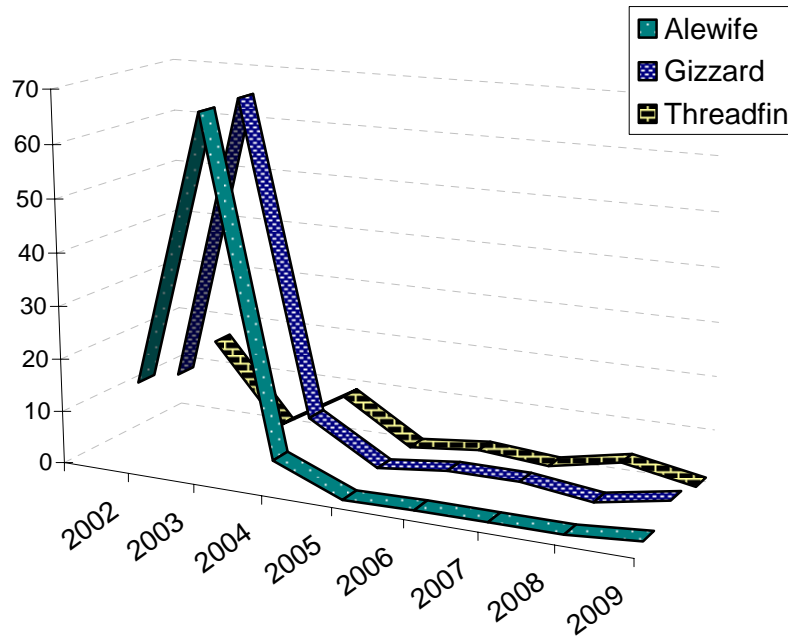


Figure 26. Geometric means for catch of shad in Cherokee Reservoir by summer gill netting from 2002 to 2009.

Figure 27. Cherokee Reservoir Water Quality at Holston River Mile 55 - July 7, 2009

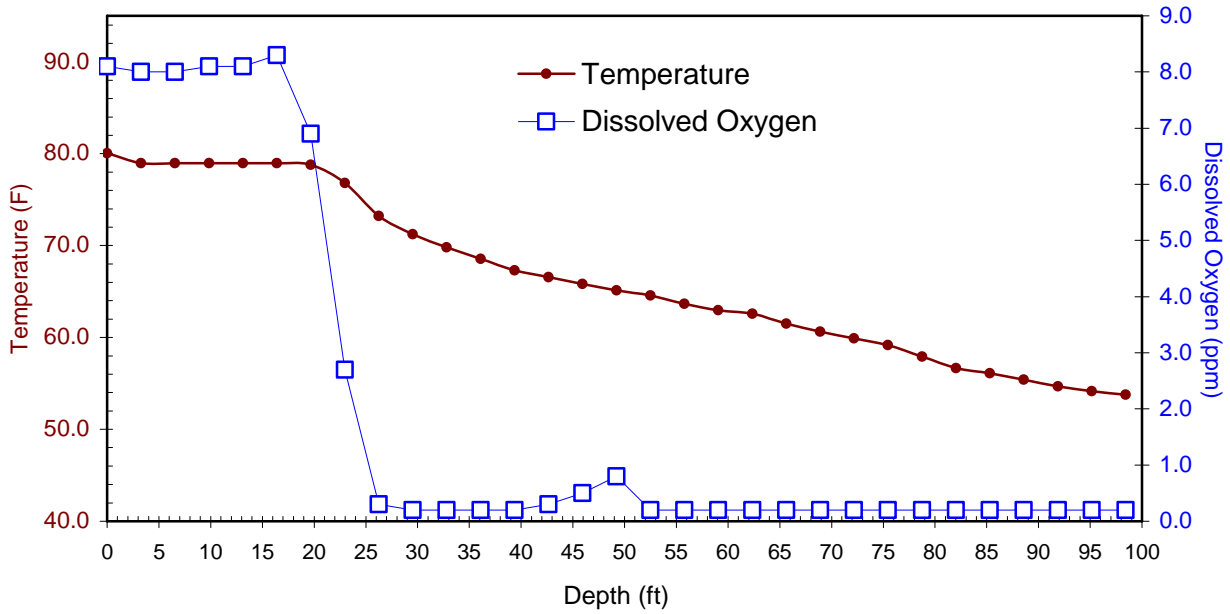


Figure 28. Cherokee Reservoir Water Quality at Holston River Mile 66 - July 7, 2009

