# South Holston Reservoir

## Annual Report 2006

Prepared By:

John Hammonds
and
Douglas C. Peterson

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

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**Largemouth Bass**

| Population Parameter | Annual Rating | Measure | Gear | Value |
|---|---|---|---|---|
| Recruitment | Fatr | Sub-stock CPUE | Electrofishing | 2.2 fish/hr. |
| *Growth** | *Good* | *Mean TL at Age-3* | *Electrofishing* | *361 mm* |
| | Good | RSD-P (380 mm) | Electrofishing | 44 % |
| Density | Good | CPUE $\geq$ Stock Size (203 mm) | Electrofishing | 10.4 fish/hr. |
| | N/A | CPUE $\geq$ Minimum Size Limit | Electrofishing | No limit |
| *Mortality** | *Low* | *Total Mortality (Z)* | *Electrofishing* | *22%* |
| Angling Pressure | Good | Fishing Effort (hours) | Creel Survey | 66,909** |
| Fishing Success | Fair | Angler Catch Rate | Creel Survey | 0.26** |
| Value of Fishery | Good | Trip Expenditures | Creel Survey | $134,640** |

** - Based on a 2000 data set.*
** Any Black Bass

*Fishery Forecast:*
Although densities of largemouth bass in South Holston Reservoir are not very high, when compared to other reservoirs, the percentage of larger fish in the population is very good. Also, the percentage of largemouth bass in South Holston over 381 mm (15 inches) has been over 40 percent since 1994, which indicates steady recruitment into the larger size classes. These two factors indicate a quality and stable fishery which should remain that way in 2007.

*Management Recommendations:*
No change to the current regulation is recommended.

**Smallmouth Bass**

| Population Parameter | Annual Rating | Measure | Gear | Value |
|---|---|---|---|---|
| Recruitment | Fair | Sub-stock CPUE | Electrofishing | 2.4 fish/hr. |
| *Growth** | *Good* | *Mean TL at Age-3* | *Electrofishing* | *324 mm* |
| | Fair | RSD-P (350 mm) | Electrofishing | 29 % |
| Density | Fair | CPUE $\geq$ Stock Size (178 mm) | Electrofishing | 8.2 fish/hr. |
| | N/A | CPUE $\geq$ Minimum Size Limit | Electrofishing | No limit |
| *Mortality** | *Moderate* | *Total Mortality (Z)* | *Electrofishing* | *48%* |
| Angling Pressure | Good | Fishing Effort (hours) | Creel Survey | 8495 |
| Fishing Success | Fair | Angler Catch Rate | Creel Survey | 0.19 |
| Value of Fishery | Good | Trip Expenditures | Creel Survey | $12,400 |

** Based on a 2006 data set.*

*Fishery Forecast:*
The sub-stock catch remained stable in 2006 which will hopefully lead to good recruitment of these fish. The smallmouth bass fishery on South Holston has some of the highest percentages of quality and preferred sized smallmouth bass, when compared to the other reservoirs, in East Tennessee. However, we have seen a slight but steady decline in our data of the preferred sized (>350 mm) smallmouth bass on South Holston the last four years. Hopefully, things will improve in 2007, since there are good numbers of fish in the size classes below the 350 mm range.

*Management Recommendations:*
Continue to monitor the concern that some smallmouth bass anglers have for the quality of the fishery. We will evaluate imposing a size limit on smallmouth bass if we continue to see a decline in the number of smallmouth bass over 350 mm.

