

Douglas Reservoir
Annual Report 2007

Prepared By:

John Hammonds
and
Douglas C. Peterson

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

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

This program receives Federal Aid in Fish and Wildlife Restoration. Under Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, the United States Department of the Interior prohibits discrimination on the basis of race, color, national origin, or disability. If you believe you have been discriminated against in any program, activity, or facility as described above, or if you desire further information, please write to:

Office of Equal Opportunity
United States Department of the Interior
Washington, D.C. 20240

Table of contents

	Page
Species Summaries	3-7
Stocking	8
Habitat	8
Tables	
1. Morphometric, physical, and chemical characteristics	10
2. Fish stocked in Douglas Reservoir	11
3. Number of species collected by gear type	12
4. Black bass CPUE and RSD by category and species.....	13
5. Crappie CPUE and RSD by category and species.....	14
6. Largemouth bass mean relative weights (Wr).....	15
7. Black crappie mean relative weights (Wr).....	15
8. White Crappie mean relative weights (Wr).....	16
9. Sauger mean relative weights (Wr).....	16
10. Geometric means of clupeids.....	17
11. Habitat enhancement summary.....	17
Figures	
1. Sites sampled on Douglas Reservoir in 2004	19
2. Largemouth bass length frequency by percent	20
3. Largemouth bass mean relative weights (Wr).....	20
4. Largemouth bass traditional PSD and RSD-15 values.....	21
5. Black crappie length frequency by percent	21
6. Black crappie mean relative weights (Wr).....	22
7. White crappie length frequency by percent.....	22
8. White crappie mean relative weights (Wr).....	23
9. Sauger length frequency by percent during winter	23
10. Sauger length frequency by percent during spring.....	24
11. Sauger mean relative weights winter (Wr).....	24
12. Sauger mean length at age	25
Appendix A – Water Quality	
Tables A1 – A11 Summer water quality sampling data.....	27 – 37
Figures A1 – A11 Summer water quality sampling data	38 – 48
Appendix B – Reservoir Elevations	
Table B1. Daily reservoir elevation data.....	50
Figure B1. Daily reservoir elevation data with guide curve	53
Appendix C – Angler Creel Survey	54

Largemouth Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Excellent	Sub-stock CPUE	Electrofishing	42.6 fish/hr.
<i>Growth*</i>	<i>Good</i>	<i>Mean TL at Age-3</i>	<i>Electrofishing</i>	<i>342 mm</i>
	Poor	RSD-P (380 mm)	Electrofishing	10 %
Density	Good	CPUE \geq Stock Size (203 mm)	Electrofishing	89.7 fish/hr.
		CPUE \geq Minimum Size Limit	Electrofishing	No limit
<i>Mortality*</i>	<i>High</i>	<i>Total Mortality (Z)</i>	<i>Electrofishing</i>	<i>71%*</i>
Angling Pressure	High	Fishing Effort (hours)	Creel Survey	88,444
Fishing Success	Good	Angler Catch Rate (#fish/hour)	Creel Survey	1.13
Value of Fishery	Excellent	Trip Expenditures	Creel Survey	\$402,820

* *Based on a 2000 data set.*

Fishery Forecast:

The largemouth bass population has potential to be comprised of larger fish due to excellent growth rates and recruitment. The percentages of preferred size largemouth (15-inches and bigger) in the population are consistently low. However, due to the excellent productivity of the reservoir, we manage to see several fish in that size range. In 2007 we saw really high numbers of largemouth less than 8-inches indicating an excellent reproductive year in 2006 which should help keep the fishery stable.

Management Recommendations:

Maintain current regulations, but consider a slot limit because of the potential of the fast growth and steady reproduction and recruitment of the largemouth bass in Douglas Reservoir.

Smallmouth Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Sub-stock CPUE	Electrofishing	0.0 fish/hr.
Growth	N/A	Mean TL at Age-3	Electrofishing	N/A
	Poor	RSD-P (350 mm)	Electrofishing	9%
Density	Good	CPUE > Stock Size (178 mm)	Electrofishing	19.8 fish/hr.
	Poor	CPUE > Minimum Size Limit	Electrofishing	0.0 fish/hr.
Mortality	N/A	Total Mortality (Z)	Electrofishing	N/A
Angling Pressure	Poor	Fishing Effort (hours)	Creel Survey	0*
Fishing Success	Poor	Angler Catch Rate (#fish/hour)	Creel Survey	0*
Value of Fishery	Poor	Trip Expenditures	Creel Survey	0*

* smallmouth bass were caught, but none of the anglers interviewed were targeting smallmouth bass

Fishery Forecast:

The number of large smallmouth in the population decreased for the first time since 2004. However really good numbers of smallmouth less than 8-inches were sampled indicating a successful spawn/and or stocking survival in 2006. The smallmouth bass population has the potential to become a nice trophy size fishery with the 20-inch minimum size limit in place. The fishery should remain stable and the number of smallmouth should increase with the large 2006 year class.

Management Recommendations:

Continue to monitor the effects of the 20-inch, 1 fish creel limit imposed in 2001. Collect a sample large enough to analyze age and growth.

Black Crappie***

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Sub-stock CPUE	Trap Net	0.04 fish/net night
<i>Growth*</i>	<i>Good</i>	<i>Mean TL at Age-3</i>	<i>Trap Net</i>	<i>327.5 mm</i>
	Excellent	RSD-P (250 mm)	Trap Net	63%
Density	Poor	CPUE > Stock Size (127 mm)	Trap Net	2.03 fish/net night
	Poor	CPUE > Minimum size Limit	Trap Net	1.1 fish/net night
<i>Mortality*</i>	<i>High</i>	<i>Total Mortality (Z)</i>	<i>Trap Net</i>	<i>73%</i>
Angling Pressure	High	Fishing Effort (hours)	Creel Survey	227,504**
Fishing Success	Excellent	Angler Catch Rate (#fish/hour)	Creel Survey	1.89**
Value of Fishery	Good	Trip Expenditures	Creel Survey	\$229,760**

* Based on an age data set collected in 1999.

** any crappie

*** 2007 was a drought year and reservoir elevations limited our trap net sets to only 30 lower sites. No nets were set upstream of Indian creek and this may have also affected the catch.

Fishery Forecast:

CPUE's for crappie were down again in 2007. This could be due to the very low water elevations, due to drought conditions, while collecting trap net data. Also, the smaller size crappie (6 to 8-inches) were not collected in high numbers for two years in a row. TWRA will make an attempt to stock crappie into Douglas Reservoir in 2008 to help compensate for the low numbers of small crappie in the population.

Management Recommendations:

1. Maintain current size and creel limit.
2. The TWRA is recommending that an elevation of 975 feet msl be attained by April 1.
3. Continue to use Henderson Island pond for a crappie nursery pond.

White Crappie***

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Sub-stock CPUE	Trap Net	0.02 fish/net night
<i>Growth*</i>	<i>Good</i>	<i>Mean TL at Age-3</i>	<i>Trap Net</i>	<i>312.49</i>
	Good	RSD-P (250 mm)	Trap Net	40%
Density	Poor	CPUE > Stock Size (5 inches)	Trap Net	0.17 fish/net night
	Poor	CPUE > Minimum size Limit	Trap Net	0.07 fish/net night
<i>Mortality*</i>	<i>High</i>	<i>Total Mortality (Z)</i>	<i>Trap Net</i>	<i>69 %</i>
Angling Pressure	High	Fishing Effort (hours)	Creel Survey	227,504**
Fishing Success	Excellent	Angler Catch Rate (#fish/hour)	Creel Survey	1.89**
Value of Fishery	Good	Trip Expenditures	Creel Survey	\$229,760**

* Based on an age data set collected in 1999.

** any crappie

*** 2007 was a drought year and reservoir elevations limited our trap net sets to only 30 lower sites. No nets were set upstream of Indian creek and this may have also affected the catch.

Fishery Forecast:

As with black crappie, CPUE's for crappie were down again in 2007. This could be due to the very low water elevations, due to drought conditions, while collecting trap net data. Also, the smaller size crappie (6 to 8-inches) were not collected in high numbers for two years in a row. TWRA will make an attempt to stock crappie into Douglas Reservoir in 2008 to help compensate for the low numbers of small crappie in the population.

Management Recommendations:

1. Maintain current size and creel limit.
2. The TWRA is recommending that an elevation of 975 feet msl be attained by April 1.
3. Continue to use Henderson Island pond for a crappie nursery pond.

Sauger

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Age-0 CPUE	Gill Net	0.0 fish/net night
	Poor	Sub-stock CPUE	Gill Net	0.0 fish/net night
Growth	Good	Mean TL at Age-3	Gill Net	367 mm
	Good	RSD-P (380 mm)	Gill Net	37 %
Density	Fair	CPUE >Stock Size (200 mm)	Gill Net	5.8 fish/net night
	Good	CPUE > Minimum size Limit	Gill Net	2.0 fish/net night
Mortality*		Total Mortality (Z)	Gill Net	N/A
Angling Pressure	Moderate	Fishing Effort (hours)	Creel Survey	15,001
Fishing Success	Good	Angler Catch Rate (#fish/hour)	Creel Survey	1.89
Value of Fishery	Fair	Trip Expenditures	Creel Survey	\$28,030

* Data set did not meet criteria for calculating mortality

Fishery Forecast:

No sauger under 12-inches were sampled in 2007 and this could effect the angler catch in late 2008 and early 2009. A new "experimental" sauger regulation will go into effect March 1, 2008 and then be evaluated each year. Currently, about 85% of the sauger harvested from Douglas Reservoir consists of mature females and the purpose of this new regulation is to protect the mature females from being harvested.

Management Recommendations:

Implement a 5-fish creel limit (in combination with walleye) with no size limit, allowing only one sauger to be harvested over 16-inches. Monitor angler harvest composition, in response to the new regulation, with a creel survey targeting sauger anglers on Douglas Reservoir.

Stocking and Stocking Evaluations

Species	Number Stocked	Mark	Evaluation	# Fish / Net Night
White Crappie	15,000	None	Trap Netting	Substock CPUE = 0.02
Black Crappie	0	None	Trap Netting	Substock CPUE = 0.04

Habitat Enhancement and Monitoring

Type of Work	Details	Date
Shoreline Stabilization		See table 10.
Shoreline Seeding		"
Aquatic Plants		"
Fish Attractors (Shallow Water)		"
Fish Attractors (Deep Water)		"
Smallmouth Spawning Benches		"
Stake Beds		"
Water Quality Monitoring	Temperature, pH, Conductivity, and D.O.	July, August, September

Tables

Table 1. The morphometric, physical, and chemical characteristics associated with Douglas Reservoir.

Parameter	Measurement	
	<i>English</i>	<i>Metric</i>
Surface Area	30,400 ac	12,303 ha
Drainage Area	4,541 sq. mi	11,770 sq. km
Full Pool Elevation	1,000 ft msl	305 m msl
Mean Annual Fluctuation	60 feet	18 m
Shoreline Distance	513 mi	826 km
Maximum Depth	129 ft	39 m
Outlet Depth (upper)	99 ft	30 m
Outlet Depth (lower)	118 ft	36 m
Thermocline Depth	23 ft	7 m
Mean Chlorophyll (Forebay)	6.8 ppm	6.8 mg/l
Shoreline Development		17%
Trophic Status (Forebay)		mesotrophic
Trophic Index, Carlson (1977)		49.3
Hydraulic Retention Time		105 days
Reservoir Age		64 years

Table 2. Fish stocked in Douglas Reservoir 1993 – 2007.

Species	Month/Year	Rate (per acre)	Length Range (in)	Number
Sauger	May 1993	0.1	1.5	1,760
	May 2000	3.6	1.0 – 2.0	111,158
	May 2001	5.6	1.0 – 2.0	169,904
	May 2003	4.8	1.25 – 2.25	145,245
	June 2004	0.7	2.0 – 3.0	20,000
	May 2005	1.7	1.5 – 2.25	50,848
	May 2006	0.9	1.0 – 2.0	27,883
	May 2007	2.3	1.0 – 1.75	68,610
White Crappie	Oct 2002	0.8	2.0 – 6.0	22,959
	June 2005	0.5	2.0 – 5.0	15,000
	July 2007	0.5	2.0 – 2.5	15,000
Smallmouth Bass	June 2005	0.25	2.0 – 3.5	7650
	July 2006	0.08	3.0 – 5.5	2500
Black Crappie	Oct 2002	5.3	1.25 – 4.5	161,786

Table 3. Number of species collected by gear type in Douglas Reservoir, 2007. Effort is represented in hours fished for electrofishing and gillnetting and net nights for trapnetting.

Species	Winter Gill Netting			Spring Electrofishing			Fall Trapnetting		
	No.	CPUE (# fish / net night)	Total Effort	No.	CPUE (# fish / hour)	Total Effort	No.	CPUE (# fish / net night)	Total Effort
Largemouth Bass	X	X	X	463	132.3	3.5	X	X	X
Smallmouth Bass	X	X	X	45	19.8	2.3	X	X	X
Spotted Bass	X	X	X	0	0.0	3.5	X	X	X
Black Crappie	X	X	X	54	15.4	3.5	128	2.1	60
Black-Nose Crappie	X	X	X	0	0.0	3.5	4	0.1	60
White Crappie	X	X	X	10	2.9	3.5	11	0.2	60
Walleye	28	4.7	6	3	0.9	3.5	X	X	X
Sauger	35	5.8	6	3	0.9	3.5	X	X	X
White Bass	X	X	X	X	X	X	X	X	X
Gizzard Shad	X	X	X	X	X	X	X	X	X
Threadfin Shad	X	X	X	X	X	X	X	X	X
Alewife	X	X	X	X	X	X	X	X	X
Bluegill	X	X	X	X	X	X	X	X	X

X = non targeted species

Table 4. Mean catch per unit effort and relative stock density for black bass species by RSD category for Douglas Reservoir 2000 – 2007.