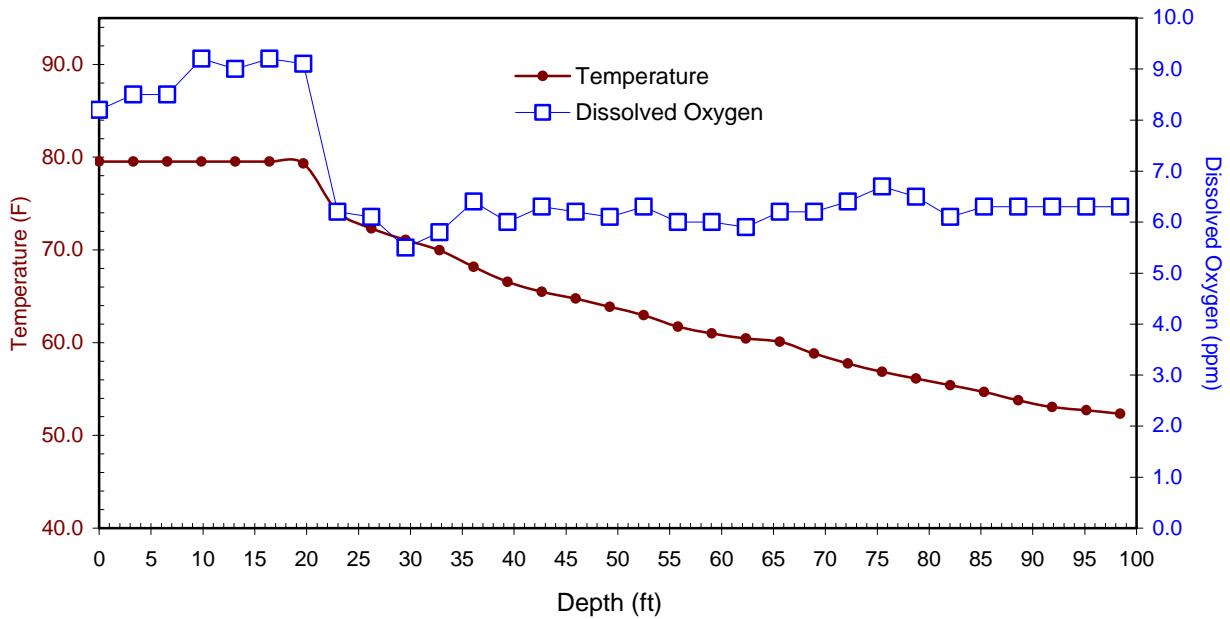


Figure 29. Cherokee Reservoir Water Quality at Holston River Mile 75 - July 7, 2009

