

Melton Hill Reservoir

Annual Report 2009

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## Melton Hill Reservoir - 2009

### Description

**Area:** 5,690 acres

**Shoreline:** 170 miles

**Counties:** Anderson, Knox, and Loudon

**Total Fishing Effort in 2009:** 103,830 hours

**Total Value by Anglers in 2009:** \$379,910.00

### Black Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Angling Pressure</b>											
All Black Bass (hrs)	-	-	82,855	-	31,871	42,403	-	23,804	36,214	36,902	42,342
All Black Bass (hrs/acre)	-	-	14.56	-	5.60	7.45	-	4.18	6.36	6.49	7.44
Any Black Bass (hrs)	-	-	80,289	-	15,355	7,350	-	23,804	36,214	36,280	33,215
Any Black Bass (hrs/acre)	-	-	14.11	-	2.70	1.29	-	4.18	6.36	6.38	5.84
Largemouth Bass (hrs)	-	-	1,645	-	15,424	32,341	-	0	0	200	8,268
Largemouth Bass (hrs/acre)	-	-	0.29	-	2.71	5.68	-	0.00	0.00	0.04	1.45
Smallmouth Bass (hrs)	-	-	921	-	1,092	2,712	-	0	0	422	858
Smallmouth Bass (hrs/acre)	-	-	0.16	-	0.19	0.48	-	0.00	0.00	0.07	0.15
Spotted Bass (hrs)	-	-	0	-	0	0	-	0	0	0	0
Spotted Bass (hrs/acre)	-	-	0.00	-	0.00	0.00	-	0.00	0.00	0.00	0.00
<b>Tournaments (all black bass)</b>											
Tournament Angler Hrs/Acre (creel)	-	-	-	-	-	-	-	-	-	-	-
Tournament Catch Rate (creel)	-	-	-	-	-	-	-	-	-	-	-
Non-Tournament Catch Rate (creel)	-	-	-	-	-	-	-	-	-	-	-
<b>Value of Fishery (Trip Expenditures)</b>											
All Black Bass	-	-	\$155,490	-	\$82,540	\$140,010	-	\$110,260	\$196,560	\$175,440	\$143,383
Any Black Bass	-	-	\$150,820	-	\$35,330	\$19,340	-	\$110,260	\$196,560	\$174,010	\$114,387
Largemouth Bass	-	-	\$2,710	-	\$43,400	\$110,470	-	\$0	\$0	\$910	\$26,248
Smallmouth Bass	-	-	\$1,960	-	\$3,810	\$10,200	-	\$0	\$0	\$520	\$2,748
Spotted Bass	-	-	\$0	-	\$0	\$0	-	\$0	\$0	\$0	\$0

## Largemouth Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Recruitment</b> (electrofishing)											
Substock CPUE	6.80	-	26.80	33.70	13.70	19.00	40.70	11.30	9.30	11.67	19.22
<b>Density</b> (electrofishing)											
PSD	37	-	36	49	51	72	32	40	58	71	50
RSD (preferred)	-	-	5	8	8	17	9	10	8	16	10
CPUE (total)	21.4	-	122.0	120.0	80.0	69.3	123.3	98.3	153.3	86.0	97.1
CPUE $\geq$ Stock	14.6	-	95.2	86.3	66.3	50.3	82.6	87.0	144.0	74.3	77.8
CPUE $\geq$ MLL (14-inches)	-	-	7.3	11.7	8.3	16.3	11.7	11.0	22.3	20.7	13.7
<b>Growth</b> (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	5.6	-	-	5.6
Length Age-3	-	-	-	-	-	-	-	9.5	-	-	9.5
<b>Condition</b> (spring electrofishing)											
Stock	83.7	-	81.3	79.3	73.9	91.1	87.4	85.0	86.0	80.2	83.1
Quality	86.5	-	85.1	80.0	79.4	89.0	87.0	87.1	86.3	80.7	84.6
Preferred	86.4	-	89.0	83.2	83.0	92.1	87.9	87.3	89.3	86.7	87.2
Memorable	84.5	-	-	-	78.7	95.5	77.7	83.9	-	93.8	85.7
<b>Mortality</b> (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	47.0%	-	-	47.0%
<b>Fishing Success</b> (creel)											
Catch Rate (intended)	-	-	1.21	-	0.22	0.50	-	-	-	0.42	0.59
Harvest Rate (intended)	-	-	0.00	-	0.02	0.12	-	-	-	0.00	0.04
% Released	-	-	98.4%	-	83.6%	82.0%	-	99.4%	95.0%	97.3%	92.6%
Mean Weight	-	-	1.33	-	1.48	2.45	-	2.76	2.29	2.36	2.11

**Fishery Forecast:** Good 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.

## Smallmouth Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Recruitment</b> (electrofishing)											
Substock CPUE	0.60	-	0.80	1.7	1.30	0.00	2.00	1.00	0.30	0.33	0.89
<b>Density</b> (electrofishing)											
PSD	-	-	75	67.0	70	100	63	45	77	79	72
RSD (preferred)	-	-	25	33	50	-	11	10	36	36	29
CPUE (preferred)	0.0	-	1.0	1.1	0.7	0.0	3.3	2.3	3.0	1.7	1.5
CPUE (memorable)	0.0	-	0.0	0.3	0.7	0.7	0.0	0.0	0.3	0.0	0.2
CPUE (trophy)	0.0	-	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
CPUE (total)	0.8	-	2.8	5.1	4.7	0.3	8.3	7.7	7.7	5.0	4.7
CPUE $\geq$ Stock	0.2	-	2.0	3.4	3.4	0.3	6.3	6.7	7.4	4.7	3.8
CPUE $\geq$ Preferred	0.0	-	1.0	1.4	1.4	1.0	3.3	2.3	3.3	1.7	1.7
CPUE $\geq$ MLL (18-inches)	-	-	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.1
<b>Growth</b> (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)											
Stock	-	-	76.3	73.6	67.9	87.7	82.4	86.5	82.4	84.1	80.1
Quality	-	-	81.0	74.7	69.8	-	81.7	81.8	78.5	78.5	78.0
Preferred	79.3	-	76.0	77.1	75.1	-	80.5	79.5	76.6	75.6	77.5
Memorable	-	-	-	67.2	74.8	-	-	-	79.4	-	73.8
<b>Mortality</b> (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)											
Catch Rate (intended)	-	-	0.52	-	0.30	0.21	-	-	-	0.17	0.30
Harvest Rate (intended)	-	-	0.06	-	0.00	0.06	-	-	-	0.00	0.03
% Released	-	-	93.4%	-	98.3%	72.2%	-	100.0%	100.0%	99.0%	93.8%
Mean Weight	-	-	3.50	-	2.40	2.65	-	-	-	4.13	3.17

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 planned for the future.

