Melton Hill Reservoir

Annual Report 2008

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Melton Hill Reservoir - 2008

Description

Area: 5,690 acres **Shoreline:** 170 miles

Counties: Anderson, Knox, and Loudon

Total Fishing Effort in 2008: 87,914 hours **Total Value by Anglers in 2008:** $382,190.00

Black Bass

Angling Pressure	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
All Black Bass (hrs)	-	-	-	82,855	-	31,871	42,403	-	23,804	36,214	43,429
All Black Bass (hrs/acre)	-	-	-	14.56	-	5.60	7.45	-	4.18	6.36	7.63
Any Black Bass (hrs)	-	-	-	80,289	-	15,355	7,350	-	23,804	36,214	32,602
Any Black Bass (hrs/acre)	-	-	-	14.11	-	2.70	1.29	-	4.18	6.36	5.73
Largemouth Bass (hrs)	-	-	-	1,645	-	15,424	32,341	-	0	0	9,882
Largemouth Bass (hrs/acre)	-	-	-	0.29	-	2.71	5.68	-	0.00	0.00	1.74
Smallmouth Bass (hrs)	-	-	-	921	-	1,092	2,712	-	0	0	945
Smallmouth Bass (hrs/acre)	-	-	-	0.16	-	0.19	0.48	-	0.00	0.00	0.17
Spotted Bass (hrs)	-	-	-	0	-	0	0	-	0	0	0
Spotted Bass (hrs/acre)	-	-	-	0.00	-	0.00	0.00	-	0.00	0.00	0.00
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	-	-	-	$155,490	-	$82,540	$140,010	-	$110,260	$196,560	$136,972
Any Black Bass	-	-	-	$150,820	-	$35,330	$19,340	-	$110,260	$196,560	$102,462
Largemouth Bass	-	-	-	$2,710	-	$43,400	$110,470	-	$0	$0	$31,316
Smallmouth Bass	-	-	-	$1,960	-	$3,810	$10,200	-	$0	$0	$3,194
Spotted Bass	-	-	-	$0	-	$0	$0	-	$0	$0	$0

Largemouth Bass

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Recruitment (electrofishing)											
Substock CPUE	13.40	6.80	-	26.80	33.70	13.70	19.00	40.70	11.30	9.30	19.41
Density (electrofishing)											
PSD	42	37	-	36	49	51	72	32	40	58	46
RSD (preferred)	-	-	-	5	8	8	17	9	10	8	9
CPUE (total)	29.2	21.4	-	122.0	120.0	80.0	69.3	123.3	98.3	153.3	90.8
CPUE ≥ Stock	15.8	14.6	-	95.2	86.3	66.3	50.3	82.6	87.0	144.0	71.3
CPUE ≥ MLL (14-inches)	-	-	-	7.3	11.7	8.3	16.3	11.7	11.0	22.3	12.7
Growth (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	5.6	-	5.6
Length Age-3	-	-	-	-	-	-	-	-	9.5	-	9.5
Condition (spring electrofishing)											
Stock	87.7	83.7	-	81.3	79.3	73.9	91.1	87.4	85.0	86.0	83.9
Quality	83.8	86.5	-	85.1	80.0	79.4	89.0	87.0	87.1	86.3	84.9
Preferred	84.5	86.4	-	89.0	83.2	83.0	92.1	87.9	87.3	89.3	87.0
Memorable	91.5	84.5	-	-	-	78.7	95.5	77.7	83.9	-	85.3
Mortality (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	47.0%	-	47.0%
Fishing Success (creel)											
Catch Rate (intended)	-	-	-	1.21	-	0.22	0.50	-	-	-	0.64
Harvest Rate (intended)	-	-	-	0.00	-	0.02	0.12	-	-	-	0.05
% Released	-	-	-	98.4%	-	83.6%	82.0%	-	99.4%	95.0%	91.7%
Mean Weight	-	-	-	1.33	-	1.48	2.45	-	2.76	2.29	2.06

Fishery Forecast: Excellent recruitment will continue to maintain the density of the fishery for the next several years. The electrofishing catch rate of greater than 14-inch largemouth is less than ideal.

Management Recommendations: A 14-inch creel limit was imposed in 2002 in response to the very low catch rates of preferred size largemouth bass. It appears that this regulation has had little effect on improving the size structure of the population. The TWRA is in the process of evaluating possible solutions to this issue.

Smallmouth Bass

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Recruitment (electrofishing)											
Substock CPUE	1.80	0.60	-	0.80	1.7	1.30	0.00	2.00	1.00	0.30	1.06
Density (electrofishing)											
PSD	44	-	-	75	67.0	70	100	63	45	77	68
RSD (preferred)	-	-	-	25	33	50	-	11	10	36	28
CPUE (preferred)	1.2	0.0	-	1.0	1.1	0.7	0.0	3.3	2.3	3.0	1.4
CPUE (memorable)	0.0	0.0	-	0.0	0.3	0.7	0.7	0.0	0.0	0.3	0.2
CPUE (trophy)	0.0	0.0	-	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
CPUE (total)	5.4	0.8	-	2.8	5.1	4.7	0.3	8.3	7.7	7.7	4.8
CPUE ≥ Stock	3.6	0.2	-	2.0	3.4	3.4	0.3	6.3	6.7	7.4	3.7
CPUE ≥ Preferred	1.2	0.0	-	1.0	1.4	1.4	1.0	3.3	2.3	3.3	1.7
CPUE ≥ MLL (18-inches)	-	-	-	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.1
Growth (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
Condition (spring electrofishing)											
Stock	86.5	-	-	76.3	73.6	67.9	87.7	82.4	86.5	82.4	80.4
Quality	83.9	-	-	81.0	74.7	69.8	-	81.7	81.8	78.5	78.8
Preferred	87.4	79.3	-	76.0	77.1	75.1	-	80.5	79.5	76.6	78.9
Memorable	-	-	-	-	67.2	74.8	-	-	-	79.4	73.8
Mortality (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Fishing Success (creel)											
Catch Rate (intended)	-	-	-	0.52	-	0.30	0.21	-	-	-	0.34
Harvest Rate (intended)	-	-	-	0.06	-	0.00	0.06	-	-	-	0.04
% Released	-	-	-	93.4%	-	98.3%	72.2%	-	100.0%	100.0%	92.8%
Mean Weight	-	-	-	3.50	-	2.40	2.65	-	-	-	2.85

Fishery Forecast: Smallmouth make up only a small percentage of the black bass in the reservoir. This trend should continue due to the limited amount of smallmouth recruitment.

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

Spotted **Bass**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Recruitment (electrofishing)											
Substock CPUE	1.60	0.00	-	1.00	0.0	0.70	0.30	0.00	0.70	0.00	0.48
Density (electrofishing)											
PSD	-	-	-	17	-	-	29	100	-	33	45
RSD (preferred)	-	-	-	-	-	-	-	-	-	17	17
CPUE (total)	1.6	1.4	-	4.0	2.3	2.3	2.7	0.3	2.0	2.0	2.1
CPUE ≥ Stock	0.0	1.4	-	3.0	2.3	1.6	2.4	0.3	1.3	2.0	1.6
Growth (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
Condition (spring electrofishing)											
Stock	84.2	87.8	-	85.1	82.5	84.1	91.9	-	96.6	85.4	87.2
Quality	-	93.2	-	90.4	-	71.8	80.6	101.2	-	94.0	88.5
Preferred	-	-	-	-	-	82.9	-	-	-	88.1	85.5
Mortality (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Fishing Success (creel)											
Catch Rate (intended)	-	-	-	-	-	-	-	-	-	-	-
Harvest Rate (intended)	-	-	-	-	-	-	-	-	-	-	-
% Released	-	-	-	100.0%	-	-	100.0%	-	100.0%	100.0%	100.0%
Mean Weight	-	-	-	-	-	-	-	-	-	-	-

Fishery Forecast: Although this species is not overly abundant, anglers are encouraged to harvest them for the table since 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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Density (electrofishing)											
PSD	-	-	-	-	-	-	-	80	100	100	93
RSD (preferred)	-	-	-	-	-	-	-	5	90	86	60
CPUE (total)	-	-	-	-	-	-	-	6.7	3.3	2.3	4.1
CPUE ≥ Stock	-	-	-	-	-	-	-	6.7	3.3	2.3	4.1
CPUE ≥ MLL (10-inches)	-	-	-	-	-	-	-	0.3	3.0	2.0	1.8
Growth (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
Condition (electrofishing)											
Stock	-	-	-	-	-	-	-	87.6	-	-	87.6
Quality	-	-	-	-	-	-	-	90.0	78.1	94.7	87.6
Preferred	-	-	-	-	-	-	-	-	86.5	91.6	89.1
Memorable	-	-	-	-	-	-	-	74.2	79.4	81.1	78.2
Mortality (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Angling Pressure (creel)											
Angler Hours (all crappie)	-	-	-	18,698	-	7,324	9,126	-	14,995	14,091	12,847
Angler Hours/Acre	-	-	-	3.3	-	1.3	1.6	-	2.6	2.5	2.3
Fishing Success (creel)											
Catch Rate (any crappie)	-	-	-	1.18	-	0.36	1.24	-	0.95	0.73	0.89
Harvest Rate (any crappie)	-	-	-	0.42	-	0.05	0.28	-	0.24	0.28	0.25
% Released (black crappie)	-	-	-	24.7%	-	0.0%	88.2%	-	79.2%	13.3%	41.1%
Mean Weight (black crappie)	-	-	-	0.58	-	0.80	0.71	-	0.86	1.13	0.82
Value of Fishery (Trip Expenditures - creel)											
All Crappie	-	-	-	$41,580	-	$12,690	$23,430	-	$53,160	$47,290	$35,630

Fishery Forecast: Although a rare find for Melton Hill prior to 2006, black crappie appear to have become fairly well established in the reservoir.

