Boone Reservoir

Annual Report 2007

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Largemouth Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Excellent	Sub-stock CPUE	Electrofishing	13.4 fish/hr
Growth*	Good	Mean TL at Age-3	Electrofishing	334 mm
	Good	RSD-P (380 mm)	Electrofishing	46 %
Density	Good	CPUE $\geq$ Stock Size (203 mm)	Electrofishing	44.8 fish/hr.
	Good	CPUE $\geq$ Minimum Size Limit	Electrofishing	19.7 fish/hr.
Mortality*	Low	Total Mortality (Z)	Electrofishing	31%
Angling Pressure	Good	Fishing Effort (hours)	Creel Survey	47,724**
Fishing Success	Fair	Angler Catch Rate (#fish/hour)	Creel Survey	0.31**
Value of Fishery	Good	Trip Expenditures	Creel Survey	$106,840**

* age data set collected in 2005
** any black bass species

Fishery Forecast:
We collected good numbers of fish larger than 15-inches in 2007 and we also saw excellent numbers of fish between 8 and 12-inches. The good number of smaller size fish in the population will help maintain the quality of the largemouth bass fishery for the next several years. The density of largemouth bass in the preferred size class (15-inches or bigger) in Boone Reservoir has remained very stable the last 5 years

Management Recommendations:
Maintain the 15-inch (381 mm) minimum length limit.

Smallmouth Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Sub-stock CPUE	Electrofishing	1.1 fish/hr
Growth	Fair	Mean TL at Age-3	Electrofishing	296 mm*
	Fair	RSD-P (350 mm))	Electrofishing	39 %
Density	Good	CPUE $\geq$ Stock Size (178 mm)	Electrofishing	12.0 fish/hr.
	Good	CPUE $\geq$ Minimum Size Limit	Electrofishing	6.0 fish/hr.
Mortality**		Total Mortality (Z)	Electrofishing	N/A
Angling Pressure	Good	Fishing Effort (hours)	Creel Survey	47,724***
Fishing Success	Fair	Angler Catch Rate (#fish/hour)	Creel Survey	0.31***
Value of Fishery	Good	Trip Expenditures	Creel Survey	$106,840***

* Based on an age data set collected in 1998
** Data set did not meet criteria for calculating mortality
*** any black bass species

Fishery Forecast:
Percentages of larger sized smallmouth bass increased again in 2007 which should maintain the quality of the fishery in 2008. The good number of smallmouth bass in Boone Reservoir over 17-inches has remained stable the last 4 years. Recruitment was noted which indicates a successful 2006 spawn and will help insure the future of the fishery. The quality size smallmouth bass should be protected with the new incremental size limit of 16-inches in 2008 and 18-inches in 2009

Management Recommendations:
Implement the new incremental size limit of 16-inches in 2008 and 18-inches in 2009 and evaluate the impact on the smallmouth fishery.

Black Crappie

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	N/A	Sub-stock CPUE	Electrofishing	N/A
Growth	N/A	Mean TL at Age-3	Electrofishing	N/A
	Good	RSD-P (254 mm)	Electrofishing	70%
Density	Fair	CPUE > Stock Size (127 mm)	Electrofishing	8.6 fish/hr.
	Fair	CPUE > Minimum size Limit	Electrofishing	6.3 fish/hr.
Mortality	N/A	Total Mortality (Z)	Electrofishing	N/A
Angling Pressure	Fair	Fishing Effort (hours)	Creel Survey	8,783*
Fishing Success	Poor	Angler Catch Rate (#fish/hour)	Creel Survey	0.14*
Value of Fishery	Fair	Trip Expenditures	Creel Survey	$13,860*

* any crappie

Fishery Forecast:
We were able to collect 5 times more crappie in 2007 than we did in 2006. However, the catch rates were still just average. Crappie are not as easily collected with electrofishing gear as bass species, thus making it difficult to obtain a good sample size. The crappie fishery, however should remain stable for the 2008 season.

Management Recommendations:

1. Continue to refine sampling strategy for black crappie.

2. Continue to stock crappie at a rate of 15 fish per acre, if available from the hatchery.

Striped Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Substock CPUE	Gill Net	0.1 fish/net night
Growth*	Good	Mean TL at Age-3	Gill Net	N/A
	Poor	RSD-P (762 mm)	Gill Net	0%
Density	Fair	CPUE >Stock Size (305 mm)	Gill Net	0.65 fish/net night
	Poor	CPUE > Minimum size Limit	Gill Net	0.5 fish/net night
Mortality**		Total Mortality (Z)	Gill Net	N/A
Angling Pressure	Fair	Fishing Effort (hours)	Creel Survey	8,798
Fishing Success	Poor	Angler Catch Rate (#fish/hour)	Creel Survey	0.05
Value of Fishery	Good	Trip Expenditures	Creel Survey	$15,080

***** No age 3 fish sampled in 2007
** Data set did not meet criteria for calculating mortality

Fishery Forecast:
Striped bass are difficult to sample within the reservoir. Therefore by-catch data from summer shad netting is used for *morone sp*. population analyses. These data show a little change in the population the last three years. In 2008, there will be a new 36-inch (914-mm) minimum size limit from November through March, which will hopefully protect the larger fish in the population.

We have set gillnets in the winter months in an attempt to collect a good sample (e.g. 100 fish) and so far have been unsuccessful. Due to stocking efforts, the fishery should remain stable within the reservoir.

Management Recommendations:
1. Stock at a rate of 5 fish/acre if possible.
2. Implement new 36-inch (914-mm) minimum size limit with a 1-fish creel limit from November to March.
3. Refine sampling strategies for collecting good numbers of striped bass.

Cherokee Bass

Population Parameter	Annual Rating	Measure	Gear	Value
Recruitment	Poor	Sub-stock CPUE	Gill Net	0.0 fish/net night
Growth	Good	Mean TL at Age-3	Gill Net	560 mm
	Excellent	RSD-P (381 mm)	Gill Net	79 %
Density	Fair	CPUE >Stock Size (305 mm)	Gill Net	1.4 fish/net night
	Fair	CPUE > Minimum size Limit	Gill Net	1.1 fish/net night
Mortality*		Total Mortality (Z)	Gill Net	N/A
Angling Pressure	Fair	Fishing Effort (hours)	Creel Survey	260
Fishing Success	Fair	Angler Catch Rate (#fish/hour)	Creel Survey	0.42
Value of Fishery	Fair	Trip Expenditures	Creel Survey	$550

* Data set did not meet criteria for calculating mortality

Fishery Forecast:
As with striped bass, Cherokee bass are difficult to sample within the reservoir. Therefore by-catch data from summer shad netting is used for *morone sp*. population analyses. These data show stability in the Cherokee bass population for this method of collection.

We have set gillnets in the winter months in an attempt to collect a good sample (e.g. 100 fish) and so far have been unsuccessful. Due to stocking efforts, the fishery should remain stable within the reservoir.

Management Recommendations:

1. Maintain the current 2 fish, 15-inch (381 mm) minimum length limit.
2. Continue to evaluate the changes made in the stocking regime in 2001. Prior to 2001, Cherokee bass were stocked at a rate of 5/acre every other year. They are now stocked at a rate of 2.5/acre every year. Early indications are that this rate is sufficient to maintain a quality fishery
3. Refine sampling strategies for collecting good numbers of Cherokee bass.

Stocking and Stocking Evaluations

Species	Number Stocked	Mark	Evaluation	# Fish / Net Night
Striped Bass	44,608	None	Gill Netting	Total CPUE = 0.7 fish/net night.
Cherokee Bass	14,620	None	Gill Netting	Total CPUE = 1.4 fish/net night

Habitat Enhancement and Monitoring

Type of Work	Details	Date
Shoreline Stabilization		See table 9
Shoreline Seeding		"
Aquatic Plants		"
Fish Attractors (Shallow Water)		"
Fish Attractors (Deep Water)		"
Smallmouth Spawning Benches		None in 2007
Stake Beds		"
Water Quality Monitoring	Temperature, pH, Conductivity, and D.O.	July, August, September

Tables

Table 1. The morphometric, physical, and chemical characteristics of Boone Reservoir.

	Measurement	
Parameter	***English***	***Metric***
Surface Area	4,520 ac	1,829 ha
Drainage Area	1,840 sq. mi	4,769 sq. km
Full Pool Elevation	1,384 ft msl	422 m msl
Mean Annual Fluctuation	54 feet	16.5 m
Shoreline Distance	127 mi	204.4 km
Maximum Depth	122 ft	37.2 m
Thermocline Depth	7 ft	2.1m
Mean Chlorophyll (Forebay)	10.8 ppm	10.8 mg/l
Shoreline Development	13%	
Trophic Status (Forebay)	Mesotrophic	
Trophic Index, Carlson (1977)	53.9	
Hydraulic Retention Time	38 days	
Reservoir Age	55 years	

Table 2. Fish stocked in Boone Reservoir 1995-2007.

Species	Date	Rate (per acre)	Mean Length	Number
Cherokee Bass	July 1995	10	2.5	45,200
	July 1998	4.9	2.5	22,016
	July 2000	5.2	1.0 – 2.0	23,700
	July 2001	2.5	2.0 – 5.0	11,289
	July 2002	3.3	1.3 – 4.0	14,702
	July 2003	3.6	1.5 – 4.0	16,249
	June 2004	5.0	2.0 – 2.5	22,420
	June 2005	3.6	2.0 – 2.5	16,410
	June 2006	2.7	1.0 – 2.5	12,376
	June 2007	3.2	1.0 – 2.0	14,620
Striped Bass	July 1997	4.8	1.0	21,712
	July 1999	5.3	2.0 – 4.0	23,859
	July 2001	5.1	3.0 – 4.0	22,866
	July 2002	6.3	3.0 – 4.0	25,713
	July 2003	9.7	1.0 – 2.0	44,038
	July 2004	2.9	2.0 – 4.0	13,000
	July 2005	2.7	2.0 – 3.5	11,991
	July 2006	5.6	1.0 – 3.0	25,445
	June/July 2007	9.9	1.0 – 3.5	44,608
Blue Catfish	July 1995	3.1	4.0	14,000
	Nov 1998	2.4	5.0	10,850
Black-Nose	Dec 1996	20.7	2.5	93,583
Black Crappie	Nov 1997	18.5	2.0	83,587
	Nov–Dec 1998	15.5	2.5	69,994
	October 2007*	6.1	2.0 – 7.0	27,558

*Black and Blacknose Crappie

Table 3. Number of species collected by gear type in Boone Reservoir, 2007. Effort is in hours for electrofishing and net nights for gill netting.

	Summer Shad Gill Netting			Spring Electrofishing		
Species	No.	CPUE (# fish / net night)	Total Effort	No.	CPUE (# fish / hour)	Total Effort
Largemouth Bass	X	X	X	204	58.3	3.5
Smallmouth Bass	X	X	X	46	13.1	3.5
Spotted Bass	X	X	X	2	0.6	3.5
Black Crappie	X	X	X	29	8.3	3.5
Black-Nose Crappie	X	X	X	1	0.3	3.5
White Crappie	X	X	X	0	0	3.5
Walleye	X	X	X	0	0	3.5
Sauger	X	X	X	X	X	X
White Bass	X	X	X	0	0	3.5
Channel Catfish	X	X	X	X	X	X
Gizzard Shad	537	26.85	20	X	X	X
Alewife	121	6.05	20	X	X	X
Striped Bass	14	0.7	20	X	X	X
Cherokee Bass	28	1.4	20	X	X	X
Bluegill	X	X	X	X	X	X

X = this type of data not collected with this method

Table 4. Black bass catch; mean catch per unit effort and relative stock density by RSD category for Boone Reservoir 1998 – 2007.

				Substock			Stock - Quality			Quality - Preferred			Preferred-Memorable			Memorable-Trophy			Trophy			PSD	Total	
Species	Year	Gear	Number of Samples	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	%	#	CPUE
Largemouth	1998	EL	12	5	1.7	**4.8**	21	7	**11**	87	29	**48**	71	24	**39**	2	0.7	**1**				**88**	186	62
Bass	1999	EL	19	14	3	**7.1**	5	0.7	**2**	74	11	**40**	102	15	**56**	2	11	**1**				**97**	198	41.7
	2000	EL	12	9	2.9	**6**	23	7.5	**17**	31	10	**23**	78	25	**59**	1	0.3	**1**				**83**	142	46.3
	2001	EL	9	26	11	**17**	54	23	**52**	39	17	**30**	36	15	**28**	0	0	**0**				**75**	155	66.3
	2002	EL	15	42	11	**17**	75	19	**37**	69	18	**34**	57	15	**28**	1	0.6	**1**				**63**	244	63.2
	2003	EL	10	23	9	**12**	38	15	**23**	68	26	**42**	57	21	**35**	0	0	**0**				**77**	186	71
	2004	EL	14	0	0	**0**	13	39	**9**	48	13	**34**	79	22	**56**	1	0.3	**1**	0	0	**0**	**91**	141	39.1
	2005	EL	14	11	3.1	**5**	27	7.6	**14**	75	21	**38**	93	26	**47**	2	0.6	**1**	0	0	**0**	**86**	208	58.8
	2006	EL	14	13	3.7	**10**	14	4	**11**	30	8.5	**25**	76	22	**62**	2	0.6	**2**	0	0	**0**	**89**	135	38.4
	2007	EL	14	47	13	**23**	51	15	**32**	33	9.4	**21**	72	21	**46**	1	0.3	**1**	0	0	**0**	**68**	204	58.3
Smallmouth	1998	EL	12	6	1.7	**11**	16	5.3	**30**	15	5	**31**	15	5	**31**	2	0.6	**4**	0	0	**0**	**67**	53	17.7
Bass	1999	EL	19	8	1.2	**5**	29	4.3	**18**	36	5.3	**23**	62	9.2	**41**	24	3.6	**16**	0.3	1		**81**	161	23.9
	2000	EL	12	4	1.3	**7**	8	2.6	**15**	14	4.6	**25**	26	8.5	**47**	7	2.3	**13**				**85**	59	19.9
	2001	EL	9	1	0.4	**4**	15	6.4	**56**	8	3.4	**30**	3	1.2	**11**		0.4					**44**	28	11.9
	2002	EL	17	3	0.8	**5**	15	3.8	**29**	8	2.1	**15**	14	3.6	**27**	14	3.5	**27**	0.3	2		**71**	55	14.1
	2003	EL	10	1	0.4	**5**	4	1.6	**19**	4	1.5	**19**	11	3.8	**52**	2	0.8	**10**				**81**	22	8.1
	2004	EL	14	0	0	**0**	14	3.8	**22**	11	3.1	**17**	27	7.5	**46**	10	2.8	**16**	1	0.3	**2**	**81**	63	17.5
	2005	EL	14	8	2.3	**11**	34	9.6	**51**	16	4.5	**24**	9	2.5	**13**	8	2.3	**12**	0	0	**0**	**49**	75	21.2
	2006	EL	14	3	0.9	**7**	13	3.7	**34**	10	2.8	**26**	6	1.7	**16**	8	2.3	**21**	1	0	**3**	**66**	41	11.6
	2007	EL	14	4	1.1	**9**	9	2.6	**21**	3	0.9	**7**	19	5.4	**45**	11	3.1	**26**	0	0	**0**	**79**	46	13.1

Table 5. Striped bass and Cherokee bass catch; mean catch per unit effort and relative stock density by RSD category in Boone Reservoir 2003 – 2007.