**Black Crappie**

| Population Parameter | Annual Rating | Measure | Gear | Value |
|---|---|---|---|---|
| Recruitment | Poor | Sub-stock CPUE | Electrofishing | 0.0 fish/hr. |
| *Growth** | *Good* | *Mean TL at Age-3* | *Electrofishing* | *254 mm* |
| | Good | RSD-P (254 mm) | Electrofishing | 62 % |
| Density | Fair | CPUE ≥ Stock Size (130 mm) | Electrofishing | 10.4 fish/hr. |
| | Fair | CPUE ≥ Minimum size Limit | Electrofishing | 6.0 fish/hr. |
| *Mortality** | *Low* | *Total Mortality (Z)* | *Electrofishing* | *29%* |
| Angling Pressure | Good | Fishing Effort (hours) | Creel Survey | 11,595** |
| Fishing Success | Fair | Angler Catch Rate | Creel Survey | 0.12** |
| Value of Fishery | Good | Trip Expenditures | Creel Survey | $17,840** |

** Based on a 2002 data set.*
** Any Crappie

*Fishery Forecast:*
The quality of the black crappie fishery should remain good. As usual, the percentage of harvestable size fish in the sample was good; however, the density of crappie in South Holston is low because of the low productivity of the reservoir.

*Management Recommendations:*
Maintain the current 15 fish, 254 mm (10-inch) length limit.

**Rainbow Trout**

| Population Parameter | Annual Rating | Measure | Gear | Value |
|---|---|---|---|---|
| Angling Pressure | Fair | Fishing Effort (hours) | Creel Survey | 1722 |
| Fishing Success | Fair | Angler Catch Rate | Creel Survey | 0.13 |
| Value of Fishery | Fair | Trip Expenditures | Creel Survey | $2,460 |

*Fishery Forecast:*
The quality of the rainbow trout fishery should remain stable. Tennessee Technological University will be conducting a research project on trout species in South Holston Reservoir and we hope to learn a lot more about the size structure, age structure and recommended stocking rates in the near future.

*Management Recommendations*
None.

**Stocking and Stocking Evaluations**

| Species | Number Stocked | Mark | Evaluation | # Fish / Net Night |
|---|---|---|---|---|
| Walleye | 56,840 | None | Gill Netting | TVA Sample |
| Lake Trout | 75,645 | fin clip | Creel | N/A |
| Rainbow Trout | 42,308 | fin clip | Creel | N/A |
| Brown Trout | 0 | None | Creel | N/A |

**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. South Holston Reservior study area morphometric, physical, and chemical characteristics.

| | **Measurement** | |
|---|---|---|
| **Parameter** | ***English*** | ***Metric*** |
| Surface Area | 7,580 ac | 3,068 ha |
| Drainage Area | 703 sq mi | 1,822 sq km |
| Full Pool Elevation | 1,729 ft msl | 527 m msl |
| Mean Annual Fluctuation | 39 feet | 12 m |
| Shoreline Distance | 182 mi | 293 km |
| Maximum Depth | 245 ft | 75 m |
| Thermocline Depth | 13 ft | 4.0 m |
| Mean Chlorophyll (Forebay) | 4.2 ppm | 4.2 mg/l |
| Shoreline Development | 14% | |
| Trophic Status (Forebay) | Mesotrophic | |
| Trophic Index, Carlson (1977) | 44.7 | |
| Hydraulic Retention Time | 340 days | |
| Reservoir Age | 56 years | |

Table 2. South Holston Reservoir stocking records 1997– 2006.