Species	Year	Gear	Number of Samples	RSD Substock			RSD Stock - Quality			RSD Quality - Preferred			RSD Preferred-Memorable			RSD Memorable-Trophy			RSD Trophy			PSD	Total		
				#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE		
				Largemouth Bass	2000	EL	6	76	50	28	100	66	51	82	54	42	7	8.6	7	1	0.1	1			
	2001	EL	12	120	39	29	134	43	46	129	42	44	30	10	10	1	0.3					54	414	133	
	2002	EL	12	77	25	17	99	33	26	225	74	58	60	20	16	1	0.3					74	462	152	
	2003	EL	13	50	14	21	73	21	38	55	16	29	57	21	30	7	3	4					62	242	80
	2004	EL	12	61	20	17	147	48	50	102	34	35	45	15	15	0	0	0	0	0	0	50	355	115.8	
	2005	EL	12	82	27	14	194	64	38	216	71	42	100	33	19	6	2	1	0	0	0	62	598	196	
	2006	EL	14	61	17	14	130	37	35	171	48	46	59	17	16	9	2.5	2	0	0	0	65	430	121.3	
	2007	EL	14	149	43	32	177	51	56	105	30	33	30	8.6	10	2	0.6	1	0	0	0	44	463	132.3	
Smallmouth Bass	2004	EL	2	1	0.6	3	13	7.4	38	9	5.1	26	8	4.6	24	3	1.7	9	0	0	0	62	35	19.9	
	2005	EL	2	0	0	0	15	6.5	42	5	2.1	14	11	4.7	31	4	1.7	11	1	0.4	3	58	36	15.5	
	2006	EL	2	0	0	0	13	6.7	39	8	4.1	24	4	2.1	12	7	3.6	21	1	0.5	3	61	33	17.1	
	2007	EL	1	0	0	0	32	14	71	9	4	20	3	1.3	7	1	0.4	2	0	0	0	29	45	19.8	

Table 5. Mean catch per unit effort and relative stock density for crappie species by RSD category for Douglas Reservoir 2000 – 2007.

Species	Year	Gear	Number of Samples	RSD Substock			RSD Stock - Quality			RSD Quality - Preferred			RSD Preferred-Memorable			RSD Memorable-Trophy			RSD Trophy			PSD	Total		
				#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE		
				Black Crappie	2000	TN	90	85	0.9	52	13	0.1	16	39	0.4	49	26	0.3	33	2	0	3			
	2001	TN	89	21	0.2	20	17	0.2	20	28	0.3	33	27	0.3	31	13	0.2	15						107	1.2
	2002	TN	90	97	1.1	19	134	1.5	31	177	2	41	105	1.1	25	11	0.1	3						525	6
	2003	TN	89	619	6.9	66	58	0.7	18	112	1.4	35	112	1.3	35	18	0.2	6						935	10.6
	2004	TN	89	31	0.4	5	69	0.8	12	283	3.2	50	197	2.2	35	12	0.1	2	0	0	0	88		592	6.7
	2005	TN	90	52	0.6	7	104	1.2	15	287	3.2	43	253	2.8	38	27	0.3	4	0	0	0	85		723	8
	2006	TN	90	35	0.4	11	7	0.1	2	91	1	31	168	1.9	58	23	0.3	8	0	0	0	98		324	3.6
	* 2007	TN	60	6	0.1	5	0	0	0	45	0.8	37	57	1	47	18	0.3	15	2	0	2	100		128	2.13
White Crappie	2000	TN	90	16	0.2	76	0	0	0	0	0	0	1	0	5	3	0	14						21	0.2
	2001	TN	89	8	0.1	50	1	0	13	1	0	13	3	0	38	3	0	38						16	0.2
	2002	TN	90	1	0.2	2	22	0.2	35	24	0.3	39	7	0.1	11	8	0.1	13						87	1
	2003	TN	89	780	8.8	97	8	0.1	35	4	0.1	17	6	0.1	26	5	0.1	22						803	9
	2004	TN	89	9	0.1	19	5	0.1	13	15	0.2	39	16	0.2	39	3	0	8	0	0	0	87		47	0.5
	2005	TN	90	102	1.1	76	3	0	9.1	8	0.1	24	15	0.2	46	7	0.1	21	0	0	0	91		135	1.5
	2006	TN	90	5	0.1	29	0	0	0	3	0.03	25	5	0.1	42	4	0.04	33	0	0	0	100		17	0.2
	* 2007	TN	60	1	0	9	0	0	0	6	0.1	60	2	0	20	2	0.03	20	0	0	0	100		11	0.18

* Could not sample the upper end because of low water. Main Channel was only 7 feet deep at Indian Creek. Only netted 30 sites instead of 45.

Table 6. Largemouth bass mean relative weights (Wr) in Douglas reservoir, spring 2007.

Length Group	Mean Wr	Std. Error	N
150	88.922	2.216	38
175	90.445	1.047	98
200	91.907	0.902	90
225	91.829	1.081	45
250	93.357	1.615	19
275	91.555	1.581	23
300	88.058	0.935	40
325	88.010	0.901	36
350	89.958	1.494	26
375	93.903	2.671	12
400	91.503	2.602	6
425	94.901	3.657	6
450	93.053	8.446	2
475	87.144	4.284	4
500			
525	98.826	5.835	2
550			
575			
Total =			447

Table 7. Black crappie mean relative weights (Wr) in Douglas Reservoir fall 2007.

Length Group	Mean Wr	Std. Error	N
125			
150			
175			
200	107.902	2.477	13
225	106.901	1.178	32
250	102.985	1.050	32
275	98.864	1.395	25
300	96.423	1.276	14
325	93.988	1.270	2
350	86.894	0.158	2
375	84.264		1
400	71.176		1
Total =			122

Table 8. White crappie mean relative weights (Wr) in Douglas Reservoir fall 2007.

Length Group	Mean Wr	Std. Error	N
125			
150			
175			
200	131.984		1
225	90.500	12.865	5
250	96.574		1
275	106.069		1
300	112.847	3.874	2
325			
350			
375			
400			
*Total =			10

Table 9. Sauger mean relative weights in Douglas Reservoir December 2007.

Length Group	Mean Wr	Std. Error	N
150			
175			
200			
225			
250			
275			
300			
325	103.661	5.408	7
350	89.012	2.143	10
375	91.865	0.962	8
400	90.287	5.743	5
425	114.345		1
450			
475			
500			
Total =			31

Table 10. Geometric mean density of the clupeid catch in experimental gill nets from Douglas Reservoir 2007.

Species	2007
Threadfin Shad	19.5056
Gizzard Shad	91.4348

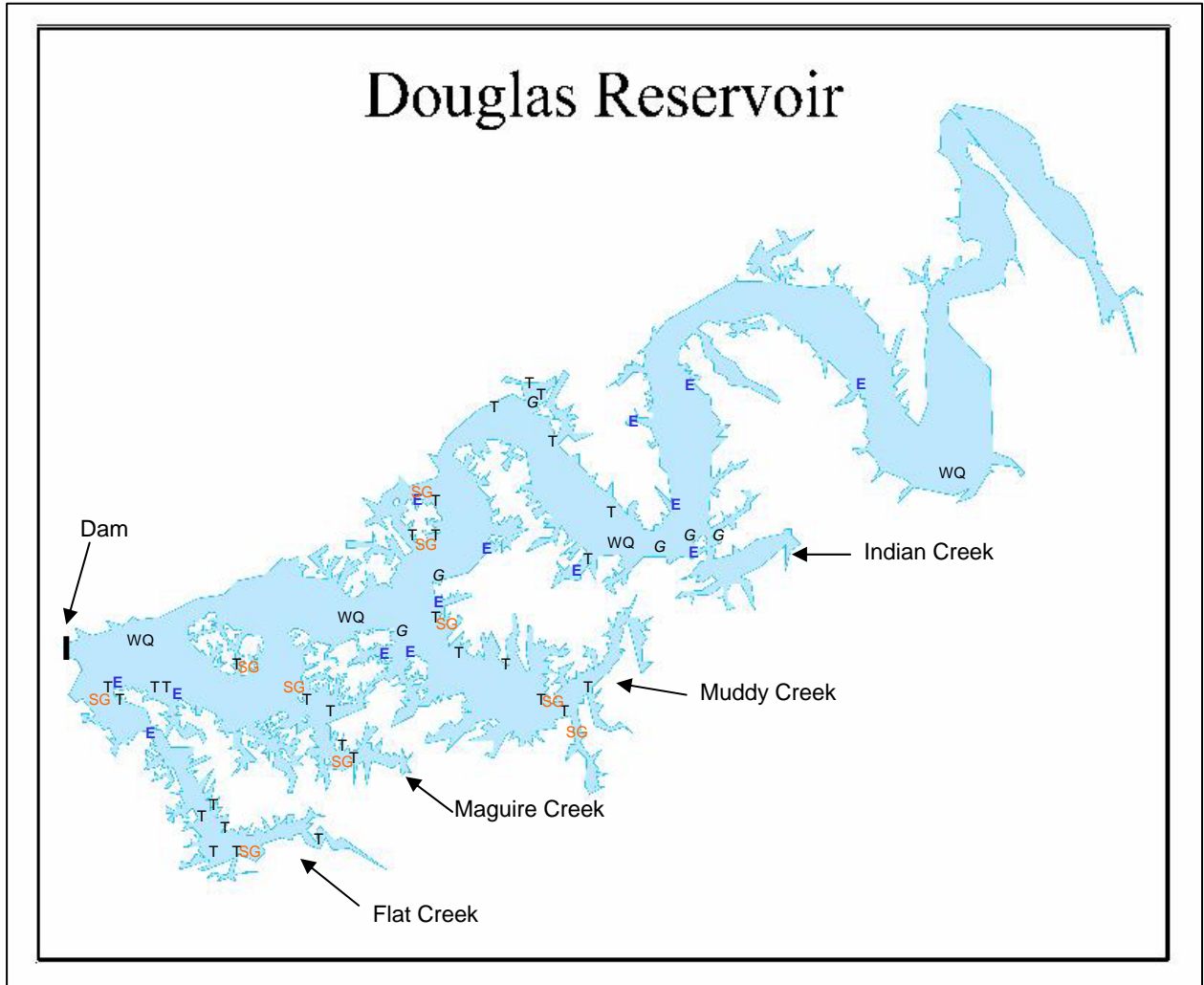
Table 11. Douglas Reservoir fish habitat enhancement summary for 2007.

Location	New Sites			Renovated Sites			Expanded Sites		
	Number	Units	Acres	Number	Units	Acres	Number	Units	Acres
FBRM 44.15 L*				1	1050	21.00			
FBRM 44.00 L*				1	400	8.00			
Total	0	0	0	2	1450	29	0	0	0

*Christmas Trees

Figures

Figure 1. Douglas Reservoir with sites sampled in 2007.



E = Electrofishing
G = Sauger Gill Netting
SG = Shad Gill Netting
T = Trap Netting
WQ = Water Quality

Largemouth Bass

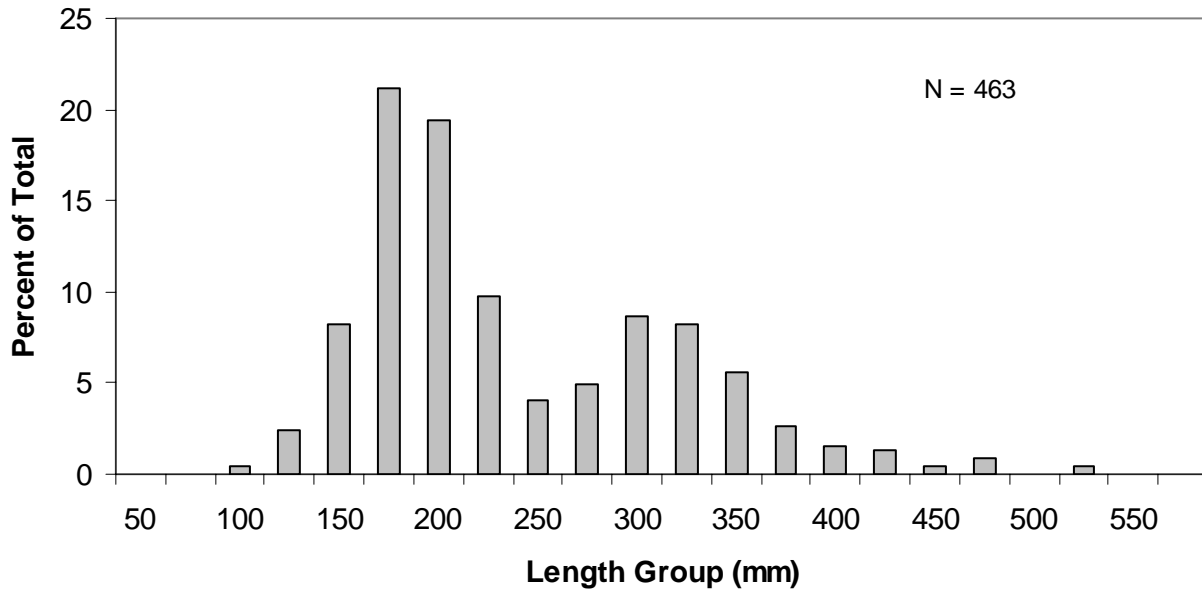


Figure 2. Largemouth bass length frequency in Douglas Reservoir, spring 2007.

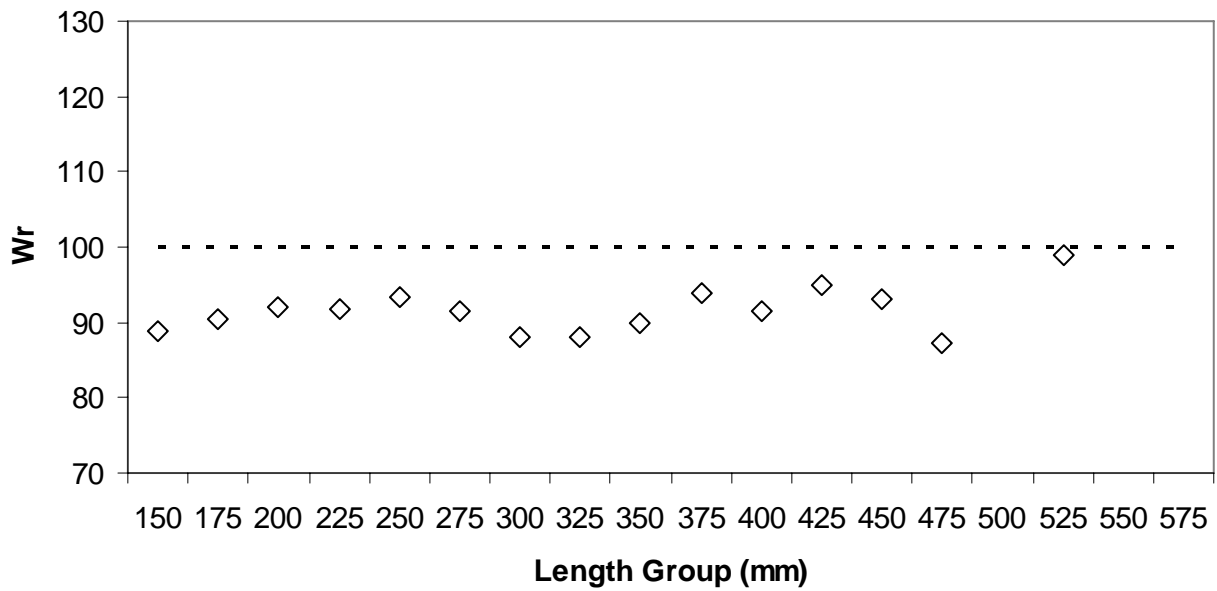


Figure 3. Largemouth bass mean relative weights (W_r) in Douglas Reservoir, spring 2007.