				RSD Substock			RSD Stock - Quality			RSD Quality - Preferred			RSD Preferred-Memorable			RSD Memorable-Trophy			RSD Trophy			**PSD**	Total	
Species	Year	Gear	Number of Samples	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	#	CPUE	RSD	%	#	CPUE
Striped	2003	GN	20	6	0.3	**8**	62	3.1	**91**	5	0.3	**7**	0	0	**0**	1	0.1	**1**	0	0	**0**	**8**	74	3.7
Bass	2004	GN	20	4	0.2	**17**	9	0.5	**47**	7	0.4	**37**	1	0.1	**5**	2	0.1	**11**	0	0	**0**	**53**	23	1.15
	2005	GN	20	1	0.1	**8**	8	0.4	**67**	4	0.2	**33**	0	0	**0**	0	0	**0**	0	0	**0**	**33**	13	0.65
	2006	GN	20	0	0	**0**	6	0.3	**60**	4	0.2	**40**	0	0	**0**	0	0	**0**	0	0	**0**	**40**	10	0.5
	2007	GN	20	1	0.1	**7**	13	0.7	**100**	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**	14	0.7
Cherokee	2003	GN	20	1	0.1	**1**	9	0.5	**10**	40	2.9	**44**	25	1.3	**27**	16	0.8	**18**	0	0	**0**	**89**	92	4.6
Bass	2004	GN	20	0	0	**0**	1	0.1	**2**	15	0.8	**35**	15	0.8	**35**	12	0.6	**28**	0	0	**0**	**98**	43	2.15
	2005	GN	20	2	0.1	**4**	11	0.6	**23**	11	0.6	**23**	5	0.3	**11**	15	0.8	**32**	5	0.3	**11**	**77**	49	2.5
	2006	GN	20	0	0	**0**	12	0.6	**22**	16	0.8	**29**	19	1	**35**	7	0.4	**13**	1	0.1	**2**	**78**	55	2.75
	2007	GN		0	0	**0**	0	0	**0**	6	0.3	**21**	9	0.5	**32**	11	0.6	**39**	2	0.1	**7**	**100**	28	1.4

Table 6. Largemouth bass mean relative weights (Wr) in Boone Reservoir, spring 2007.

Length Group	Mean Wr	Std. Error	N
150	89.5	2.9	14
175	85.3	5.5	16
200	91.1	4.0	6
225	91.3	2.7	22
250	97.1	8.1	14
275	87.8	1.2	9
300	95.7	1.9	6
325	97.6	2.8	8
350	94.7	1.9	14
375	95.3	1.8	19
400	94.0	1.6	27
425	92.0	2.2	18
450	92.9	4.0	6
475	100.5	4.0	7
500	92.0		1
525			
		Total =	**187**

Table 7. Smallmouth bass mean relative weights in Boone Reservoir, spring 2007.

Length Group	Mean Wr	Std. Error	N
150			0
175			
200	85.9	3.2	6
225			
250	81.8	3.1	2
275	90.2		1
300	85.2	1.3	2
325	79.4		1
350	84.9	3.2	5
375	83.7	1.5	8
400	80.0	1.6	6
425	80.7	1.9	3
450	83.2	2.4	5
475	73.9	0.9	2
500	80.2		1
525			
550			
		Total =	**42**

Table 8. Geometric mean density of the clupeid catch in experimental gill nets from South Holston and Boone Reservoirs 2001 - 2007.

Reservoir	Species	2001	2002	2003	2004	2005	2006	2007
South Holston	Threadfin Shad	9.4	29.7	5.5	4	3.9	2.7	no sample
	Gizzard Shad	4.2	3.2	4	2.2	3.1	1.3	no sample
	Alewife	42.4	3.5	8.2	1.8	0.2	0.2	no sample
Boone	Threadfin Shad	2.5	22.2	0.03	1.5	15.9	11.2	40.2
	Gizzard Shad	46.1	32.7	14.4	42.3	26.1	25.9	23.9
	Alewife	52.3	4.6	107.3	2.9	2.4	2.4	3.3

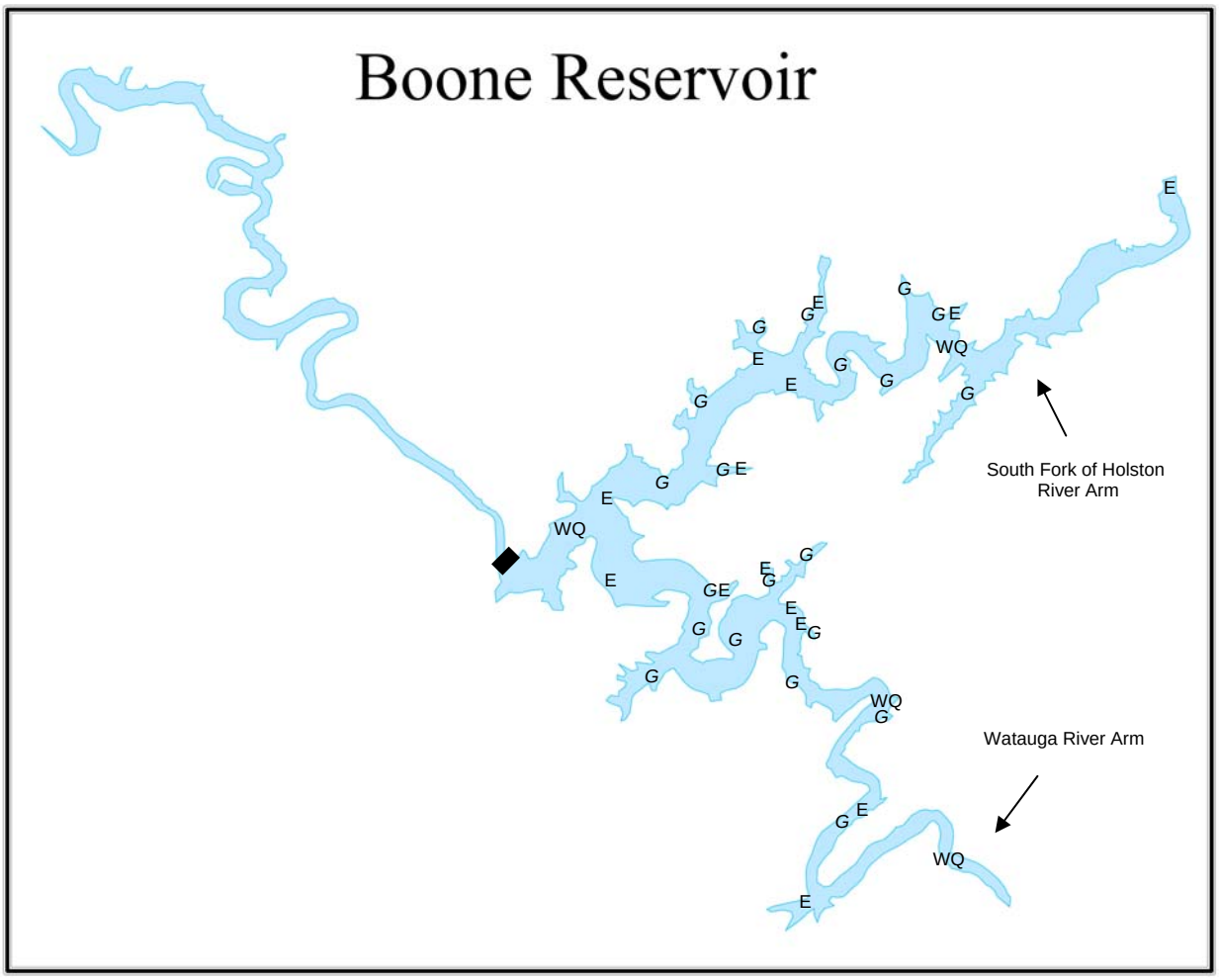
Table 9. Boone Reservoir fish habitat enhancement summary for 2007.

	New Sites			Renovated Sites			Expanded Sites		
Location	Number	Units	Acres	Number	Units	Acres	Number	Units	Acres
WRM 0.75 l*				1	125	2.50			
SFHRM 19.35 R*				1	100	2.00			
SFHRM 19.85 R*				1	421	8.42			
Total	***0***	***0***	***0***	***3***	***646***	***13***	***0***	***0***	***0***

*Christmas Trees

Figures

Figure 1. Sites sampled on Boone Reservoir in 2007.



E = Electrofishing
G = Gill Netting
WQ = Water Quality

Largemouth Bass

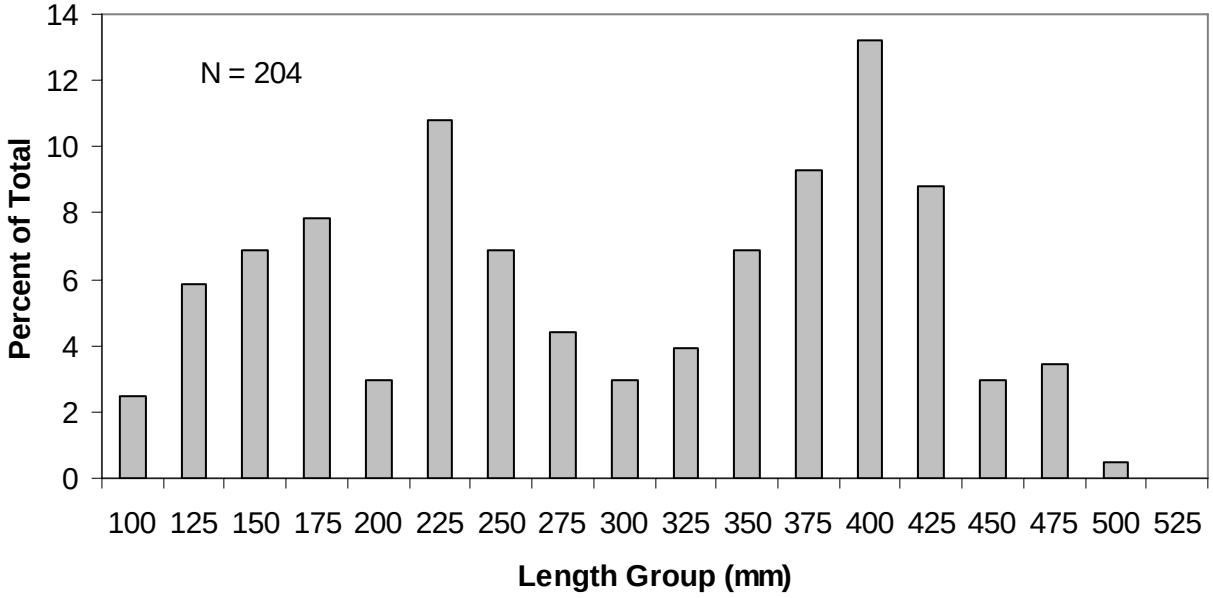


Figure 2. Largemouth bass length frequency by percent in Boone Reservoir, spring 2007.

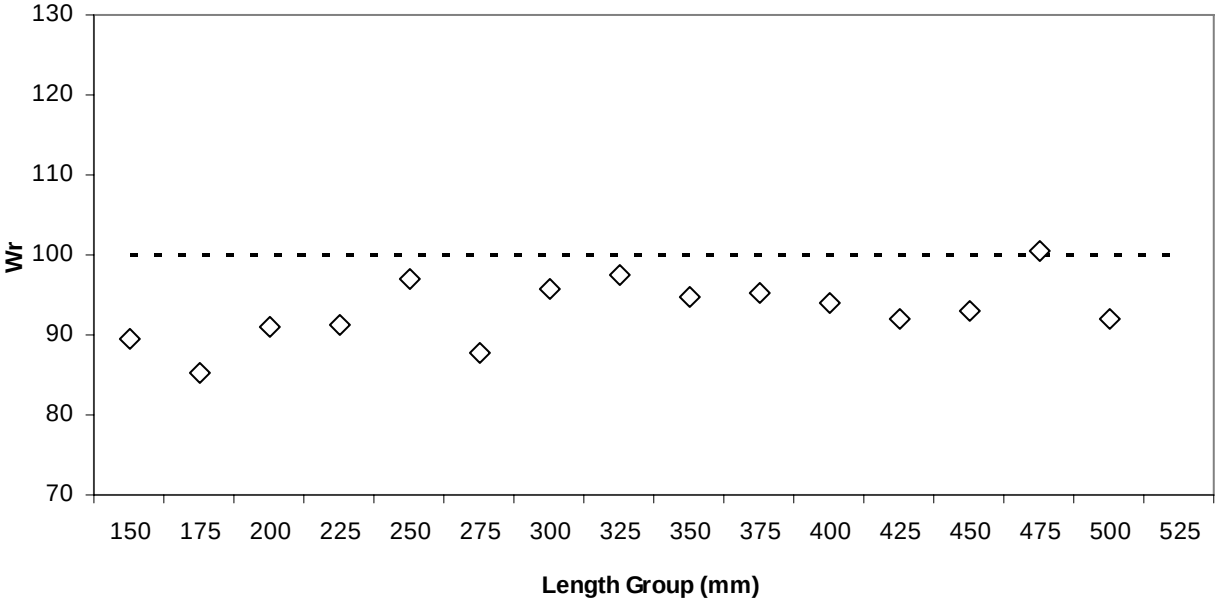


Figure 3. Largemouth bass mean relative weights (Wr) in Boone Reservoir, spring 2007.

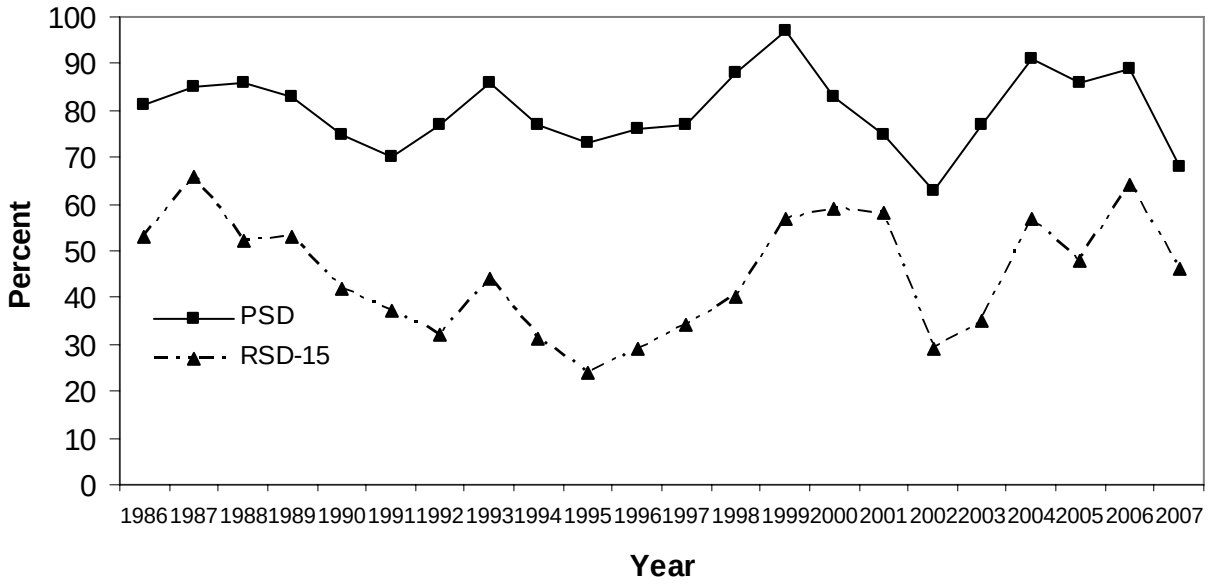


Figure 4. Largemouth bass traditional PSD and RSD-15 values in Boone Reservoir 1986 – 2007.