| Species | Date | Rate (per acre) | Mean Length | Number |
|---|---|---|---|---|
| Walleye | May 1997 | 5.0 | 1.5 | 37,900 |
| | May 1998* | 5.2 | 1.5 | 39,182 |
| | May 1999 | 5.2 | 1.0 – 3.0 | 39,508 |
| | May 2000* | 19.3 | 1.5 | 146,000 |
| | May 2001* | 19.7 | 1.0 – 1.25 | 149,700 |
| | May 2002 | 6.8 | 1.25 – 1.6 | 51,411 |
| | May 2002* | 6.3 | 1.0 – 2.0 | 47,553 |
| | May 2003 | 2.2 | 1.25 – 2.25 | 17,047 |
| | May 2003 | 23.6 | | 179,033 |
| | May 2004 | 6.2 | 1.00 – 1.25 | 46,725 |
| | May 2005 | 5.4 | 1.0 – 1.1 | 41,199 |
| | May 2006 | 7.5 | 1.0 – 2.0 | 56,840 |
| Blacknose | Nov.-Dec. 1997 | 15.0 | 2.50 | 113,469 |
| Black Crappie | Nov. 1998 | 16.1 | 2.50 | 121,921 |
| Lake Trout | Jan. 2006 | 10.0 | 5.0 – 6.0 | 75,645 |
| Rainbow Trout | 1997 | 4.6 | Adult | 34,977 |
| | 1998 | 7.0 | Adult | 52,724 |
| | 1999 | 5.3 | Adult | 40,533 |
| | 2000 | 5.4 | Adult | 40,627 |
| | 2001 | 4.9 | Adult | 37,502 |
| | 2002 | 6.5 | Adult | 49,003 |
| | 2003 | 5.3 | Adult | 40,576 |
| | 2004 | 5.3 | Adult | 40,210 |
| | 2005 | 4.2 | Adult | 31,712 |
| | 2006 | 5.6 | 9.0 – 10.0 | 42,308 |
| Brown Trout | 2001 | 1.3 | Fingerling | 10,092 |
| | 2002 | 1.3 | Fingerling | 10,156 |
| | 2003 | 1.3 | Fingerling | 10,031 |
| | 2004 | 0.0 | | 0 |
| | 2005 | 2.6 | Fingerling | 20,012 |
| | 2006 | 0.0 | | 0 |

* - fished stocked by VDGIF

Table 3. Number of species collected by gear type in South Holston Reservoir, 2006. Effort is represented in hours for electrofishing and net nights for gill netting

| | Summer Gill Netting | | | Spring Electrofishing | | | Winter Gill Netting | | |
|---|---|---|---|---|---|---|---|---|---|
| Species | 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 | 63 | 12.6 | 5 | X | X | X |
| Smallmouth Bass | X | X | X | 53 | 10.6 | 5 | X | X | X |
| Spotted Bass | X | X | X | 0 | 0.0 | 5 | X | X | X |
| Black Crappie | X | X | X | 52 | 10.4 | 5 | X | X | X |
| Black-Nose Crappie | X | X | X | 0 | 0.0 | 5 | X | X | X |
| White Crappie | X | X | X | 0 | 0.0 | 5 | X | X | X |
| Walleye | X | X | X | 23 | 4.6 | 5 | 199 | 8.3 | 24 |
| White Bass | X | X | X | 0 | 0 | 5 | X | X | X |
| Gizzard Shad | 38 | 1.9 | 20 | X | X | X | X | X | X |
| Threadfin Shad | 436 | 21.8 | 20 | X | X | X | X | X | X |
| Alewife | 8 | 0.4 | 20 | X | X | X | X | X | X |

X = non targeted species

Table 4. Black bass catch, mean CPUE, and RSD by incremental category for target species by gear in South Holston Reservoir 1998 – 2006.