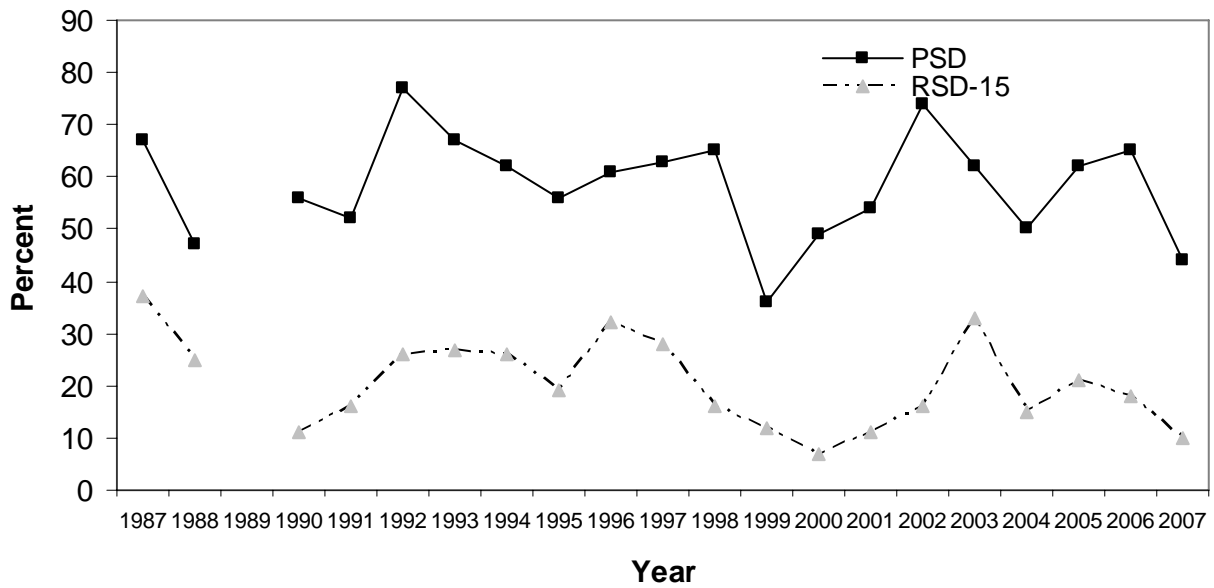


Figure 4. Largemouth bass traditional PSD and RSD-15 values in Douglas Reservoir 1987 – 2007.

Black Crappie

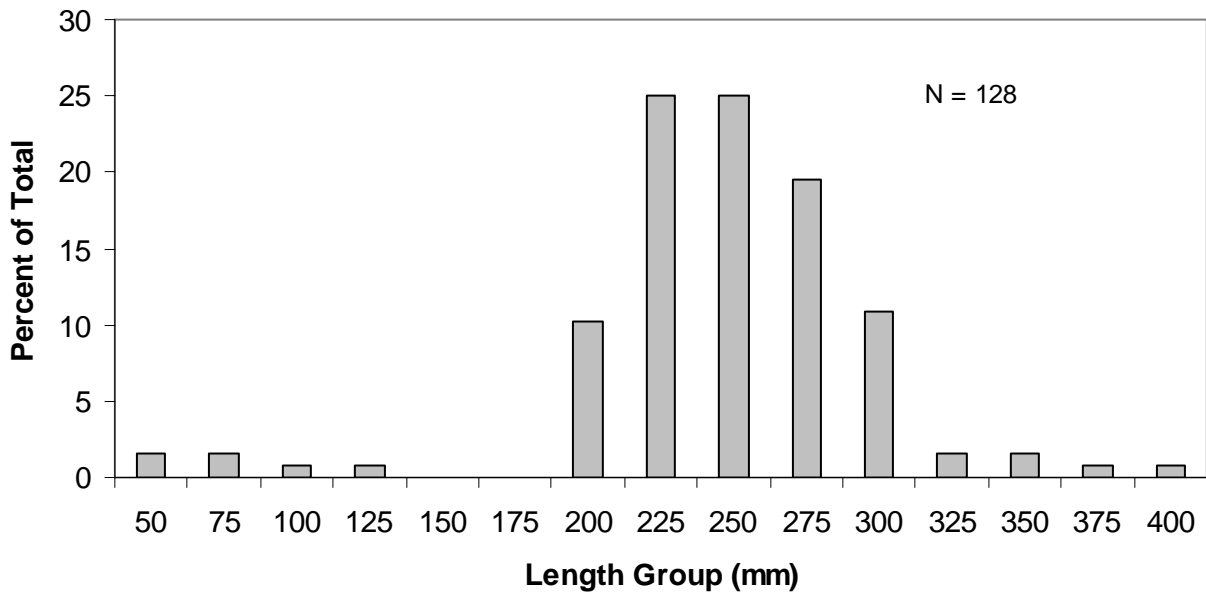


Figure 5. Black Crappie length frequency in Douglas Reservoir, fall 2007.

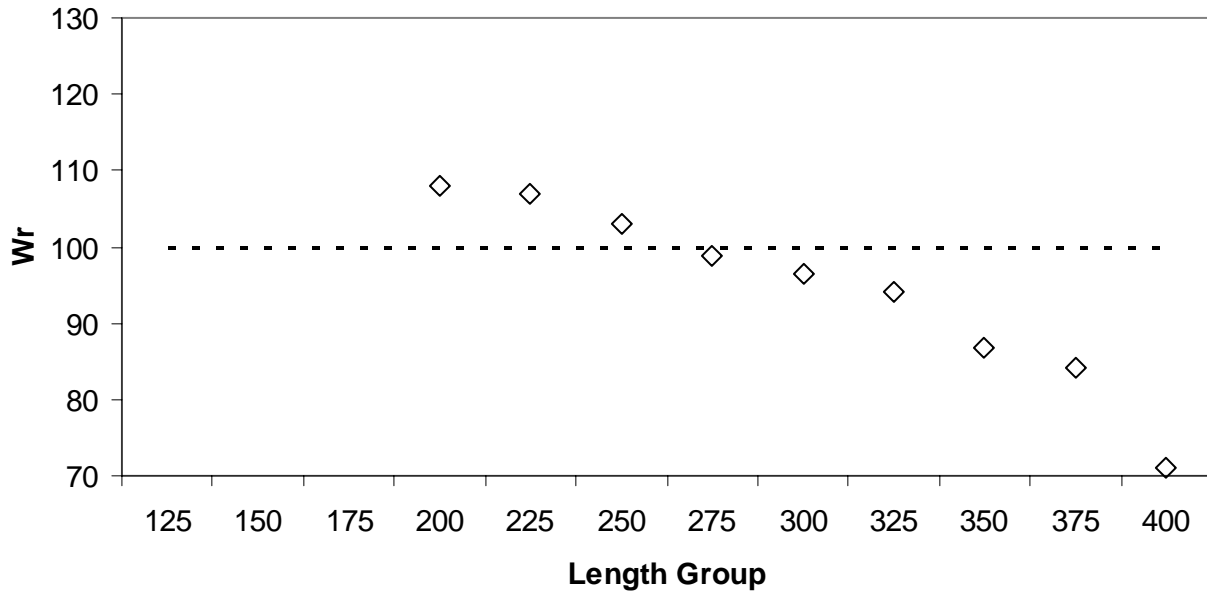


Figure 6. Black crappie mean relative weights (Wr) in Douglas Reservoir, fall 2007.

White Crappie

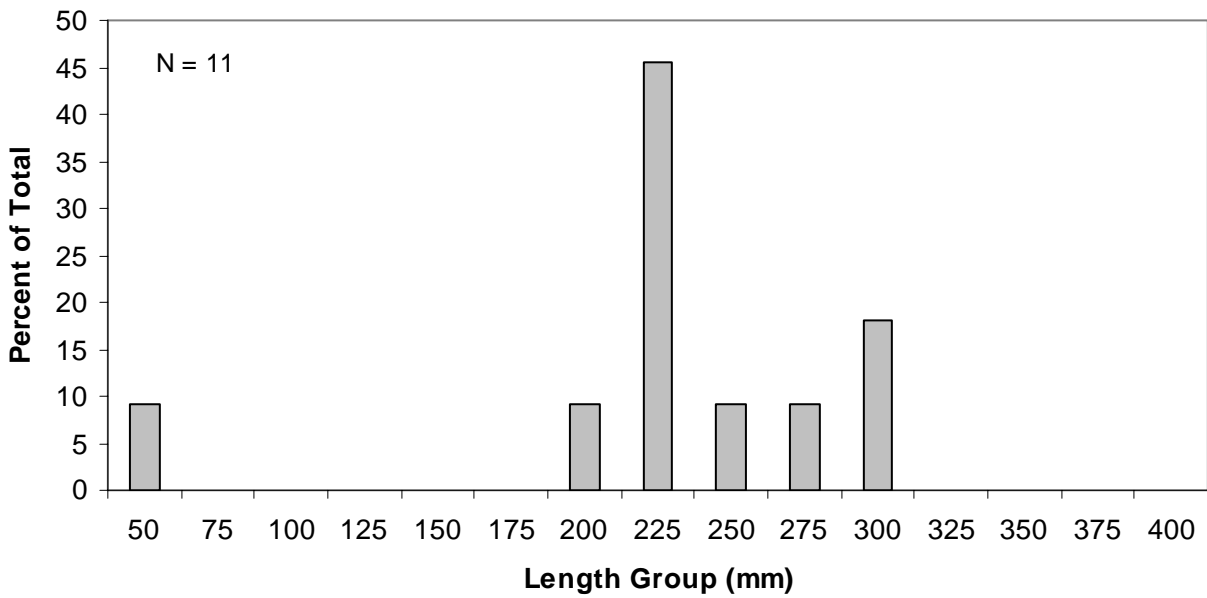


Figure 7. White Crappie length frequency in Douglas Reservoir, fall 2007.

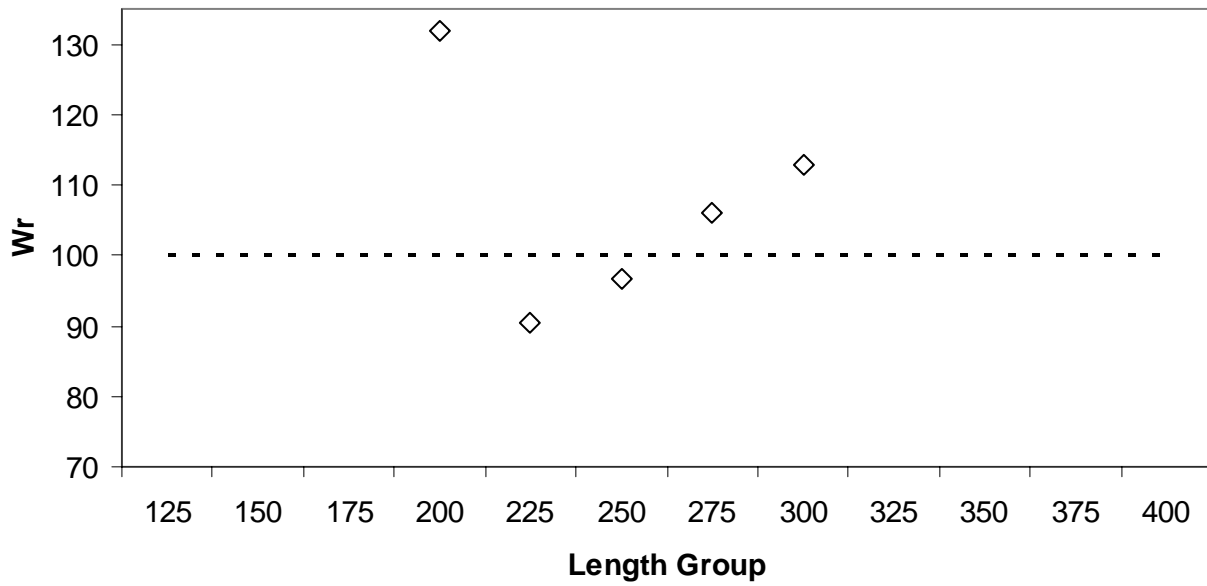


Figure 8. White crappie mean relative weights (Wr) in Douglas Reservoir, fall 2007.

Sauger

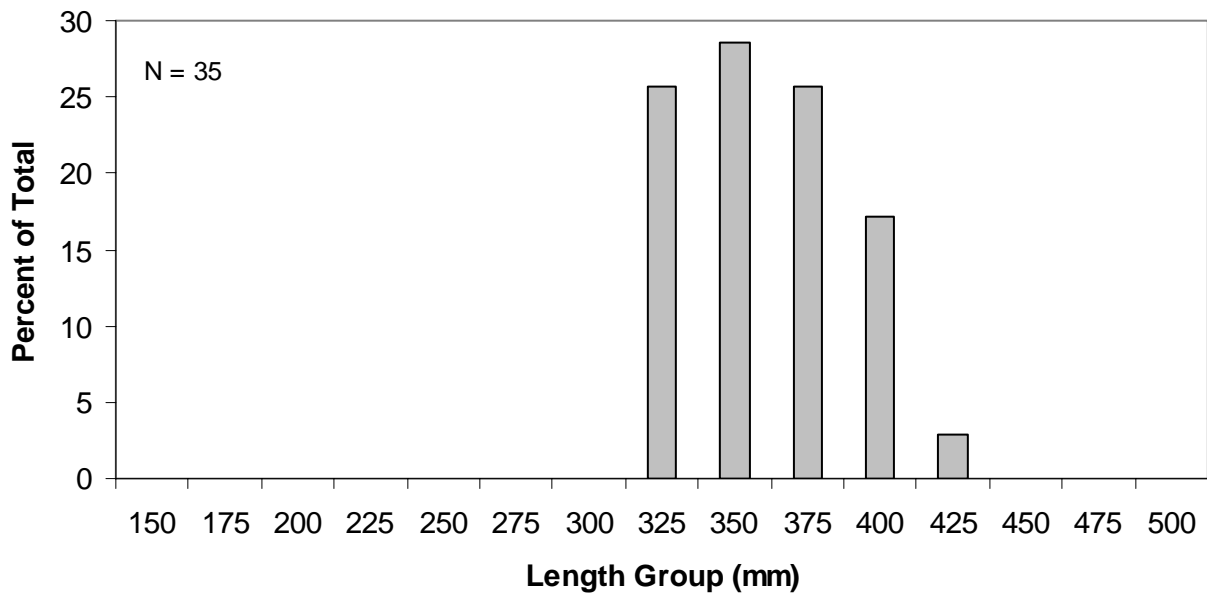


Figure 9. Sauger length frequency in Douglas Reservoir, winter 2007.