Smallmouth Bass

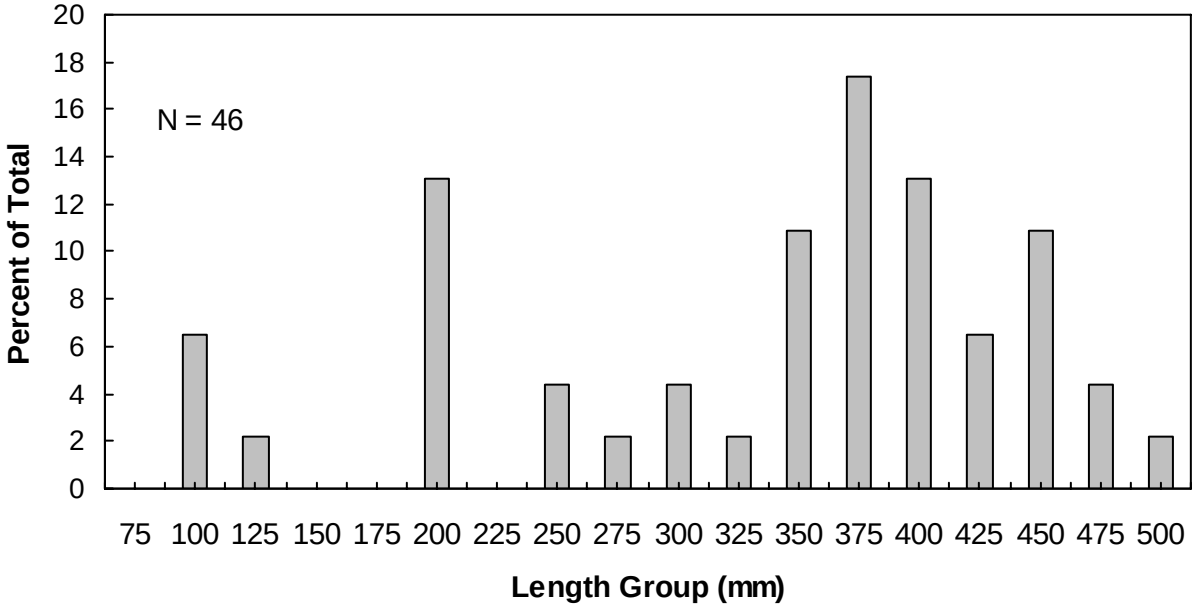


Figure 5. Smallmouth bass length frequency by percent in Boone Reservoir, spring 2007.

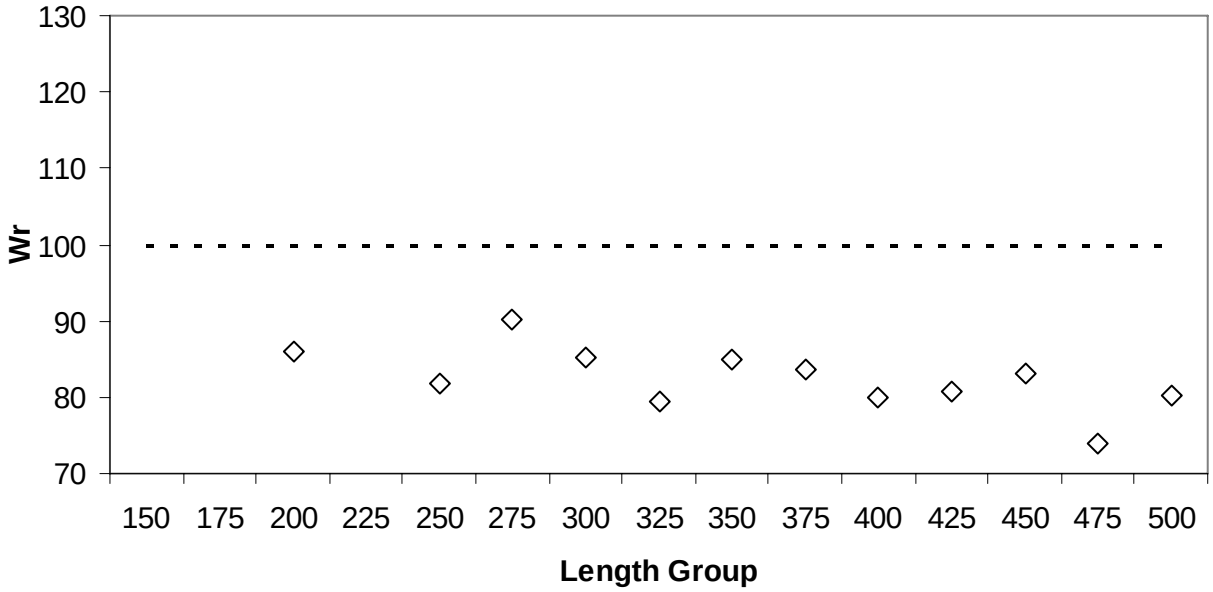


Figure 6. Smallmouth bass mean relative weights (Wr) in Boone Reservoir, spring 2007.

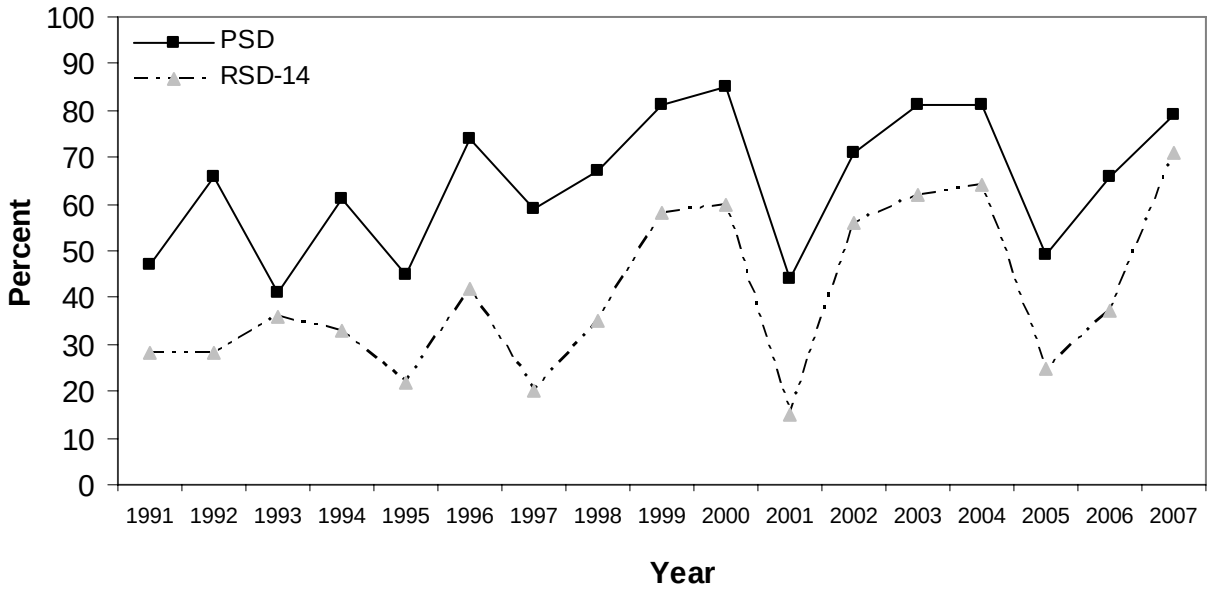


Figure 7. Smallmouth bass traditional PSD and RSD-14 values in Boone Reservoir 1991 – 2007.

Striped Bass

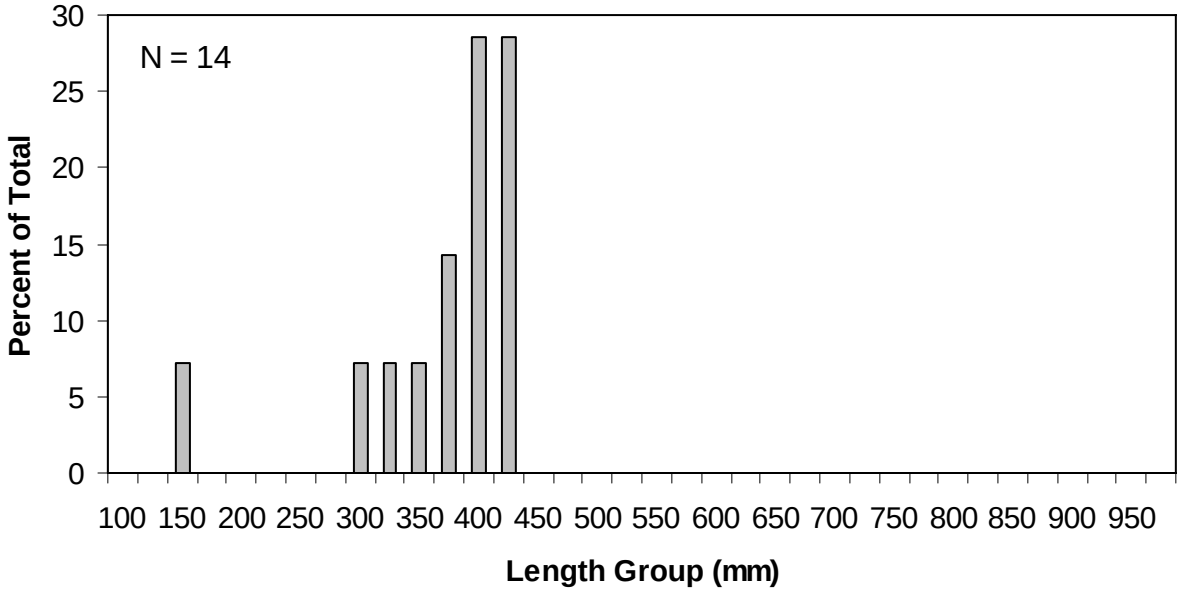


Figure 8. Striped bass length frequency in Boone Reservoir, summer 2007.

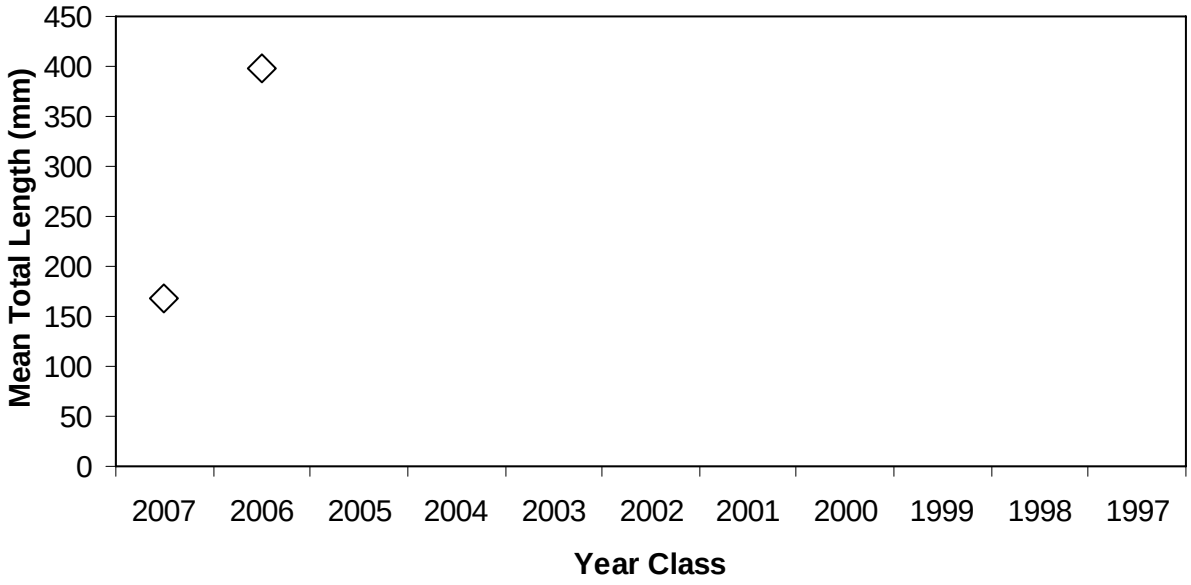


Figure 9. Striped Bass mean length at age in Boone Reservoir, September 2007.

Cherokee Bass

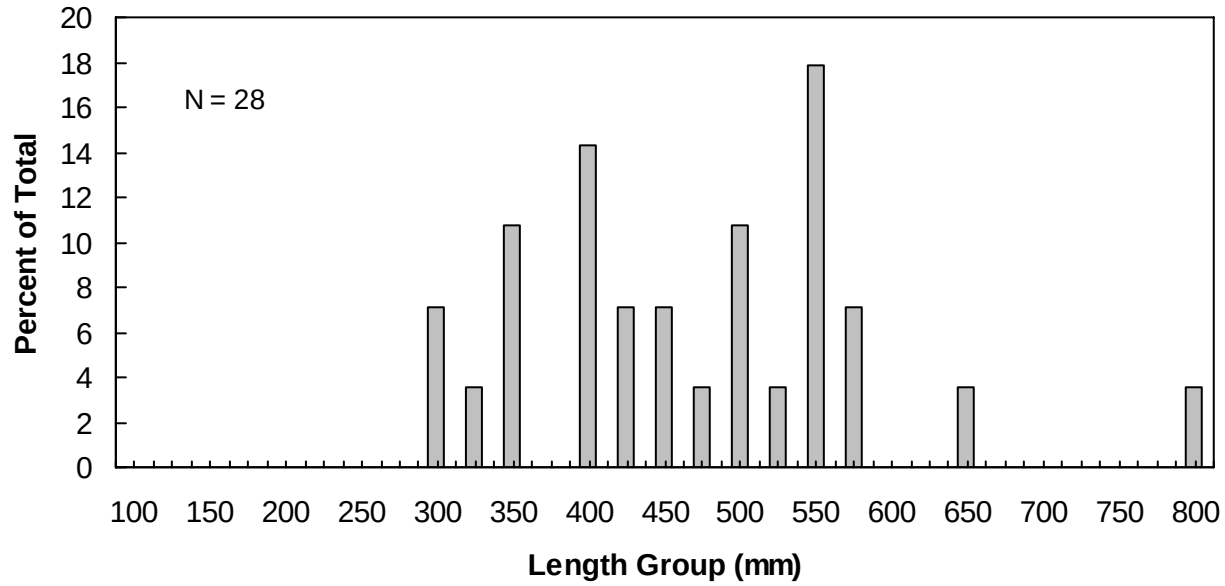


Figure 10. Cherokee bass length frequency by percent in Boone Reservoir, Summer 2007.

Figure 11. Cherokee Bass mean length at age in Boone Reservoir, September 2007.