## Spotted Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Recruitment</b> (electrofishing)											
Substock CPUE	0.00	-	1.00	0.0	0.70	0.30	0.00	0.70	0.00	0.00	0.30
<b>Density</b> (electrofishing)											
PSD	-	-	17	-	-	29	100	-	33	33	42
RSD (preferred)	-	-	-	-	-	-	-	-	17	-	17
CPUE (total)	1.4	-	4.0	2.3	2.3	2.7	0.3	2.0	2.0	1.0	2.0
CPUE $\geq$ Stock	1.4	-	3.0	2.3	1.6	2.4	0.3	1.3	2.0	1.0	1.7
<b>Growth</b> (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)											
Stock	87.8	-	85.1	82.5	84.1	91.9	-	96.6	85.4	94.1	88.4
Quality	93.2	-	90.4	-	71.8	80.6	101.2	-	94.0	78.0	87.0
Preferred	-	-	-	-	82.9	-	-	-	88.1	-	85.5
<b>Mortality</b> (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Density</b> (electrofishing)											
PSD	-	-	-	-	-	-	80	100	100	-	93
RSD (preferred)	-	-	-	-	-	-	5	90	86	-	60
CPUE (total)	-	-	-	-	-	-	6.7	3.3	2.3	-	4.1
CPUE $\geq$ Stock	-	-	-	-	-	-	6.7	3.3	2.3	-	4.1
CPUE $\geq$ MLL (10-inches)	-	-	-	-	-	-	0.3	3.0	2.0	-	1.8
<b>Growth</b> (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (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
<b>Mortality</b> (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)											
Angler Hours (all crappie)	-	-	18,698	-	7,324	9,126	-	14,995	14,091	13,011	12,874
Angler Hours/Acre	-	-	3.3	-	1.3	1.6	-	2.6	2.5	2.3	2.3
<b>Fishing Success</b> (creel)											
Catch Rate (any crappie)	-	-	1.18	-	0.36	1.24	-	0.95	0.73	0.96	0.90
Harvest Rate (any crappie)	-	-	0.42	-	0.05	0.28	-	0.24	0.28	0.28	0.26
% 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
<b>Value of Fishery</b> (Trip Expenditures - creel)											
All Crappie	-	-	\$41,580	-	\$12,690	\$23,430	-	\$53,160	\$47,290	\$49,870	\$38,003

Fishery Forecast: Black crappie were rarely seen in Melton Hill prior to 2006, but appear to have become fairly well established. None were collected by electrofishing in 2009.

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

## White Crappie

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Density</b> (electrofishing)											
PSD	80	-	100	93	77	100	96	97	100	100	94
RSD (preferred)	-	-	61	52	64	87	62	51	81	69	66
CPUE (total)	2.0	-	12.8	4.1	7.3	10.0	24.7	22.7	19.0	8.7	12.4
CPUE ≥ Stock	2.0	-	12.8	4.1	7.3	10.0	24.7	22.7	19.0	8.7	12.4
CPUE ≥ MLL (10-inches)	-	-	6.3	3.7	4.7	7.7	14.7	11.0	14.7	6.0	8.6
<b>Growth</b> (electrofishing)											
Length Age-1	-	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)											
Stock	84.6	-	-	80.7	79.9	-	91.9	85.3	-	-	84.5
Quality	86.4	-	84.5	87.1	86.5	87.1	92.8	86.6	94.7	91.5	88.6
Preferred	78.9	-	84.0	83.1	91.6	91.4	85.9	83.8	92.2	84.5	86.2
Memorable	81.1	-	78.4	81.9	91.5	85.0	85.9	83.6	89.0	84.0	84.5
<b>Mortality</b> (electrofishing)											
Total Mortality	-	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)											
Angler Hours (all crappie)	-	-	18,698	-	7,324	9,126	-	14,995	14,091	13,011	12,874
Angler Hours/Acre	-	-	3.3	-	1.3	1.6	-	2.6	2.5	2.3	2.3
<b>Fishing Success</b> (creel)											
Catch Rate (any crappie)	-	-	1.18	-	0.36	1.24	-	0.95	0.73	0.96	0.90
Harvest Rate (any crappie)	-	-	0.42	-	0.05	0.28	-	0.24	0.28	0.28	0.26
% Released (white crappie)	-	-	72.1%	-	66.5%	86.3%	-	81.3%	70.4%	75.4%	75.3%
Mean Weight (white crappie)	-	-	0.71	-	0.85	0.74	-	0.75	0.83	0.96	0.81
<b>Value of Fishery</b> (Trip Expenditures - creel)											
All Crappie	-	-	\$41,580	-	\$12,690	\$23,430	-	\$53,160	\$47,290	\$49,870	\$38,003

Fishery Forecast: The angler catch rate for crappie was average in 2009 while TWRA's electrofishing catch rate was slightly below average.

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



## Muskie

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Stocking</b>											
#	0	7,200	1,621	1,145	0	2,537	6,169	3,162	1,520	2,629	2,598
#/Acre	0.0	1.3	0.3	0.2	0.0	0.4	1.1	0.6	0.3	0.5	0.5
<b>Angling Pressure (creel)</b>											
Angler Hours	-	-	0	-	94	858	-	3,802	2,175	5,585	2,086
Angler Hours/Acre	-	-	0.0	-	0.0	0.2	-	0.7	0.4	1.0	0.4
<b>Fishing Success (creel)</b>											
Catch Rate (intended)	-	-	0.00	-	0.10	0.37	-	0.02	0.03	0.03	0.09
Harvest Rate (intended)	-	-	0.00	-	0.00	0.09	-	0.00	0.00	0.00	0.02
% Released	-	-	100.0%	-	-	89.8%	-	100.0%	100.0%	100.0%	98.0%
Mean Weight	-	-	-	-	-	28.50	-	-	-	-	28.50
<b>Value of Fishery (Trip Expenditures - creel)</b>											
Musky	-	-	-	-	\$190	\$2,680	-	\$16,960	\$16,530	\$42,580	\$15,788

Fishery Forecast: A group of fish have surpassed the 50- inch range and the fishery should continue to improve during the next several years. The new 50-inch minimum length limit effective March 1, 2010 will aid in conserving the resource.

Management Recommendations: Enact a reservoir-wide, immediate release regulation.

## Striped Bass

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Angling Pressure (creel)</b>											
Angler Hours	-	-	7,231	-	6,418	2,382	-	4,159	6,545	4,537	5,212
Angler Hours/Acre	-	-	1.3	-	1.1	0.4	-	0.7	1.2	0.8	0.9
<b>Fishing Success (creel)</b>											
Catch Rate (intended)	-	-	0.34	-	0.18	0.43	-	0.10	0.06	0.06	0.20
Harvest Rate (intended)	-	-	0.01	-	0.01	0.08	-	0.03	0.00	0.00	0.02
% Released	-	-	82.4%	-	88.5%	67.6%	-	97.4%	100.0%	100.0%	89.3%
Mean Weight	-	-	11.48	-	9.23	5.00	-	38.80	-	-	16.13
<b>Value of Fishery (Trip Expenditures - creel)</b>											
Striped Bass	-	-	\$14,030	-	\$6,910	\$5,770	-	\$13,630	\$50,480	\$18,460	\$18,213

## Sunfish

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Angling Pressure (creel)</b>											
Angler Hours (all sunfish)	-	-	4,994	-	873	1,339	-	796	2,295	2,581	2,146
Angler Hours/Acre	-	-	0.9	-	0.2	0.2	-	0.1	0.4	0.5	0.4
<b>Fishing Success (creel)</b>											
Catch Rate (any sunfish)	-	-	3.21	-	2.82	4.09	-	1.80	1.73	1.53	2.53
Harvest Rate (any sunfish)	-	-	0.30	-	0.58	0.23	-	0.00	0.64	0.75	0.42
% Released (bluegill)	-	-	82.1%	-	100.0%	93.2%	-	95.2%	89.8%	70.1%	88.4%
Mean Weight (bluegill)	-	-	0.24	-	-	0.39	-	0.45	0.58	0.41	0.41
<b>Value of Fishery (Trip Expenditures - creel)</b>											
All Sunfish	-	-	\$5,590	-	\$1,100	\$3,020	-	\$2,270	\$10,710	\$7,230	\$4,987

## Catfish

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Mean
<b>Angling Pressure (creel)</b>											
Angler Hours (all catfish)	-	-	5,722	-	391	1,825	-	1,877	1,703	2,811	2,388
Angler Hours/Acre	-	-	1.0	-	0.1	0.3	-	0.3	0.3	0.5	0.4
<b>Fishing Success (creel)</b>											
Catch Rate (any catfish)	-	-	0.14	-	0.95	0.34	-	0.72	0.10	0.19	0.41
Harvest Rate (any catfish)	-	-	0.06	-	0.00	0.13	-	0.08	0.00	0.07	0.06
% Released (channel)	-	-	18.2%	-	-	100.0%	-	-	100.0%	89.4%	76.9%
Mean Weight (channel)	-	-	2.58	-	-	-	-	-	-	-	2.58
<b>Value of Fishery (Trip Expenditures - creel)</b>											
All Catfish	-	-	\$10,170	-	\$1,050	\$4,810	-	\$5,550	\$4,740	\$12,500	\$6,470