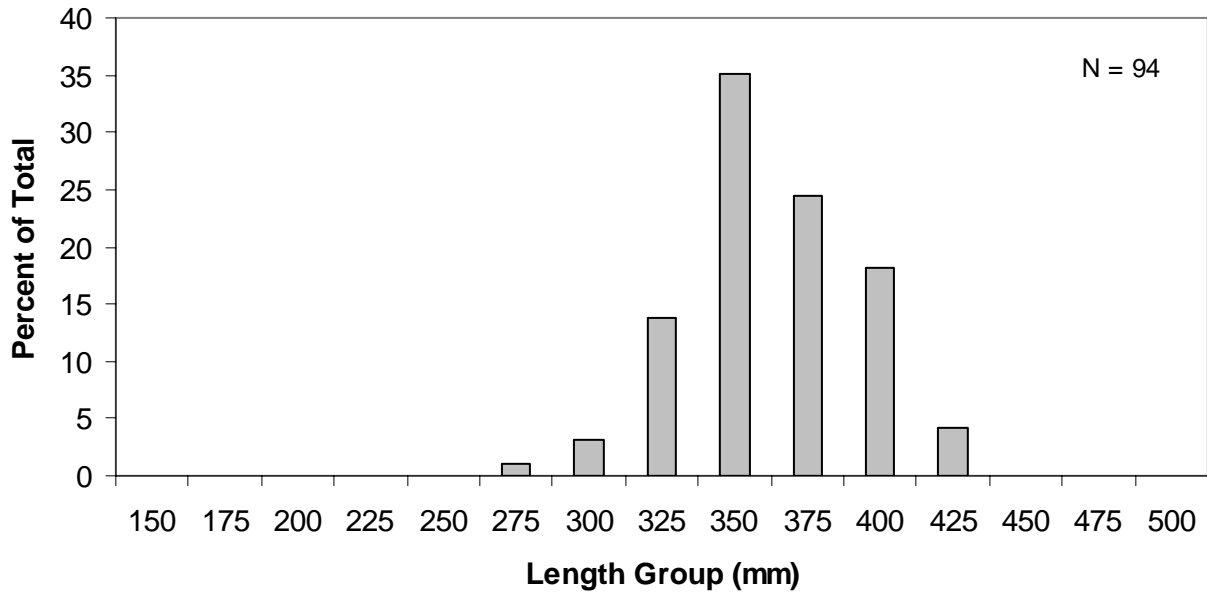


Figure 10. Sauger length frequency in Douglas Reservoir, spring 2007.

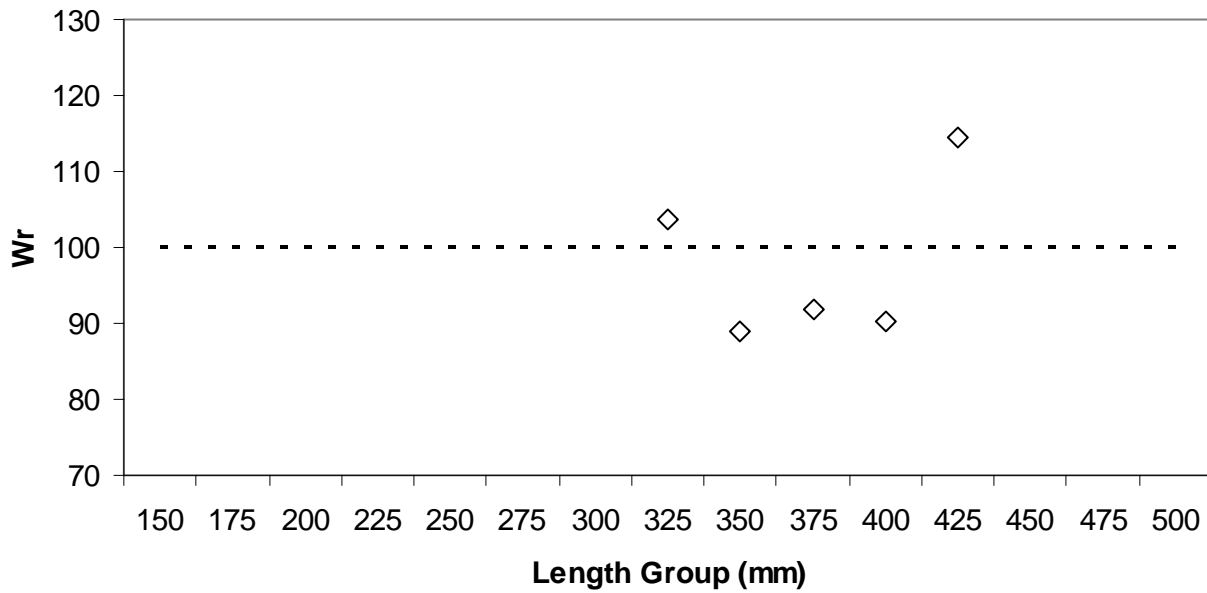


Figure 11. Sauger mean relative weights (Wr) in Douglas Reservoir, winter 2007.



Figure 12. Sauger mean length at age in Douglas Reservoir, December 2007.

Appendix A
Water Quality

Table A1. Douglas Reservoir, water quality data at FB 34, July 6, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	27.6	323	7.3	FB34	1.8	1020
1	27.4	326	7.4			
2	27.2	328	7.4			
3	27.2	329	7.4			
4	27.1	329	7.4			
5	27.0	330	7.4			
6	25.8	334	3.0			
7	23.9	334	0.3			
8	23.1	334	0.2			
9	22.5	334	0.2			
10	21.3	336	0.2			
11	20.3	336	0.2			
12	19.2	336	0.2			
13	18.4	337	0.2			
14	17.9	336	0.1			
15	17.1	333	0.2			
16	16.6	334	0.2			
17	16.1	333	0.2			
18	15.3	335	0.2			
19	14.9	333	0.2			
20	14.3	334	0.1			
21	13.8	333	0.1			
22	13.4	332	0.2			
23	13.2	329	0.2			
24	12.9	328	0.1			
25	12.5	331	0.1			
26	12.3	331	0.1			
27	12.2	329	0.1			
28	12.1	329	0.1			
29	11.7	356	0.1			
30	Bottom					

Table A2. Douglas Reservoir, water quality data at FB 40, July 6, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	27.6	330	6.9	FB40	1.5	0940
1	27.5	332	7.0			
2	27.4	332	7.0			
3	27.4	333	7.0			
4	27.4	333	6.9			
5	27.4	333	6.9			
6	27.2	334	6.3			
7	25.8	339	2.9			
8	23.4	346	0.7			
9	21.9	343	0.3			
10	20.5	343	0.2			
11	19.5	338	0.2			
12	18.7	336	0.1			
13	17.7	336	0.1			
14	16.9	334	0.1			
15	16.0	336	0.1			
16	15.4	339	0.1			
17	15.0	330	0.1			
18	14.5	337	0.1			
19	14.1	337	0.1			
20	13.9	336	0.1			
21	13.7	336	0.1			
22	13.1	337	0.1			
23	12.8	336	0.1			
24	12.6	335	0.1			
25	12.5	370	0.1			
26	Bottom					
27						
28						
29						
30						

Table A3. Douglas Reservoir, water quality data at FB 50, July 6, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	27.4	325	6.7	FB50	1.3	0915
1	27.4	330	6.6			
2	27.4	332	6.6			
3	27.4	332	6.6			
4	27.4	334	6.6			
5	27.4	333	6.6			
6	26.2	341	2.4			
7	25.7	343	1.2			
8	25.1	346	0.5			
9	23.2	347	0.3			
10	21.3	352	0.3			
11	20.2	352	0.2			
12	19.2	353	0.2			
13	18.6	352	0.2			
14	18.3	351	0.2			
15	Bottom					
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Table A4. Douglas Reservoir, water quality data at FB 60, July 6, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	27.8	335	9.0	FB60	0.8	0845
1	27.9	336	9.1			
2	27.9	337	9.1			
3	27.9	339	9.1			
4	27.7	340	9.0			
5	27.3	342	7.6			
6	26.8	344	5.7			
7	25.7	349	3.3			
8	25.0	349	2.6			
9	22.5	363	0.3			
10	21.2	375	0.2			
11	Bottom					
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Table A5. Douglas Reservoir, water quality data at FB 34, August 2, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	28.4	324	7.8	FB34	2.6	1030
1	28.2	328	7.8			
2	28.1	329	7.8			
3	27.2	331	8.0			
4	27.0	331	8.0			
5	26.5	331	7.5			
6	26.1	329	6.2			
7	25.9	329	5.3			
8	25.8	330	5.2			
9	25.2	331	2.3			
10	24.4	332	0.5			
11	23.5	334	0.3			
12	22.0	334	0.2			
13	21.1	335	0.2			
14	20.2	334	0.1			
15	19.3	335	0.1			
16	18.4	335	0.1			
17	17.9	333	0.1			
18	17.5	330	0.1			
19	17.1	331	0.1			
20	16.6	332	0.1			
21	15.7	332	0.1			
22	15.1	333	0.1			
23	14.9	331	0.1			
24	14.6	337	0.1			
25	14.1	336	0.1			
26	13.9	337	0.1			
27	13.5	336	0.1			
28	13.1	338	0.1			
29	Bottom					
30						

Table A6. Douglas Reservoir, water quality data at FB 40, August 2, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	28.2	321	8.5	FB40	2.0	0945
1	28.3	326	8.3			
2	28.2	328	8.3			
3	27.4	331	8.3			
4	27.2	331	8.2			
5	26.6	332	7.5			
6	26.4	330	7.4			
7	25.9	332	5.0			
8	25.7	335	3.1			
9	25.5	334	2.8			
10	24.9	335	1.0			
11	23.9	335	0.3			
12	22.9	337	0.2			
13	21.7	338	0.1			
14	20.5	340	0.1			
15	18.8	345	0.1			
16	18.4	343	0.1			
17	17.8	342	0.1			
18	17.5	340	0.1			
19	16.7	342	0.1			
20	16.3	340	0.1			
21	16.3	340	0.1			
22	15.7	341	0.1			
23	15.3	341	0.1			
24	14.5	345	0.1			
25	14.1	344	0.1			
26	Bottom					
27						
28						
29						
30						

Table A7. Douglas Reservoir, water quality data at FB 50, August 2, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	28.8	329	9.3	FB50	1.4	0910
1	28.8	334	9.4			
2	27.8	337	9.1			
3	26.7	339	6.9			
4	26.4	339	5.5			
5	26.3	338	4.4			
6	26.2	338	3.6			
7	25.9	340	2.7			
8	25.6	343	2.1			
9	25.3	344	1.2			
10	25.0	347	0.3			
11	24.1	353	0.2			
12	23.2	358	0.2			
13	22.0	366	0.1			
14	Bottom					
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Table A8. Douglas Reservoir, water quality data at FB 60, August 2, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	28.5	333	10.7	FB60	0.8	0830
1	28.1	331	10.2			
2	26.7	332	7.9			
3	26.4	330	7.3			
4	25.7	327	6.7			
5	25.3	327	6.6			
6	24.9	327	6.1			
7	24.4	329	5.2			
8	24.2	331	4.6			
9	23.5	334	3.6			
10	23.5	335	2.9			
11	Bottom					
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Table A9. Douglas Reservoir, water quality data at FB 34, September 7, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	28.4	260	8.6	FB34	2.2	0935
1	28.4	261	8.5			
2	28.4	262	8.5			
3	28.4	262	8.5			
4	28.4	262	8.5			
5	28.4	263	8.5			
6	28.3	264	7.3			
7	28.1	264	7.4			
8	28.0	264	7.3			
9	27.8	265	7.4			
10	27.4	266	7.7			
11	26.7	267	6.9			
12	26.2	266	3.4			
13	25.8	267	1.5			
14	25.2	271	0.5			
15	24.7	273	0.3			
16	24.4	275	0.2			
17	24.0	278	0.2			
18	23.7	280	0.2			
19	23.2	281	0.2			
20	22.5	285	0.1			
21	22.0	287	0.1			
22	21.7	288	0.1			
23	20.1	298	0.1			
24	Bottom					
25						
26						
27						
28						
29						
30						

Table A10. Douglas Reservoir, water quality data at FB 40, September 7, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	28.4	265	7.8	FB40	1.5	0910
1	28.5	267	7.7			
2	28.5	267	7.7			
3	28.5	268	7.7			
4	28.5	269	7.6			
5	28.3	273	4.7			
6	28.2	275	4.6			
7	28.2	280	3.5			
8	28.1	280	2.4			
9	28.0	276	0.8			
10	27.3	280	0.3			
11	26.7	281	0.3			
12	26.3	280	0.2			
13	26.0	282	0.2			
14	25.7	282	0.2			
15	25.2	283	0.2			
16	24.8	284	0.2			
17	24.4	287	0.2			
18	24.2	287	0.1			
19	22.3	302	0.1			
20	20.3	316	0.1			
21	Bottom					
22						
23						
24						
25						
26						
27						
28						
29						
30						

Table A11. Douglas Reservoir, water quality data at FB 50, September 7, 2007.

Depth (m)	Temp ©	Cond	DO	Site	Secchi (m)	Time
0	28.2	286	6.7	FB50	1.0	0840
1	28.2	287	6.8			
2	28.2	287	6.8			
3	28.2	287	6.7			
4	28.1	289	6.5			
5	27.6	297	1.9			
6	27.3	301	1.4			
7	27.1	301	4.3			
8	27.1	300	4.7			
9	27.1	300	4.9			
10	27.0	304	0.6			
11	26.9	306	0.1			
12	Bottom					
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

No data taken for FB 60 in September, 2007.

Figure A1. Douglas Reservoir water quality data at FBRM 34, July 2007.