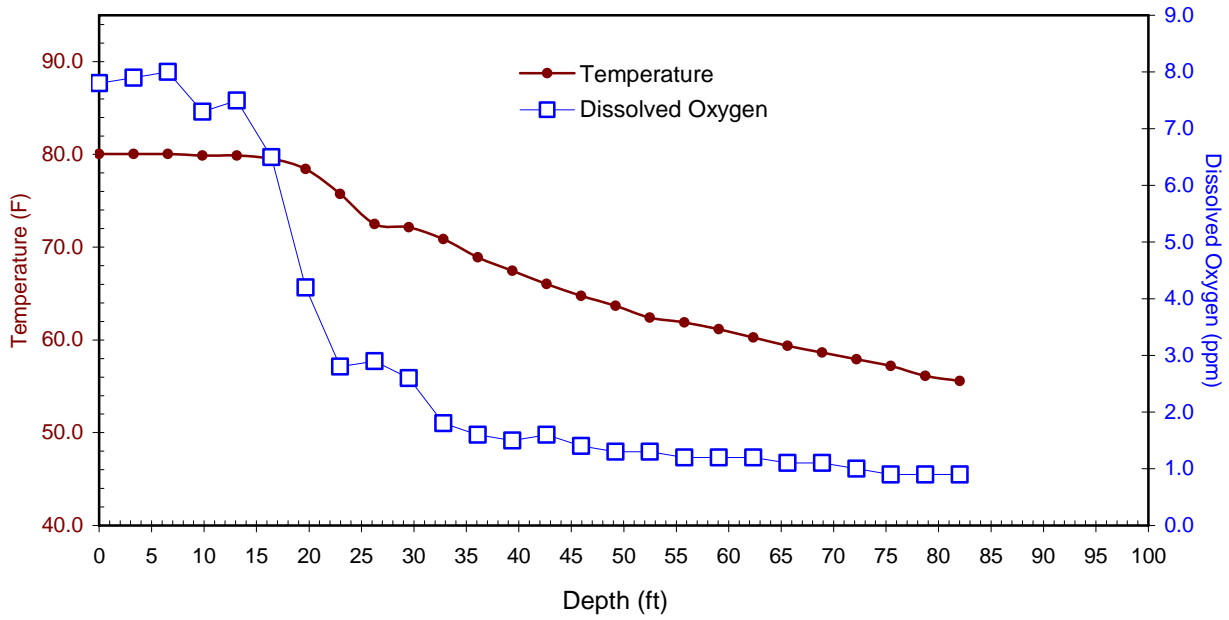


Figure 30. Cherokee Reservoir Water Quality at Holston River Mile 55 - Sept 3, 2009

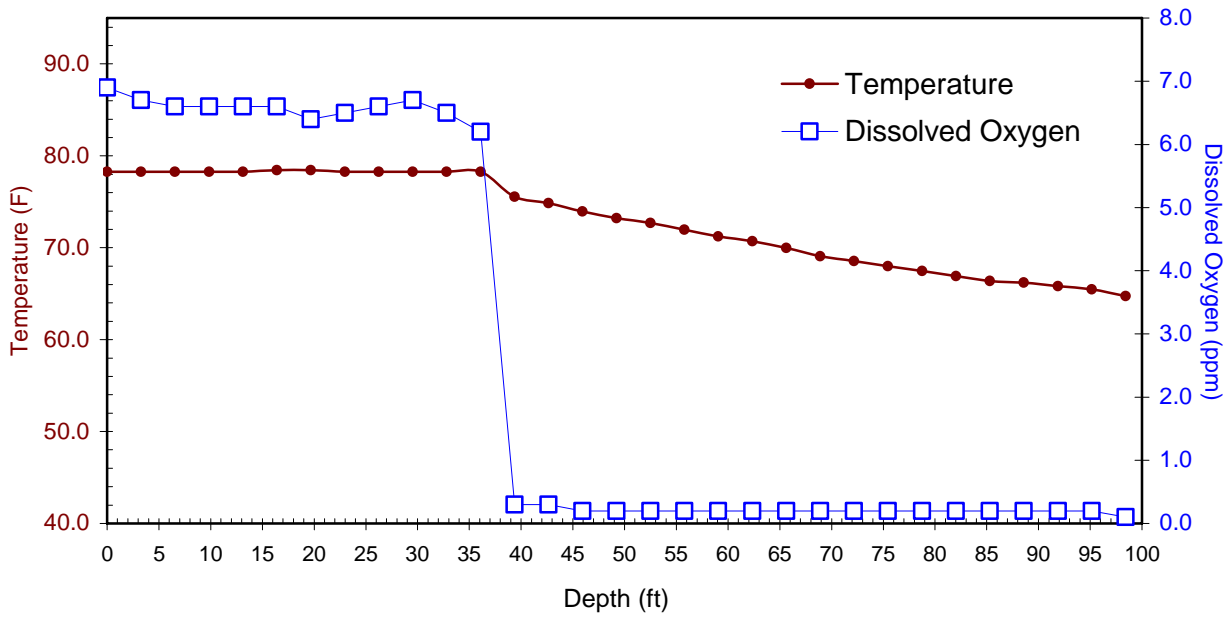


Figure 31. Cherokee Reservoir Water Quality at Holston River Mile 66 - Sept 3, 2009