| | | | | 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 |
| Largemouth | 1998 | EL | 22 | 4 | 0.6 | **3** | 46 | 8 | **37** | 20 | 3.5 | **16** | 50 | 8.6 | **40** | 5 | 0.8 | **4** | | | | **60** | 130 | 21.6 |
| Bass | 1999 | EL | 18 | 6 | 1.3 | **5** | 25 | 5.6 | **22** | 34 | 7.6 | **29** | 54 | 12 | **47** | 3 | 0.7 | **3** | | | | **79** | 122 | 27.1 |
| | 2000 | EL | 18 | 9 | 2 | **13** | 11 | 2.4 | **18** | 17 | 3.7 | **28** | 29 | 6.2 | **48** | 3 | 0.6 | **5** | | | | **81** | 69 | 15 |
| | 2001 | EL | 17 | 11 | 2.5 | **14** | 21 | 4.8 | **30** | 19 | 4.4 | **27** | 28 | 6.4 | **40** | 2 | 0.5 | **3** | | | | **70** | 81 | 18.5 |
| | 2002 | EL | 14 | 13 | 3.6 | **22** | 12 | 3.2 | **26** | 15 | 4.1 | **33** | 19 | 5.3 | **41** | 0 | 0 | **0** | | | | **74** | 59 | 16.2 |
| | 2003 | EL | 20 | 5 | 1 | **5** | 32 | 6 | **32** | 14 | 2.6 | **14** | 49 | 9 | **49** | 4 | 1 | **4** | | | | **67** | 104 | 19.3 |
| | 2004 | EL | 20 | 9 | 1.7 | **9** | 15 | 2.9 | **17** | 28 | 5.4 | **33** | 37 | 7.1 | **43** | 6 | 1.2 | **7** | 0 | 0 | **0** | **83** | 95 | 18.4 |
| | 2005 | EL | 20 | 7 | 1.4 | **9** | 21 | 4.1 | **31** | 12 | 2.4 | **18** | 35 | 6.9 | **51** | 0 | 0 | **0** | 0 | 0 | **0** | **69** | 75 | 14.8 |
| | 2006 | EL | 20 | 11 | 2.2 | **17** | 10 | 2 | **19** | 19 | 3.8 | **37** | 22 | 4.4 | **42** | 1 | 0.2 | **2** | 0 | 0 | **0** | **81** | 63 | 12.56 |
| Smallmouth | 1998 | EL | 22 | 30 | 5.2 | **19** | 31 | 5.4 | **24** | 59 | 10 | **46** | 31 | 5.4 | **24** | 9 | 1.5 | **7** | | | | **77** | 160 | 27.7 |
| Bass | 1999 | EL | 18 | 19 | 4.2 | **14** | 35 | 7.8 | **30** | 37 | 8.2 | **32** | 27 | 6 | **23** | 17 | 3.8 | **15** | | | | **70** | 135 | 30 |
| | 2000 | EL | 18 | 23 | 5 | **17** | 31 | 6.7 | **27** | 27 | 5.8 | **24** | 22 | 6.2 | **19** | 29 | 6.2 | **26** | | | | **69** | 136 | 29.3 |
| | 2001 | EL | 17 | 7 | 1.6 | **5** | 13 | 2.9 | **10** | 32 | 7.3 | **25** | 42 | 9.6 | **33** | 36 | 8.2 | **29** | | | | **87** | 133 | 30.17 |
| | 2002 | EL | 14 | 3 | 0.8 | **7** | 10 | 2.7 | **24** | 7 | 2 | **17** | 15 | 4.3 | **37** | 8 | 2.3 | **20** | 1 | 0.3 | **2** | **74** | 44 | 12.3 |
| | 2003 | EL | 20 | 1 | 0.2 | **2** | 13 | 2.4 | **28** | 9 | 1.7 | **20** | 11 | 2.1 | **24** | 10 | 1.9 | **22** | | | | **66** | 47 | 8.8 |
| | 2004 | EL | 20 | 1 | 0.2 | **1** | 26 | 5 | **29** | 24 | 4.6 | **27** | 19 | 3.7 | **21** | 17 | 3.3 | **19** | 0 | 0 | **0** | **67** | 91 | 17.5 |
| | 2005 | EL | 20 | 13 | 2.5 | **14** | 29 | 5.7 | **37** | 19 | 3.7 | **24** | 18 | 3.5 | **23** | 10 | 2 | **13** | 2 | 0.4 | **3** | **63** | 91 | 17.8 |
| | 2006 | EL | 20 | 12 | 2.4 | **23** | 24 | 4.8 | **59** | 5 | 1 | **12** | 9 | 1.8 | **22** | 3 | 0.6 | **7** | 0 | 0 | **0** | **41** | 53 | 10.58 |

Table 5. Black crappie and Walleye catch, mean CPUE, and RSD by incremental category for target species by gear in South Holston Reservoir 1998 – 2006.