Clupeid Species

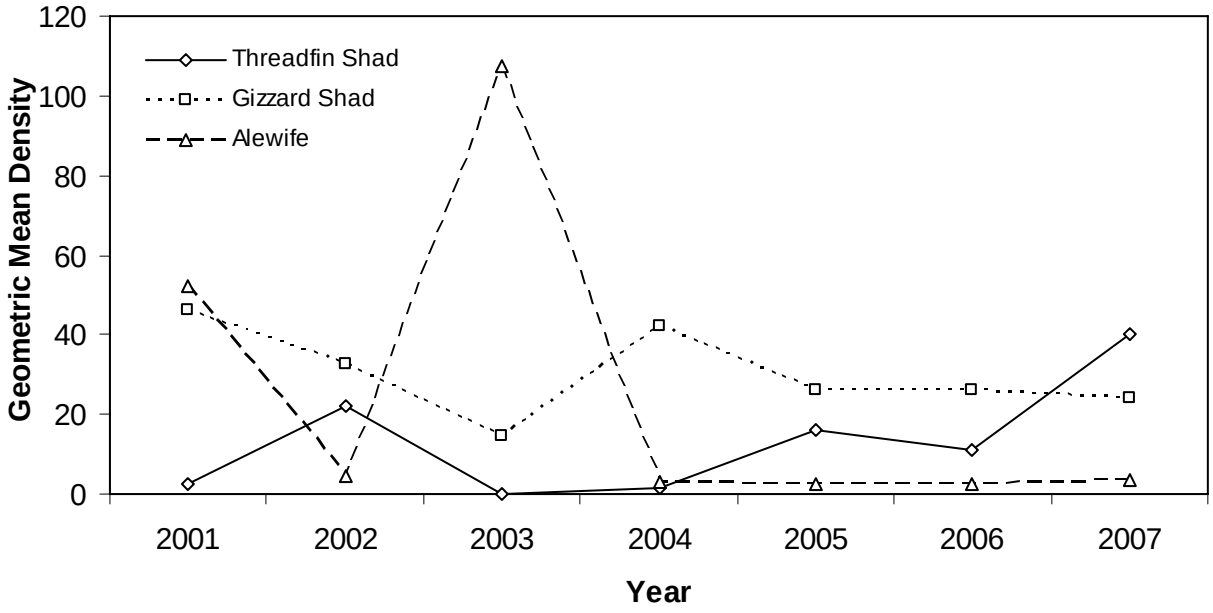


Figure 12. Geometric mean density of the clupeid catches in experimental gill nets from Boone Reservoir 2001 - 2007

Appendix A

Water Quality

Table A1. Boone Reservoir, water quality data at SFHRM 19, July 2, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	27.7	353	8.2	SFHRM19	1.4	14:45
1	27.5	354	10.4			
2	27.2	355	10.5			
3	26.8	354	10.8			
4	24.8	360	12.7			
5	21.3	379	11.1			
6	19.3	375	5.3			
7	18.2	380	2.1			
8	17.6	372	1.6			
9	16.9	360	2.5			
10	16.4	351	4.0			
11	16.1	350	4.1			
12	15.7	345	4.2			
13	15.4	350	4.3			
14	15.2	369	3.2			
15	15.0	388	3.2			
16	14.9	383	3.9			
17	14.6	379	4.2			
18	14.3	378	4.9			
19	14.0	381	5.7			
20	13.8	387	6.2			
21	13.6	385	6.8			
22	13.3	385	7.2			
23	13.2	385	7.7			
24	13.0	384	7.9			
25	12.8	384	8.1			
26	12.6	384	8.3			
27	12.5	385	8.3			
28	12.4	383	8.3			
29	12.4	382	8.1			
30	12.2	382	7.8			

Table A2. Boone Reservoir, water quality data at SFHRM 26, July 2, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	27.8	374	10.3	SFHRM26	1.2	15:45
1	27.4	377	10.6			
2	26.8	380	11.1			
3	24.3	443	10.1			
4	22.4	428	6.2			
5	20.3	417	0.5			
6	18.8	402	0.4			
7	18.0	387	0.3			
8	17.1	383	0.2			
9	16.7	395	0.2			
10	16.4	406	0.2			
11	16.3	409	1.5			
12	15.8	402	4.7			
13	15.6	399	6.1			
14	15.2	393	8.5			
15	15.1	393	8.5			
16	14.8	388	9.7			
17	14.2	389	10.1			
18	13.1	381	10.0			
19	12.7	381	10.2			
20	12.3	379	10.1			
21	12.1	378	10.0			
22	12.0	378	9.8			
23	Bottom					
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Table A3. Boone Reservoir, water quality data at WRM 6, July 2, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	344	10.6	9.1	WRM6	1.2	14:10
1	346	10.8	9.1			
2	350	11.0	9.0			
3	353	10.9	8.8			
4	359	9.5	8.2			
5	356	8.6	7.8			
6	351	8.7	7.6			
7	347	8.8	7.5			
8	343	8.6	7.3			
9	342	8.5	7.2			
10	339	7.6	7.0			
11	338	7.3	6.9			
12	338	6.2	6.8			
13	336	6.0	6.8			
14	335	5.8	6.8			
15	335	5.9	6.8			
16	333	5.9	6.8			
17	333	5.9	6.7			
18	334	4.9	6.6			
19	332	2.6	6.6			
20	**334**	**1.1**	**6.5**			
21	Bottom					
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Table A4. Boone Reservoir, water quality data at WRM 11, July 2, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	26.9	350	11.3	WRM11	1.0	12:40
1	26.9	350	11.5			
2	26.9	350	11.5			
3	26.7	351	11.5			
4	23.6	366	10.6			
5	20.9	355	10.9			
6	18.1	356	11.0			
7	16.5	353	11.2			
8	15.7	347	11.1			
9	14.0	328	9.3			
10	14.1	348	9.3			
11	Bottom					
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Table A5. Boone Reservoir, water quality data at SFHRM 19, August 6, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	27.7	348	**9.3**	SFHRM19	**2.4**	**9:35**
1	27.6	349	**9.3**			
2	27.6	349	**9.3**			
3	25.0	355	**10.1**			
4	22.5	351	**8.6**			
5	21.2	349	**6.7**			
6	20.1	348	**4.2**			
7	19.3	342	**3.7**			
8	18.4	332	**3.8**			
9	18.0	328	**3.8**			
10	17.6	323	**3.9**			
11	17.3	321	**4.1**			
12	17.0	319	**4.1**			
13	16.8	319	**3.9**			
14	16.5	318	**3.6**			
15	16.3	318	**3.5**			
16	16.2	318	**3.5**			
17	16.0	322	**3.5**			
18	15.8	328	**3.4**			
19	15.6	347	**3.4**			
20	15.4	358	**3.6**			
21	15.2	354	**3.9**			
22	14.9	341	**4.1**			
23	14.8	355	**4.5**			
24	14.3	338	**4.5**			
25	14.0	332	**3.4**			
26	13.8	329	**3.3**			
27	13.5	320	**1.2**			
28	13.6	365	**5.5**			
29	13.4	352	**4.4**			
30	13.3	350	**4.2**			

Table A6. Boone Reservoir, water quality data at SFHRM 26, August 3, 2006.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	27.9	360	9.7	SFHRM26	**1.5**	**10:30**
1	27.7	362	9.8			
2	27.6	363	9.8			
3	25.1	392	11.2			
4	23.7	416	9.6			
5	21.8	411	3.5			
6	20.3	386	0.7			
7	19.5	377	0.3			
8	18.9	370	0.2			
9	18.3	383	0.2			
10	17.9	301	0.1			
11	17.6	400	1.3			
12	17.3	407	2.7			
13	17.1	401	2.8			
14	16.8	399	3.1			
15	16.6	398	4.1			
16	16.4	397	4.3			
17	16.2	395	7.2			
18	15.8	395	4.5			
19	15.4	394	4.6			
20	15.1	387	5.9			
21	14.6	390	5.4			
22	Bottom					
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Table A7. Boone Reservoir, water quality data at WRM 6, August 6, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	28.0	347	9.6	WRM6	1.5	11:45
1	27.7	346	9.7			
2	27.5	345	9.7			
3	26.0	349	10.0			
4	23.4	351	8.2			
5	21.2	352	7.5			
6	20.2	346	7.5			
7	19.1	340	7.8			
8	18.4	335	7.7			
9	17.8	331	7.7			
10	17.5	325	7.8			
11	17.1	321	8.0			
12	17.0	320	8.0			
13	16.7	316	8.0			
14	16.4	314	8.1			
15	16.0	312	8.2			
16	15.8	310	8.2			
17	15.6	308	8.4			
18	15.4	306	8.6			
19	15.2	305	8.7			
20	15.1	302	8.6			
21	Bottom					
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Table A8. Boone Reservoir, water quality data at WRM 11, August 6, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	28.0	336	10.0	WRM11	1.5	**12:15**
1	27.6	337	10.1			
2	27.1	338	10.2			
3	24.1	357	10.0			
4	22.7	348	9.8			
5	17.7	347	10.2			
6	16.5	348	10.4			
7	16.1	341	10.3			
8	14.9	329	9.7			
9	14.7	323	9.4			
10	Bottom					
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Table A9. Boone Reservoir, water quality data at SFHRM 19, September 6, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	**27.3**	**273**	**10.5**	SFHRM19		**14:15**
1	**27.1**	**272**	**10.6**			
2	**26.7**	**272**	**10.7**			
3	**26.6**	**272**	**10.6**			
4	**24.5**	**275**	**11.1**			
5	**22.0**	**283**	**7.5**			
6	**20.6**	**288**	**5.0**			
7	**19.6**	**291**	**2.3**			
8	**18.6**	**279**	**2.0**			
9	**18.2**	**267**	**3.2**			
10	**17.8**	**259**	**4.0**			
11	**17.5**	**255**	**4.9**			
12	**17.3**	**255**	**4.6**			
13	**17.0**	**256**	**4.5**			
14	**16.7**	**252**	**4.6**			
15	**16.6**	**252**	**4.7**			
16	**16.4**	**255**	**4.5**			
17	**16.4**	**264**	**4.2**			
18	**16.0**	**252**	**3.7**			
19	**15.9**	**261**	**3.6**			
20	**15.7**	**264**	**2.5**			
21	**15.4**	**270**	**2.4**			
22	**15.1**	**259**	**2.1**			
23	**15.0**	**288**	**1.9**			
24	**14.8**	**318**	**5.6**			
25	**14.5**	**323**	**5.9**			
26	**14.2**	**324**	**6.6**			
27	**14.0**	**323**	**7.7**			
28	**13.8**	**323**	**8.0**			
29	**13.7**	**323**	**8.1**			
30	**13.5**	**322**	**8.3**			

Table A10. Boone Reservoir, water quality data at SFHRM 26, September 6, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	**27.3**	**298**	**11.0**	SFHRM26	1.2	14:55
1	**27.2**	**298**	**11.0**			
2	**26.8**	**299**	**11.1**			
3	**26.4**	**304**	**11.2**			
4	**23.9**	**333**	**9.7**			
5	**21.8**	**339**	**4.7**			
6	**20.9**	**324**	**2.0**			
7	**19.3**	**307**	**0.5**			
8	**18.5**	**303**	**0.4**			
9	**18.1**	**308**	**0.3**			
10	**17.6**	**321**	**0.2**			
11	**17.4**	**334**	**1.7**			
12	**17.2**	**336**	**2.9**			
13	**16.9**	**336**	**4.3**			
14	**16.8**	**336**	**5.7**			
15	**16.7**	**335**	**6.2**			
16	**16.2**	**332**	**7.7**			
17	**15.3**	**328**	**8.5**			
18	**14.2**	**325**	**9.6**			
19	**14.0**	**324**	**10.0**			
20	**13.8**	**323**	**10.1**			
21	**13.6**	**323**	**10.2**			
22	Bottom					
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Table A11. Boone Reservoir, water quality data at WRM 6, September 6, 2007.

Depth (m)	Temp (C)	Cond	DO	Site	Secchi (m)	Time
0	**27.3**	**269**	**10.5**	WRM 6	**1.1**	**13:45**
1	**27.2**	**269**	**10.6**			
2	**26.9**	**269**	**10.7**			
3	**26.4**	**271**	**10.7**			
4	**23.3**	**276**	**7.9**			
5	**21.4**	**272**	**6.4**			
6	**19.9**	**264**	**6.8**			
7	**19.3**	**260**	**7.1**			
8	**18.5**	**258**	**7.1**			
9	**18.0**	**256**	**7.1**			
10	**17.7**	**254**	**7.1**			
11	**17.4**	**253**	**7.2**			
12	**17.2**	**252**	**7.4**			
13	**16.9**	**251**	**7.6**			
14	**16.7**	**250**	**7.7**			
15	**16.4**	**249**	**7.8**			
16	**16.2**	**247**	**7.9**			
17	**16.0**	**245**	**8.0**			
18	**15.7**	**244**	**8.0**			
19	**15.5**	**243**	**7.9**			
20	**15.4**	**244**	**7.6**			
21	**15.2**	**245**	**6.0**			
22	**15.1**	**269**	**2.7**			
23	Bottom					
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Figure A1. Boone Reservoir water quality data at SFHRM 19, July 2007.

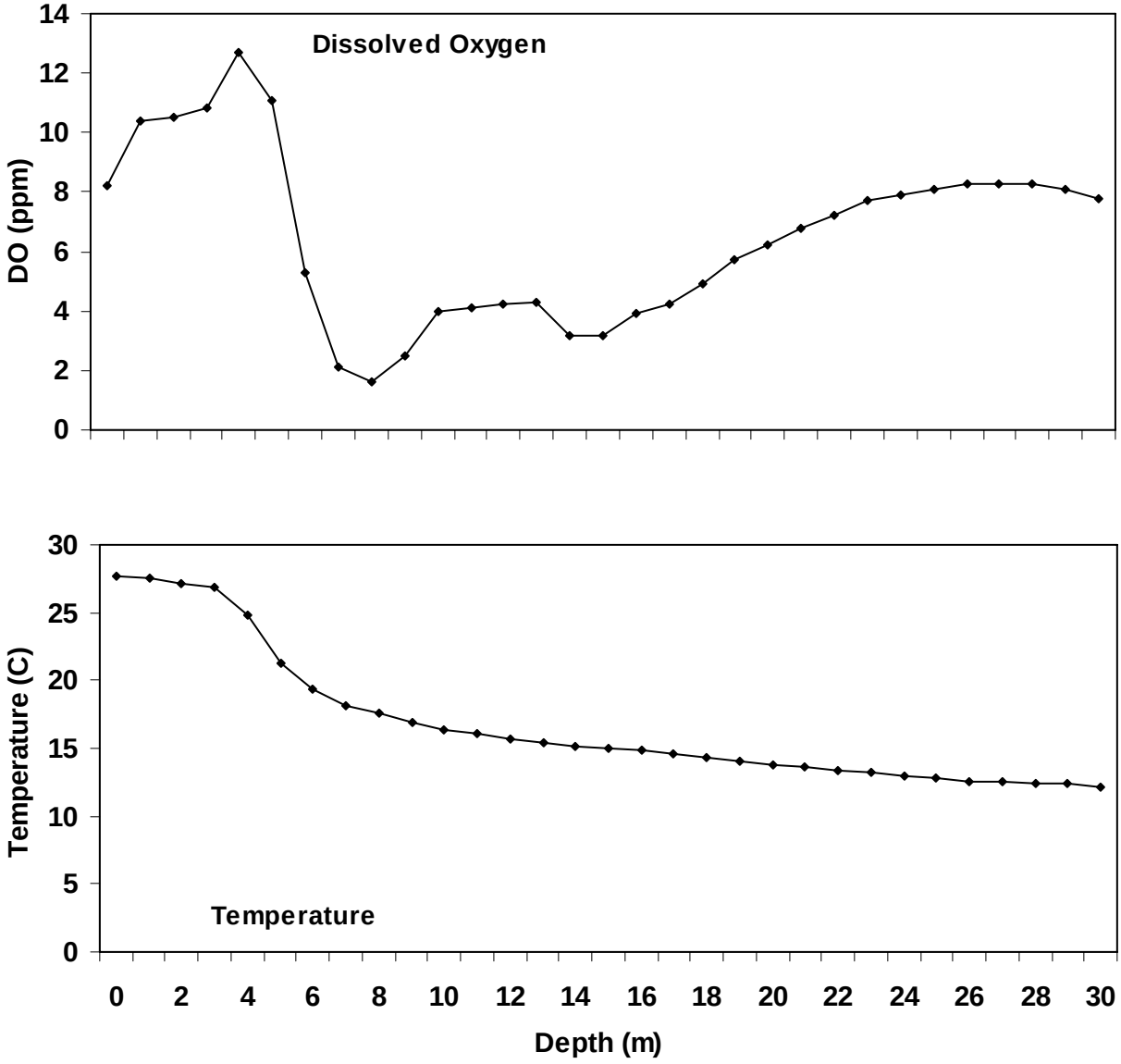


Figure A2. Boone Reservoir water quality data at SFHRM 26, July 2007.