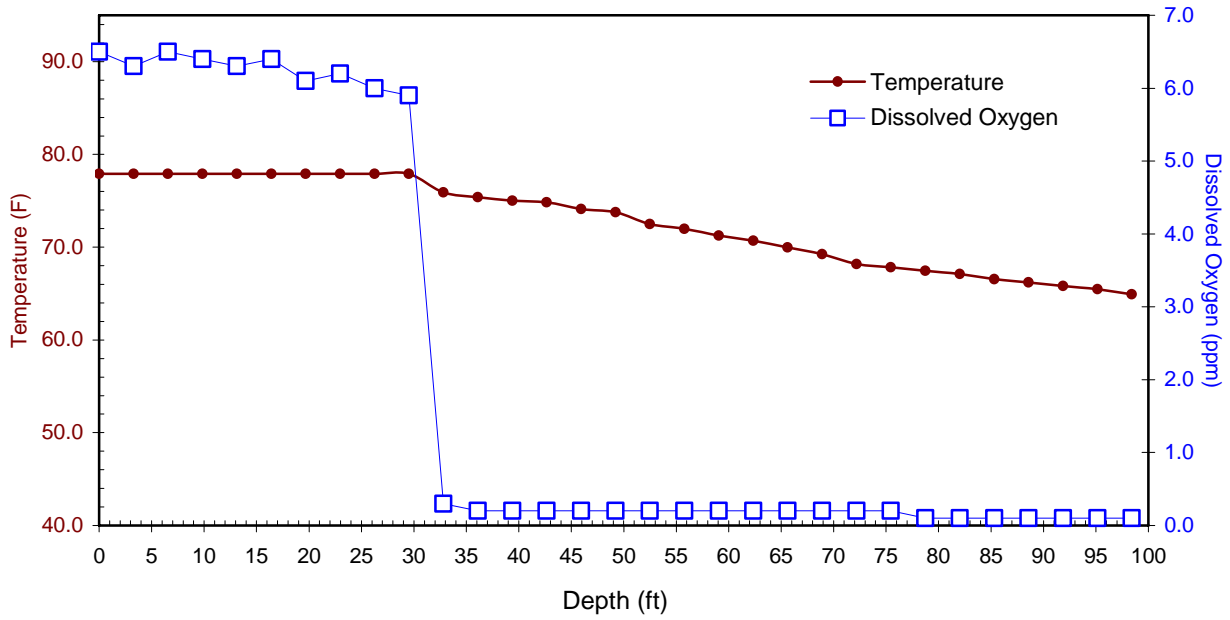


Figure 32. Cherokee Reservoir Water Quality at Holston River Mile 75 - Sept 3, 2009