## Habitat Enhancement

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	Christmas trees with block	none	none

## 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 - 2009

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
	2009	0.5	2,629

Total Number ----- 34,866  
 Average # fish/acre/year ----- 0.51

Table 3. Relative stock density, mean relative weight, and catch per unit effort by RSD category for target species collected in Melton Hill Reservoir 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.
Largemouth Bass	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
	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
2009	Electro	12	35	11.7	13.6	65	21.7	25.2	80.2	123	41.0	47.7	80.7	34	11.3	13.2	86.7	1	0.3	0.4	93.8	0	0.0	0.0	0.0	258	86.0	71	
Smallmouth Bass	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
	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
2009	Electro	12	1	0.3	6.7	3	1.0	20.0	84.1	6	2.0	40.0	78.5	5	1.7	33.3	75.6	0	0.0	0.0	0.0	0	0.0	0.0	0.0	15	5.0	79	
Spotted Bass	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	
	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	66.7	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
2009	Electro	12	0	0.0	0.0	2	0.7	66.7	94.1	1	0.3	33.3	78.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	3	1.0	33	
White Crappie	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
	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
2009	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	8	2.7	30.8	91.5	13	4.3	50.0	84.5	5	1.7	19.2	84.0	0	0.0	0.0	0.0	26	8.7	100	
Black Crappie	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
	2007	Electro	12	0	0.0	0.0	0	0.0	0.0	0.0	1	0.3	10																

Table 4. Mean relative weight and standard error values by size class for Melton Hill Reservoir largemouth bass collected during the 2009 electrofishing sample.

<b>Size Class</b>	<b>Mean Wr</b>	<b>Std. Error</b>	<b>N</b>
8	85.2		1
9	78.4	3.1	6
10	78.5	4.0	5
11	80.5	1.1	14
12	79.8	0.7	41
13	79.5	1.0	49
14	82.2	0.9	42
15	82.0	1.3	32
16	83.4	1.7	15
17	93.9	5.0	4
18	87.1	3.3	5
19	90.2	2.6	4
20	89.8		1
21	93.8		1
<b>Total Catch</b>			<b>220</b>

Table 5. Melton Hill Reservoir water levels for 2009. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
793.65	JANUARY	1	793.66	FEBRUARY	24	793.89	APRIL	19
792.71	JANUARY	2	793.68	FEBRUARY	25	794.15	APRIL	20
792.88	JANUARY	3	793.70	FEBRUARY	26	794.15	APRIL	21
793.01	JANUARY	4	793.85	FEBRUARY	27	793.91	APRIL	22
793.16	JANUARY	5	793.63	FEBRUARY	28	793.97	APRIL	23
793.72	JANUARY	6	793.83	MARCH	1	793.92	APRIL	24
794.81	JANUARY	7	793.73	MARCH	2	794.00	APRIL	25
794.34	JANUARY	8	793.53	MARCH	3	793.98	APRIL	26
794.76	JANUARY	9	793.33	MARCH	4	793.91	APRIL	27
794.50	JANUARY	10	793.35	MARCH	5	793.99	APRIL	28
794.38	JANUARY	11	793.42	MARCH	6	793.99	APRIL	29
793.93	JANUARY	12	793.45	MARCH	7	793.89	APRIL	30
793.32	JANUARY	13	793.47	MARCH	8	793.98	MAY	1
793.35	JANUARY	14	793.51	MARCH	9	794.14	MAY	2
793.71	JANUARY	15	793.44	MARCH	10	794.10	MAY	3
793.95	JANUARY	16	793.08	MARCH	11	793.55	MAY	4
794.13	JANUARY	17	793.07	MARCH	12	794.07	MAY	5
794.39	JANUARY	18	793.02	MARCH	13	794.16	MAY	6
794.64	JANUARY	19	793.73	MARCH	14	794.32	MAY	7
793.41	JANUARY	20	794.25	MARCH	15	794.17	MAY	8
793.51	JANUARY	21	794.80	MARCH	16	793.86	MAY	9
793.65	JANUARY	22	794.58	MARCH	17	793.88	MAY	10
793.72	JANUARY	23	794.55	MARCH	18	794.00	MAY	11
793.82	JANUARY	24	794.09	MARCH	19	792.62	MAY	12
793.96	JANUARY	25	794.06	MARCH	20	793.18	MAY	13
793.74	JANUARY	26	794.33	MARCH	21	792.49	MAY	14
794.06	JANUARY	27	793.72	MARCH	22	792.16	MAY	15
793.70	JANUARY	28	793.40	MARCH	23	793.30	MAY	16
794.32	JANUARY	29	792.81	MARCH	24	792.76	MAY	17
793.59	JANUARY	30	791.89	MARCH	25	793.13	MAY	18
793.93	JANUARY	31	791.62	MARCH	26	793.87	MAY	19
794.24	FEBRUARY	1	790.98	MARCH	27	793.27	MAY	20
794.43	FEBRUARY	2	791.07	MARCH	28	793.50	MAY	21
794.39	FEBRUARY	3	791.09	MARCH	29	793.59	MAY	22
794.44	FEBRUARY	4	791.26	MARCH	30	794.21	MAY	23
794.47	FEBRUARY	5	791.42	MARCH	31	794.12	MAY	24
794.51	FEBRUARY	6	791.50	APRIL	1	794.32	MAY	25
794.40	FEBRUARY	7	791.26	APRIL	2	794.24	MAY	26
794.07	FEBRUARY	8	791.35	APRIL	3	793.94	MAY	27
793.94	FEBRUARY	9	791.07	APRIL	4	794.06	MAY	28
794.10	FEBRUARY	10	791.11	APRIL	5	793.67	MAY	29
794.11	FEBRUARY	11	790.80	APRIL	6	793.90	MAY	30
794.24	FEBRUARY	12	791.59	APRIL	7	794.05	MAY	31
794.44	FEBRUARY	13	792.17	APRIL	8	793.96	JUNE	1
794.40	FEBRUARY	14	792.63	APRIL	9	793.95	JUNE	2
793.78	FEBRUARY	15	793.15	APRIL	10	793.96	JUNE	3
793.73	FEBRUARY	16	794.02	APRIL	11	794.14	JUNE	4
794.11	FEBRUARY	17	794.33	APRIL	12	794.20	JUNE	5
794.99	FEBRUARY	18	793.93	APRIL	13	793.82	JUNE	6
794.90	FEBRUARY	19	793.91	APRIL	14	793.83	JUNE	7
794.33	FEBRUARY	20	794.08	APRIL	15	794.00	JUNE	8
794.20	FEBRUARY	21	794.08	APRIL	16	794.05	JUNE	9
793.64	FEBRUARY	22	794.11	APRIL	17	794.22	JUNE	10
793.58	FEBRUARY	23	793.93	APRIL	18	793.86	JUNE	11

Table 6. Melton Hill Reservoir water levels for 2009. (TVA)

ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY	ELEVATION	MONTH	DAY
793.78	JUNE	12	793.86	AUGUST	5	794.04	SEPTEMBER	28
794.04	JUNE	13	793.91	AUGUST	6	793.86	SEPTEMBER	29
793.85	JUNE	14	793.76	AUGUST	7	793.74	SEPTEMBER	30
793.66	JUNE	15	793.97	AUGUST	8	793.84	OCTOBER	1
793.87	JUNE	16	793.91	AUGUST	9	794.06	OCTOBER	2
794.17	JUNE	17	793.96	AUGUST	10	793.97	OCTOBER	3
794.28	JUNE	18	793.69	AUGUST	11	794.00	OCTOBER	4
794.46	JUNE	19	793.93	AUGUST	12	794.17	OCTOBER	5
794.08	JUNE	20	794.25	AUGUST	13	794.16	OCTOBER	6
794.15	JUNE	21	793.43	AUGUST	14	793.62	OCTOBER	7
794.35	JUNE	22	793.93	AUGUST	15	794.10	OCTOBER	8
794.53	JUNE	23	793.96	AUGUST	16	794.29	OCTOBER	9
794.14	JUNE	24	793.56	AUGUST	17	793.99	OCTOBER	10
793.72	JUNE	25	794.41	AUGUST	18	793.97	OCTOBER	11
794.19	JUNE	26	794.09	AUGUST	19	793.61	OCTOBER	12
794.26	JUNE	27	794.10	AUGUST	20	794.15	OCTOBER	13
794.09	JUNE	28	794.17	AUGUST	21	794.45	OCTOBER	14
793.95	JUNE	29	793.82	AUGUST	22	794.69	OCTOBER	15
794.07	JUNE	30	793.42	AUGUST	23	794.14	OCTOBER	16
794.26	JULY	1	793.80	AUGUST	24	794.48	OCTOBER	17
794.23	JULY	2	793.79	AUGUST	25	793.81	OCTOBER	18
794.22	JULY	3	793.84	AUGUST	26	794.43	OCTOBER	19
793.99	JULY	4	793.63	AUGUST	27	794.51	OCTOBER	20
793.84	JULY	5	793.72	AUGUST	28	793.92	OCTOBER	21
793.82	JULY	6	793.80	AUGUST	29	793.91	OCTOBER	22
793.70	JULY	7	793.77	AUGUST	30	793.63	OCTOBER	23
793.80	JULY	8	793.91	AUGUST	31	794.12	OCTOBER	24
793.76	JULY	9	793.76	SEPTEMBER	1	793.78	OCTOBER	25
793.97	JULY	10	793.83	SEPTEMBER	2	793.22	OCTOBER	26
794.12	JULY	11	793.73	SEPTEMBER	3	794.58	OCTOBER	27
794.15	JULY	12	794.23	SEPTEMBER	4	793.63	OCTOBER	28
793.49	JULY	13	792.81	SEPTEMBER	5	794.55	OCTOBER	29
793.74	JULY	14	793.67	SEPTEMBER	6	794.00	OCTOBER	30
793.96	JULY	15	793.58	SEPTEMBER	7	794.13	OCTOBER	31
793.95	JULY	16	793.30	SEPTEMBER	8	794.37	NOVEMBER	1
793.26	JULY	17	793.75	SEPTEMBER	9	793.70	NOVEMBER	2
793.68	JULY	18	793.97	SEPTEMBER	10	793.76	NOVEMBER	3
793.83	JULY	19	794.03	SEPTEMBER	11	794.30	NOVEMBER	4
793.73	JULY	20	794.02	SEPTEMBER	12	794.08	NOVEMBER	5
793.70	JULY	21	793.97	SEPTEMBER	13	794.16	NOVEMBER	6
793.98	JULY	22	793.74	SEPTEMBER	14	793.82	NOVEMBER	7
793.47	JULY	23	793.39	SEPTEMBER	15	793.76	NOVEMBER	8
793.38	JULY	24	793.57	SEPTEMBER	16	793.67	NOVEMBER	9
793.58	JULY	25	793.73	SEPTEMBER	17	793.73	NOVEMBER	10
794.07	JULY	26	793.92	SEPTEMBER	18	794.56	NOVEMBER	11
794.03	JULY	27	794.25	SEPTEMBER	19	794.25	NOVEMBER	12
793.64	JULY	28	793.97	SEPTEMBER	20	793.41	NOVEMBER	13
793.46	JULY	29	794.13	SEPTEMBER	21	793.70	NOVEMBER	14
793.50	JULY	30	793.62	SEPTEMBER	22	793.91	NOVEMBER	15
793.53	JULY	31	793.79	SEPTEMBER	23	793.95	NOVEMBER	16
794.08	AUGUST	1	793.89	SEPTEMBER	24	793.68	NOVEMBER	17
793.89	AUGUST	2	793.94	SEPTEMBER	25	793.49	NOVEMBER	18
794.15	AUGUST	3	794.99	SEPTEMBER	26	793.65	NOVEMBER	19
794.45	AUGUST	4	794.40	SEPTEMBER	27	793.89	NOVEMBER	20



Table 7. Melton Hill Reservoir water levels for 2009. (TVA)

ELEVATION	MONTH	DAY
793.71	NOVEMBER	21
793.12	NOVEMBER	22
793.13	NOVEMBER	23
793.64	NOVEMBER	24
794.28	NOVEMBER	25
794.26	NOVEMBER	26
793.98	NOVEMBER	27
793.56	NOVEMBER	28
793.62	NOVEMBER	29
793.81	NOVEMBER	30
794.04	DECEMBER	1
794.55	DECEMBER	2
794.70	DECEMBER	3
794.30	DECEMBER	4
793.27	DECEMBER	5
794.26	DECEMBER	6
794.03	DECEMBER	7
794.25	DECEMBER	8
793.23	DECEMBER	9
793.76	DECEMBER	10
794.01	DECEMBER	11
794.02	DECEMBER	12
794.69	DECEMBER	13
793.49	DECEMBER	14
793.85	DECEMBER	15
793.49	DECEMBER	16
792.93	DECEMBER	17
794.38	DECEMBER	18
793.99	DECEMBER	19
793.01	DECEMBER	20
793.23	DECEMBER	21
793.72	DECEMBER	22
793.48	DECEMBER	23
793.37	DECEMBER	24
793.72	DECEMBER	25
793.21	DECEMBER	26
793.49	DECEMBER	27
792.85	DECEMBER	28
793.10	DECEMBER	29
793.65	DECEMBER	30
793.65	DECEMBER	31