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

White Crappie

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Density (electrofishing)											
PSD	63	80	-	100	93	77	100	96	97	100	90
RSD (preferred)	-	-	-	61	52	64	87	62	51	81	65
CPUE (total)	3.2	2.0	-	12.8	4.1	7.3	10.0	24.7	22.7	19.0	11.8
CPUE ≥ Stock	3.2	2.0	-	12.8	4.1	7.3	10.0	24.7	22.7	19.0	11.8
CPUE ≥ MLL (10-inches)	-	-	-	6.3	3.7	4.7	7.7	14.7	11.0	14.7	9.0
Growth (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
Condition (electrofishing)											
Stock	93.7	84.6	-	-	80.7	79.9	-	91.9	85.3	-	86.0
Quality	95.3	86.4	-	84.5	87.1	86.5	87.1	92.8	86.6	94.7	89.0
Preferred	81.5	78.9	-	84.0	83.1	91.6	91.4	85.9	83.8	92.2	85.8
Memorable	78.9	81.1	-	78.4	81.9	91.5	85.0	85.9	83.6	89.0	83.9
Mortality (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
Angling Pressure (creel)											
Angler Hours (all crappie)	-	-	-	18,698	-	7,324	9,126	-	14,995	14,091	12,847
Angler Hours/Acre	-	-	-	3.3	-	1.3	1.6	-	2.6	2.6	2.3
Fishing Success (creel)											
Catch Rate (any crappie)	-	-	-	1.18	-	0.36	1.24	-	0.95	0.73	0.89
Harvest Rate (any crappie)	-	-	-	0.42	-	0.05	0.28	-	0.24	0.28	0.25
% Released (white crappie)	-	-	-	72.1%	-	66.5%	86.3%	-	81.3%	70.4%	75.3%
Mean Weight (white crappie)	-	-	-	0.71	-	0.85	0.74	-	0.75	0.83	0.78
Value of Fishery (Trip Expenditures - creel)											
All Crappie	-	-	-	$41,580	-	$12,690	$23,430	-	$53,160	$47,290	$35,630

Fishery Forecast: The white crappie population remains strong.

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

Muskie

Stocking	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
#	7,010	0	7,200	1,621	1,145	0	2,537	6,169	3,162	1,520	3,036
#/Acre	1.2	0.0	1.3	0.3	0.2	0.0	0.4	1.1	0.6	0.3	0.5
Angling Pressure (creel)											
Angler Hours	-	-	-	0	-	94	858	-	3,802	2,175	1,386
Angler Hours/Acre	-	-	-	0.0	-	0.0	0.2	-	0.7	0.4	0.2
Fishing Success (creel)											
Catch Rate (intended)	-	-	-	0.00	-	0.10	0.37	-	0.02	0.03	0.10
Harvest Rate (intended)	-	-	-	0.00	-	0.00	0.09	-	0.00	0.00	0.02
% Released	-	-	-	100.0%	-	-	89.8%	-	100.0%	100.0%	97.5%
Mean Weight	-	-	-	-	-	-	28.50	-	-	-	28.50
Value of Fishery (Trip Expenditures - creel)											
Musky	-	-	-	-	-	$190	$2,680	-	$16,960	$16,530	$9,090

Fishery Forecast: A group of fish are reaching the 50- inch range and the fishery should continue to improve during the next several years. The new 50-inch limit effective in 2010 along with an estimated reduction in power production at The Bull Run Steam Plant will aid in conservation of the fishery.

Management Recommendations: No changes are planed for the future.

Striped Bass

Angling Pressure (creel)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Angler Hours	-	-	-	7,231	-	6,418	2,382	-	4,159	6,545	5,347
Angler Hours/Acre	-	-	-	1.3	-	1.1	0.4	-	0.7	1.2	0.9
Fishing Success (creel)											
Catch Rate (intended)	-	-	-	0.34	-	0.18	0.43	-	0.10	0.06	0.22
Harvest Rate (intended)	-	-	-	0.01	-	0.01	0.08	-	0.03	0.00	0.03
% Released	-	-	-	82.4%	-	88.5%	67.6%	-	97.4%	100.0%	87.2%
Mean Weight	-	-	-	11.48	-	9.23	5.00	-	38.80	-	16.13
Value of Fishery (Trip Expenditures - creel)											
Striped Bass	-	-	-	$14,030	-	$6,910	$5,770	-	$13,630	$50,480	$18,164

Sunfish

Angling Pressure (creel)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Angler Hours (all sunfish)	-	-	-	4,994	-	873	1,339	-	796	2,295	2,059
Angler Hours/Acre	-	-	-	0.9	-	0.2	0.2	-	0.1	0.4	0.4
Fishing Success (creel)											
Catch Rate (any sunfish)	-	-	-	3.21	-	2.82	4.09	-	1.80	1.73	2.73
Harvest Rate (any sunfish)	-	-	-	0.30	-	0.58	0.23	-	0.00	0.64	0.35
% Released (bluegill)	-	-	-	82.1%	-	100.0%	93.2%	-	95.2%	89.8%	92.1%
Mean Weight (bluegill)	-	-	-	0.24	-	-	0.39	-	0.45	0.58	0.42
Value of Fishery (Trip Expenditures - creel)											
All Sunfish	-	-	-	$5,590	-	$1,100	$3,020	-	$2,270	$10,710	$4,538

Catfish

Angling Pressure (creel)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Angler Hours (all catfish)	-	-	-	5,722	-	391	1,825	-	1,877	1,703	2,304
Angler Hours/Acre	-	-	-	1.0	-	0.1	0.3	-	0.3	0.3	0.4
Fishing Success (creel)											
Catch Rate (any catfish)	-	-	-	0.14	-	0.95	0.34	-	0.72	0.10	0.45
Harvest Rate (any catfish)	-	-	-	0.06	-	0.00	0.13	-	0.08	0.00	0.05
% Released (channel)	-	-	-	18.2%	-	-	100.0%	-	-	100.0%	72.7%
Mean Weight (channel)	-	-	-	2.58	-	-	-	-	-	-	2.58
Value of Fishery (Trip Expenditures - creel)											
All Catfish	-	-	-	$10,170	-	$1,050	$4,810	-	$5,550	$4,740	$5,264

Habitat Enhancement

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	Christmas trees with block	none	7 sites, 750 units, 15 acres

Tables

Table 1. Melton Hill Reservoir physical and chemical characteristics.

Surface Area	5,690 acres
Drainage Area	3,343 sq. mi.
Full Pool Elevation	795 feet-msl
Mean Annual Fluctuation	5 feet
Shoreline Distance	193 miles
Total Developed Shoreline	18%
Maximum Depth	60 feet
Outlet Depth	9 feet
Thermocline Depth	10 feet (Aug 1998)
Trophic Status (Forebay)	Mesotrophic
Mean Chlorophyll (Forebay)	5.6 mg/L
Trophic Index Value	47.5
Hydraulic Retention Time	12 days
Year Impounded	1963

Table 2. Melton Hill Reservoir muskie stockings 1998 - 2008

Species	**Year**	**Rate** (per acre)	**Total Stocked**
Muskie	1998	0.3	1,873
	1999	1.2	7,010
	2000	0.0	0
	2001	1.3	7,200
	2002	0.3	1,621
	2003	0.2	1,145
	2004	0.0	0
	2005	0.4	2,537
	2006	1.1	6,169
	2007	0.6	3,162
	2008	0.3	1,520

Total Number ---------- 32,237
Average # fish/acre/year ----- 0.52

Table 3. Relative stock density, mean relative weight, and catch per unit effort by RSD catagory for target species collected in Melton Hill Reservoir 1998-2008.