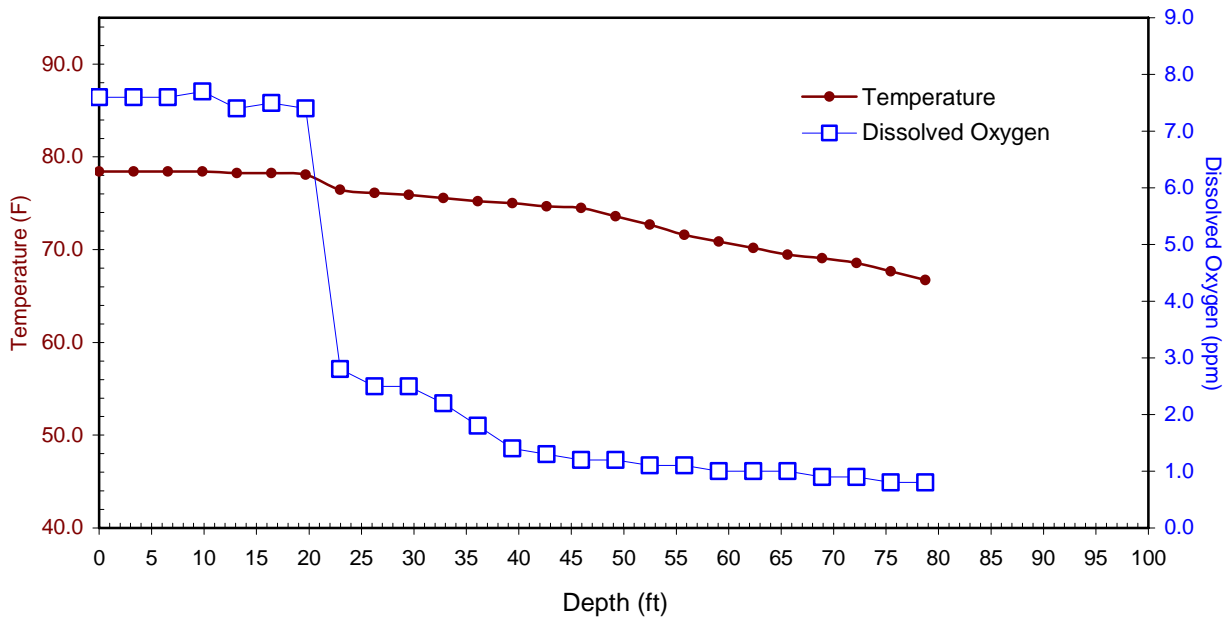


Figure 33. Cherokee Reservoir Water Quality at Holston River Mile 83 - Sept 3, 2009

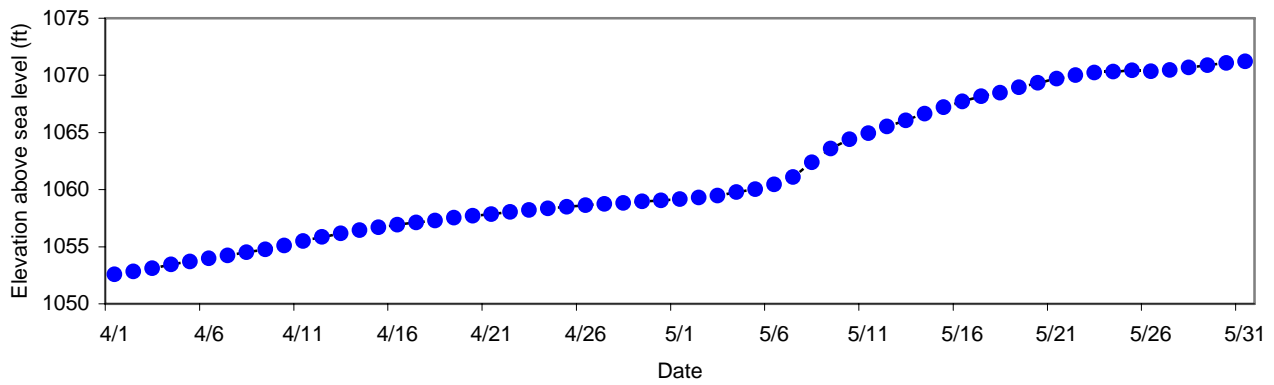
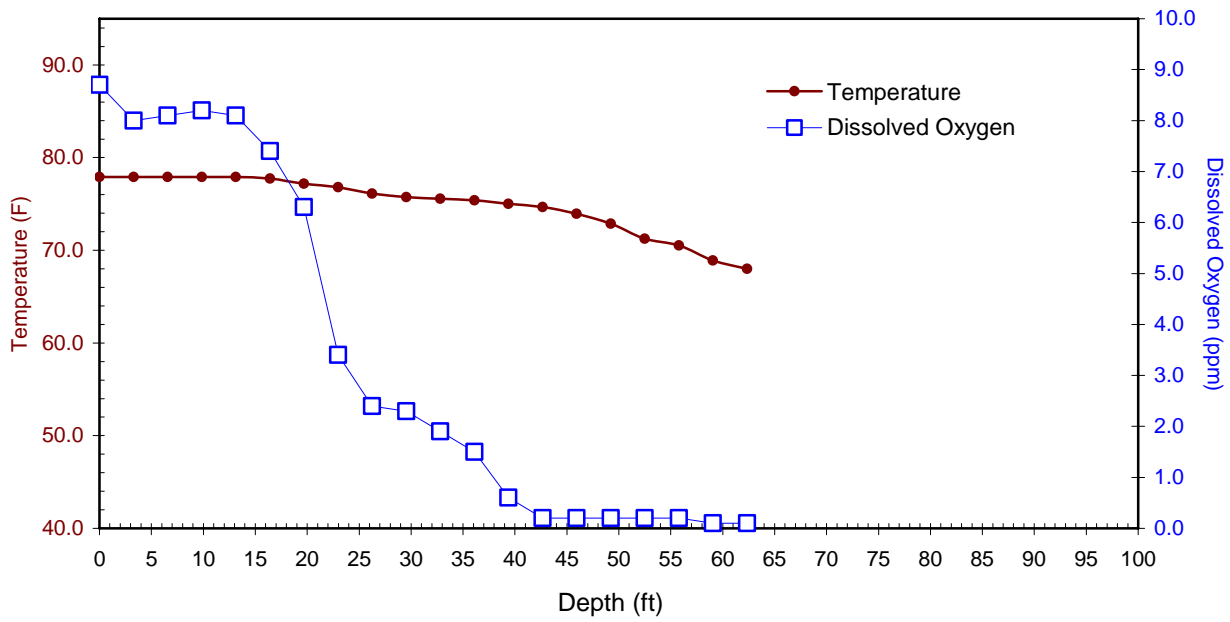