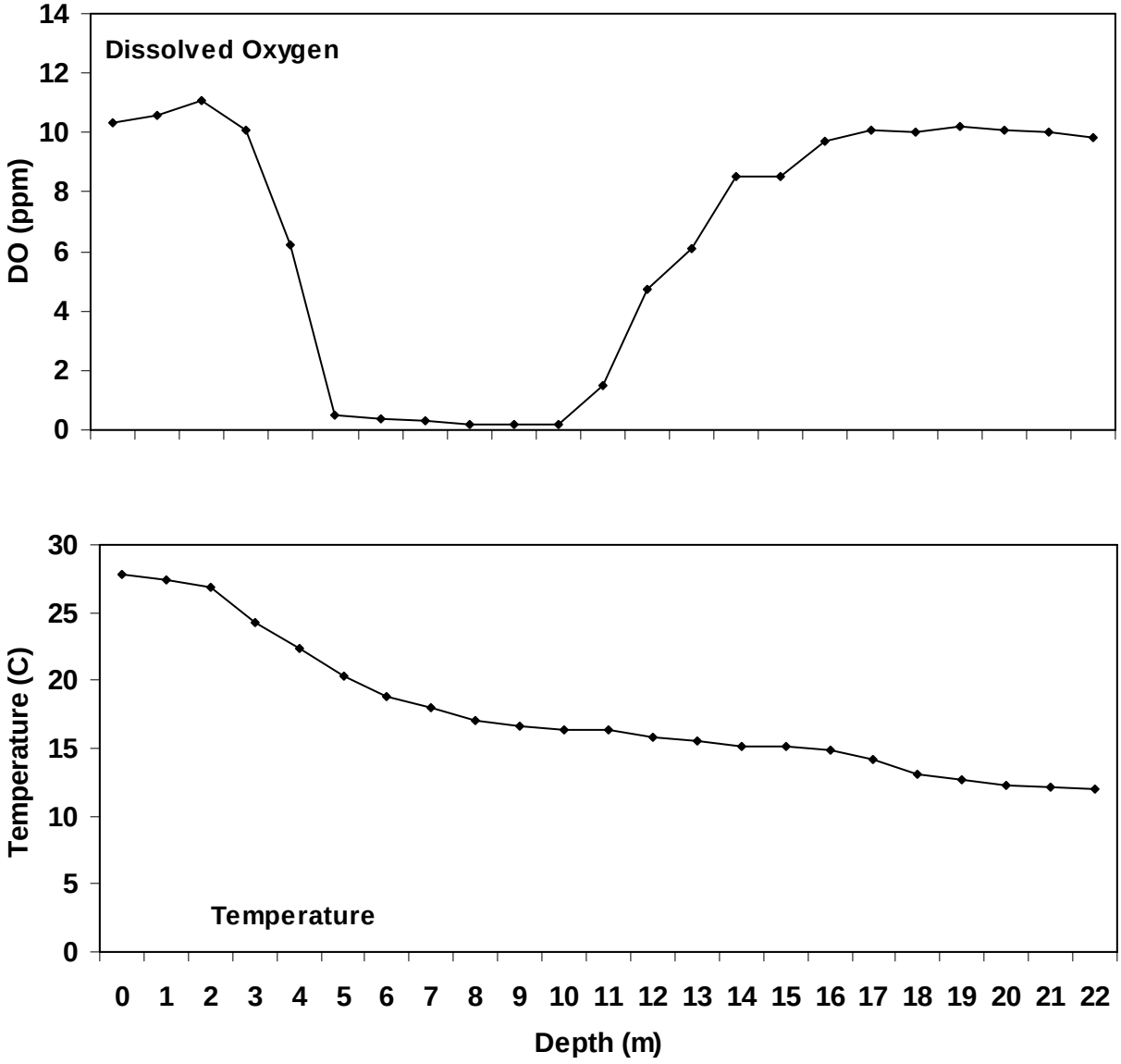


Figure A3. Boone Reservoir water quality data at WRM 6, July 2007.

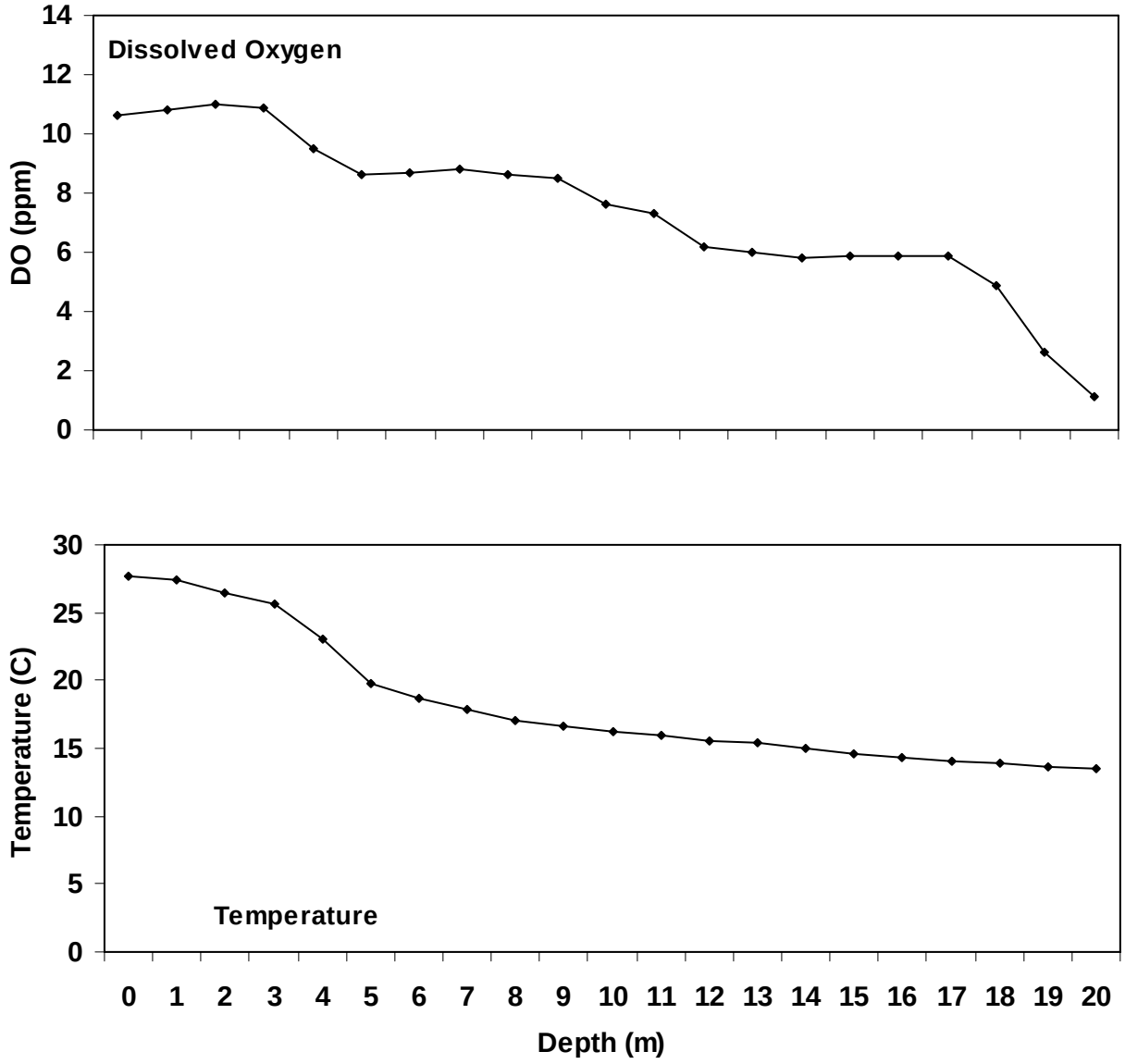


Figure A4. Boone Reservoir water quality data at WRM 11, July 2007.

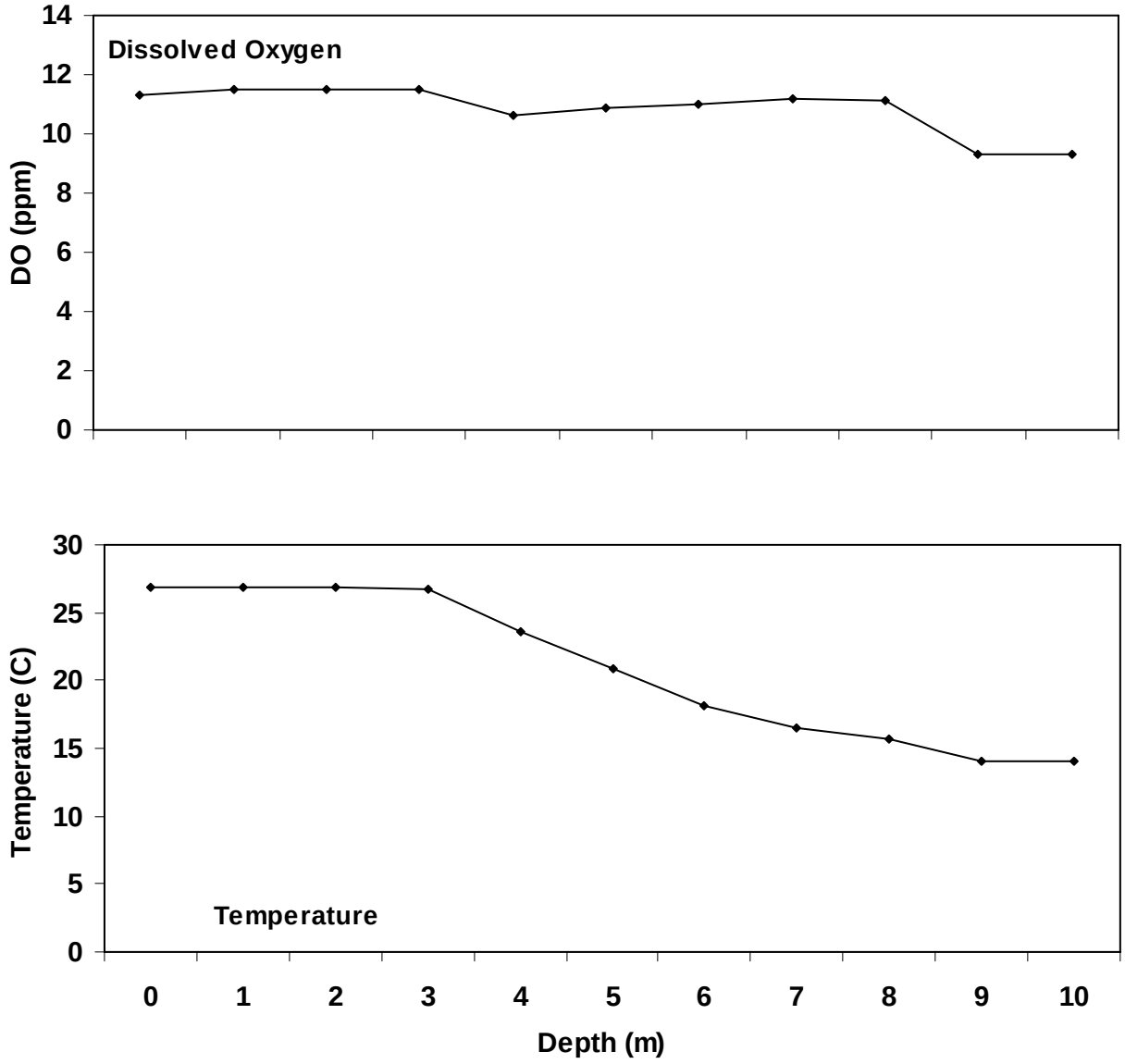


Figure A5. Boone Reservoir water quality data at SFHRM 19, August 2007.

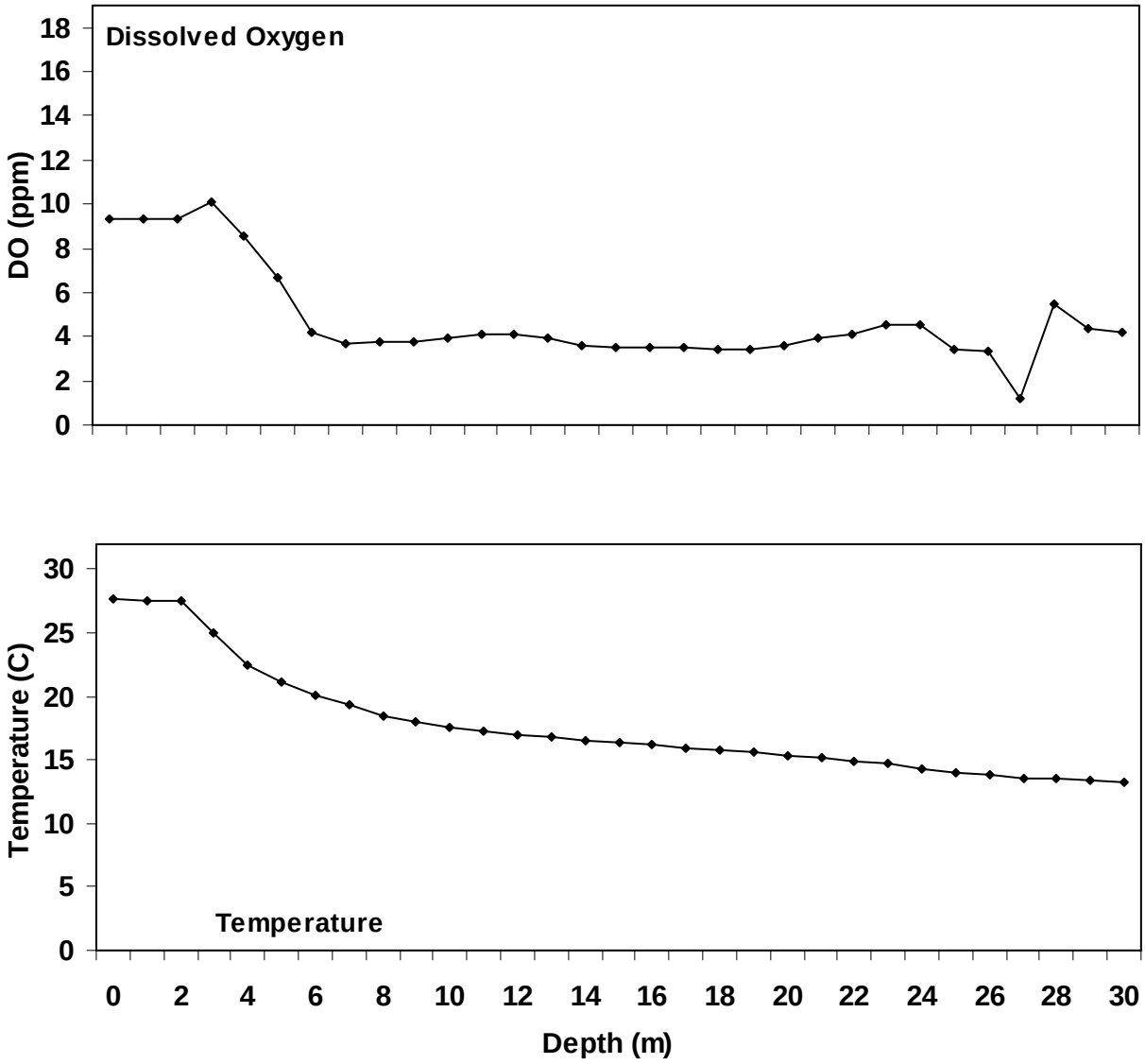


Figure A6. Boone Reservoir water quality data at SFHRM 26, August 2007.