				Substock			RSD-stock				RSD-quality				RSD-preferred				RSD-memorable				RSD-trophy				Total		PSD
Species	Year	Gear	Samples	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.
Largemouth	1998	Electro	20	78	15.6	28.3	97	19.4	35.1	85.7	75	15.0	27.2	84.0	23	4.6	8.3	80.4	3	0.6	1.1	86.4	0	0.0	0.0	0.0	276	55.2	51
Bass	1999	Electro	20	67	13.4	45.9	46	9.2	31.5	87.7	28	5.6	19.2	83.8	3	0.6	2.1	84.5	2	0.4	1.4	91.5	0	0.0	0.0	0.0	146	29.2	42
	2000	Electro	20	34	6.8	31.8	46	9.2	43.0	83.7	23	4.6	21.5	86.5	3	0.6	2.8	86.4	1	0.2	0.9	84.5	0	0.0	0.0	0.0	107	21.4	37
	2002	Electro	16	107	26.8	21.9	242	60.5	49.6	81.3	120	30.0	24.6	85.1	19	4.8	3.9	89.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	488	122.0	36
	2003	Electro	14	118	33.7	28.1	153	43.7	36.4	79.3	126	36.0	30.0	80.0	22	6.3	5.2	83.2	1	0.3	0.2	na	0	0.0	0.0	0.0	420	120.0	49
	2004	Electro	12	41	13.7	17.1	98	32.7	40.8	73.9	85	28.3	35.4	79.4	15	5.0	6.3	83.0	1	0.3	0.4	78.7	0	0.0	0.0	0.0	240	80.0	51
	2005	Electro	12	57	19.0	27.4	43	14.3	20.7	91.1	83	27.7	39.9	89.0	23	7.7	11.1	92.1	2	0.7	1.0	95.5	0	0.0	0.0	0.0	208	69.3	72
	2006	Electro	12	122	40.7	33.0	169	56.3	45.7	87.4	56	18.7	15.1	87.0	22	7.3	5.9	87.9	1	0.3	0.3	77.7	0	0.0	0.0	0.0	370	123.3	32
	2007	Electro	12	34	11.3	11.5	157	52.3	53.2	85.0	79	26.3	26.8	87.1	24	8.0	8.1	87.3	1	0.3	0.3	83.9	0	0.0	0.0	0.0	295	98.3	40
	2008	Electro	12	28	9.3	6.1	181	60.3	39.3	86.0	215	71.7	46.7	86.3	36	12.0	7.8	89.3	0	0.0	0.0	0.0	0	0.0	0.0	0.0	460	153.3	58
Smallmouth	1998	Electro	20	3	0.6	9.4	10	2.0	31.3	71.8	12	2.4	37.5	78.2	6	1.2	18.8	74.8	1	0.2	3.1	82.7	0	0.0	0.0	0.0	32	6.4	66
Bass	1999	Electro	20	9	1.8	33.3	10	2.0	37.0	86.5	6	1.2	22.2	83.9	2	0.4	7.4	87.4	0	0.0	0.0	0.0	0	0.0	0.0	0.0	27	5.4	44
	2000	Electro	20	3	0.6	75.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.2	25.0	79.3	0	0.0	0.0	0.0	0	0.0	0.0	0.0	4	0.8	
	2002	Electro	16	3	0.8	27.3	2	0.5	18.2	76.3	4	1.0	36.4	81.0	2	0.5	18.2	76.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	11	2.8	75
	2003	Electro	14	6	1.7	33.3	4	1.1	22.2	73.6	4	1.1	22.2	74.7	3	0.9	16.7	77.1	1	0.3	5.6	67.2	0	0.0	0.0	0.0	18	5.1	67
	2004	Electro	12	4	1.3	28.6	3	1.0	21.4	67.9	2	0.7	14.3	69.8	3	1.0	21.4	75.1	2	0.7	14.3	74.8	0	0.0	0.0	0.0	14	4.7	70
	2005	Electro	12	0	0.0	0.0	1	0.3	100.0	87.7	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	0.3	100
	2006	Electro	12	6	2.0	24.0	7	2.3	28.0	82.4	10	3.3	40.0	81.7	2	0.7	8.0	80.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	25	8.3	63
	2007	Electro	12	3	1.0	13.0	11	3.7	47.8	86.5	7	2.3	30.4	81.8	2	0.7	8.7	79.5	0	0.0	0.0	0.0	0	0.0	0.0	0.0	23	7.7	45
	2008	Electro	12	1	0.3	4.3	5	1.7	21.7	82.4	9	3.0	39.1	78.5	7	2.3	30.4	76.6	1	0.3	4.3	79.4	0	0.0	0.0	0.0	23	7.7	77
Spotted	1998	Electro	20	1	0.2	16.7	5	1.0	83.3	87.6	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	0.0	6	1.2	
Bass	1999	Electro	20	5	1.6	62.5	3	0.6	37.5	84.2	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	8	1.6	
	2000	Electro	20	0	0.0	0.0	5	1.0	71.4	87.8	2	0.4	28.6	93.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	7	1.4	
	2002	Electro	16	4	1.0	25.0	10	2.5	62.5	85.1	2	0.5	12.5	90.4	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	16	4.0	17
	2003	Electro	14	0	0.0	0.0	8	2.3	100.0	82.5	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	8	2.3	
	2004	Electro	12	2	0.7	28.6	3	1.0	42.9	84.1	1	0.3	14.3	71.8	1	0.3	14.3	82.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	7	2.3	
	2005	Electro	12	1	0.3	12.5	5	1.7	62.5	91.9	2	0.7	25.0	80.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	8	2.7	29
	2006	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	100.0	101.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	100
	2007	Electro	12	2	0.7	33.3	4	1.3	66.6	96.6	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	0.0	6	2.0	
	2008	Electro	12	0	0.0	0.0	4	1.3	66.6	85.4	1	0.3	16.7	94.0	1	0.3	16.7	88.1	0	0.0	0.0	0.0	0	0.0	0.0	0.0	6	2.0	33
White	1998	Electro	20	0	0.0	0.0	0	0.0	0.0	0.0	12	2.4	31.6	82.3	20	0.0	52.6	84.6	6	1.2	15.8	80.6	0	0.0	0.0	0.0	38	7.6	100
Crappie	1999	Electro	20	0	0.0	0.0	6	1.2	37.5	93.7	1	0.2	6.3	95.3	7	1.4	43.8	81.5	2	0.4	12.5	78.9	0	0.0	0.0	0.0	16	3.2	63
	2000	Electro	20	0	0.0	0.0	2	0.4	20.0	84.6	1	0.2	10.0	86.4	4	0.8	40.0	78.9	3	0.6	30.0	81.1	0	0.0	0.0	0.0	10	2.0	80
	2002	Electro	16	0	0.0	0.0	0	0.0	0.0	0.0	20	5.0	39.2	84.5	26	6.5	51.0	84.0	5	1.3	9.8	78.4	0	0.0	0.0	0.0	51	12.8	100
	2003	Electro	14	0	0.0	0.0	2	0.6	6.9	80.7	12	3.4	41.4	87.1	11	3.1	37.9	83.1	4	1.1	13.8	81.9	0	0.0	0.0	0.0	29	4.1	93
	2004	Electro	12	0	0.0	0.0	5	1.7	22.7	79.9	3	1.0	13.6	86.5	13	4.3	59.1	91.6	1	0.3	4.5	91.5	0	0.0	0.0	0.0	22	7.3	77
	2005	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	4	1.3	13.3	87.1	22	7.3	73.3	91.4	4	1.3	13.3	85.0	0	0.0	0.0	0.0	30	10.0	100
	2006	Electro	12	0	0.0	0.0	3	1.0	4.1	91.9	25	8.3	33.8	92.8	30	10.0	40.5	85.9	16	5.3	21.6	85.9	0	0.0	0.0	0.0	74	24.7	96
	2007	Electro	12	0	0.0	0.0	2	0.7	2.9	85.3	31	10.3	45.6	86.6	24	8.0	35.3	83.8	11	3.7	16.2	83.6	0	0.0	0.0	0.0	68	22.7	97
	2008	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	11	3.7	19.3	94.7	30	10.0	52.6	92.2	16	5.3	28.1	89.0	0	0.0	0.0	0.0	57	19.0	100
Black	2006	Electro	12	0	0.0	0.0	4	1.3	19.9	87.6	15	5.0	75.0	90.0	0	0.0	0.0	0.0	1	0.3	5.0	74.2	0	0.0	0.0	0.0	20	6.7	80
Crappie	2007	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	10.0	78.1	7	2.3	70.0	86.5	2	0.7	20.0	79.4	0	0.0	0.0	0.0	10	3.3	100
	2008	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	14.3	94.5	2	0.7	28.6	91.6	4	1.3	57.1	81.1	0	0.0	0.0	0.0	7	2.3	100
Blacknose	2006	Electro	12	0	0.0	0.0	1	0.3	8.3	94.0	10	3.3	83.3	94.4	1	0.3	8.3	83.2	0	0.0	0.0	0.0	0	0.0	0.0	0.0	12	4.0	92
Crappie	2007	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	50.0	86.7	1	0.3	50.0	87.8	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.7	100
	2008	Electro	12	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	0.3	100.0	81.9	0	0.0	0.0	0.0	1	0.3	100
Musky	2003	Electro	14	1	0.9	20.0	0	0.0	0.0	0.0	4	0.6	80.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	5	1.4	100
	2004	Electro	14	1	0.3	12.5	7	2.3	87.5	94.3	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	8	2.7	
	2005	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	6	2.0	100.0	84.9	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	6	2.0	100
	2006	Electro	12	1	0.3	16.7	0	0.0	0.0	0.0	3	1.0	50.0	nr	1	0.3	16.7	nr	1	0.3	16.7	nr	0	0.0	0.0	0.0	6	2.0	100
	2007	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	100.0	91.1	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	100
	2008	Electro	12	1	0.3	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	0.3	100
Channel cat	2001	Gill	8	7	0.9	8.9	19	2.4	24.0	0.0	44	5.5	55.7	0.0	9	1.1	11.4	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	79	9.9	
White bass	2001	Gill	8	0	0.0	0.0	16	2.0	50.0	0.0	3	0.4	9.4	0.0	13	1.6	40.6	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	32	4.0	
Yellow bass	2001	Gill	8	0	0.0	0.0	2	0.3	2.8	0.0	66	8.3	93.0	0.0	3	0.4	4.2	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	71	8.9	

Table 4. Mean relative weight and standard error values by size class for Melton Hill Reservoir largemouth bass collected during the 2008 electrofishing sample.

Size Class	Mean Wr	Std. Error	N
8	81.1	2.9	7
9	92.0	5.6	27
10	86.0	1.1	72
11	84.5	0.6	100
12	86.1	0.6	103
13	86.6	0.8	55
14	87.6	1.1	33
15	90.7	3.1	12
16	87.9	1.5	9
17	89.5	2.1	7
18			
19	89.9	2.5	5
20	73.5		1
		Total Catch	431

Table 5. Mean relative weight and standard error values by size class for Melton Hill Reservoir white crappie collected during the 2008 electrofishing sample.

Size Class	Mean Wr	Std. Error	N
8	94.8	8.7	2
9	95.0	1.5	11
10	93.5	1.3	15
11	89.5	0.9	17
12	89.3	1.6	9
13	89.8	3.9	3
		Total Catch	57