## Figures

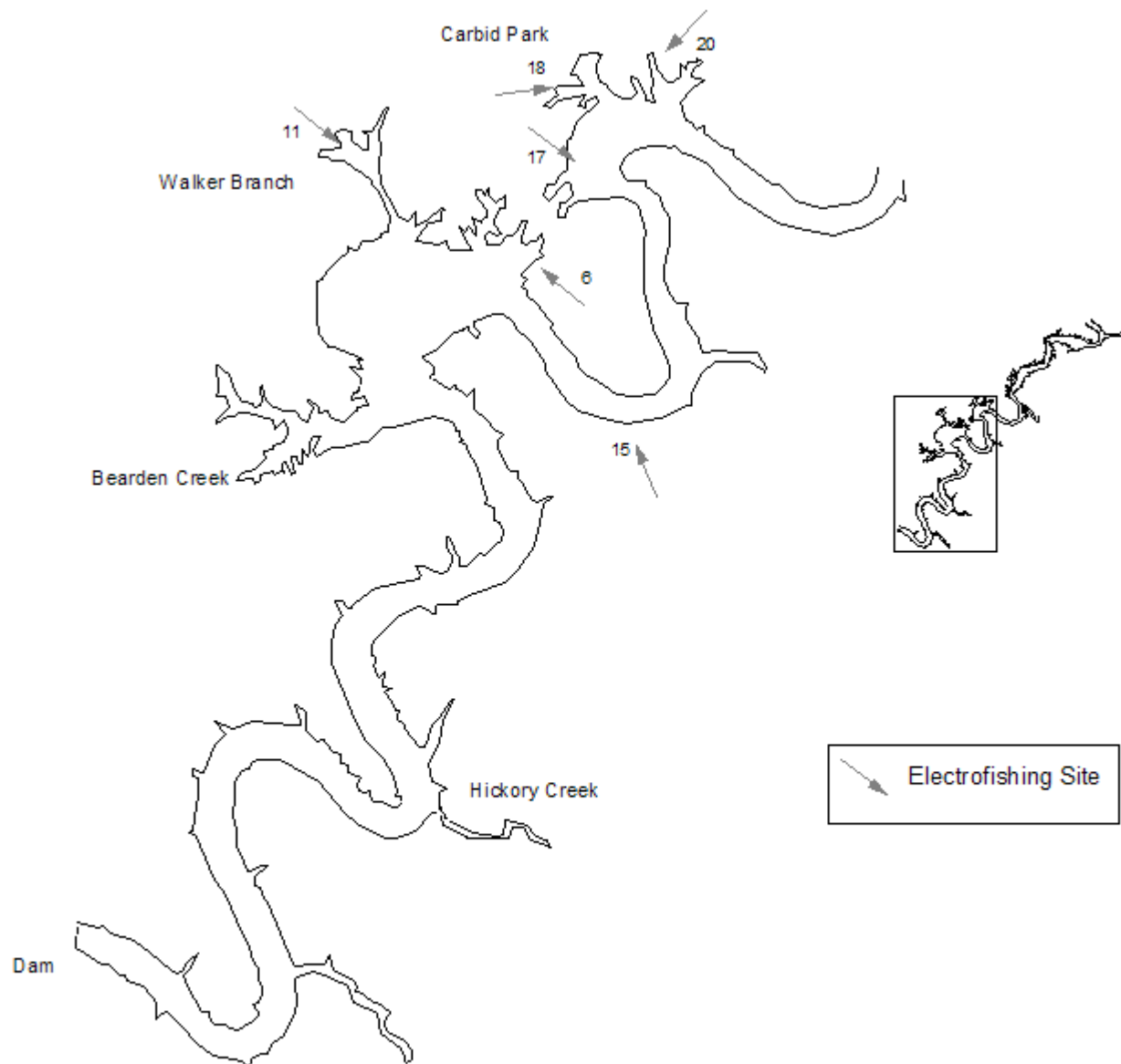


Figure 1. Electrofishing sites in the lower section of Melton Hill Reservoir in 2009.

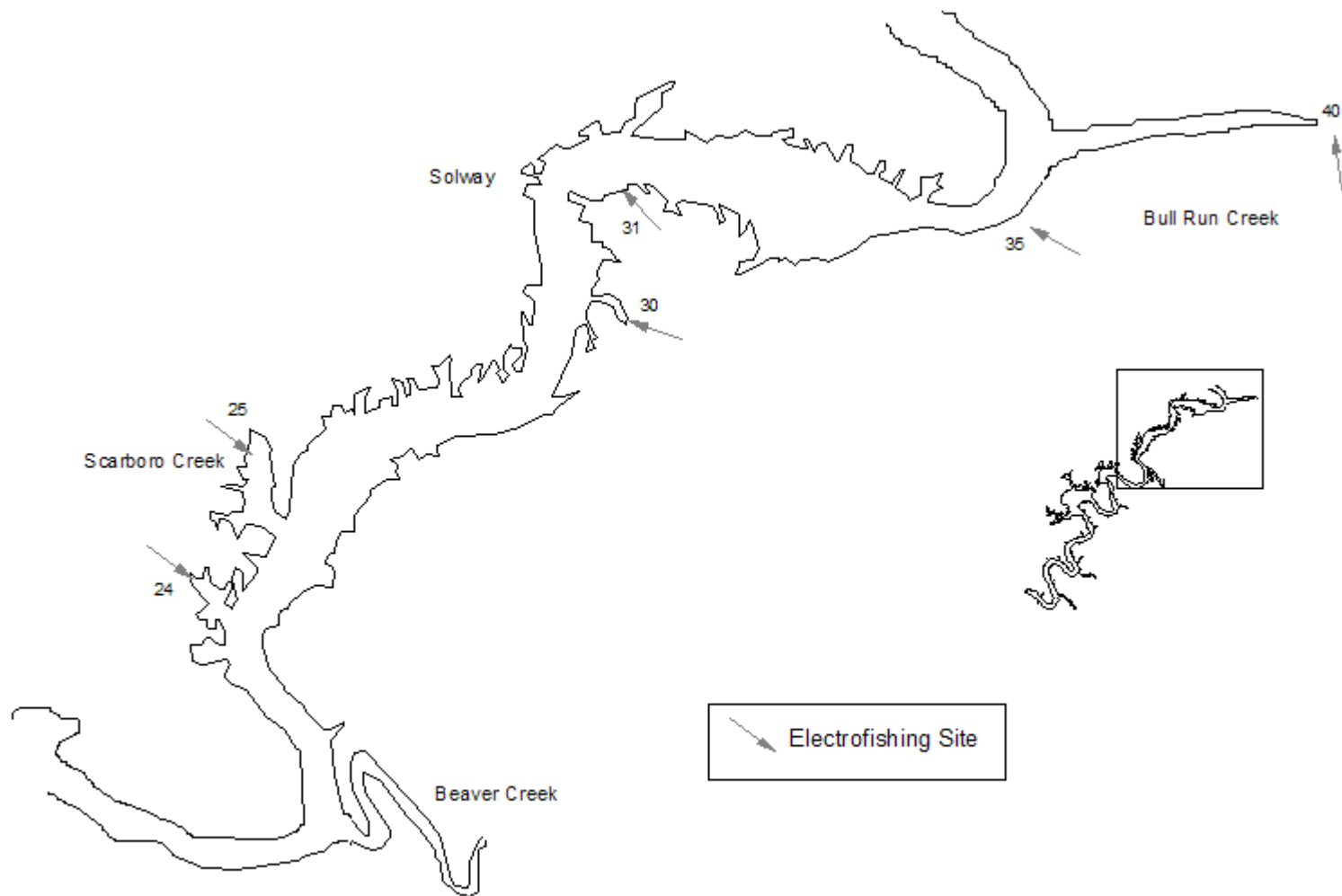


Figure 2. Electrofishing sites in the upper section of Melton Hill Reservoir in 2009.

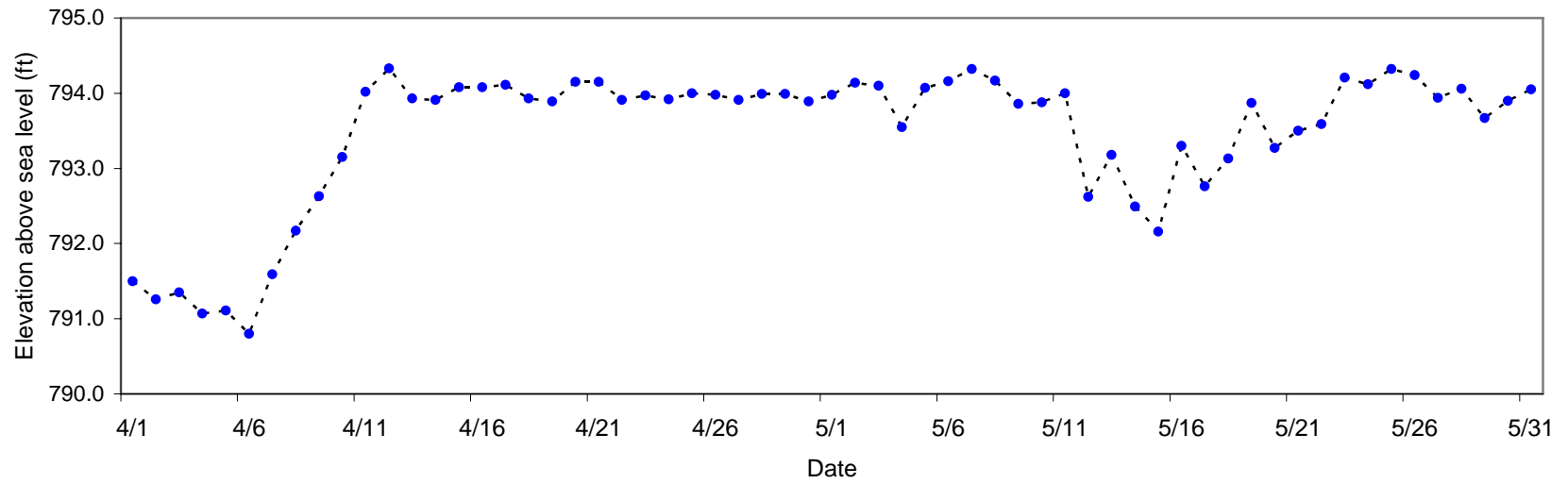


Figure 3. Melton Hill's 2009 April and May water levels (TVA data).