| 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 | 1998 | EL | 22 | 1 | 0.1 | **3** | 4 | 0.7 | **11** | 8 | 1.3 | **22** | 17 | 2.9 | **50** | 5 | 0.8 | **14** | | | | **86** | 36 | 6 |
| | 1999 | EL | 18 | 0 | 0 | | 0 | 0 | | 24 | 5.3 | **34** | 41 | 9.1 | **59** | 5 | 1.1 | **7** | | | | **100** | 70 | 15.6 |
| | 2000 | EL | 18 | 0 | 0 | | 0 | 0 | | 3 | 0.7 | **14** | 10 | 2.2 | **48** | 8 | 1.7 | **38** | | | | **100** | 21 | 4.6 |
| | 2001 | EL | 17 | 1 | 0.2 | **1** | 15 | 3.4 | **13** | 26 | 5.9 | **23** | 54 | 12 | **47** | 19 | 4.3 | **17** | | | | **87** | 115 | 26.3 |
| | 2002 | EL | 14 | 1 | 0.3 | **4** | 1 | 0.3 | **5** | 3 | 0.9 | **14** | 11 | 3.1 | **50** | 7 | 2 | **32** | | | | **96** | 23 | 6.5 |
| | 2003 | EL | 20 | 0 | 0 | | 2 | 0.4 | **3** | 12 | 2.1 | **19** | 22 | 4.1 | **35** | 27 | 5.1 | **43** | | | | **97** | 63 | 11.7 |
| | 2004 | EL | 20 | 0 | 0 | **0** | 2 | 0.4 | **6** | 7 | 1.4 | **20** | 18 | 3.5 | **51** | 8 | 1.5 | **23** | 0 | 0 | **0** | **94** | 35 | 6.8 |
| | 2005 | EL | 20 | 0 | 0 | **0** | 2 | 0.4 | **5** | 8 | 1.6 | **19** | 12 | 2.4 | **28** | 21 | 4.1 | **49** | 0 | 0 | **0** | **96** | 43 | 8.5 |
| | 2006 | EL | 20 | 0 | 0 | **0** | 7 | 1.4 | **13** | 13 | 2.6 | **25** | 20 | 4 | **38** | 12 | 2.4 | **23** | 0 | 0 | **0** | **87** | 52 | 10.4 |
| Walleye (Winter Gill Net) | 1998 | GN | 6 | 0 | | | 0 | | | 56 | 9.7 | **75** | 19 | 3.2 | **25** | 0 | 0 | | 0 | | | **100** | 77 | 12.8 |
| | 1999 | GN | 9 | 0 | | | 1 | 0.1 | **1** | 53 | 5.9 | **60** | 35 | 3.9 | **48** | 0 | 0 | | | | | **100** | 89 | 9.8 |
| | 2000 | GN | 23 | 0 | | | 2 | 0.1 | **1** | 79 | 3.4 | **48** | 80 | 3.5 | **49** | 3 | 0.1 | **2** | 1 | 0 | **1** | **99** | 164 | 7.1 |
| | 2001 | GN* | | | | | | | | | | | | | | | | | | | | | | |
| | 2002 | GN | 36 | 1 | 0 | | 8 | 0.2 | **2** | 190 | 5.3 | **56** | 130 | 3.6 | **39** | 9 | 0.3 | **3** | | | | **98** | 338 | 9.4 |
| | 2003 | GN | | | | | | | | | | | | | | | | | | | | | | |
| | 2004 | GN | 14 | 1 | 0.1 | **1** | 5 | 0.4 | **5** | 47 | 3.4 | **47** | 46 | 3.3 | **46** | 2 | 0.1 | **2** | 0 | 0 | **0** | **95** | 101 | 7.21 |
| | 2005 | GN | | | | | | | | | | | | | | | | | | | | | | |
| | 2006 | GN | 24 | 3 | 0.1 | **2** | 17 | 0.7 | **9** | 105 | 4.4 | **54** | 72 | 3 | **37** | 2 | 0.1 | **1** | 0 | 0 | **0** | **91** | 199 | 8.29 |