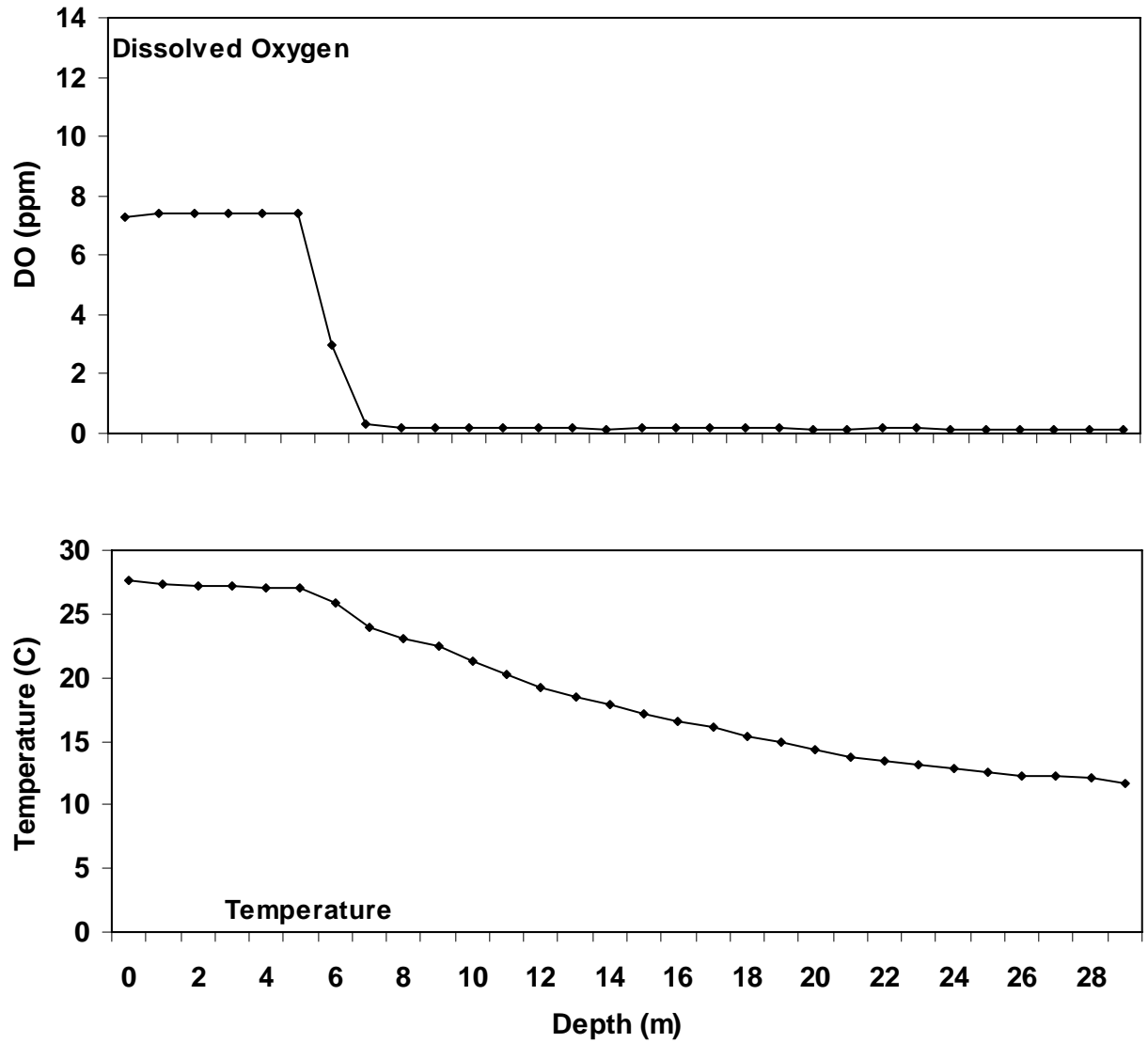


Figure A2. Douglas Reservoir water quality data at FBRM 40, July 2007.

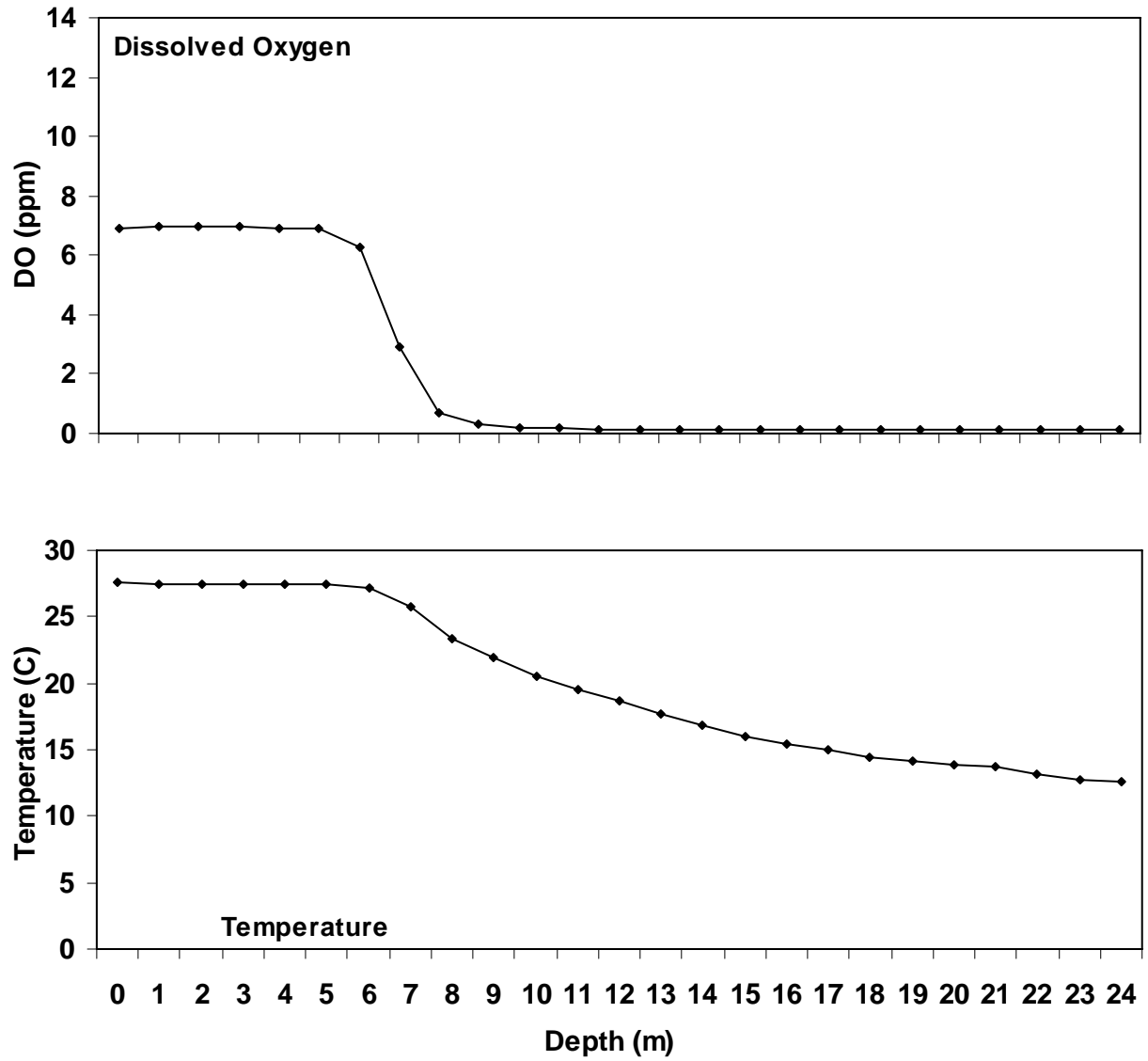


Figure A3. Douglas Reservoir water quality data at FBRM 50, July 2007.

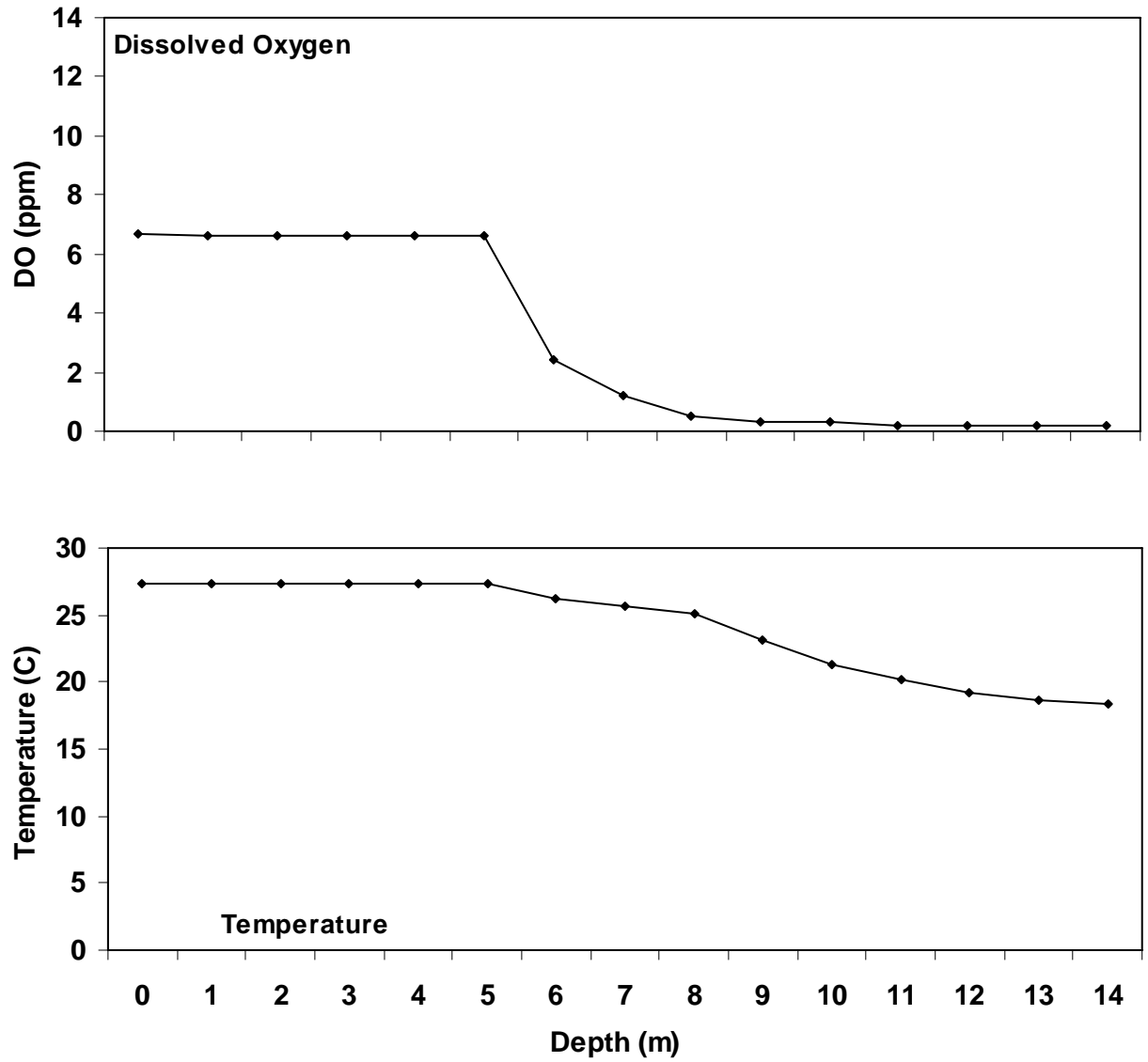


Figure A4. Douglas Reservoir water quality data at FBRM 60, July 2007.

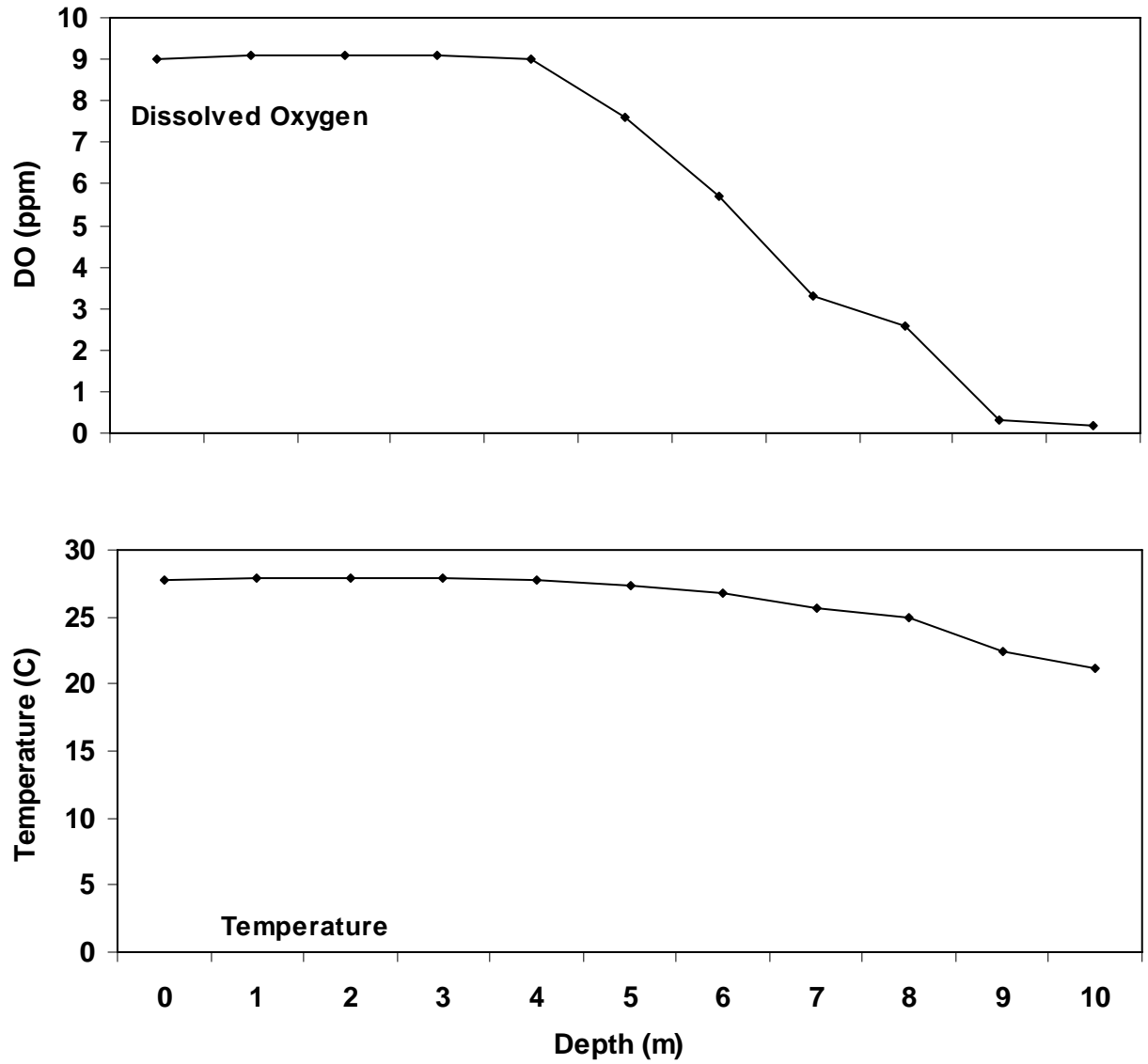


Figure A5. Douglas Reservoir water quality data at FBRM 34, August 2007.