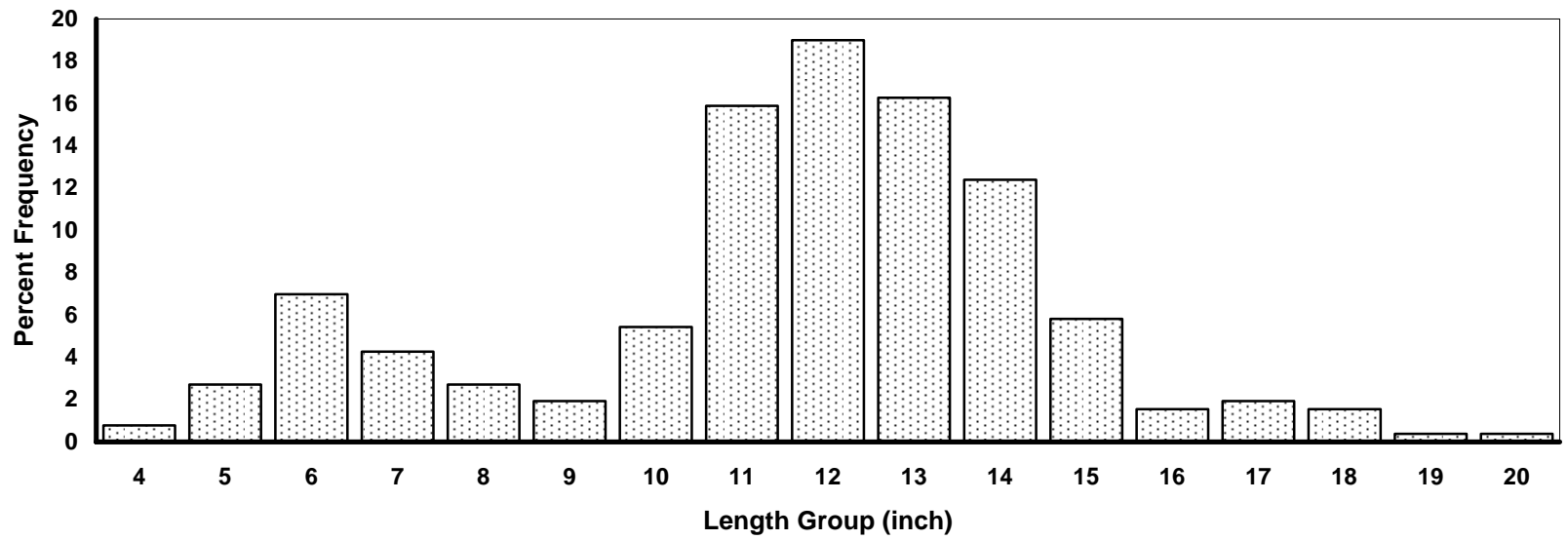


Figure 4. Melton Hill Reservoir largemouth bass length frequency by percent for the 2009 electrofishing sample (n=258).

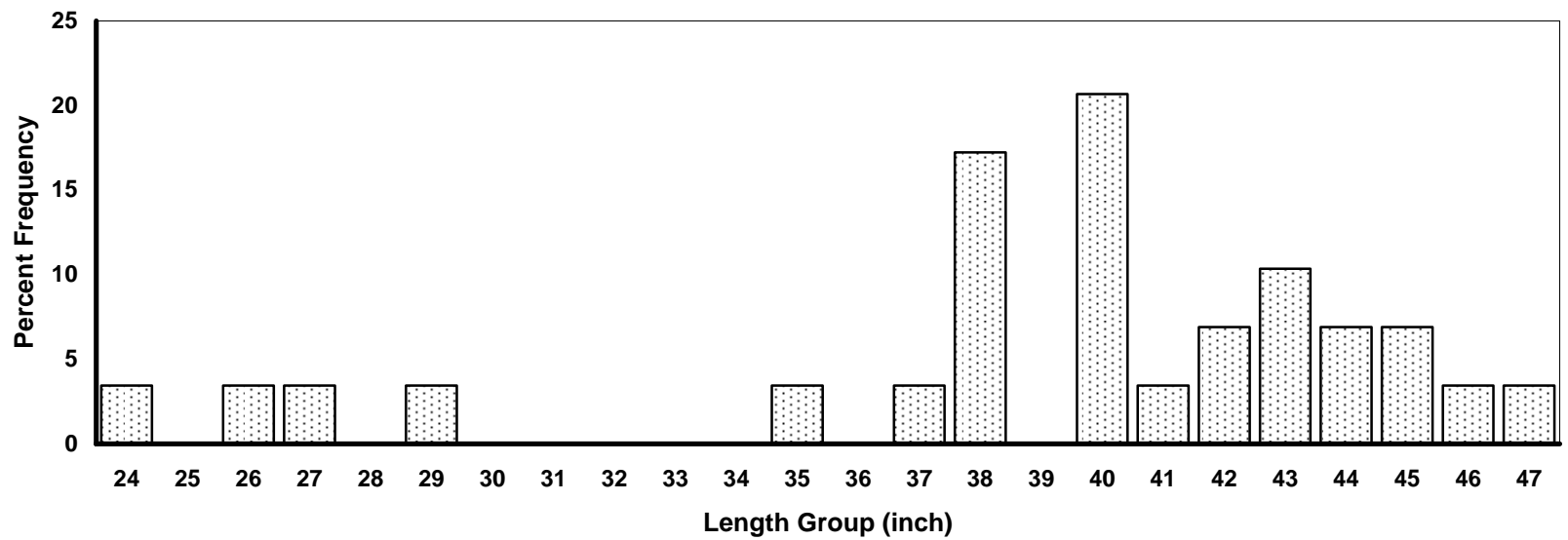


Figure 5. Melton Hill Reservoir musky length frequency by percent for the 2009 targeted electrofishing and floy tagging sample (n=29).

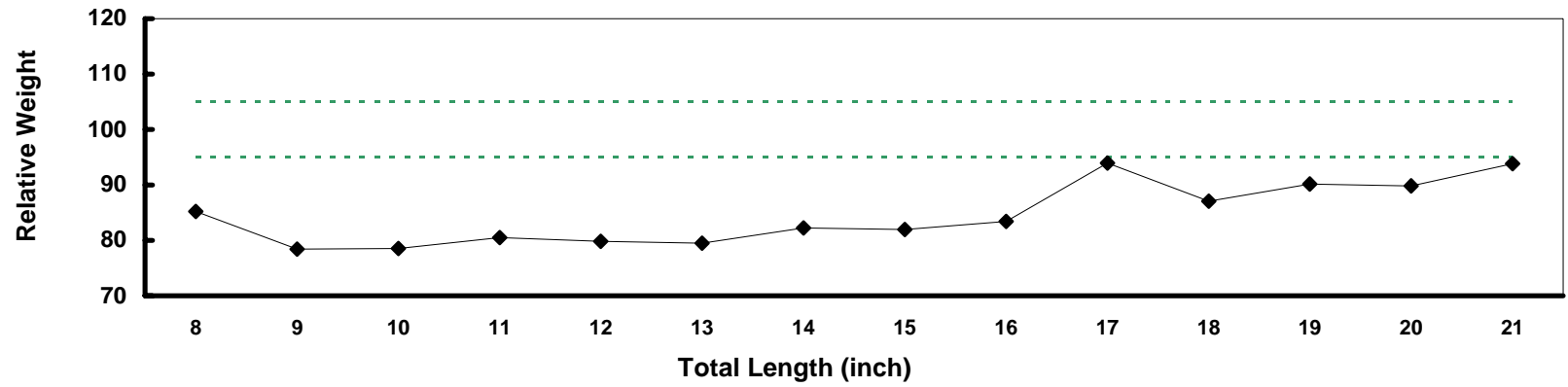


Figure 6. Melton Hill Reservoir largemouth bass mean relative weight values from the 2009 electrofishing sample (n=220).