Table 6. Melton Hill Reservoir water levels for 2008. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
793.73	JANUARY	1	794.27	FEBRUARY	24	793.89	APRIL	19
793.81	JANUARY	2	794.08	FEBRUARY	25	794.23	APRIL	20
794.09	JANUARY	3	793.85	FEBRUARY	26	794.17	APRIL	21
794.10	JANUARY	4	794.09	FEBRUARY	27	794.05	APRIL	22
794.01	JANUARY	5	793.83	FEBRUARY	28	793.84	APRIL	23
793.95	JANUARY	6	794.02	MARCH	1	793.69	APRIL	24
793.85	JANUARY	7	793.77	MARCH	2	792.85	APRIL	25
793.98	JANUARY	8	793.95	MARCH	3	793.26	APRIL	26
794.01	JANUARY	9	794.38	MARCH	4	793.28	APRIL	27
794.68	JANUARY	10	794.21	MARCH	5	793.61	APRIL	28
794.16	JANUARY	11	794.37	MARCH	6	793.63	APRIL	29
793.90	JANUARY	12	794.36	MARCH	7	793.38	APRIL	30
793.96	JANUARY	13	794.30	MARCH	8	793.19	MAY	1
794.13	JANUARY	14	794.28	MARCH	9	792.94	MAY	2
794.03	JANUARY	15	793.88	MARCH	10	792.83	MAY	3
794.08	JANUARY	16	794.04	MARCH	11	792.91	MAY	4
793.92	JANUARY	17	793.92	MARCH	12	792.99	MAY	5
793.94	JANUARY	18	793.58	MARCH	13	793.39	MAY	6
793.98	JANUARY	19	793.73	MARCH	14	793.61	MAY	7
794.07	JANUARY	20	793.90	MARCH	15	793.99	MAY	8
794.06	JANUARY	21	794.07	MARCH	16	794.29	MAY	9
793.93	JANUARY	22	793.88	MARCH	17	794.27	MAY	10
794.00	JANUARY	23	793.45	MARCH	18	794.00	MAY	11
793.93	JANUARY	24	793.85	MARCH	19	794.09	MAY	12
793.89	JANUARY	25	793.52	MARCH	20	794.20	MAY	13
793.86	JANUARY	26	792.95	MARCH	21	794.14	MAY	14
793.86	JANUARY	27	792.24	MARCH	22	794.20	MAY	15
794.02	JANUARY	28	791.24	MARCH	23	794.26	MAY	16
793.77	JANUARY	29	790.93	MARCH	24	793.91	MAY	17
793.82	JANUARY	30	790.52	MARCH	25	794.00	MAY	18
794.15	JANUARY	31	791.05	MARCH	26	793.81	MAY	19
794.46	FEBRUARY	1	791.41	MARCH	27	794.04	MAY	20
794.51	FEBRUARY	2	791.07	MARCH	28	793.89	MAY	21
794.32	FEBRUARY	3	791.42	MARCH	29	794.02	MAY	22
794.51	FEBRUARY	4	791.39	MARCH	30	794.00	MAY	23
794.02	FEBRUARY	5	790.87	MARCH	31	793.85	MAY	24
794.63	FEBRUARY	6	791.27	APRIL	1	793.75	MAY	25
794.15	FEBRUARY	7	791.18	APRIL	2	794.01	MAY	26
794.41	FEBRUARY	8	791.45	APRIL	3	793.78	MAY	27
793.96	FEBRUARY	9	791.94	APRIL	4	794.09	MAY	28
793.83	FEBRUARY	10	791.28	APRIL	5	794.14	MAY	29
793.99	FEBRUARY	11	792.13	APRIL	6	793.98	MAY	30
794.02	FEBRUARY	12	792.45	APRIL	7	793.80	MAY	31
793.52	FEBRUARY	13	793.04	APRIL	8	793.93	JUNE	1
793.81	FEBRUARY	14	793.31	APRIL	9	793.86	JUNE	2
794.00	FEBRUARY	15	793.35	APRIL	10	793.59	JUNE	3
793.91	FEBRUARY	16	793.58	APRIL	11	793.77	JUNE	4
794.35	FEBRUARY	17	793.63	APRIL	12	793.82	JUNE	5
794.25	FEBRUARY	18	793.68	APRIL	13	793.97	JUNE	6
793.37	FEBRUARY	19	793.30	APRIL	14	793.90	JUNE	7
793.56	FEBRUARY	20	793.67	APRIL	15	794.03	JUNE	8
793.81	FEBRUARY	21	793.66	APRIL	16	793.73	JUNE	9
794.10	FEBRUARY	22	793.65	APRIL	17	793.97	JUNE	10
794.21	FEBRUARY	23	793.70	APRIL	18	794.04	JUNE	11

Table 7. Melton Hill Reservoir water levels for 2008. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
794.09	JUNE	12	793.71	AUGUST	5	794.01	SEPTEMBER	28
794.09	JUNE	13	793.45	AUGUST	6	794.02	SEPTEMBER	29
793.94	JUNE	14	793.68	AUGUST	7	794.15	SEPTEMBER	30
793.87	JUNE	15	793.29	AUGUST	8	793.98	OCTOBER	1
794.00	JUNE	16	793.75	AUGUST	9	793.98	OCTOBER	2
793.89	JUNE	17	794.02	AUGUST	10	793.91	OCTOBER	3
794.11	JUNE	18	793.49	AUGUST	11	794.09	OCTOBER	4
793.94	JUNE	19	793.49	AUGUST	12	793.95	OCTOBER	5
794.45	JUNE	20	793.70	AUGUST	13	793.93	OCTOBER	6
794.39	JUNE	21	793.94	AUGUST	14	793.80	OCTOBER	7
794.20	JUNE	22	794.04	AUGUST	15	793.93	OCTOBER	8
793.64	JUNE	23	793.45	AUGUST	16	793.98	OCTOBER	9
793.92	JUNE	24	793.43	AUGUST	17	793.96	OCTOBER	10
793.98	JUNE	25	793.32	AUGUST	18	794.18	OCTOBER	11
793.65	JUNE	26	793.65	AUGUST	19	794.02	OCTOBER	12
793.84	JUNE	27	793.98	AUGUST	20	794.04	OCTOBER	13
793.59	JUNE	28	793.90	AUGUST	21	794.02	OCTOBER	14
793.75	JUNE	29	793.95	AUGUST	22	793.93	OCTOBER	15
794.54	JUNE	30	793.69	AUGUST	23	793.84	OCTOBER	16
793.90	JULY	1	793.88	AUGUST	24	793.80	OCTOBER	17
793.67	JULY	2	793.50	AUGUST	25	794.07	OCTOBER	18
794.06	JULY	3	793.70	AUGUST	26	793.95	OCTOBER	19
793.59	JULY	4	793.76	AUGUST	27	793.95	OCTOBER	20
793.73	JULY	5	793.84	AUGUST	28	794.02	OCTOBER	21
793.84	JULY	6	793.67	AUGUST	29	793.92	OCTOBER	22
793.72	JULY	7	793.71	AUGUST	30	793.79	OCTOBER	23
794.06	JULY	8	793.61	AUGUST	31	794.11	OCTOBER	24
793.83	JULY	9	793.75	SEPTEMBER	1	794.01	OCTOBER	25
794.17	JULY	10	793.86	SEPTEMBER	2	793.99	OCTOBER	26
794.25	JULY	11	794.05	SEPTEMBER	3	793.95	OCTOBER	27
793.71	JULY	12	793.87	SEPTEMBER	4	793.70	OCTOBER	28
793.97	JULY	13	793.65	SEPTEMBER	5	793.60	OCTOBER	29
793.82	JULY	14	793.96	SEPTEMBER	6	793.49	OCTOBER	30
793.78	JULY	15	793.48	SEPTEMBER	7	793.44	OCTOBER	31
793.45	JULY	16	793.21	SEPTEMBER	8	793.28	NOVEMBER	1
793.65	JULY	17	793.68	SEPTEMBER	9	793.16	NOVEMBER	2
793.76	JULY	18	794.02	SEPTEMBER	10	793.14	NOVEMBER	3
793.81	JULY	19	794.14	SEPTEMBER	11	793.07	NOVEMBER	4
793.98	JULY	20	794.12	SEPTEMBER	12	793.02	NOVEMBER	5
793.77	JULY	21	794.13	SEPTEMBER	13	793.00	NOVEMBER	6
793.82	JULY	22	794.14	SEPTEMBER	14	792.95	NOVEMBER	7
793.94	JULY	23	794.47	SEPTEMBER	15	792.98	NOVEMBER	8
793.72	JULY	24	794.41	SEPTEMBER	16	792.98	NOVEMBER	9
793.50	JULY	25	794.35	SEPTEMBER	17	792.76	NOVEMBER	10
793.68	JULY	26	794.27	SEPTEMBER	18	792.69	NOVEMBER	11
793.65	JULY	27	794.33	SEPTEMBER	19	792.70	NOVEMBER	12
793.59	JULY	28	794.18	SEPTEMBER	20	792.89	NOVEMBER	13
793.73	JULY	29	793.91	SEPTEMBER	21	793.00	NOVEMBER	14
794.42	JULY	30	793.71	SEPTEMBER	22	793.31	NOVEMBER	15
793.37	JULY	31	793.98	SEPTEMBER	23	793.31	NOVEMBER	16
793.65	AUGUST	1	794.07	SEPTEMBER	24	793.23	NOVEMBER	17
793.77	AUGUST	2	794.04	SEPTEMBER	25	793.13	NOVEMBER	18
793.82	AUGUST	3	794.05	SEPTEMBER	26	793.10	NOVEMBER	19
793.81	AUGUST	4	794.15	SEPTEMBER	27	793.04	NOVEMBER	20

Table 8. Melton Hill Reservoir water levels for 2008. (TVA)

ELEVATION	MONTH	DAY
793.01	NOVEMBER	21
793.00	NOVEMBER	22
792.98	NOVEMBER	23
792.99	NOVEMBER	24
793.06	NOVEMBER	25
792.84	NOVEMBER	26
792.76	NOVEMBER	27
792.74	NOVEMBER	28
792.78	NOVEMBER	29
792.85	NOVEMBER	30
792.92	DECEMBER	1
793.09	DECEMBER	2
793.16	DECEMBER	3
793.27	DECEMBER	4
793.38	DECEMBER	5
793.53	DECEMBER	6
793.45	DECEMBER	7
793.62	DECEMBER	8
793.65	DECEMBER	9
794.69	DECEMBER	10
794.52	DECEMBER	11
793.95	DECEMBER	12
793.94	DECEMBER	13
793.54	DECEMBER	14
793.38	DECEMBER	15
793.91	DECEMBER	16
793.97	DECEMBER	17
793.90	DECEMBER	18
793.41	DECEMBER	19
793.87	DECEMBER	20
793.55	DECEMBER	21
794.49	DECEMBER	22
793.82	DECEMBER	23
793.44	DECEMBER	24
793.28	DECEMBER	25
793.44	DECEMBER	26
793.64	DECEMBER	27
793.75	DECEMBER	28
793.92	DECEMBER	29
793.90	DECEMBER	30
793.83	DECEMBER	31

Table 9. Melton Hill Reservoir fish habitat enhancement summary for 2008.