Figure 34. Cherokee Reservoir's 2009 April and May water levels (TVA data).

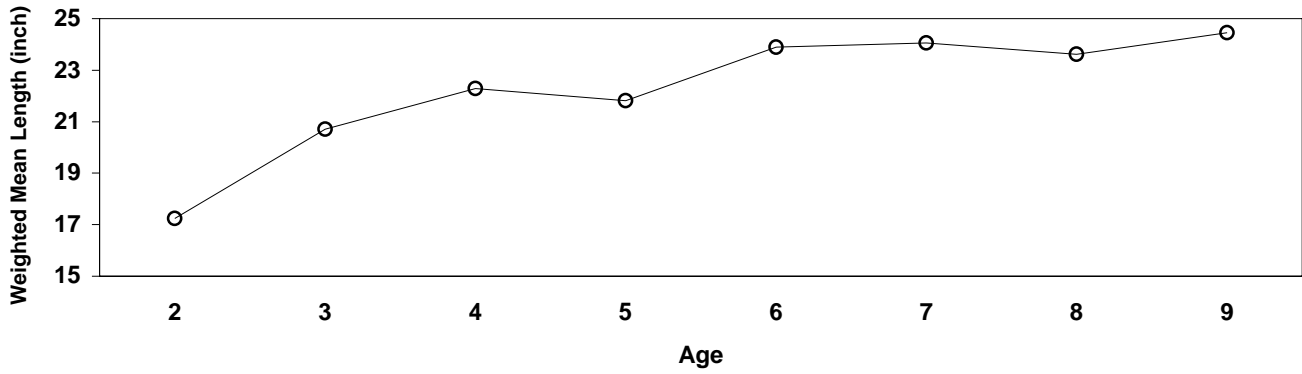


Figure 35. Weighted mean length at age of hybrid striped bass from Cherokee Reservoir's 2009 winter gill net sample.

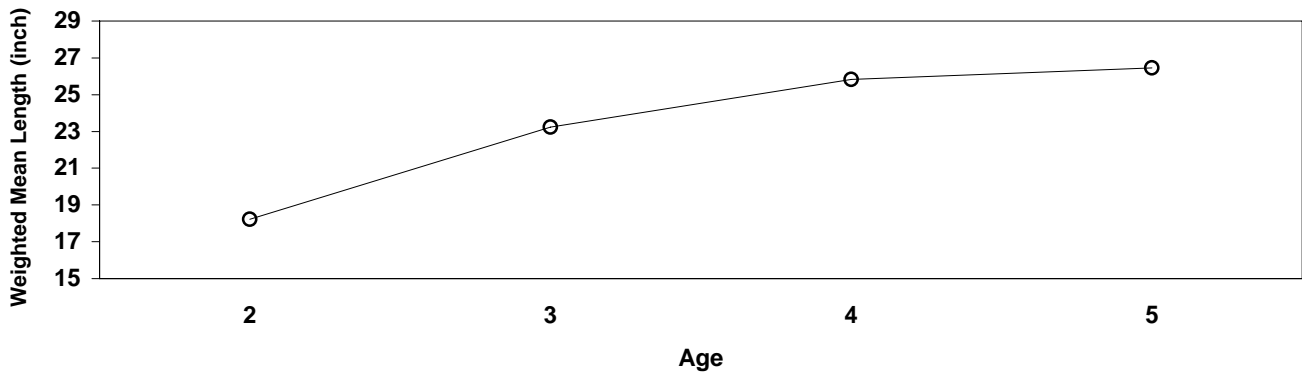


Figure 36. Weighted mean length at age of striped bass from Cherokee Reservoir's 2009 winter gill net sample.