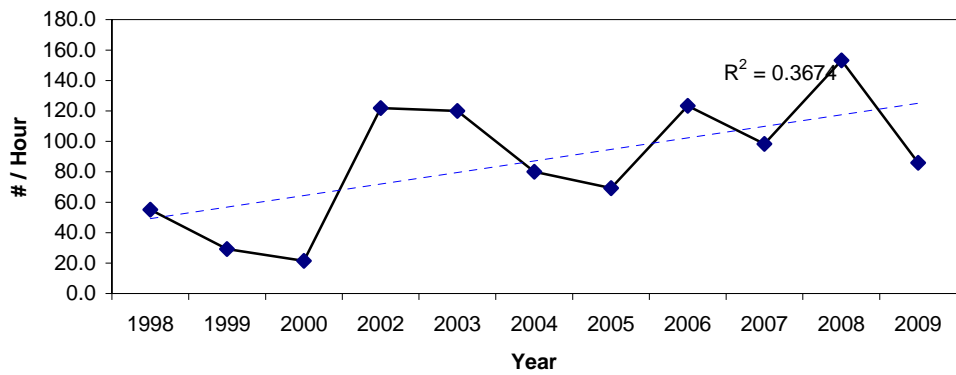


Figure 7. Melton Hill Reservoir largemouth bass electrofishing catch rates from 1998 to 2009.

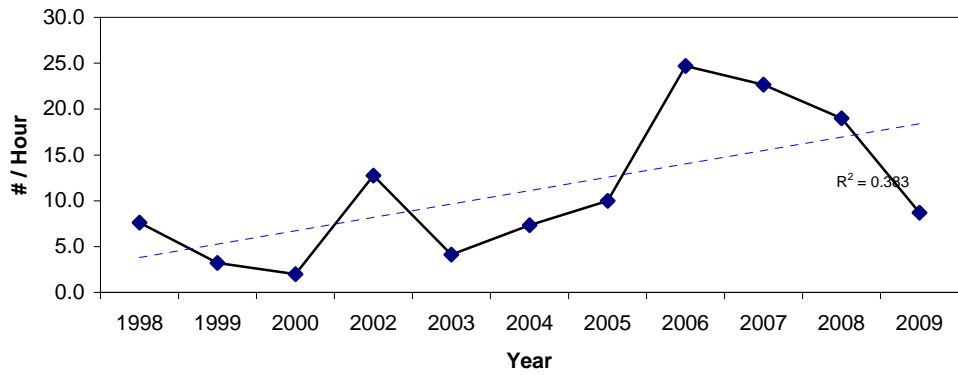


Figure 8. Melton Hill Reservoir white crappie electrofishing catch rates from 1998 to 2009.

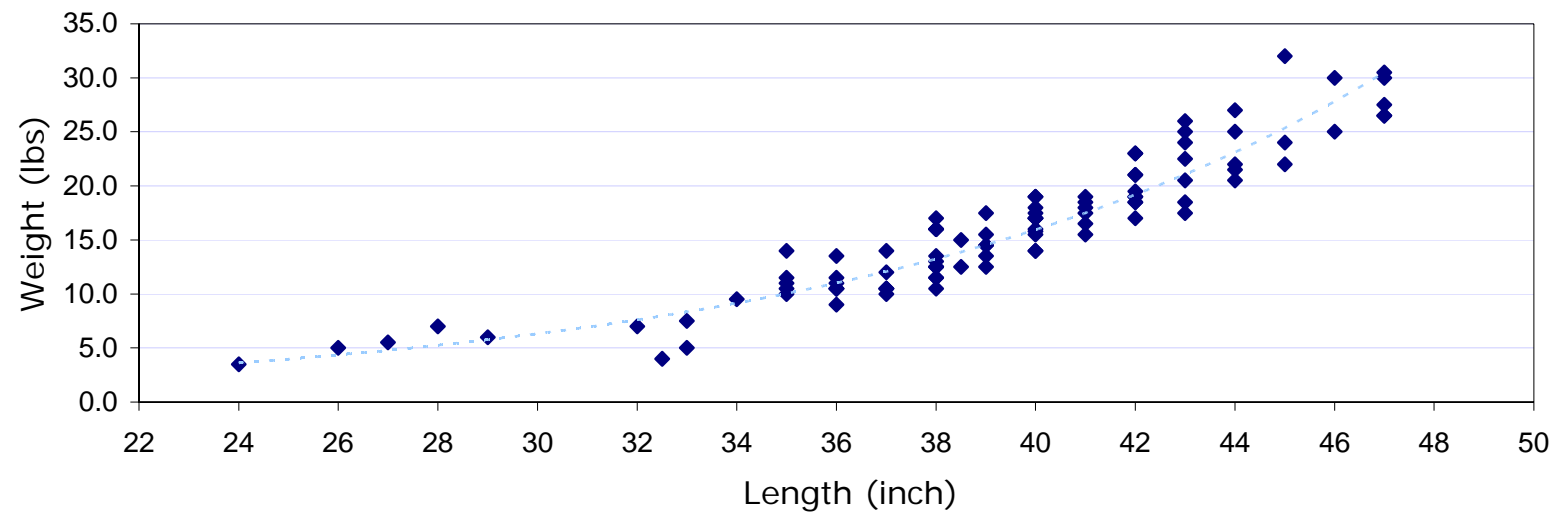


Figure 9. Melton Hill muskie length/weight relationship from electrofishing and angling in 2007-2009 (n=98)

## Appendix – Creel

MONTHLY ANGLING EFFORT FOR ALL ANGLERS - 2009

LAKE=MELTON HILL

MONTH	ANGLER HOURS	RELATIVE STANDARD ERROR	HOURS PER ACRE	ANGLER TRIPS	TRIPS PER ACRE	PERCENT EFFORT
01 JANUARY	5538	27.6	1.0	1291	0.2	5.3
02 FEBRUARY	4149	17.4	0.7	1220	0.2	4.0
03 MARCH	11049	30.5	1.9	2805	0.5	10.6
04 APRIL	9272	17.8	1.6	2183	0.4	8.9
05 MAY	16183	30.8	2.8	3995	0.7	15.6
06 JUNE	12332	10.3	2.2	3200	0.6	11.9
07 JULY	11871	14.3	2.1	2678	0.5	11.4
08 AUGUST	10612	4.4	1.9	2012	0.4	10.2
09 SEPTEMBER	11384	8.4	2.0	2406	0.4	11.0
10 OCTOBER	6938	11.9	1.2	1361	0.2	6.7
11 NOVEMBER	2835	23.5	0.5	803	0.1	2.7
12 DECEMBER	1667	22.0	0.3	506	0.1	1.6
-----	-----			-----		
<b>TOTAL</b>	<b>103830</b>			<b>24460</b>		

MONTHLY CATCH STATISTICS FOR ALL ANGLERS - 2009

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	7366	33.3	1.33	18.0	1329	27.6	0.24	0.0
02 FEBRUARY	1494	17.7	0.36	2.7	83	17.4	0.02	0.0
03 MARCH	11049	40.6	1.00	25.5	1215	48.9	0.11	37.0
04 APRIL	7510	21.2	0.81	11.4	927	51.7	0.10	46.1
05 MAY	13756	33.9	0.85	13.5	324	63.2	0.02	53.8
06 JUNE	8386	21.5	0.68	18.7	863	51.0	0.07	51.1
07 JULY	9734	22.4	0.82	17.0	1187	52.0	0.10	51.6
08 AUGUST	9657	17.1	0.91	16.4	743	72.2	0.07	69.2
09 SEPTEMBER	12864	19.7	1.13	17.8	3643	52.8	0.32	51.2
10 OCTOBER	7909	29.9	1.14	27.2	1388	50.7	0.20	48.3
11 NOVEMBER	1503	52.4	0.53	45.3	340	84.4	0.12	80.9
12 DECEMBER	83	107.0	0.05	100.0	0	.	0.00	.
<b>TOTAL</b>	<b>91311</b>				<b>12042</b>			