	NEW SITES			RENOVATED SITES			EXPANDED SITES		
LOCATION	NUMBER	UNITS	ACRES	NUMBER	UNITS	ACRES	NUMBER	UNITS	ACRES
CRM 23.4 L*				1	105	2.10			
CRM 23.75 L*				1	110	2.20			
CRM 25.1 R*				1	110	2.20			
CRM 26.2 L*				1	105	2.10			
CRM 26.6 L*				1	110	2.20			
CRM 28.2 R*				1	105	2.10			
CRM 29.3 L*				1	105	2.10			
				7	750	15.00			

*Christmas trees with block

Figures

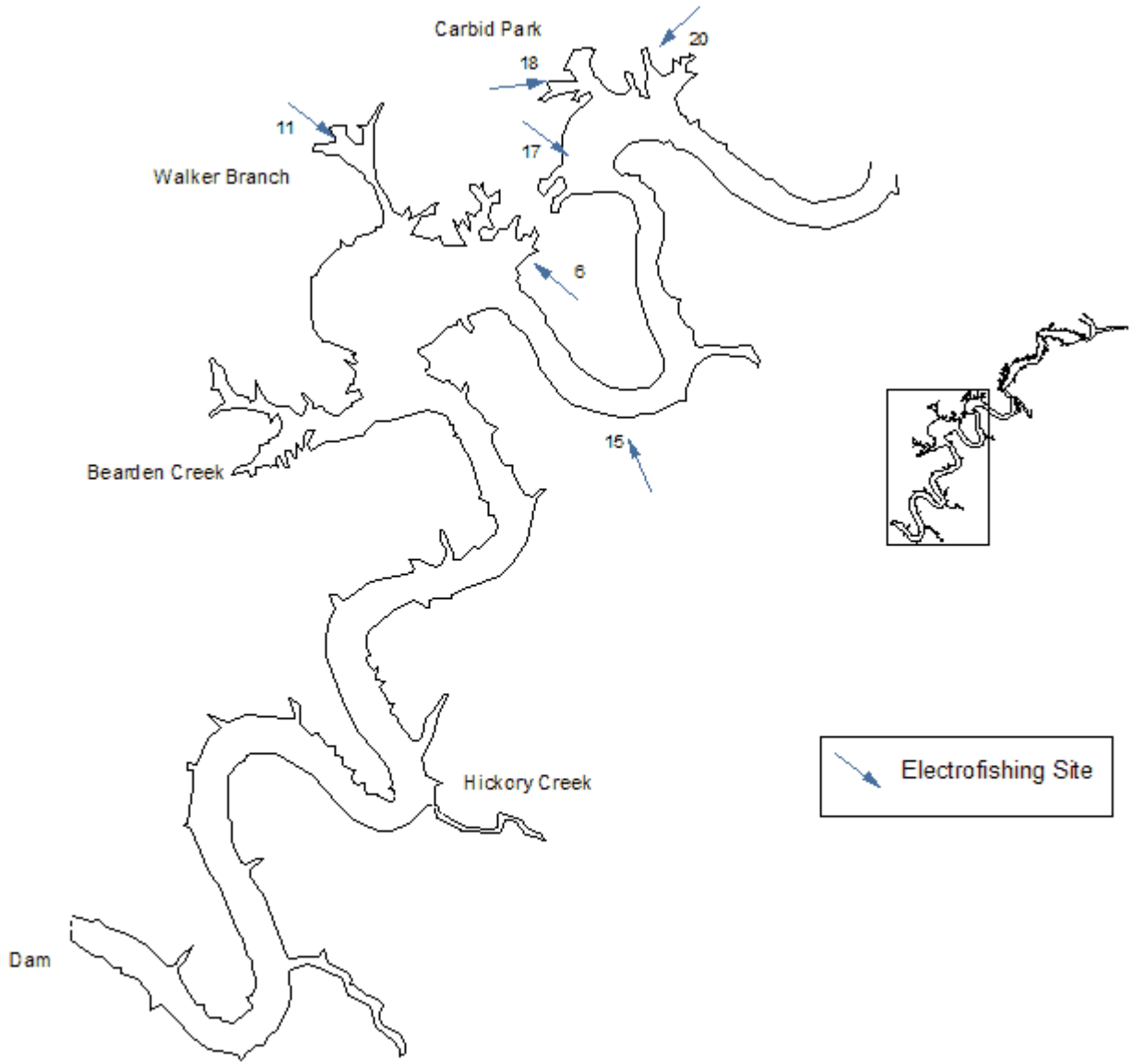

Figure 1. Electrofishing sites in the lower section of Melton Hill Reservoir in 2008.

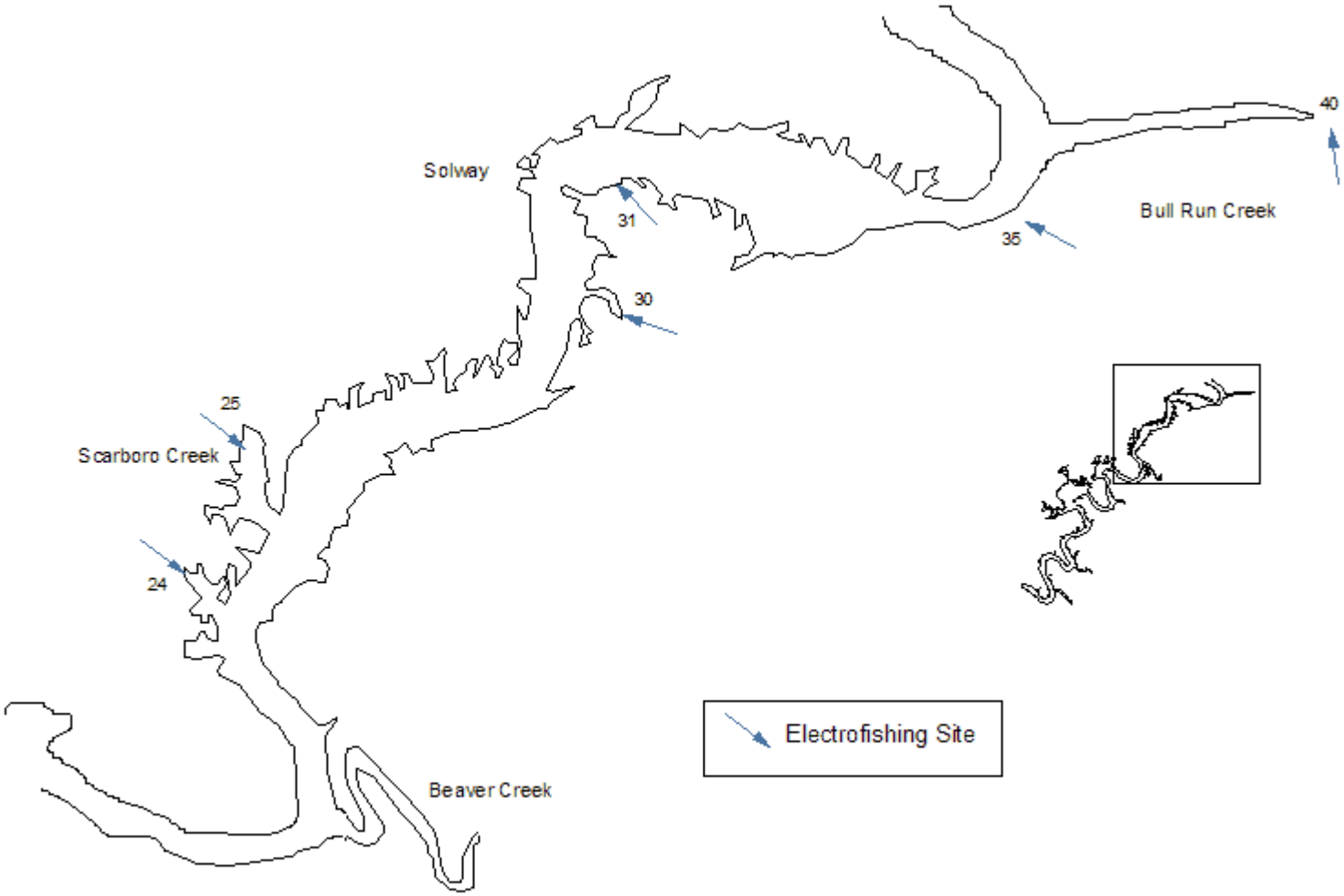

Figure 2. Electrofishing sites in the upper section of Melton Hill Reservoir in 2008.

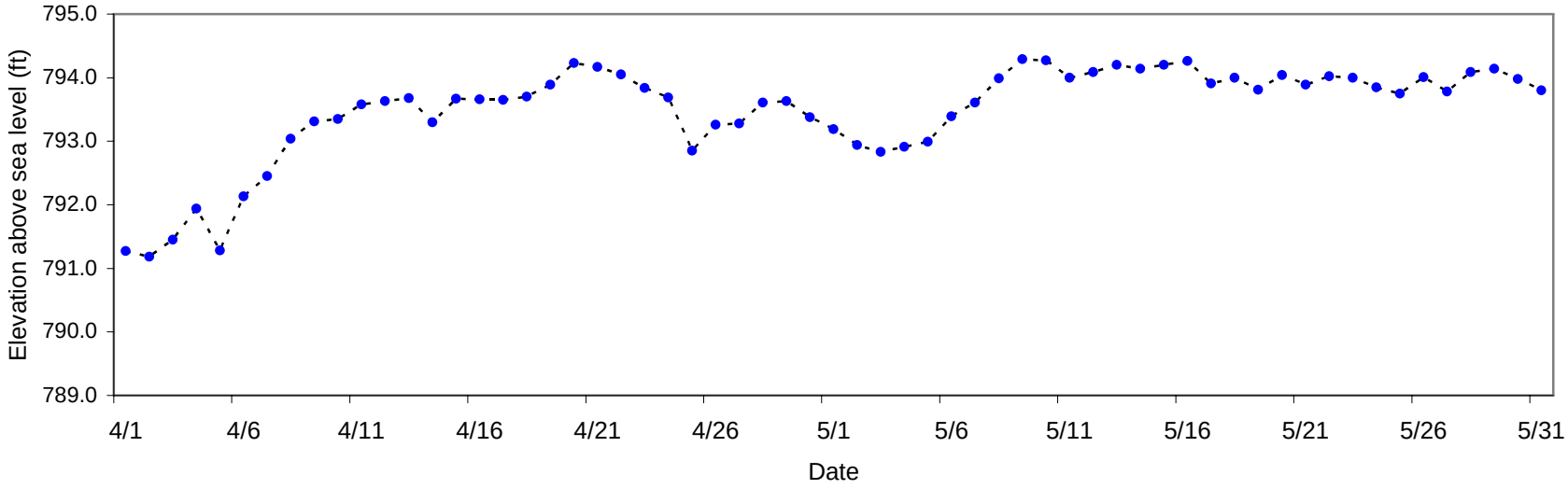

Figure 3. Melton Hill's 2008 April and May water levels (TVA data).