Table 6. Largemouth bass mean relative weights (Wr) in South Holston Reservoir, spring 2006.

| Length Group | Mean Wr | Std. Error | N |
|---|---|---|---|
| 150 | 90.940 | 3.900 | 4 |
| 175 | | | 0 |
| 200 | 83.319 | | 1 |
| 225 | | | 0 |
| 250 | 94.540 | 3.827 | 3 |
| 275 | 91.969 | 1.833 | 6 |
| 300 | 100.839 | | 1 |
| 325 | 95.003 | 4.030 | 5 |
| 350 | 91.931 | 2.553 | 11 |
| 375 | 90.601 | 2.511 | 5 |
| 400 | 92.392 | 3.729 | 6 |
| 425 | 82.409 | 18.941 | 5 |
| 450 | 93.041 | 1.925 | 5 |
| 475 | 90.114 | 10.481 | 3 |
| 500 | | | 0 |
| 525 | 88.997 | | 1 |
| | | **Total =** | **56** |

Table 7. Smallmouth bass mean relative weights (Wr) in South Holston Reservoir, spring 2006.

| Length Group | Mean Wr | Std. Error | N |
|---|---|---|---|
| 150 | 75.615 | 2.797 | 5 |
| 175 | 81.258 | 1.695 | 9 |
| 200 | 87.780 | 3.377 | 6 |
| 225 | 93.075 | 4.449 | 8 |
| 250 | 91.061 | 3.453 | 6 |
| 275 | 98.745 | 6.281 | 5 |
| 300 | 91.124 | 1.987 | 9 |
| 325 | 91.896 | 2.861 | 7 |
| 350 | 89.456 | 3.864 | 5 |
| 375 | 90.758 | 2.618 | 6 |
| 400 | 89.649 | 2.644 | 5 |
| 425 | 93.622 | 6.318 | 3 |
| 450 | 83.885 | 5.844 | 4 |
| 475 | 86.002 | 7.114 | 3 |
| 500 | 94.599 | 5.924 | 3 |
| 525 | 95.669 | | 1 |
| 550 | | | |
| | | **Total =** | **85** |

Table 8. Black crappie mean relative weights (Wr) in South Holston Reservoir, spring 2006.

| Length Group | Mean Wr | Std. Error | N |
|---|---|---|---|
| 150 | 98.782 | 4.574 | 3 |
| 175 | 98.321 | 3.180 | 4 |
| 200 | 98.102 | 5.492 | 6 |
| 225 | 102.232 | 4.486 | 7 |
| 250 | 102.836 | 3.651 | 8 |
| 275 | 93.469 | 1.968 | 12 |
| 300 | 89.822 | 2.684 | 5 |
| 325 | 88.098 | 3.319 | 3 |
| 350 | 91.766 | 1.238 | 4 |
| | | **Total =** | **52** |

Table 9. Geometric means of the clupeid catch in experimental gill nets from South Holston 2001 - 2006.

| Species | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|---|
| Threadfin Shad | 9.4 | 29.7 | 5.5 | 4 | 3.9 | 2.7 |
| Gizzard Shad | 4.2 | 3.2 | 4 | 2.2 | 3.1 | 1.3 |
| Alewife | 42.4 | 3.5 | 8.2 | 1.8 | 0.2 | 0.2 |