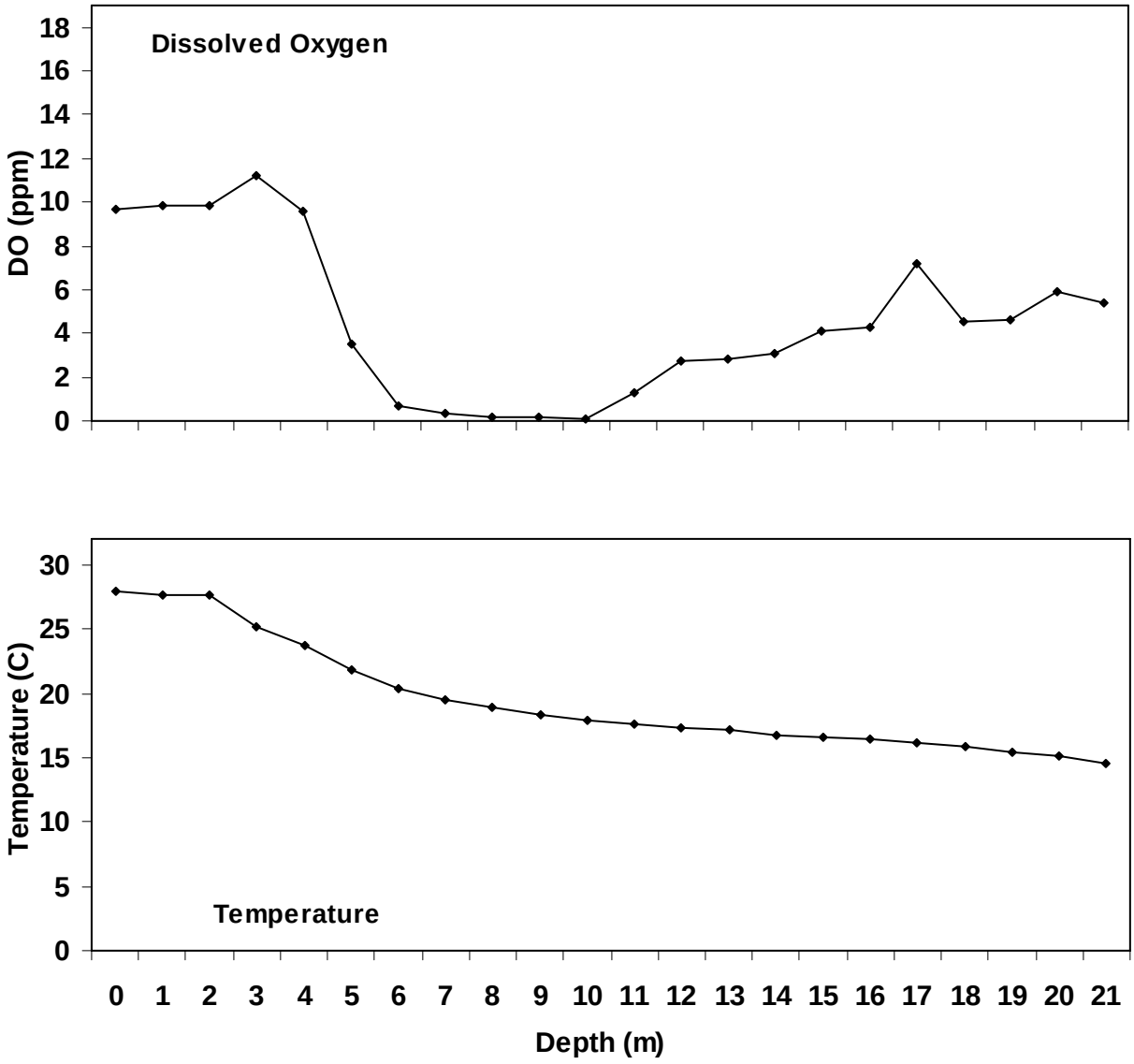


Figure A7. Boone Reservoir water quality data at WRM 6, August 2007.

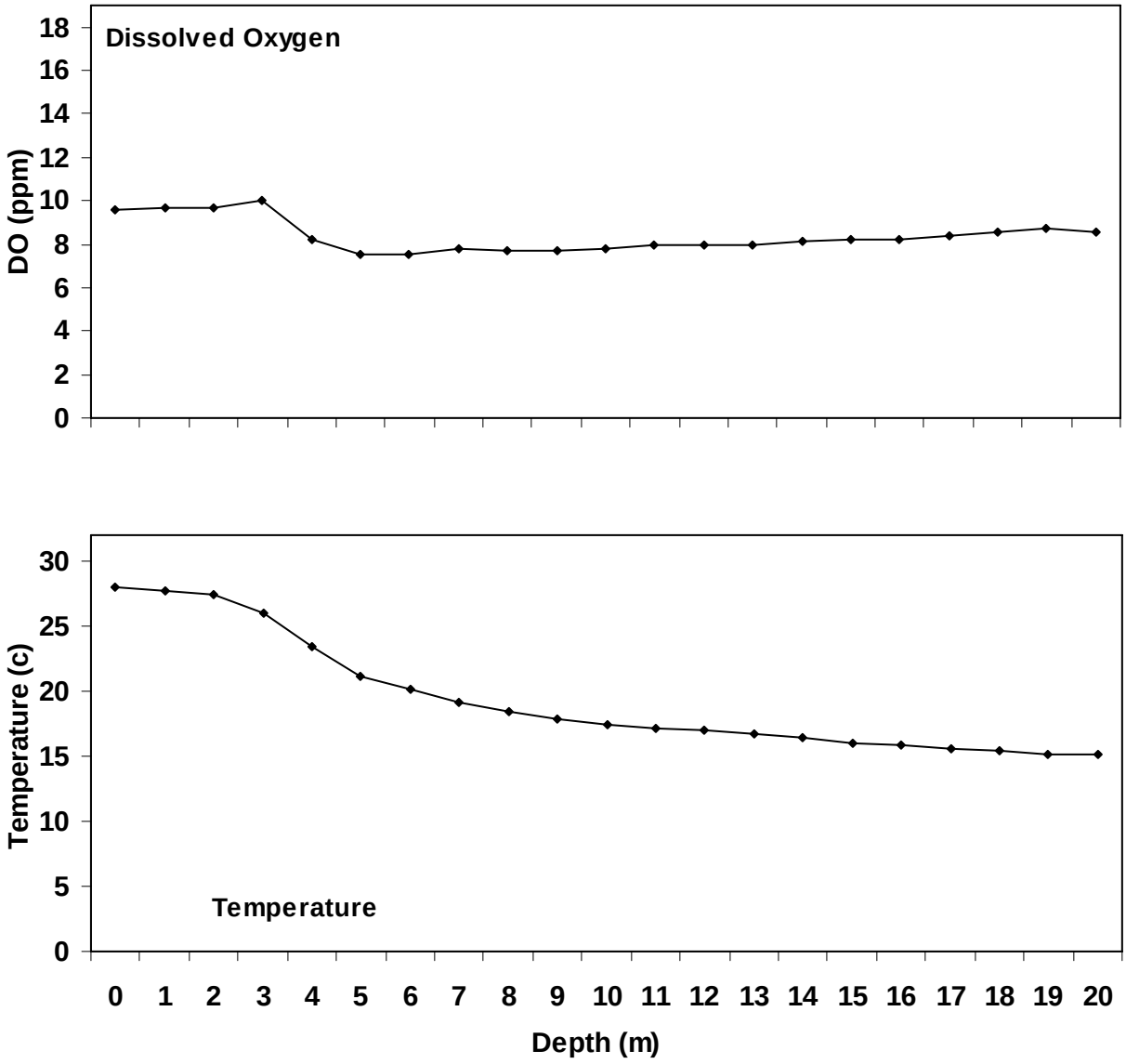


Figure A8. Boone Reservoir water quality data at WRM 11, August 20076.

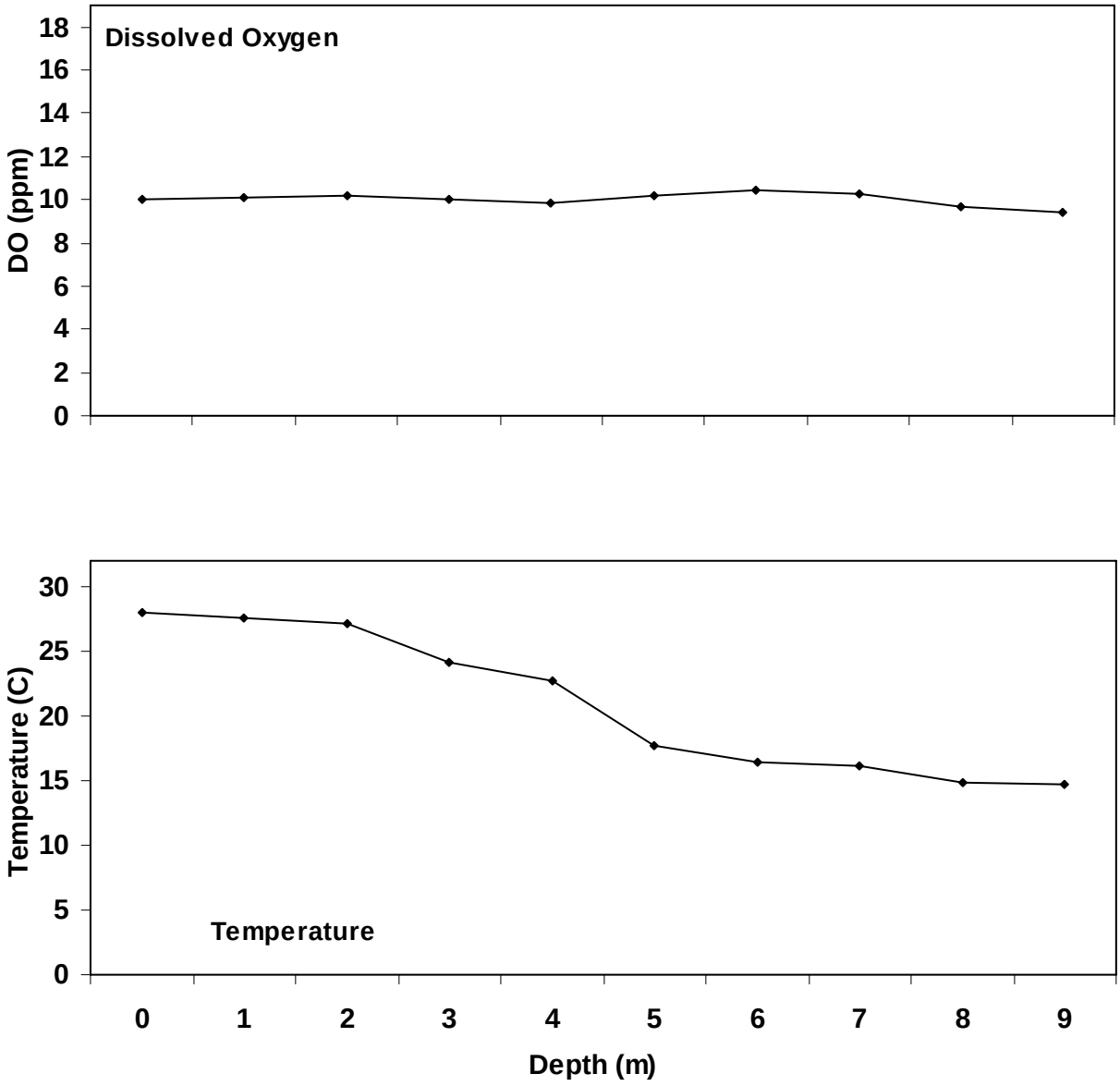


Figure A9. Boone Reservoir water quality data at SFHRM 19, September 2007.