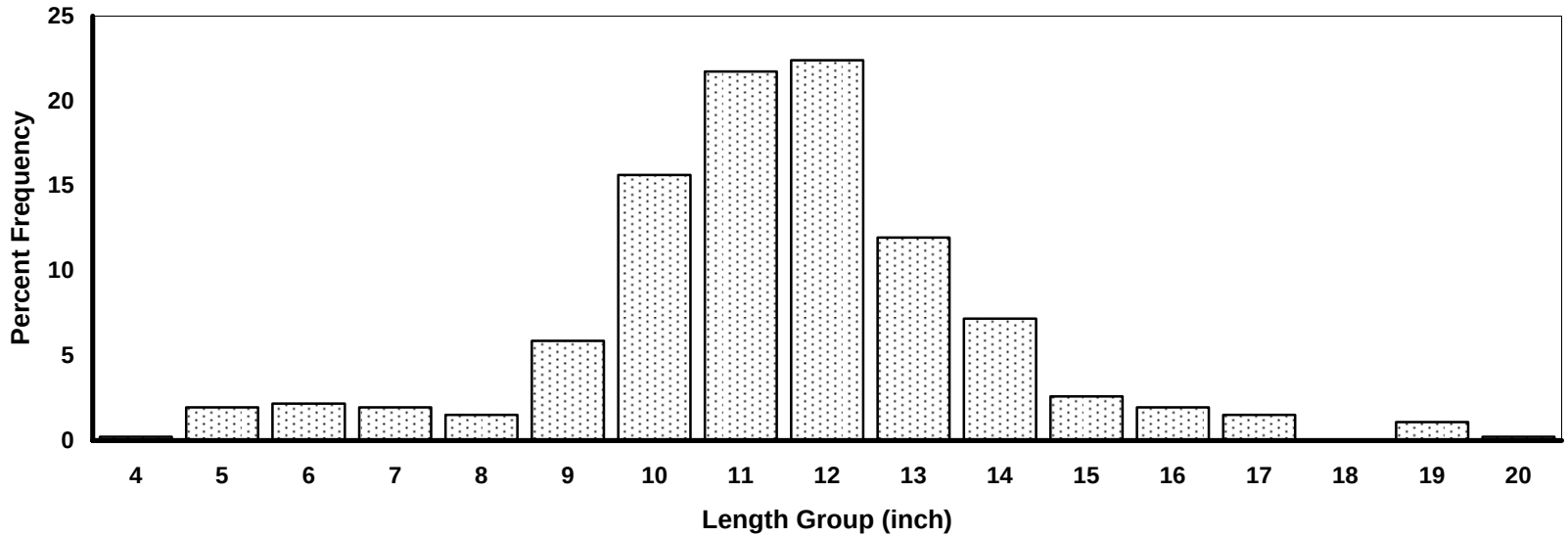

Figure 4. Melton Hill Reservoir largemouth bass length frequency by percent for the 2008 electrofishing sample (n=460).

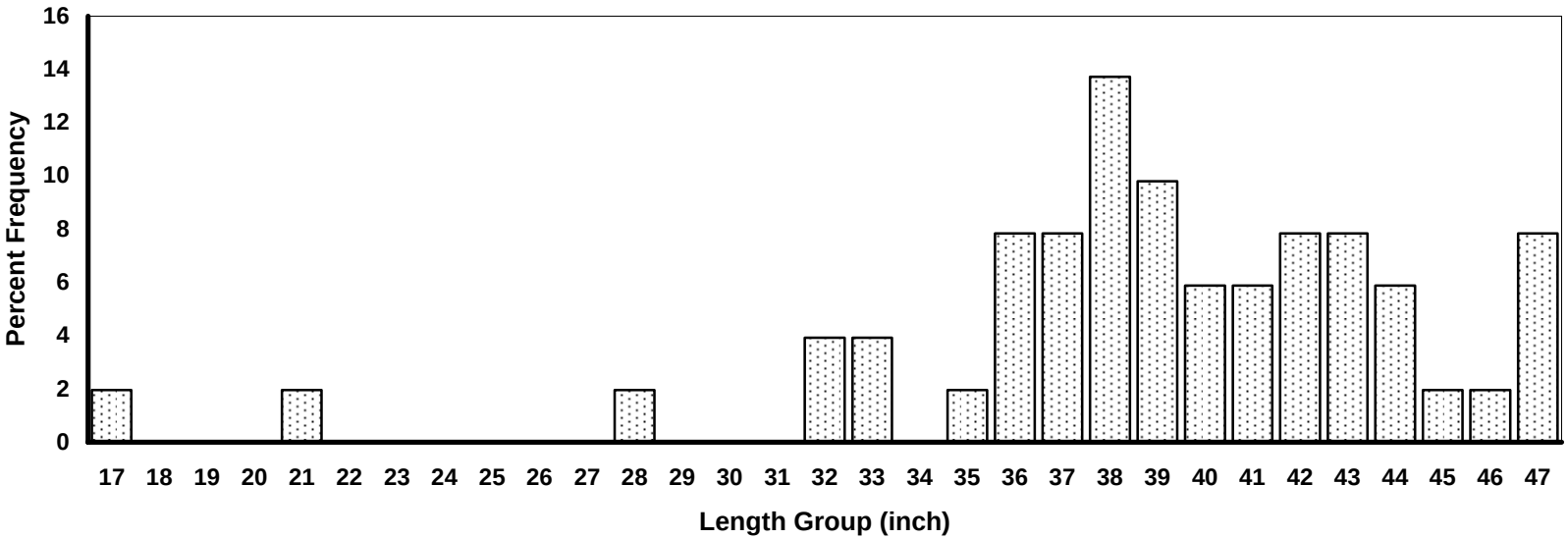

Figure 5. Melton Hill Reservoir musky length frequency by percent for the 2008 targeted electrofishing sample and reliable angling (n=51).

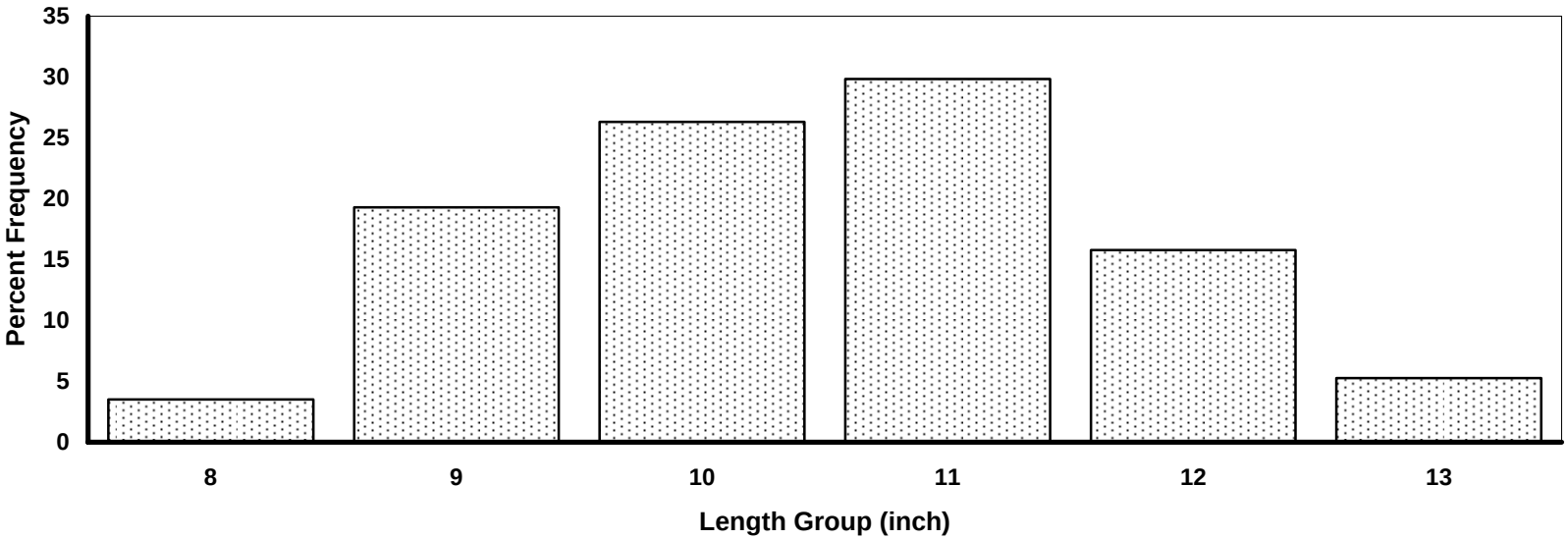

Figure 6. Melton Hill Reservoir white crappie length frequency by percent for the 2008 electrofishing sample (n=57).