**SUMMARY OF SPECIES CATCH STATISTICS - 2009**

**LAKE=MELTON HILL**

SPECIES	TOTAL	RSE	SPECIES	INTENDED	TOTAL	RSE	SPECIES	INTENDED	% OF	AVERAGE	NUMBER
	NUMBER	FOR	CATCH	NUMBER	NUMBER	FOR	HARVEST	NUMBER	CAUGHT	WEIGHT	FISH
	FISH	CATCH	COMPOSITION	CAUGHT	FISH	HARVEST	COMPOSITION	HARVESTED	FISH	(LBS)	RECORDED
	CAUGHT		(%)		HARVESTED		(%)		RELEASED		
CARP	1552	175.2	1.7	1293	0	.	0.0	0	100.0	.	0
BLACK BUFFALO	40	602.6	0.0	40	40	602.6	0.3	40	0.0	3.50	1
BLUE CATFISH	214	353.0	0.2	214	59	524.4	0.5	59	72.4	8.10	2
CHANNEL CATFISH	388	459.7	0.4	388	41	516.9	0.3	41	89.4	8.00	1
MUSKELLUNGE	214	375.7	0.2	214	0	.	0.0	0	100.0	.	0
RAINBOW TROUT	84	361.0	0.1	84	84	361.0	0.7	84	0.0	0.77	3
WHITE BASS	232	607.3	0.3	58	0	.	0.0	0	100.0	.	0
STRIPED BASS	2567	94.2	2.8	781	0	.	0.0	0	100.0	.	0
BLUEGILL	16397	25.9	18.0	15058	4909	34.9	40.8	4909	70.1	0.41	149
SMALLMOUTH BASS	5709	54.2	6.2	5609	59	242.2	0.5	59	99.0	4.13	2
SPOTTED BASS	2580	140.1	2.8	2141	0	.	0.0	0	100.0	.	0
LARGEMOUTH BASS	35678	14.7	39.1	34874	980	43.8	8.1	980	97.3	2.36	29
WHITE CRAPPIE	17695	27.3	19.4	17045	4357	24.7	36.2	4300	75.4	0.96	76
BLACKNOSE CRAPPIE	27	792.8	0.0	27	27	792.8	0.2	27	0.0	1.40	1
YELLOW PERCH	1575	101.1	1.7	1170	894	81.4	7.4	787	43.2	0.72	25
FRESHWATER DRUM	1598	174.4	1.7	1090	0	.	0.0	0	100.0	.	0

SUMMARY OF FISHING EFFORT AND CATCH RATES FOR INTENDED SPECIES GROUPS - 2009

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	2811	32.6	643	2.7	0.19	57.5	0.07	0.0	11
MUSKELLUNGE	5585	19.3	1434	5.4	0.03	124.4	0.00		33
RAINBOW TROUT	142	98.8	33	0.1	0.75		0.75		1
STRIPED BASS	4537	22.5	1135	4.4	0.06	152.4	0.00		26
ANY SUNFISH	2581	36.1	629	2.5	1.53	34.6	0.75	63.1	8
ANY BLACK BASS	36280	9.3	8390	34.9	0.93	19.4	0.03	94.2	193
SMALLMOUTH BASS	422	71.3	104	0.4	0.17		0.00		2
LARGEMOUTH BASS	200	70.8	61	0.2	0.42	82.7	0.00		2
ANY CRAPPIE	13011	14.8	3164	12.5	0.96	33.6	0.28	48.2	91
ANY SPECIES	38258	9.5	8871	36.8	0.60	40.4	0.18	106.1	132
----- TOTAL	103827		24464						

SUMMARY OF RELATIVE SPECIES CATCH RATES  
WITHIN TARGET GROUPS - 2009

LAKE=MELTON HILL

TARGET GROUP	SPECIES WITHIN TARGET GROUPS	RELATIVE CATCH RATE	RELATIVE HARVEST RATE
ANY CATFISH	ANY CATFISH	0.00	0.00
	BLUE CATFISH	0.07	0.04
	CHANNEL CATFISH	0.12	0.03
ANY SUNFISH	ANY SUNFISH	0.00	0.00
	BLUEGILL	1.53	0.75
ANY BLACK BASS	SMALLMOUTH BASS	0.15	0.00
	SPOTTED BASS	0.06	0.00
	LARGEMOUTH BASS	0.95	0.03
ANY CRAPPIE	WHITE CRAPPIE	0.96	0.28
	BLACKNOSE CRAPPIE	0.00	0.00



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	0.17	7
02 FEBRUARY	0		0	0.00	3
03 MARCH	0		0	0.86	12
04 APRIL	0		0	1.14	25
05 MAY	5	0.67	2	1.26	19
06 JUNE	19	1.55	7	0.92	27
07 JULY	4	0.80	4	0.70	25
08 AUGUST	0		0	0.50	14
09 SEPTEMBER	35	1.26	3	1.20	22
10 OCTOBER	32	0.60	4	1.29	16
11 NOVEMBER	0		0	1.43	4
12 DECEMBER	0		0	0.42	2

**SUMMARY OF TRIP EXPENDITURES AND CONSUMER SURPLUS  
FOR INTENDED SPECIES - 2009**

**LAKE=MELTON HILL**

<b>INTENDED SPECIES</b>	<b>TOTAL TRIP EXPENDITURES</b>	<b>TOTAL CONSUMER SURPLUS</b>	<b>TOTAL VALUE BY ANGLERS</b>	<b>NUMBER OF INTERVIEWS</b>
ANY CATFISH	12500	5480	17980	11
MUSKELLUNGE	42580	36810	79390	33
RAINBOW TROUT	500	0	500	1
STRIPED BASS	18460	14550	33020	26
ANY SUNFISH	7230	6910	14150	8
ANY BLACK BASS	174010	103920	277930	193
SMALLMOUTH BASS	520	1280	1800	2
LARGEMOUTH BASS	910	2730	3640	2
ANY CRAPPIE	49870	25340	75210	91
ANY SPECIES	73330	21830	95160	132
<b>-----</b>	<b>-----</b>	<b>-----</b>	<b>-----</b>	<b>-----</b>
<b>TOTAL</b>	<b>379910</b>	<b>218850</b>	<b>598780</b>	<b>499</b>

**SUMMARY OF SOCIOLOGICAL QUESTIONS - 2009**

LAKE=MELTON HILL

**DISTRIBUTION OF STATES OF RESIDENCE OF INTERVIEWED ANGLERS**

LAKE=MELTON HILL

STATE	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
TN	940	97.6
OTHERS	23	2.4

**DISTRIBUTION OF COUNTIES OF RESIDENCE OF INTERVIEWED ANGLERS**

COUNTY	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
ANDERSON	484	51.5
KNOX	349	37.1
OTHERS IN TN	107	11.4

**DISTRIBUTION OF ONE-WAY MILEAGE OF ANGLERS INTERVIEWED**

ONE-WAY MILES TRAVELED	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 0-25	915	95.2
B) 26-100	24	2.5
C) 101-250	16	1.7
D) > 250	6	0.6

**DISTRIBUTION OF REASONS WHY INTERVIEWED ANGLERS MADE THE TRIP**

REASON FOR TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) FISHING	489	98.2
B) VACATION	8	1.6
C) BUSINESS	1	0.2

**DISTRIBUTION OF NUMBER OF DAYS IN TRIPS OF INTERVIEWED ANGLERS**

NUMBER DAYS IN TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 1	481	96.8
B) 2-5	12	2.4
C) 6-10	1	0.2
D) 11-15	1	0.2
F) >20	2	0.4