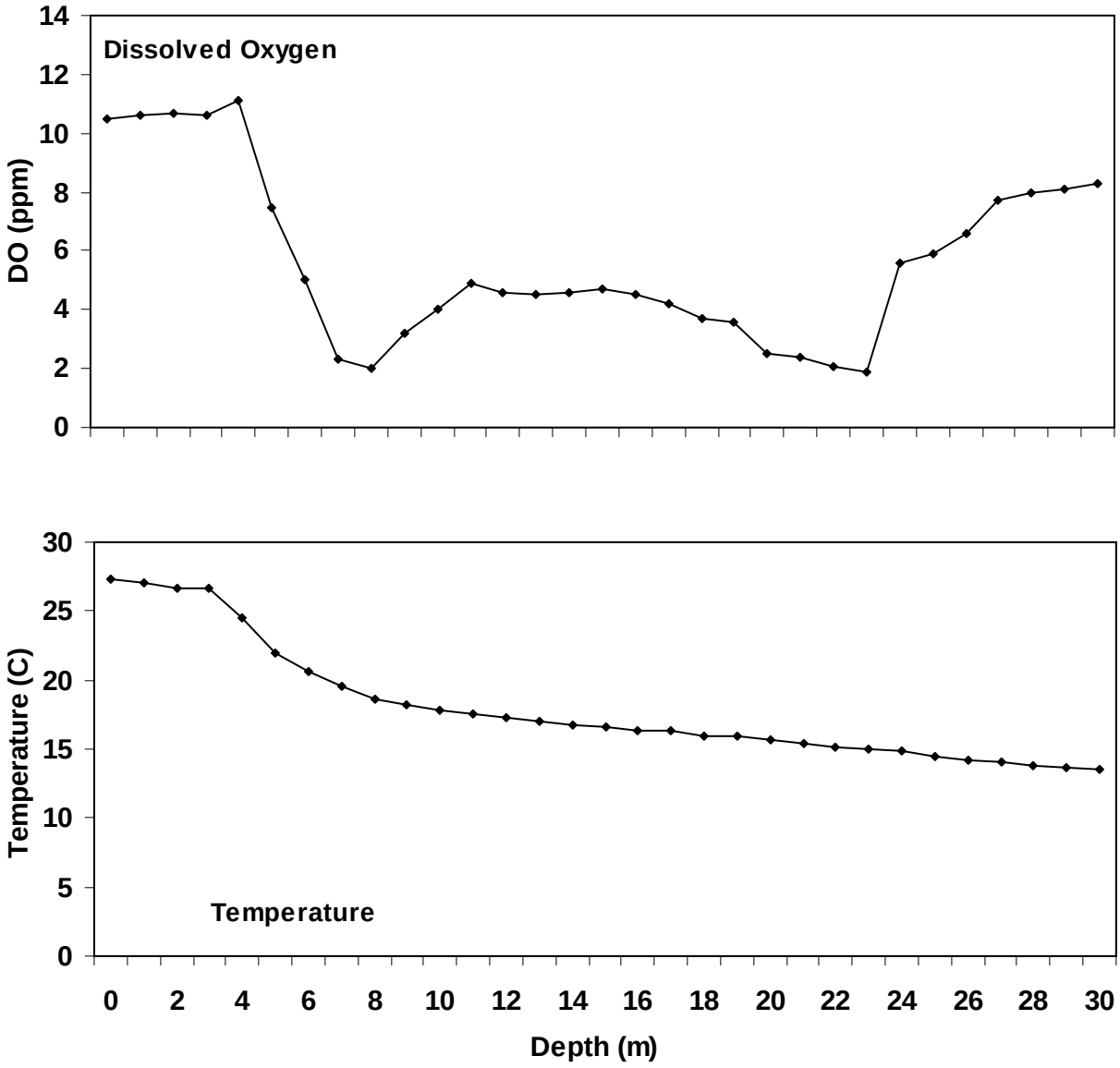


Figure A10. Boone Reservoir water quality data at SFHRM 26, September 2007.

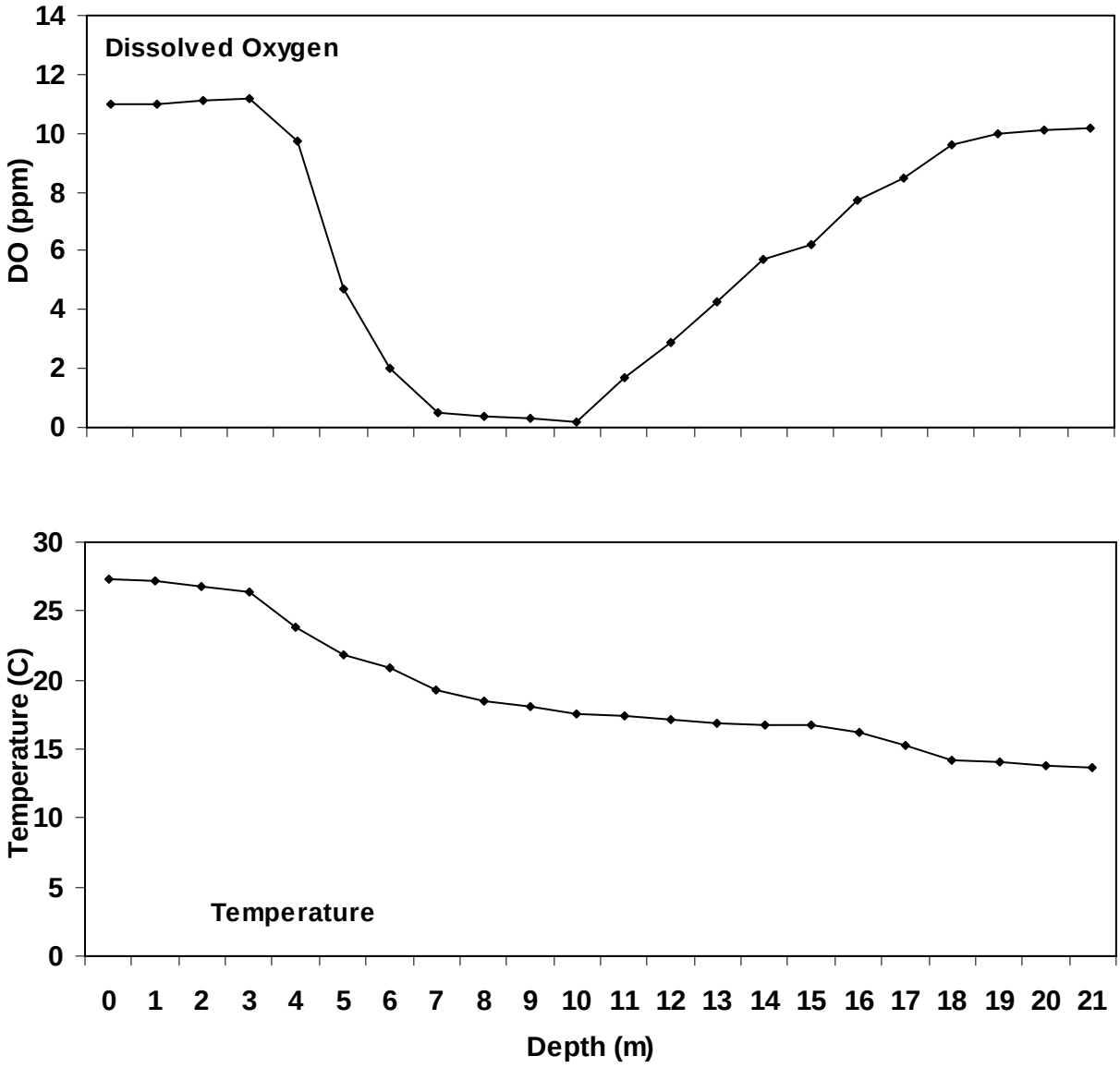
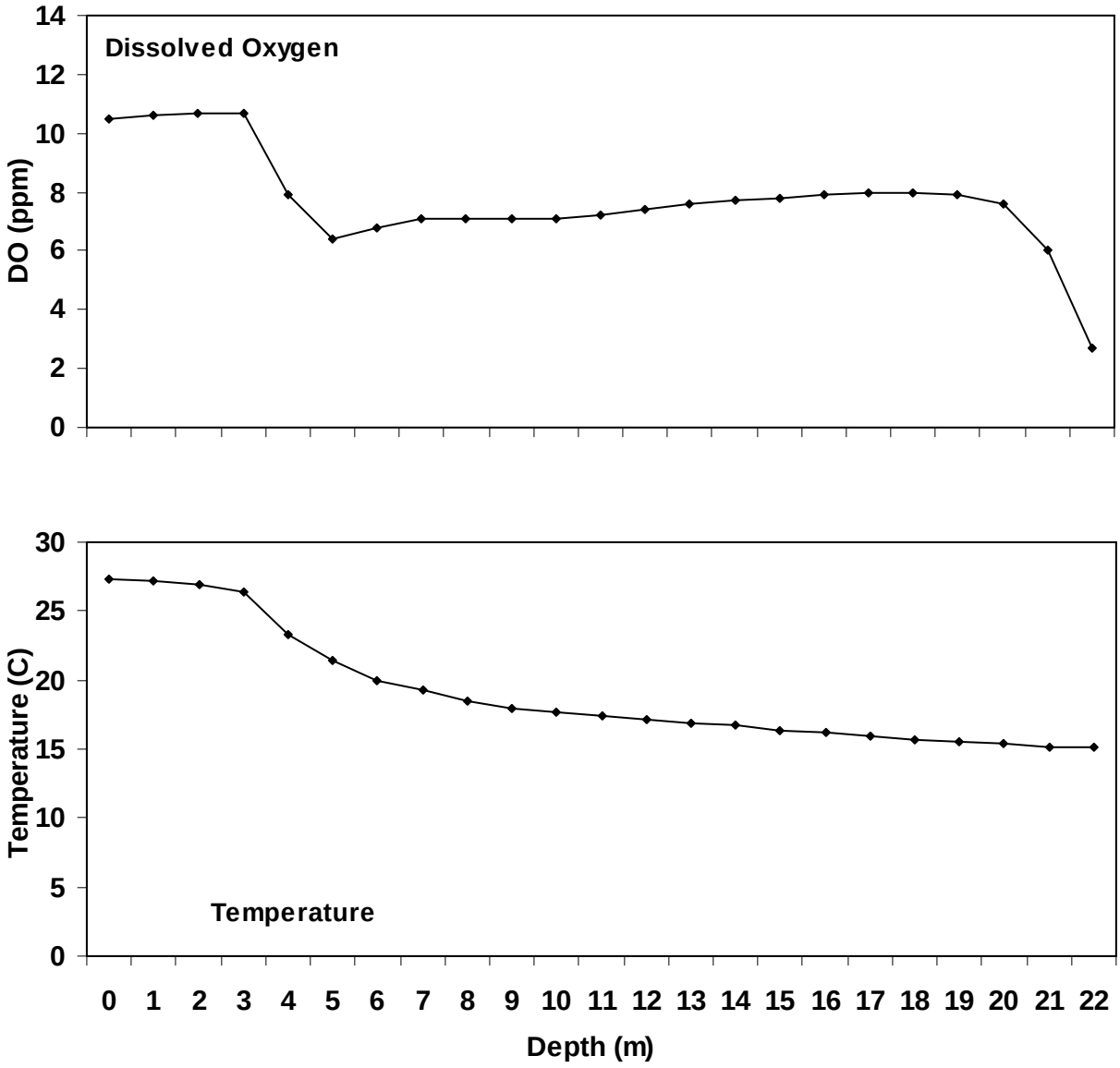


Figure A11. Boone Reservoir water quality data at WRM 6, September 2007.



Appendix B

Reservoir Elevations

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

Elevation	Month	Day	Elevation	Month	Day	Elevation	Month	Day
1358.07	January	1	1362.88	February	24	1379.48	April	19
1357.58	January	2	1362.90	February	25	1379.70	April	20
1357.98	January	3	1363.15	February	26	1379.85	April	21
1357.29	January	4	1363.62	February	27	1379.98	April	22
1357.69	January	5	1363.93	February	28	1380.33	April	23
1357.64	January	6	1364.33	March	1	1380.37	April	24
1356.61	January	7	1365.50	March	2	1380.55	April	25
1356.44	January	8	1365.74	March	3	1380.90	April	26
1357.05	January	9	1365.85	March	4	1381.01	April	27
1357.07	January	10	1366.24	March	5	1381.08	April	28
1357.41	January	11	1366.65	March	6	1381.10	April	29
1357.46	January	12	1367.06	March	7	1381.03	April	30
1357.36	January	13	1367.43	March	8	1381.10	May	1
1357.65	January	14	1367.33	March	9	1381.09	May	2
1357.80	January	15	1367.59	March	10	1381.31	May	3
1357.36	January	16	1368.03	March	11	1381.72	May	4
1357.10	January	17	1368.22	March	12	1381.84	May	5
1357.53	January	18	1368.72	March	13	1381.97	May	6
1357.69	January	19	1368.67	March	14	1381.98	May	7
1357.99	January	20	1368.76	March	15	1381.96	May	8
1358.09	January	21	1370.47	March	16	1381.92	May	9
1358.20	January	22	1371.80	March	17	1381.95	May	10
1357.94	January	23	1372.39	March	18	1381.68	May	11
1357.73	January	24	1373.00	March	19	1381.74	May	12
1358.00	January	25	1373.38	March	20	1382.02	May	13
1358.19	January	26	1373.73	March	21	1381.84	May	14
1358.19	January	27	1374.64	March	22	1381.91	May	15
1358.03	January	28	1374.76	March	23	1381.89	May	16
1358.34	January	29	1374.91	March	24	1381.84	May	17
1358.08	January	30	1375.01	March	25	1381.92	May	18
1357.92	January	31	1375.11	March	26	1381.79	May	19
1357.55	February	1	1375.36	March	27	1381.63	May	20
1357.37	February	2	1375.42	March	28	1381.85	May	21
1357.47	February	3	1375.51	March	29	1381.62	May	22
1357.55	February	4	1375.49	March	30	1381.76	May	23
1358.15	February	5	1375.46	March	31	1381.85	May	24
1359.14	February	6	1375.48	April	1	1381.68	May	25
1359.78	February	7	1375.60	April	2	1381.91	May	26
1360.36	February	8	1375.94	April	3	1381.95	May	27
1360.59	February	9	1376.15	April	4	1381.57	May	28
1361.24	February	10	1376.43	April	5	1381.56	May	29
1361.39	February	11	1376.50	April	6	1381.64	May	30
1361.31	February	12	1376.50	April	7	1381.50	May	31
1361.14	February	13	1376.60	April	8	1381.79	June	1
1361.20	February	14	1376.70	April	9	1381.96	June	2
1361.31	February	15	1376.77	April	10	1381.47	June	3
1361.55	February	16	1377.05	April	11	1381.61	June	4
1361.60	February	17	1377.35	April	12	1381.75	June	5
1361.64	February	18	1377.41	April	13	1381.72	June	6
1362.07	February	19	1377.38	April	14	1381.27	June	7
1362.54	February	20	1378.06	April	15	1381.32	June	8
1362.89	February	21	1378.55	April	16	1381.56	June	9
1362.94	February	22	1378.98	April	17	1381.51	June	10
1362.92	February	23	1379.28	April	18	1381.21	June	11

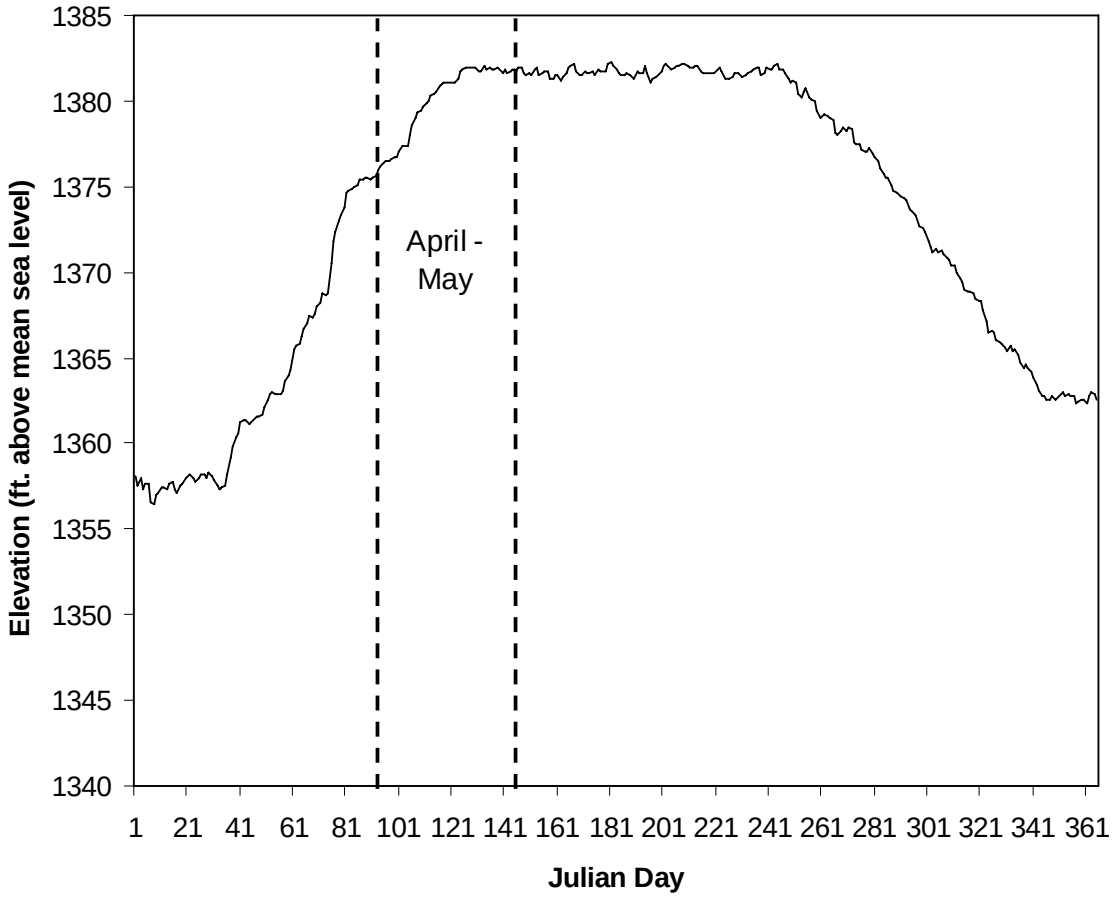
Table B1. Continued.