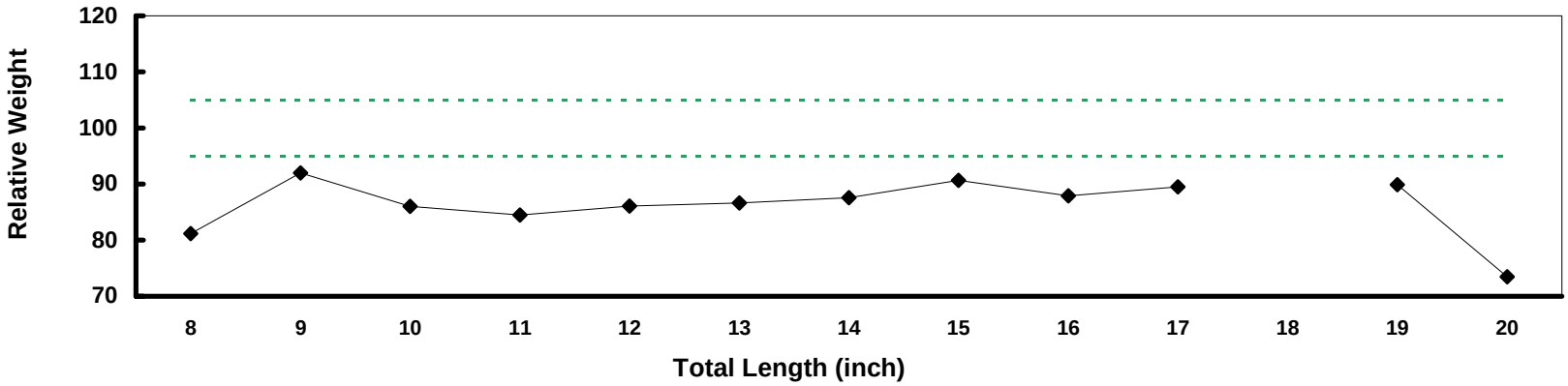

Figure 7. Melton Hill Reservoir largemouth bass mean relative weight values from the 2008 electrofishing sample (n=431).

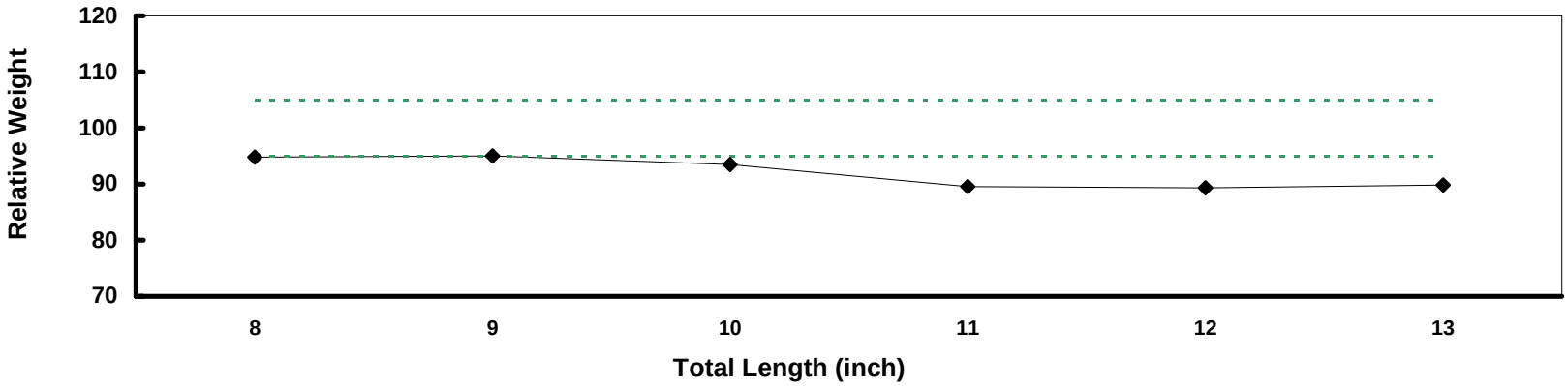

Figure 8. Melton Hill Reservoir white crappie mean relative weight values from the 2008 electrofishing sample (n=57).

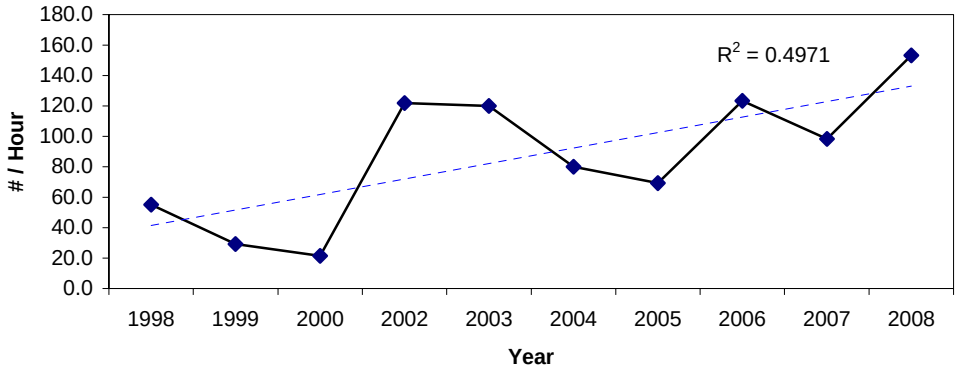

Figure 9. Melton Hill Reservoir largemouth bass electrofishing catch rates from 1998 to 2008.

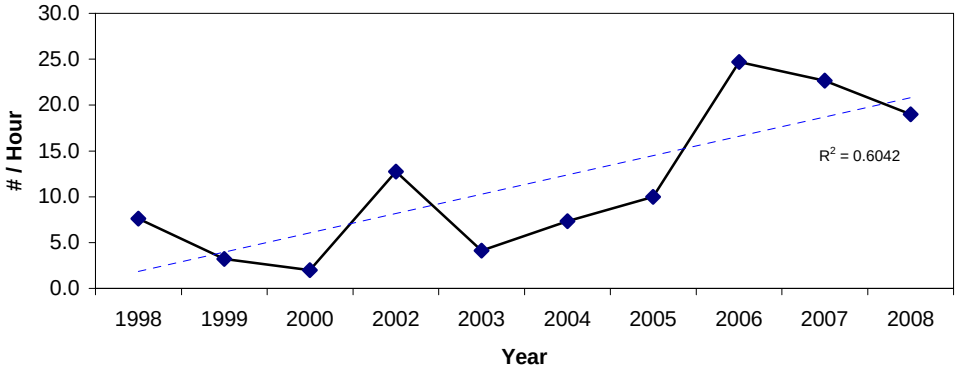

Figure 10. Melton Hill Reservoir white crappie electrofishing catch rates from 1998 to 2008.

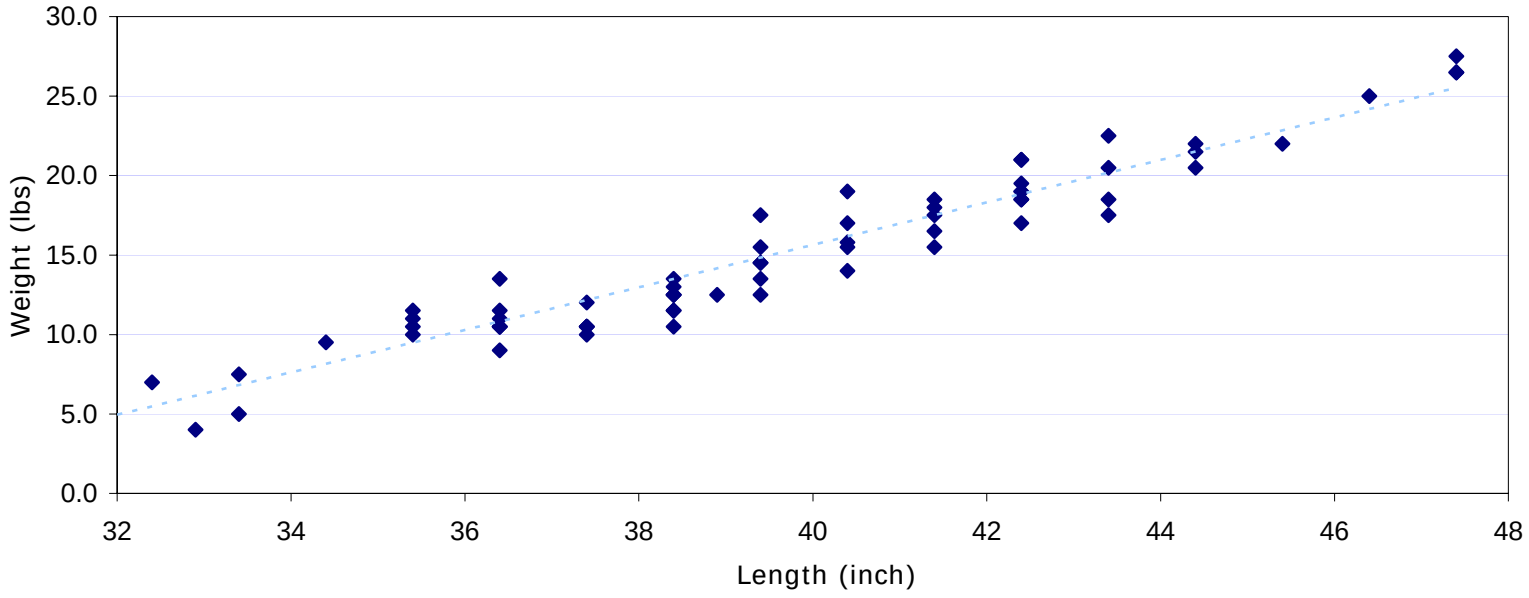

Figure 11. Melton Hill muskie length/weight relationship from electrofishing and angling in 2007-2008 (n=68)

Appendix – Creel

MONTHLY ANGLING EFFORT FOR ALL ANGLERS - 2008

LAKE=MELTON HILL

MONTH	ANGLER HOURS	RELATIVE STANDARD ERROR	HOURS PER ACRE	ANGLER TRIPS	TRIPS PER ACRE	PERCENT EFFORT
01 JANUARY	2716	21.0	0.5	624	0.1	3.1
02 FEBRUARY	2430	63.1	0.4	448	0.1	2.8
03 MARCH	7622	5.8	1.3	1606	0.3	8.7
04 APRIL	16472	15.5	2.9	3940	0.7	18.7
05 MAY	12520	9.5	2.2	3345	0.6	14.2
06 JUNE	12682	10.9	2.2	3357	0.6	14.4
07 JULY	9782	6.5	1.7	2448	0.4	11.1
08 AUGUST	9034	18.3	1.6	2500	0.4	10.3
09 SEPTEMBER	5546	22.0	1.0	1601	0.3	6.3
10 OCTOBER	5545	17.8	1.0	1556	0.3	6.3
11 NOVEMBER	1821	39.3	0.3	528	0.1	2.1
12 DECEMBER	1744	32.5	0.3	506	0.1	2.0
TOTAL	**87914**			**22459**		