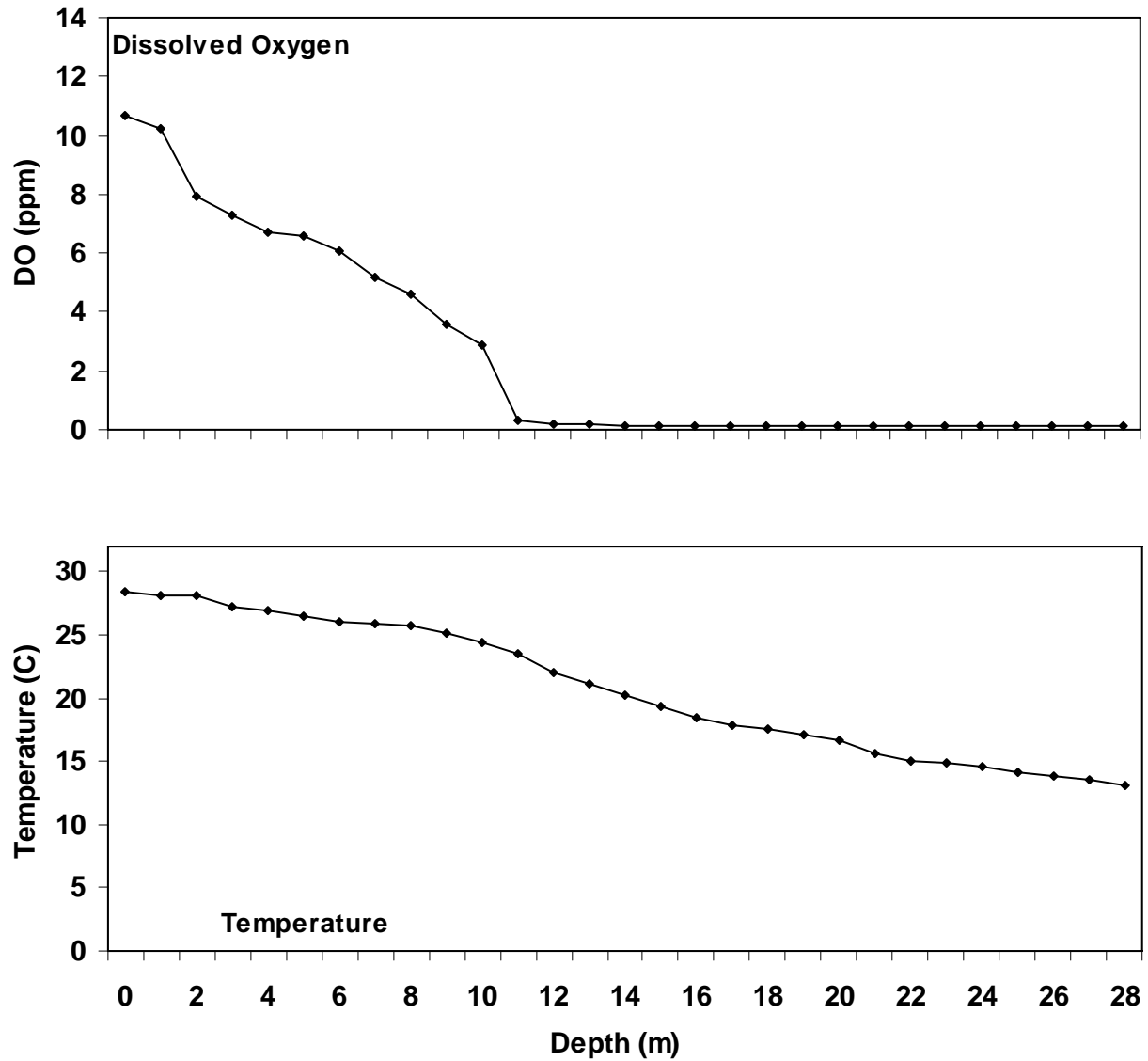


Figure A6. Douglas Reservoir water quality data at FBRM 40, August 2007.

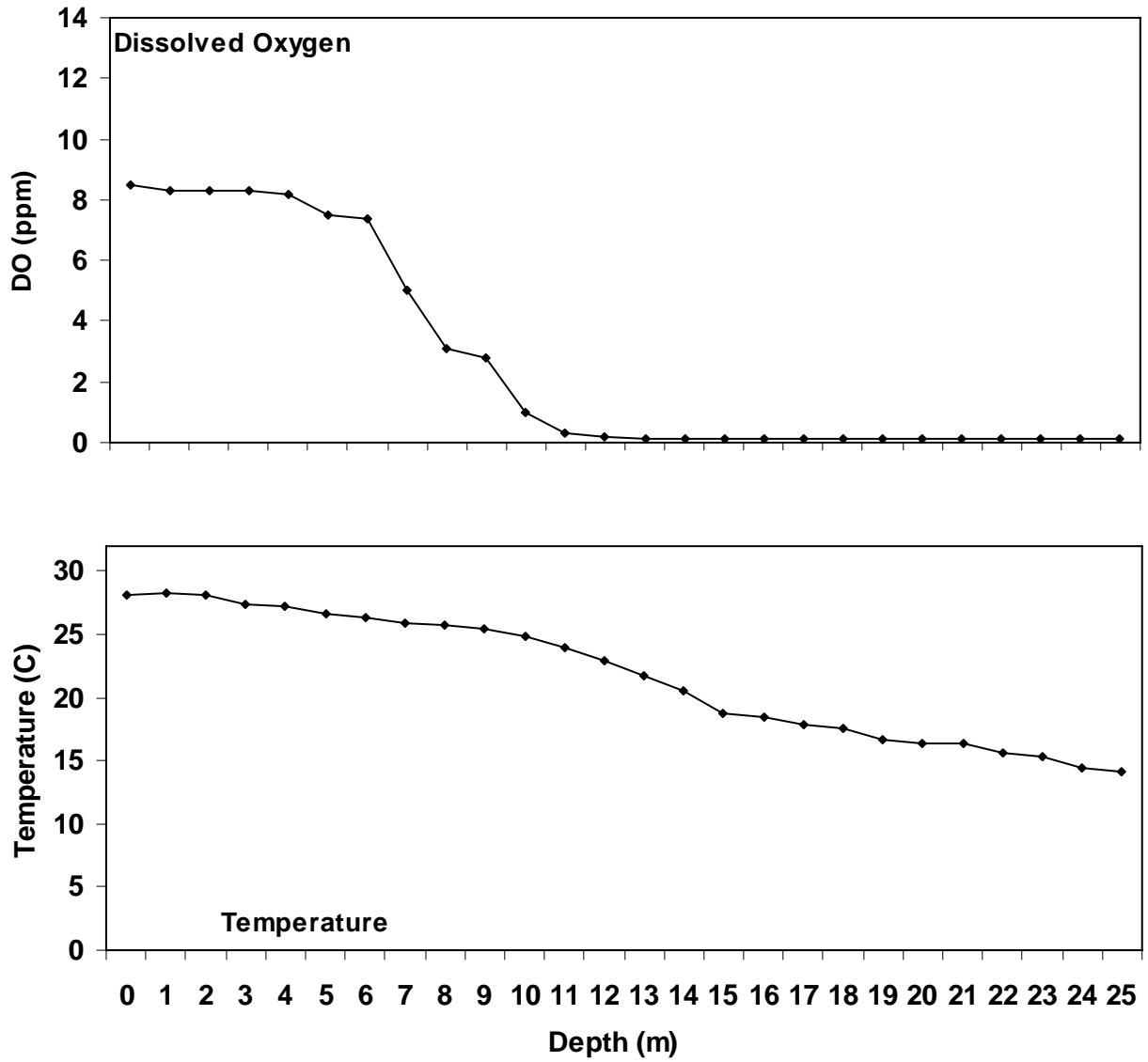


Figure A7. Douglas Reservoir water quality data at FBRM 50, August 2007.

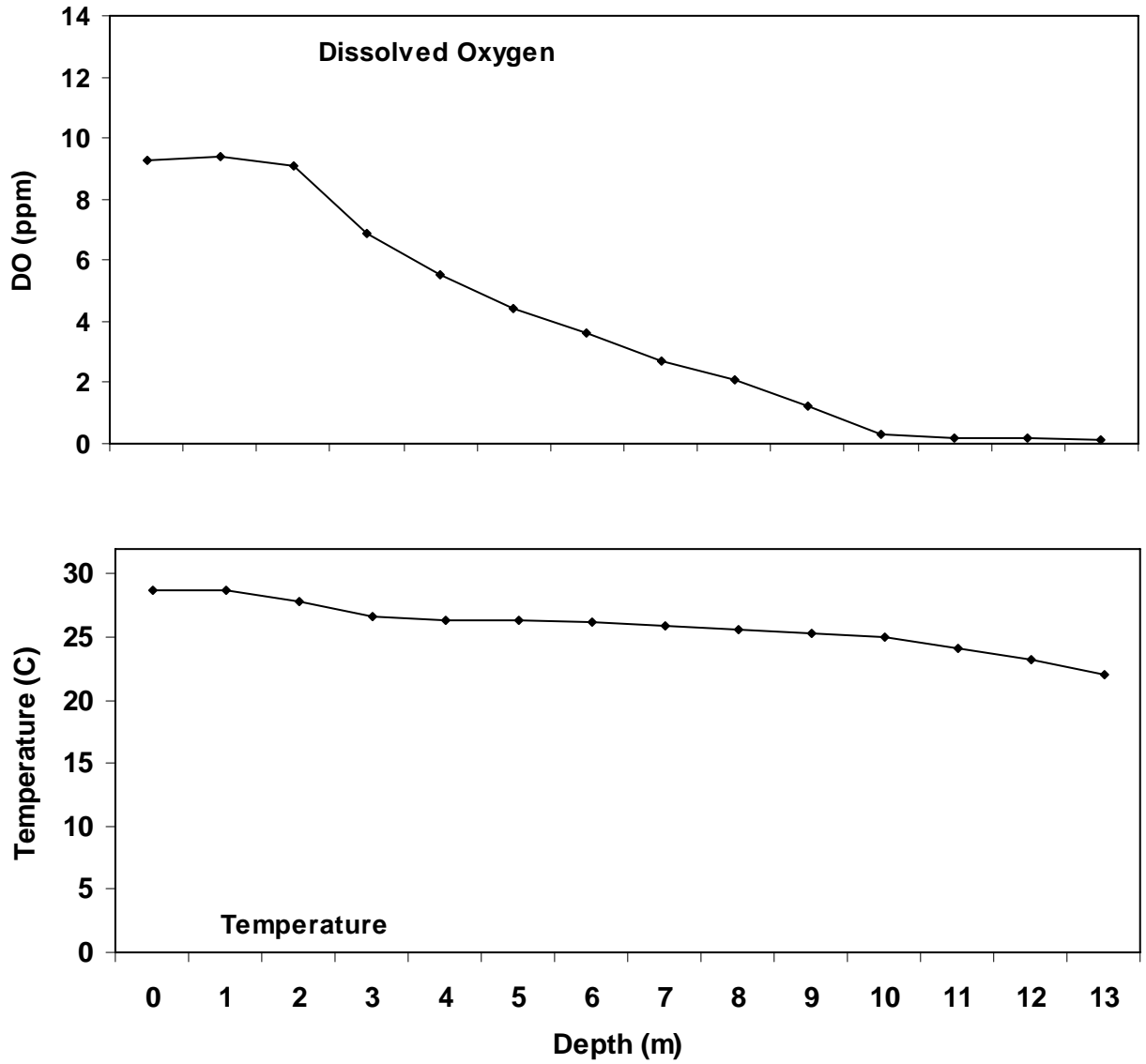


Figure A8. Douglas Reservoir water quality data at FBRM 60, August 2007.

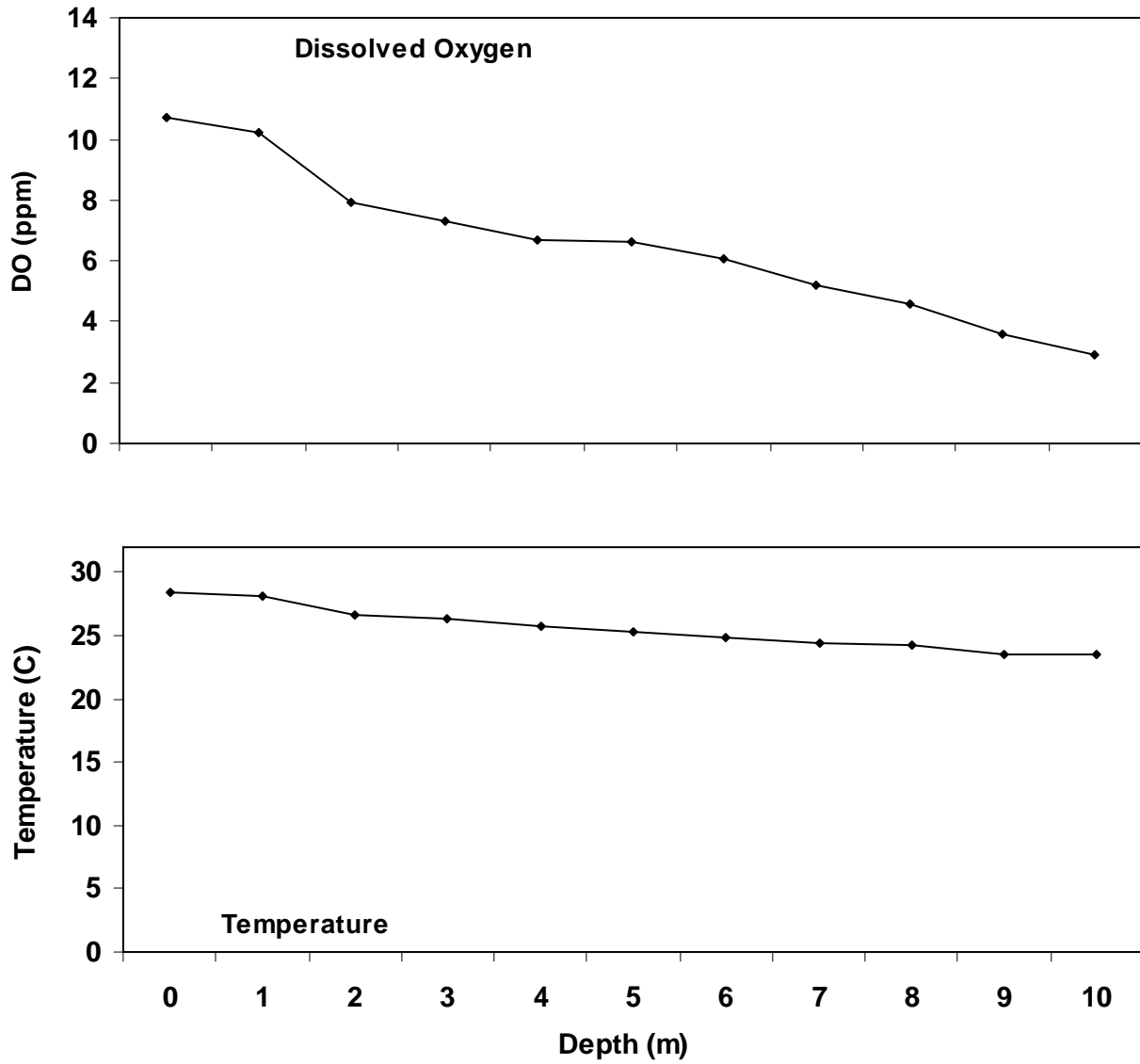


Figure A9. Douglas Reservoir water quality data at FBRM 34, September 2007.