Elevation	Month	Day	Elevation	Month	Day	Elevation	Month	Day
1381.36	June	12	1381.58	August	5	1378.45	September	28
1381.60	June	13	1381.67	August	6	1378.37	September	29
1381.92	June	14	1381.67	August	7	1377.64	September	30
1382.06	June	15	1381.66	August	8	1377.49	October	1
1382.16	June	16	1381.78	August	9	1377.48	October	2
1381.75	June	17	1381.96	August	10	1377.16	October	3
1381.52	June	18	1381.70	August	11	1377.07	October	4
1381.54	June	19	1381.27	August	12	1377.05	October	5
1381.77	June	20	1381.29	August	13	1377.29	October	6
1381.57	June	21	1381.34	August	14	1376.96	October	7
1381.65	June	22	1381.40	August	15	1376.74	October	8
1381.71	June	23	1381.63	August	16	1376.50	October	9
1381.53	June	24	1381.64	August	17	1376.05	October	10
1381.80	June	25	1381.47	August	18	1375.77	October	11
1381.77	June	26	1381.43	August	19	1375.47	October	12
1381.72	June	27	1381.52	August	20	1375.49	October	13
1381.76	June	28	1381.65	August	21	1375.13	October	14
1382.13	June	29	1381.76	August	22	1374.76	October	15
1382.29	June	30	1381.83	August	23	1374.62	October	16
1382.08	July	1	1381.92	August	24	1374.59	October	17
1381.81	July	2	1381.95	August	25	1374.44	October	18
1381.59	July	3	1381.53	August	26	1374.31	October	19
1381.51	July	4	1381.67	August	27	1374.16	October	20
1381.50	July	5	1381.91	August	28	1373.70	October	21
1381.57	July	6	1381.84	August	29	1373.54	October	22
1381.55	July	7	1381.85	August	30	1373.29	October	23
1381.38	July	8	1382.08	August	31	1372.98	October	24
1381.33	July	9	1382.21	September	1	1372.71	October	25
1381.77	July	10	1381.82	September	2	1372.59	October	26
1381.61	July	11	1381.86	September	3	1372.32	October	27
1381.63	July	12	1381.65	September	4	1371.81	October	28
1382.02	July	13	1381.29	September	5	1371.48	October	29
1381.66	July	14	1381.07	September	6	1371.15	October	30
1381.10	July	15	1381.19	September	7	1371.35	October	31
1381.33	July	16	1381.12	September	8	1371.18	November	1
1381.43	July	17	1380.44	September	9	1371.22	November	2
1381.50	July	18	1380.22	September	10	1371.09	November	3
1381.69	July	19	1380.51	September	11	1370.87	November	4
1382.06	July	20	1380.80	September	12	1370.76	November	5
1382.16	July	21	1380.23	September	13	1370.42	November	6
1381.97	July	22	1380.13	September	14	1370.35	November	7
1381.85	July	23	1379.94	September	15	1369.95	November	8
1381.91	July	24	1379.49	September	16	1369.61	November	9
1382.04	July	25	1379.05	September	17	1369.46	November	10
1382.04	July	26	1379.13	September	18	1368.98	November	11
1382.14	July	27	1379.24	September	19	1368.89	November	12
1382.17	July	28	1379.13	September	20	1368.88	November	13
1382.01	July	29	1379.06	September	21	1368.76	November	14
1381.99	July	30	1378.86	September	22	1368.47	November	15
1381.96	July	31	1378.13	September	23	1368.37	November	16
1382.07	August	1	1377.99	September	24	1368.30	November	17
1382.10	August	2	1378.26	September	25	1367.82	November	18
1381.76	August	3	1378.42	September	26	1367.08	November	19
1381.59	August	4	1378.22	September	27	1366.46	November	20

Table B1. Continued.

Elevation	Month	Day
1366.57	November	21
1366.49	November	22
1366.01	November	23
1365.92	November	24
1365.81	November	25
1365.62	November	26
1365.37	November	27
1365.67	November	28
1365.37	November	29
1365.53	November	30
1365.13	December	1
1364.73	December	2
1364.45	December	3
1364.67	December	4
1364.36	December	5
1364.14	December	6
1363.86	December	7
1363.40	December	8
1363.07	December	9
1362.82	December	10
1362.82	December	11
1362.60	December	12
1362.58	December	13
1362.82	December	14
1362.60	December	15
1362.63	December	16
1362.79	December	17
1363.02	December	18
1362.81	December	19
1362.83	December	20
1362.76	December	21
1362.82	December	22
1362.38	December	23
1362.47	December	24
1362.57	December	25
1362.54	December	26
1362.35	December	27
1362.73	December	28
1362.94	December	29
1362.84	December	30
1362.56	December	31

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



Appendix C

Angler Creel Survey

MONTHLY ANGLING EFFORT FOR ALL ANGLERS - 2007

LAKE=BOONE

MONTH	ANGLER HOURS	RELATIVE STANDARD ERROR	HOURS PER ACRE	ANGLER TRIPS	TRIPS PER ACRE	PERCENT EFFORT
01 JANUARY	4327	17.5	1.0	663	0.1	5.1
02 FEBRUARY	3822	16.3	0.8	622	0.1	4.5
03 MARCH	8574	8.9	1.9	1301	0.3	10.2
04 APRIL	8499	12.5	1.9	1292	0.3	10.1
05 MAY	8832	7.6	2.0	1417	0.3	10.5
06 JUNE	8972	5.6	2.0	1426	0.3	10.7
07 JULY	10154	18.7	2.2	1584	0.4	12.1
08 AUGUST	6584	11.9	1.5	979	0.2	7.8
09 SEPTEMBER	8437	17.0	1.9	1248	0.3	10.0
10 OCTOBER	5642	10.9	1.2	858	0.2	6.7
11 NOVEMBER	5525	12.0	1.2	862	0.2	6.6
12 DECEMBER	4730	11.8	1.0	770	0.2	5.6
TOTAL	**84098**			**13022**		

MONTHLY CATCH STATISTICS FOR ALL ANGLERS - 2007

LAKE=BOONE

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	865	33.1	0.20	27.3	87	36.4	0.02	36.5
02 FEBRUARY	1185	35.4	0.31	31.4	76	19.4	0.02	10.6
03 MARCH	1372	16.5	0.16	14.1	171	43.4	0.02	49.9
04 APRIL	1445	19.6	0.17	15.3	255	45.8	0.03	42.3
05 MAY	2208	21.5	0.25	20.0	883	53.4	0.10	53.3
06 JUNE	2512	22.9	0.28	22.4	449	37.6	0.05	40.2
07 JULY	2742	25.5	0.27	16.9	406	58.3	0.04	60.3
08 AUGUST	2041	31.8	0.31	29.2	132	54.0	0.02	48.7
09 SEPTEMBER	2278	28.3	0.27	22.5	422	42.2	0.05	40.7
10 OCTOBER	1749	22.7	0.31	19.8	226	34.0	0.04	36.1
11 NOVEMBER	1381	25.3	0.25	22.2	111	31.3	0.02	26.1
12 DECEMBER	1183	27.9	0.25	24.9	142	47.9	0.03	55.3
TOTAL	**20961**				**3360**			

SUMMARY OF SPECIES CATCH STATISTICS - 2007

LAKE=BOONE

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
CARP	103	280.3	0.5	0	58	184.2	1.7	0	43.7	11.20	2
BLUE CATFISH	19	348.4	0.1	19	19	348.4	0.6	19	0.0	13.35	1
CHANNEL CATFISH	837	67.1	4.0	747	652	59.5	19.4	652	22.1	2.93	26
FLATHEAD CATFISH	101	255.0	0.5	101	101	255.0	3.0	101	0.0	10.29	4
RAINBOW TROUT	192	276.5	0.9	17	0	.	0.0	0	100.0	.	0
BROWN TROUT	157	308.0	0.7	16	10	183.0	0.3	0	93.6	4.85	1
ANY TEMPERATE BASS	23	950.4	0.1	23	0	.	0.0	0	100.0	.	0
STRIPED BASS	463	119.6	2.2	356	94	109.4	2.8	94	79.7	10.55	6
CHEROKEE BASS	669	88.0	3.2	242	208	96.7	6.2	185	68.9	3.03	9
BLUEGILL	2820	34.5	13.3	1893	806	43.2	24.0	806	71.4	0.22	28
SMALLMOUTH BASS	6934	12.4	32.8	6902	453	26.0	13.5	453	93.5	2.40	25
LARGEMOUTH BASS	8120	11.3	38.4	8032	550	25.2	16.4	550	93.2	2.84	26
WHITE CRAPPIE	83	258.8	0.4	83	66	281.9	2.0	66	20.5	1.08	2
BLACK CRAPPIE	584	99.6	2.8	478	313	100.2	9.3	313	46.4	0.86	16
BLACKNOSE CRAPPIE	44	379.8	0.2	44	27	234.2	0.8	27	38.6	0.95	2

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

LAKE=BOONE

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	1978	25.3	305	2.4	0.24	43.5	0.24	43.5	18
ANY TEMPERATE BASS	7638	12.5	1185	9.1	0.05	82.1	0.03	128.2	59
WHITE BASS	125	91.7	19	0.1	0.00		0.00		1
STRIPED BASS	8798	11.5	1358	10.5	0.05	79.6	0.01	140.2	68
CHEROKEE BASS	260	77.0	40	0.3	0.42		0.13		2
ANY SUNFISH	1955	25.9	298	2.3	2.16	39.2	0.55	97.0	17
ANY BLACK BASS	47724	5.3	7387	56.8	0.31	12.7	0.01	71.8	386
SMALLMOUTH BASS	1628	24.7	258	1.9	0.22	25.7	0.12	42.0	20
ANY CRAPPIE	8783	11.7	1361	10.4	0.14	84.0	0.09	99.3	87
ANY SPECIES	4927	15.6	764	5.9	0.26	90.4	0.14	132.9	56
OTHER	279	63.9	44	0.3	0.00		0.00		4
TOTAL	**84095**		**13019**						

SUMMARY OF RELATIVE SPECIES CATCH RATES WITHIN TARGET GROUPS - 2007

LAKE=BOONE

TARGET GROUP	SPECIES WITHIN TARGET GROUPS	RELATIVE CATCH RATE	RELATIVE HARVEST RATE
ANY CATFISH			
	BLUE CATFISH	0.01	0.01
	CHANNEL CATFISH	0.21	0.20
	FLATHEAD CATFISH	0.03	0.03
ANY TEMPERATE BASS			
	STRIPED BASS	0.03	0.01
	CHEROKEE BASS	0.02	0.02
ANY SUNFISH			
	BLUEGILL	2.16	0.55
ANY BLACK BASS			
ANY BLACK BASS			
	SMALLMOUTH BASS	0.14	0.01
	LARGEMOUTH BASS	0.16	0.01
ANY CRAPPIE			
	WHITE CRAPPIE	0.02	0.01
	BLACK CRAPPIE	0.11	0.07
	BLACKNOSE CRAPPIE	0.01	0.01

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=BOONE

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	0.38	31
02 FEBRUARY	0		0	0.28	25
03 MARCH	0		0	0.25	44
04 APRIL	13	0.27	5	0.27	37
05 MAY	32	0.41	6	0.26	29
06 JUNE	10	0.32	5	0.31	34
07 JULY	27	0.36	8	0.33	33
08 AUGUST	5	0.18	2	0.29	28
09 SEPTEMBER	17	0.37	6	0.34	27
10 OCTOBER	0		0	0.34	29
11 NOVEMBER	0		0	0.32	27
12 DECEMBER	0		0	0.27	29

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

LAKE=BOONE

INTENDED SPECIES	TOTAL TRIP EXPENDITURES	TOTAL CONSUMER SURPLUS	TOTAL VALUE BY ANGLERS	NUMBER OF INTERVIEWS
ANY CATFISH	4270	2440	6700	18
ANY TEMPERATE BASS	13990	9530	23520	59
WHITE BASS	190	190	380	1
STRIPED BASS	15080	13910	28990	68
CHEROKEE BASS	550	390	940	2
ANY SUNFISH	1960	1690	3650	17
ANY BLACK BASS	106840	51280	158120	383
SMALLMOUTH BASS	2810	3250	6060	20
ANY CRAPPIE	13860	14070	27930	87
ANY SPECIES	6800	7340	14150	56
OTHER	610	440	1060	4
TOTAL	**166960**	**104530**	**271500**	**715**

SUMMARY OF SOCIOLOGICAL QUESTIONS - 2007

LAKE=BOONE

DISTRIBUTION OF STATES OF RESIDENCE OF INTERVIEWED ANGLERS

STATE	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
TN	1015	84.7
VA	157	13.1
OTHERS	27	2.3

DISTRIBUTION OF COUNTIES OF RESIDENCE OF INTERVIEWED ANGLERS

COUNTY	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
CARTER	52	5.1
SULLIVAN	465	45.9
WASHINGTON	422	41.6
OTHERS IN TN	74	7.3
OUT-OF-STATE	1	0.1

DISTRIBUTION OF ONE-WAY MILEAGE OF ANGLERS INTERVIEWED

ONE-WAY MILES TRAVELED	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 0-25	914	76.3
B) 26-100	265	22.1
C) 101-250	8	0.7
D) > 250	11	0.9

DISTRIBUTION OF REASONS WHY INTERVIWED ANGLERS MADE THE TRIP

REASON FOR TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) FISHING	713	99.3
B) VACATION	5	0.7

DISTRIBUTION OF NUMBER OF DAYS IN TRIPS OF INTERVIEWED ANGLERS

NUMBER DAYS IN TRIP	NUMBER ANGLERS INTERVIEWED	PERCENT CONTRIBUTION
A) 1	710	99.0
B) 2-5	6	0.8
C) 6-10	1	0.1