MONTHLY CATCH STATISTICS FOR ALL ANGLERS - 2008

LAKE=MELTON HILL

MONTH	NUMBER FISH CAUGHT	RSE FOR CATCH	FISH CAUGHT PER HOUR	RSE FOR CATCH RATE	NUMBER FISH HARVESTED	RSE FOR HARVEST	FISH HARVESTED PER HOUR	RSE FOR HARVEST RATE
01 JANUARY	2173	33.0	0.80	24.9	109	73.3	0.04	72.0
02 FEBRUARY	1288	64.1	0.53	9.4	510	63.2	0.21	2.8
03 MARCH	6631	31.1	0.87	30.6	1143	63.8	0.15	65.6
04 APRIL	17131	22.6	1.04	16.3	2306	28.3	0.14	23.4
05 MAY	7762	21.7	0.62	19.4	125	73.1	0.01	72.3
06 JUNE	12682	19.0	1.00	15.5	1395	52.4	0.11	52.0
07 JULY	7043	23.2	0.72	22.3	196	64.3	0.02	64.8
08 AUGUST	4698	36.6	0.52	31.3	452	60.4	0.05	58.9
09 SEPTEMBER	2496	36.0	0.45	28.1	55	87.4	0.01	70.8
10 OCTOBER	1386	37.0	0.25	31.6	0		0.00	100.0
11 NOVEMBER	2404	97.9	1.32	83.4	601	115.4	0.33	100.0
12 DECEMBER	366	81.2	0.21	70.8	35	90.6	0.02	100.0
TOTAL	**66060**				**6927**			

SUMMARY OF SPECIES CATCH STATISTICS - 2008

LAKE=MELTON HILL

SPECIES	TOTAL NUMBER FISH CAUGHT	RSE FOR CATCH	SPECIES CATCH COMPOSITION (%)	INTENDED NUMBER CAUGHT	TOTAL NUMBER FISH HARVESTED	RSE FOR HARVEST	SPECIES HARVEST COMPOSITION (%)	INTENDED NUMBER HARVESTED	% OF CAUGHT FISH RELEASED	AVERAGE WEIGHT (LBS)	NUMBER FISH RECORDED
ANY GAR	99	895.0	0.1	0	0		0.0	0	100.0		0
GIZZARD SHAD	33	399.4	0.0	33	0		0.0	0	100.0		0
CARP	305	499.1	0.5	203	0		0.0	0	100.0		0
ANY CARPSUCKER	112	797.3	0.2	112	0		0.0	0	100.0		0
CHANNEL CATFISH	50	1256.9	0.1	50	0		0.0	0	100.0		0
MUSKELLUNGE	322	502.1	0.5	184	0		0.0	0	100.0		0
RAINBOW TROUT	603	230.4	0.9	603	267	168.3	3.9	267	55.7	0.94	8
WHITE BASS	1090	221.8	1.6	694	0		0.0	0	100.0		0
STRIPED BASS	1778	113.1	2.7	1046	0		0.0	0	100.0		0
WARMOUTH	80	621.0	0.1	0	28	157.5	0.4	0	65.0	0.65	1
BLUEGILL	11748	30.2	17.8	10216	1200	46.3	17.3	1138	89.8	0.58	39
SMALLMOUTH BASS	4828	47.9	7.3	4589	0		0.0	0	100.0		0
SPOTTED BASS	867	229.8	1.3	867	0		0.0	0	100.0		0
LARGEMOUTH BASS	27365	13.1	41.4	25780	1358	32.2	19.6	1276	95.0	2.29	33
WHITE CRAPPIE	12457	29.2	18.8	12366	3693	30.1	53.3	3693	70.4	0.83	100
BLACK CRAPPIE	361	242.4	0.5	289	313	144.1	4.5	313	13.3	1.13	4
YELLOW PERCH	871	179.1	1.3	871	0		0.0	0	100.0		0
FRESHWATER DRUM	1107	170.1	1.7	604	0		0.0	0	100.0		0

SUMMARY OF FISHING EFFORT AND CATCH RATES FOR INTENDED SPECIES GROUPS - 2008

LAKE=MELTON HILL

INTENDED SPECIES	ANGLER HOURS	RSE FOR ANGLER HOURS	ANGLER TRIPS	PERCENT EFFORT	NUMBER CAUGHT PER HOUR	RSE FOR CATCH PER HOUR	NUMBER HARVESTED PER HOUR	RSE FOR HARVEST PER HOUR	NUMBER OF INTERVIEWS
ANY CATFISH	1703	33.9	466	1.9	0.10	0.0	0.00		9
MUSKELLUNGE	2175	24.4	500	2.5	0.03	120.9	0.00		16
RAINBOW TROUT	725	52.1	176	0.8	0.73	6.0	0.41	18.6	3
STRIPED BASS	6545	16.3	1688	7.4	0.06	88.5	0.00		42
ANY SUNFISH	2295	28.7	613	2.6	1.73	15.8	0.64	53.4	10
ANY BLACK BASS	36214	7.4	9270	41.2	0.88	22.7	0.04	64.2	230
ANY CRAPPIE	14091	12.2	3489	16.0	0.73	27.7	0.28	43.2	94
WALLEYE	161	103.8	46	0.2	0.00		0.00		1
ANY SPECIES	24005	8.6	6210	27.3	0.72	49.4	0.01	168.0	123
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TOTAL	**87914**		**22458**						

SUMMARY OF RELATIVE SPECIES CATCH RATES WITHIN TARGET GROUPS - 2008

LAKE=MELTON HILL

TARGET GROUP	SPECIES WITHIN TARGET GROUPS	RELATIVE CATCH RATE	RELATIVE HARVEST RATE
ANY CATFISH			
	ANY CATFISH	0.00	0.00
	CHANNEL CATFISH	0.10	0.00
ANY SUNFISH			
	WARMOUTH	0.00	0.00
	BLUEGILL	1.73	0.64
ANY BLACK BASS			
	SMALLMOUTH BASS	0.13	0.00
	SPOTTED BASS	0.02	0.00
	LARGEMOUTH BASS	0.71	0.04
ANY CRAPPIE			
	WHITE CRAPPIE	0.71	0.26
	BLACK CRAPPIE	0.02	0.02

COMPARISON OF BLACK BASS CATCH RATES (# FISH/HOUR) BETWEEN TOURNAMENT AND NON-TOURNAMENT ANGLERS
(MONTHS ARE LISTED ONLY IF > 90% OF BLACK BASS ANGLERS RESPONDED TO THE QUESTION ON TOURNAMENT PARTICIPATION)

LAKE=MELTON HILL

MONTH	% BLACK BASS EFFORT BY TOURNAMENT ANGLERS	CATCH RATE FOR TOURNAMENT ANGLERS	# OF INTERVIEWS (TOURNAMENT)	CATCH RATE FOR NON-TOURNAMENT ANGLERS	# OF INTERVIEWS (NON-TOURNAMENT)
01 JANUARY	0		0	0.63	7
02 FEBRUARY	33	0.11	1	1.32	5
03 MARCH	37	1.60	6	0.45	14
04 APRIL	30	1.22	8	1.36	27
05 MAY	1	0.00	1	0.78	24
06 JUNE	35	1.79	30	0.87	19
07 JULY	20	0.87	10	0.77	18
08 AUGUST	15	0.96	4	0.25	19
09 SEPTEMBER	0		0	0.37	15
10 OCTOBER	3	0.00	1	0.57	13
11 NOVEMBER	0		0	0.54	3
12 DECEMBER	0		0	1.04	5

SUMMARY OF TRIP EXPENDITURES AND CONSUMER SURPLUS FOR INTENDED SPECIES - 2008

LAKE=MELTON HILL

INTENDED SPECIES	TOTAL TRIP EXPENDITURES	TOTAL CONSUMER SURPLUS	TOTAL VALUE BY ANGLERS	NUMBER OF INTERVIEWS
ANY CATFISH	4740	1200	5940	9
MUSKELLUNGE	16530	23170	39700	16
RAINBOW TROUT	3300	1030	4320	3
STRIPED BASS	50480	35180	85660	42
ANY SUNFISH	10710	6090	16800	10
ANY BLACK BASS	196560	133910	330470	230
ANY CRAPPIE	47290	21840	69130	94
WALLEYE	460	0	460	1
ANY SPECIES	52120	17440	69560	123
TOTAL	**382190**	**239860**	**622040**	**528**

SUMMARY OF SOCIOLOGICAL QUESTIONS – 2008

LAKE=MELTON HILL

DISTRIBUTION OF STATES OF RESIDENCE OF INTERVIEWED ANGLERS

STATE	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
TN	951	98.4
OTHERS	15	1.6

DISTRIBUTION OF COUNTIES OF RESIDENCE OF INTERVIEWED ANGLERS

COUNTY	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
ANDERSON	409	43.0
KNOX	390	41.0
LOUDON	58	6.1
OTHERS IN TN	94	9.9

DISTRIBUTION OF ONE-WAY MILEAGE OF ANGLERS INTERVIEWED

ONE-WAY MILES TRAVELED	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 0-25	928	96.1
B) 26-100	20	2.1
C) 101-250	17	1.8
D) > 250	1	0.1

DISTRIBUTION OF REASONS WHY INTERVIWED ANGLERS MADE THE TRIP

REASON FOR TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) FISHING	526	99.4
B) VACATION	3	0.6

DISTRIBUTION OF NUMBER OF DAYS IN TRIPS OF INTERVIEWED ANGLERS

NUMBER DAYS IN TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 1	519	98.1
B) 2-5	9	1.7
C) 6-10	1	0.2