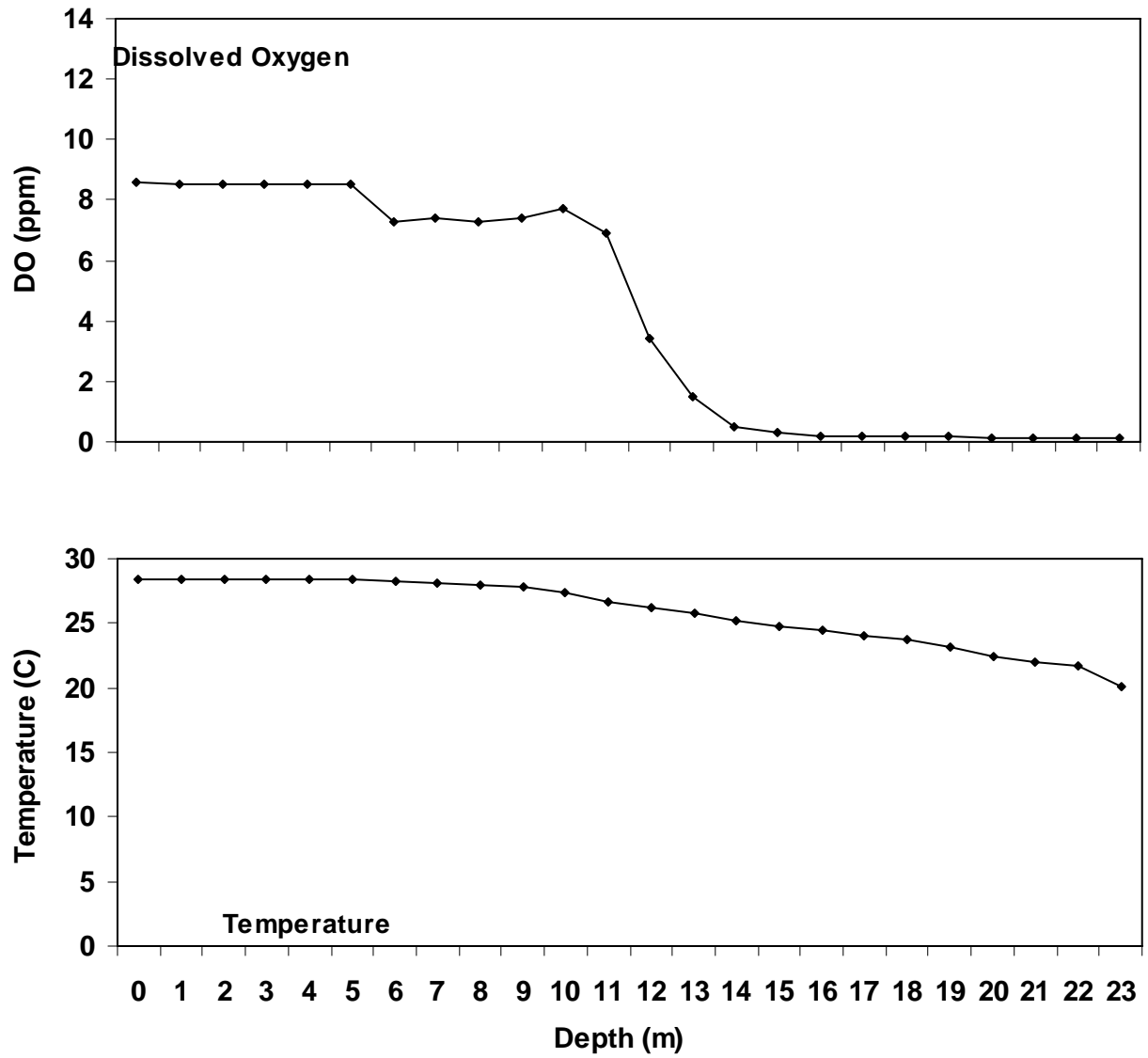


Figure A10. Douglas Reservoir water quality data at FBRM 40, September 2007.

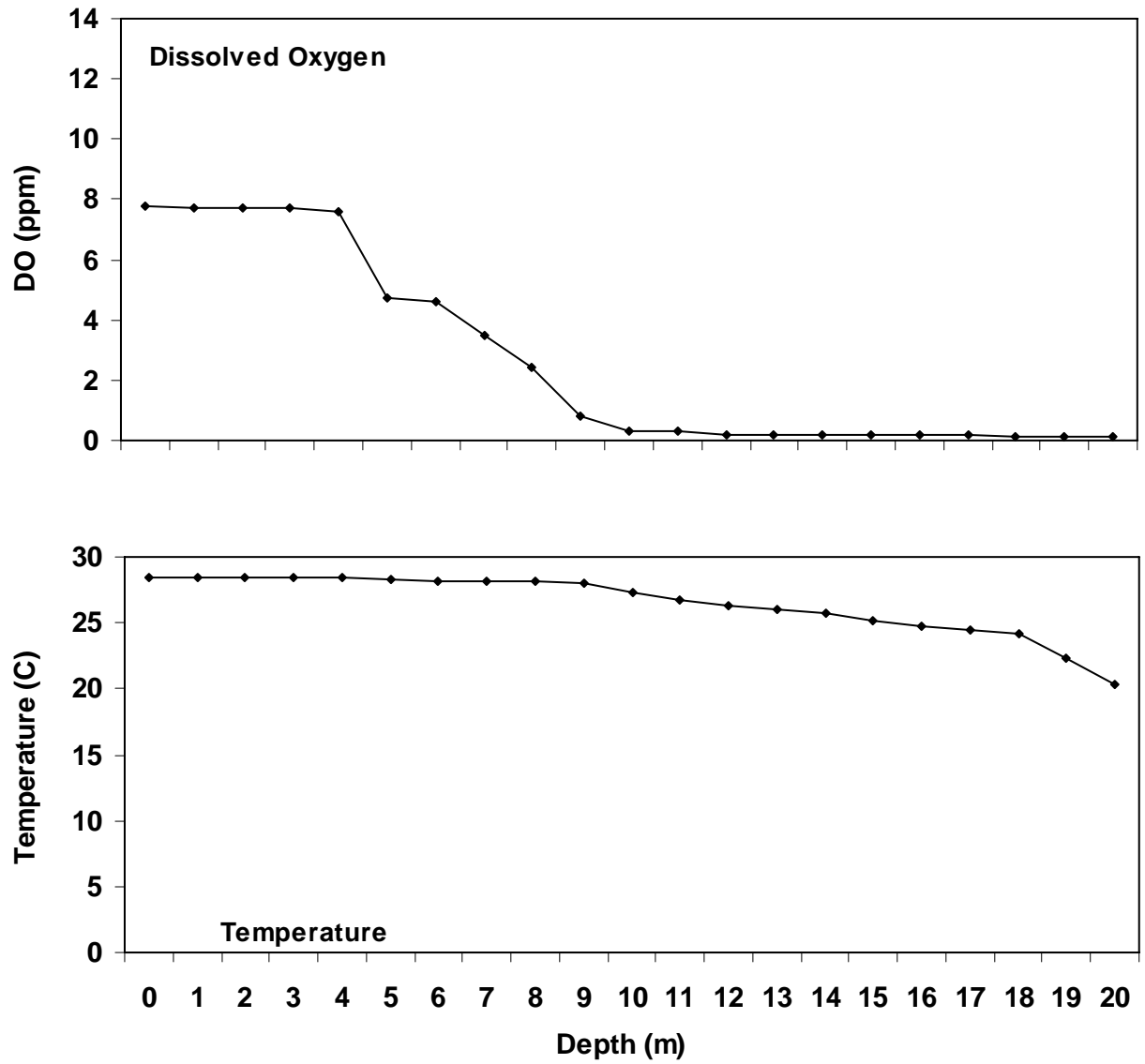
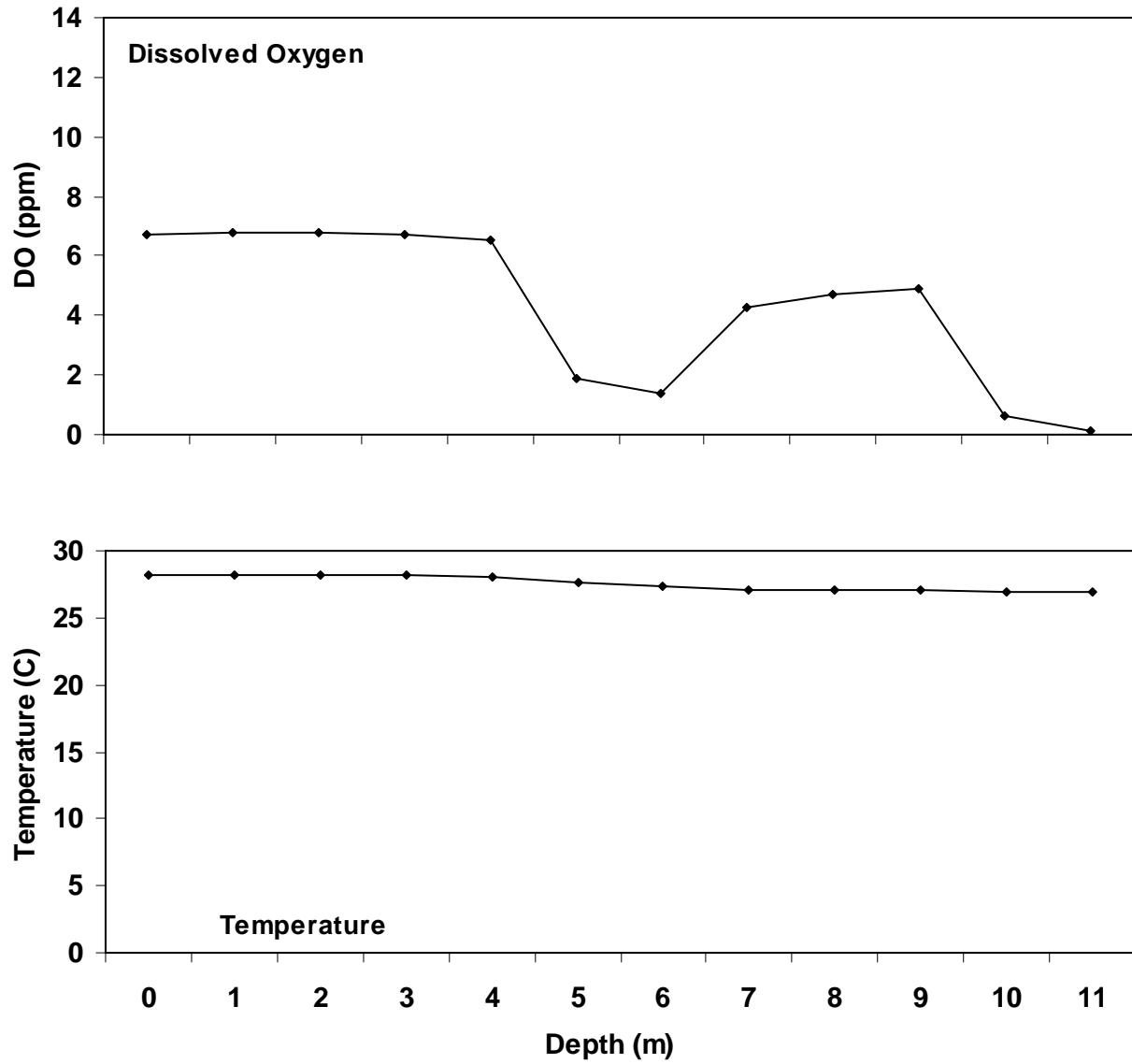


Figure A11. Douglas Reservoir water quality data at FBRM 50, September 2007.



Appendix B
Elevation Data

Table B1. Douglas Reservoir elevation data for 2007. Data is courtesy of TVA.

Elevation	Month	Day	Elevation	Month	Day	Elevation	Month	Day
957.78	January	1	950.38	February	24	974.61	April	19
958.19	January	2	950.83	February	25	974.92	April	20
958.21	January	3	951.06	February	26	975.19	April	21
957.66	January	4	951.34	February	27	975.41	April	22
956.75	January	5	951.78	February	28	975.68	April	23
956.55	January	6	952.24	March	1	975.88	April	24
956.45	January	7	953.30	March	2	976.07	April	25
955.81	January	8	955.09	March	3	976.35	April	26
955.53	January	9	956.55	March	4	976.61	April	27
955.45	January	10	957.56	March	5	976.89	April	28
954.64	January	11	958.23	March	6	977.15	April	29
954.34	January	12	958.79	March	7	977.34	April	30
955.31	January	13	959.32	March	8	977.55	May	1
956.00	January	14	959.81	March	9	977.68	May	2
955.67	January	15	960.27	March	10	977.88	May	3
954.77	January	16	960.55	March	11	978.05	May	4
953.85	January	17	960.90	March	12	978.47	May	5
952.81	January	18	961.21	March	13	978.87	May	6
951.90	January	19	961.51	March	14	979.22	May	7
952.27	January	20	961.86	March	15	979.53	May	8
952.58	January	21	962.62	March	16	979.82	May	9
952.50	January	22	963.95	March	17	980.05	May	10
952.49	January	23	964.97	March	18	980.27	May	11
952.38	January	24	965.71	March	19	980.39	May	12
952.19	January	25	966.27	March	20	980.57	May	13
951.94	January	26	966.77	March	21	980.66	May	14
952.38	January	27	967.31	March	22	980.81	May	15
952.76	January	28	967.74	March	23	980.95	May	16
952.34	January	29	968.12	March	24	981.08	May	17
952.20	January	30	968.43	March	25	981.22	May	18
951.86	January	31	968.75	March	26	981.28	May	19
951.56	February	1	969.03	March	27	981.37	May	20
951.51	February	2	969.30	March	28	981.52	May	21
952.03	February	3	969.60	March	29	981.56	May	22
951.85	February	4	969.84	March	30	981.65	May	23
951.10	February	5	970.08	March	31	981.79	May	24
950.38	February	6	970.18	April	1	981.79	May	25
950.42	February	7	970.31	April	2	981.86	May	26
949.91	February	8	970.44	April	3	981.89	May	27
949.23	February	9	970.60	April	4	981.91	May	28
949.03	February	10	970.76	April	5	981.69	May	29
949.41	February	11	970.97	April	6	981.57	May	30
949.46	February	12	971.11	April	7	981.35	May	31
949.85	February	13	971.33	April	8	981.18	June	1
949.67	February	14	971.34	April	9	981.07	June	2
949.34	February	15	971.50	April	10	981.05	June	3
948.91	February	16	971.70	April	11	980.93	June	4
949.22	February	17	971.95	April	12	980.94	June	5
949.55	February	18	972.15	April	13	980.86	June	6
949.20	February	19	972.38	April	14	980.43	June	7
948.97	February	20	972.75	April	15	980.01	June	8
949.17	February	21	973.21	April	16	979.94	June	9
949.46	February	22	973.84	April	17	979.90	June	10
949.91	February	23	974.26	April	18	979.60	June	11

Table B1. Continued.

Elevation	Month	Day	Elevation	Month	Day	Elevation	Month	Day
979.25	June	12	972.67	August	5	953.39	September	28
978.90	June	13	972.21	August	6	953.18	September	29
978.66	June	14	971.46	August	7	953.12	September	30
978.55	June	15	970.82	August	8	952.43	October	1
978.40	June	16	970.19	August	9	951.79	October	2
978.29	June	17	969.55	August	10	950.99	October	3
977.95	June	18	969.09	August	11	950.12	October	4
977.95	June	19	968.57	August	12	949.30	October	5
977.52	June	20	967.94	August	13	949.22	October	6
977.12	June	21	967.49	August	14	949.21	October	7
976.67	June	22	967.05	August	15	948.82	October	8
976.55	June	23	966.51	August	16	948.59	October	9
976.47	June	24	966.02	August	17	948.28	October	10
976.11	June	25	965.71	August	18	947.93	October	11
975.79	June	26	965.39	August	19	947.53	October	12
975.77	June	27	964.77	August	20	947.39	October	13
975.78	June	28	964.14	August	21	947.27	October	14
975.72	June	29	963.54	August	22	946.79	October	15
975.76	June	30	962.84	August	23	946.35	October	16
975.75	July	1	962.20	August	24	945.85	October	17
975.59	July	2	961.95	August	25	945.33	October	18
975.39	July	3	961.86	August	26	945.36	October	19
975.15	July	4	961.31	August	27	945.40	October	20
974.95	July	5	960.84	August	28	945.45	October	21
974.72	July	6	960.35	August	29	945.45	October	22
974.63	July	7	959.87	August	30	945.54	October	23
974.45	July	8	959.08	August	31	945.68	October	24
973.97	July	9	958.86	September	1	945.94	October	25
973.73	July	10	958.64	September	2	946.13	October	26
973.56	July	11	958.29	September	3	946.36	October	27
973.48	July	12	958.17	September	4	946.48	October	28
973.50	July	13	958.03	September	5	946.50	October	29
973.49	July	14	957.90	September	6	946.37	October	30
973.51	July	15	957.63	September	7	946.27	October	31
973.36	July	16	957.51	September	8	946.18	November	1
973.21	July	17	957.44	September	9	946.21	November	2
973.11	July	18	957.33	September	10	946.23	November	3
973.05	July	19	957.24	September	11	946.25	November	4
973.01	July	20	957.12	September	12	946.27	November	5
973.01	July	21	956.97	September	13	946.25	November	6
973.01	July	22	956.79	September	14	946.26	November	7
972.90	July	23	956.89	September	15	946.23	November	8
972.85	July	24	957.04	September	16	946.21	November	9
972.85	July	25	956.91	September	17	946.28	November	10
972.94	July	26	956.70	September	18	946.34	November	11
973.14	July	27	956.46	September	19	946.40	November	12
973.43	July	28	956.14	September	20	946.47	November	13
973.68	July	29	955.82	September	21	946.60	November	14
973.64	July	30	955.69	September	22	946.70	November	15
973.57	July	31	955.63	September	23	946.92	November	16
973.43	August	1	955.20	September	24	947.14	November	17
973.19	August	2	954.80	September	25	947.30	November	18
972.92	August	3	954.34	September	26	947.43	November	19
972.79	August	4	953.82	September	27	947.54	November	20

Table B1. Continued.

Elevation	Month	Day
947.53	November	21
947.50	November	22
947.51	November	23
947.54	November	24
947.65	November	25
947.69	November	26
947.73	November	27
947.89	November	28
948.03	November	29
948.15	November	30
948.23	December	1
948.38	December	2
948.39	December	3
948.45	December	4
948.54	December	5
948.58	December	6
948.66	December	7
948.71	December	8
948.73	December	9
948.79	December	10
948.88	December	11
948.95	December	12
949.10	December	13
949.21	December	14
949.25	December	15
949.31	December	16
949.47	December	17
949.65	December	18
949.82	December	19
949.94	December	20
950.06	December	21
950.11	December	22
950.23	December	23
950.53	December	24
951.12	December	25
951.38	December	26
951.44	December	27
951.70	December	28
952.16	December	29
952.88	December	30
953.62	December	31

Figure B1. Douglas Reservoir daily reservoir elevations 2007 (TVA data).



Appendix C
Angler Creel Survey

MONTHLY ANGLING EFFORT FOR ALL ANGLERS - 2007

LAKE=DOUGLAS

MONTH	ANGLER HOURS	RELATIVE STANDARD ERROR	HOURS PER ACRE	ANGLER TRIPS	TRIPS PER ACRE	PERCENT EFFORT
01 JANUARY	44243	32.7	1.4	9485	0.3	7.8
02 FEBRUARY	13780	29.0	0.5	3598	0.1	2.4
03 MARCH	63734	19.2	2.1	11767	0.4	11.2
04 APRIL	54764	15.3	1.8	10065	0.3	9.7
05 MAY	71317	27.6	2.3	14504	0.5	12.6
06 JUNE	67931	11.4	2.2	12308	0.4	12.0
07 JULY	71210	17.4	2.3	13264	0.4	12.6
08 AUGUST	37305	12.9	1.2	7208	0.2	6.6
09 SEPTEMBER	43901	18.5	1.4	7417	0.2	7.7
10 OCTOBER	38930	10.2	1.3	7441	0.2	6.9
11 NOVEMBER	35773	20.1	1.2	6979	0.2	6.3
12 DECEMBER	24117	22.7	0.8	5289	0.2	4.3
----- TOTAL	567005			109325		

MONTHLY CATCH STATISTICS FOR ALL ANGLERS - 2007

LAKE=DOUGLAS

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	76098	34.9	1.72	11.4	20794	35.7	0.47	13.5
02 FEBRUARY	18190	34.2	1.32	17.4	5099	40.5	0.37	26.9
03 MARCH	109622	21.2	1.72	8.9	32504	26.6	0.51	18.0
04 APRIL	92004	20.1	1.68	12.8	20263	26.2	0.37	20.8
05 MAY	151192	28.6	2.12	7.0	59906	30.0	0.84	11.4
06 JUNE	200396	14.4	2.95	8.7	86952	15.1	1.28	9.7
07 JULY	101830	19.7	1.43	9.2	30620	24.8	0.43	17.5
08 AUGUST	49989	19.6	1.34	14.6	12311	24.7	0.33	20.6
09 SEPTEMBER	60144	22.8	1.37	13.0	13609	24.8	0.31	16.3
10 OCTOBER	58395	12.7	1.50	7.5	14793	18.5	0.38	15.5
11 NOVEMBER	85140	23.2	2.38	11.5	39350	29.6	1.10	21.3
12 DECEMBER	39552	24.5	1.64	9.0	14953	30.5	0.62	19.9
----- TOTAL	1042552				351154			

SUMMARY OF SPECIES CATCH STATISTICS - 2007

LAKE=DOUGLAS

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
ALEWIFE	3014	287.7	0.3	0	1015	330.8	0.3	0	66.3	0.65	22
GIZZARD SHAD	37	3410.1	0.0	0	37	3410.1	0.0	0	0.0	1.25	1
CARP	185	1836.7	0.0	0	0	.	0.0	0	100.0	.	0
BLACK BULLHEAD	939	559.7	0.1	939	832	582.7	0.2	832	11.4	2.58	13
BLUE CATFISH	152	1706.7	0.0	76	152	1706.7	0.0	76	0.0	2.85	2
CHANNEL CATFISH	55951	19.4	5.4	40152	34960	22.7	10.0	25854	37.5	1.66	549
FLATHEAD CATFISH	3349	169.6	0.3	3148	2920	175.8	0.8	2787	12.8	2.59	44
WHITE BASS	66935	20.2	6.4	38278	19094	31.0	5.4	15126	71.5	1.12	409
STRIPED BASS	319	1422.3	0.0	0	106	1812.2	0.0	0	66.8	0.93	3
CHEROKEE BASS	35	3172.0	0.0	0	35	3172.0	0.0	0	0.0	3.85	1
BLUEGILL	197068	11.5	18.9	135809	109311	14.4	31.1	85625	44.5	0.28	1710
REDEAR SUNFISH	657	1251.3	0.1	0	303	1710.8	0.1	0	53.9	0.29	4
SMALLMOUTH BASS	15287	59.5	1.5	10934	0	.	0.0	0	100.0	.	0
LARGEMOUTH BASS	283024	7.7	27.2	245924	17213	18.1	4.9	8029	93.9	1.45	309
WHITE CRAPPIE	297778	7.8	28.6	280218	118957	11.2	33.9	114538	60.1	0.64	2600
BLACK CRAPPIE	57343	21.6	5.5	55049	31945	25.4	9.1	30867	44.3	0.81	726
BLACKNOSE CRAPPIE	1519	625.3	0.1	1519	824	708.6	0.2	824	45.8	0.93	17
YELLOW PERCH	35	3172.0	0.0	0	35	3172.0	0.0	0	0.0	0.30	1
SAUGER	31966	33.9	3.1	14841	6805	56.0	1.9	3380	78.7	1.27	150
WALLEYE	13948	66.5	1.3	5698	3008	109.9	0.9	1316	78.4	1.89	46
FRESHWATER DRUM	7693	125.4	0.7	237	2408	194.5	0.7	181	68.7	1.94	40

SUMMARY OF FISHING EFFORT AND CATCH RATES FOR INTENDED SPECIES GROUPS - 2007

LAKE=DOUGLAS

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	46155	14.1	8830	8.1	1.03	12.0	0.70	11.9	106
WHITE BASS	14397	20.1	2738	2.5	2.71	17.1	1.12	36.1	31
ANY SUNFISH	31338	14.9	5936	5.5	5.23	10.7	3.32	14.3	74
ANY BLACK BASS	116281	8.3	21846	20.5	0.91	7.2	0.03	40.6	403
LARGEMOUTH BASS	88444	11.0	17241	15.6	1.13	7.4	0.01	155.8	248
ANY CRAPPIE	227504	7.4	44492	40.1	1.89	13.5	0.85	23.9	656
SAUGER	15001	19.5	2972	2.6	0.85	22.4	0.21	30.5	38
WALLEYE	5178	28.7	948	0.9	1.21	16.0	0.26	28.0	14
ANY SPECIES	22707	15.2	4323	4.0	0.93	28.8	0.56	30.2	36
-----	-----		-----						
TOTAL	567005		109326						

**SUMMARY OF RELATIVE SPECIES CATCH RATES
WITHIN TARGET GROUPS - 2007**

LAKE=DOUGLAS

TARGET GROUP	SPECIES WITHIN TARGET GROUPS	RELATIVE CATCH RATE	RELATIVE HARVEST RATE
ANY CATFISH	BLACK BULLHEAD	0.02	0.02
	ANY CATFISH	0.00	0.00
	BLUE CATFISH	0.00	0.00
	CHANNEL CATFISH	0.93	0.61
	FLATHEAD CATFISH	0.07	0.07
ANY SUNFISH	BLUEGILL	5.23	3.32
	REDEAR SUNFISH	0.00	0.00
ANY BLACK BASS	SMALLMOUTH BASS	0.05	0.00
	LARGEMOUTH BASS	1.20	0.04
ANY CRAPPIE	ANY CRAPPIE	0.00	0.00
	WHITE CRAPPIE	1.57	0.67
	BLACK CRAPPIE	0.31	0.18
	BLACKNOSE CRAPPIE	0.01	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=DOUGLAS

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	1.17	27
02 FEBRUARY	0		0	0.76	12
03 MARCH	22	0.80	6	0.67	26
04 APRIL	11	1.58	5	1.36	45
05 MAY	14	1.03	6	1.25	50
06 JUNE	26	1.39	13	1.00	58
07 JULY	28	0.65	13	0.88	74
08 AUGUST	23	0.87	11	0.65	57
09 SEPTEMBER	71	0.92	43	0.77	40
10 OCTOBER	38	1.36	18	1.07	54
11 NOVEMBER	35	1.07	14	0.95	43
12 DECEMBER	0		0	1.16	32

**SUMMARY OF TRIP EXPENDITURES AND CONSUMER SURPLUS
FOR INTENDED SPECIES - 2007**

LAKE=DOUGLAS

INTENDED SPECIES	TOTAL TRIP EXPENDITURES	TOTAL CONSUMER SURPLUS	TOTAL VALUE BY ANGLERS	NUMBER OF INTERVIEWS
ANY CATFISH	23200	45480	68680	100
WHITE BASS	27880	29830	57710	30
ANY SUNFISH	12640	52330	64970	73
ANY BLACK BASS	610600	418280	1028890	398
LARGEMOUTH BASS	402820	247980	650790	241
ANY CRAPPIE	229760	383460	613220	644
SAUGER	28030	31990	60020	37
WALLEYE	5010	7470	12480	14
ANY SPECIES	8120	11520	19640	32
----- TOTAL	1348060	1228340	2576400	1569

SUMMARY OF SOCIOLOGICAL QUESTIONS - 2007

LAKE=DOUGLAS

DISTRIBUTION OF STATES OF RESIDENCE OF INTERVIEWED ANGLERS

STATE	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
TN	2878	88.9
OTHERS	358	11.1

DISTRIBUTION OF COUNTIES OF RESIDENCE OF INTERVIEWED ANGLERS

COUNTY	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
COCKE	410	14.3
HAMBLEN	346	12.0
JEFFERSON	766	26.7
KNOX	446	15.5
SEVIER	368	12.8
OTHERS IN TN	537	18.7
OUT-OF-STATE	1	0.0

DISTRIBUTION OF ONE-WAY MILEAGE OF ANGLERS INTERVIEWED

ONE-WAY MILES TRAVELED	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 0-25	2253	69.6
B) 26-100	866	26.8
C) 101-250	70	2.2
D) > 250	46	1.4

DISTRIBUTION OF REASONS WHY INTERVIEWED ANGLERS MADE THE TRIP

REASON FOR TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) FISHING	1599	99.3
B) VACATION	12	0.7

DISTRIBUTION OF NUMBER OF DAYS IN TRIPS OF INTERVIEWED ANGLERS

NUMBER DAYS IN TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 1	1563	97.0
B) 2-5	48	3.0
D) 11-15	1	0.1