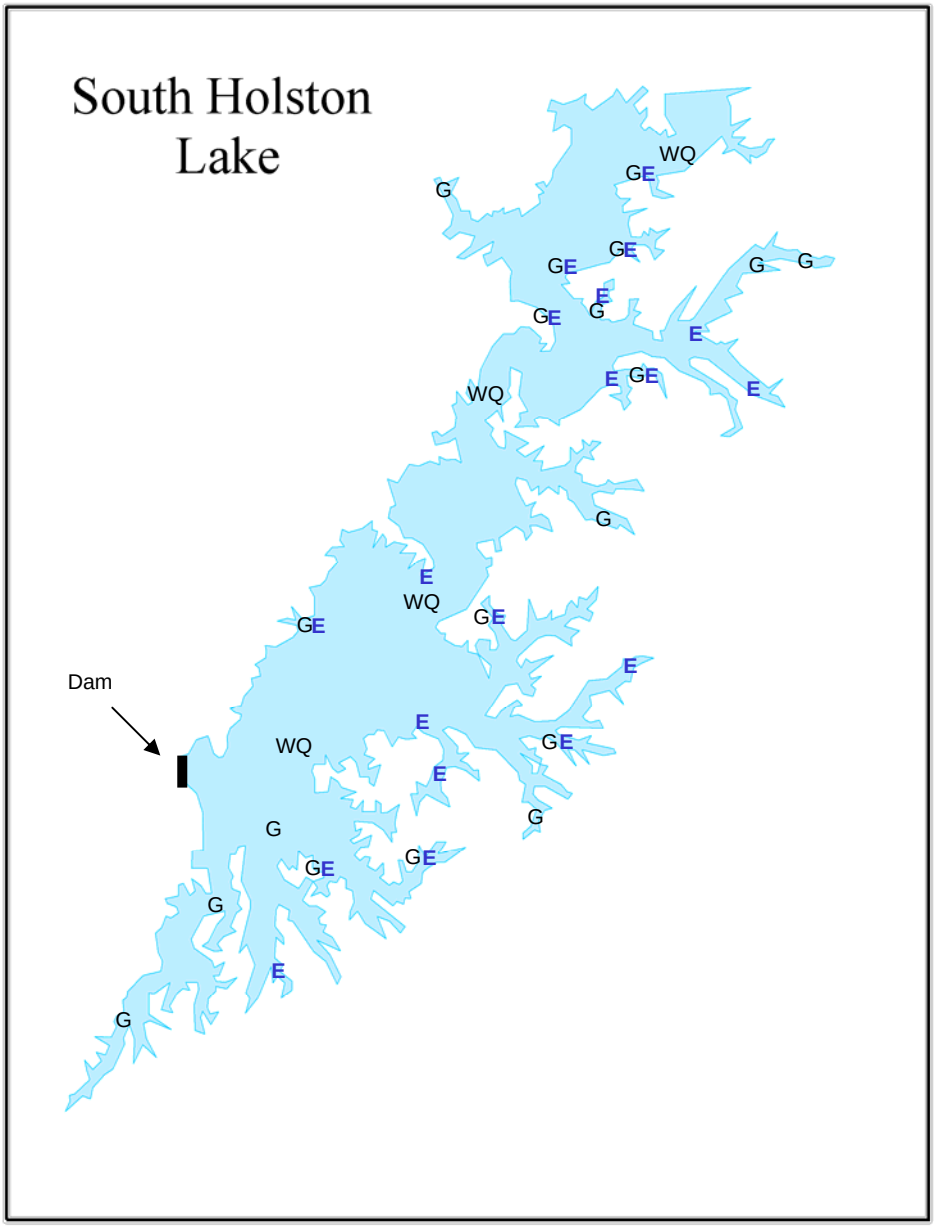
Table 10. South Holston Reservoir fish habitat enhancement summary for 2006.

| | New Sites | | | Renovated Sites | | | Expanded Sites | | |
|---|---|---|---|---|---|---|---|---|---|
| **Location** | **Number** | **Units** | **Acres** | **Number** | **Units** | **Acres** | **Number** | **Units** | **Acres** |
| SFHRM 60.50 L* | | | | 1 | 400 | 8.00 | | | |
| SFHRM 60.75 L* | | | | 1 | 198 | 3.96 | | | |
| ***Total*** | ***0*** | ***0*** | ***0*** | ***2*** | ***598*** | ***12*** | ***0*** | ***0*** | ***0*** |

*Christmas Trees

Figures

Figure 1. South Holston Reservoir with sites sampled in 2006.




E = Spring Electrofishing
WQ = Water Quality
*G* = Gillnet

## *Largemouth Bass*

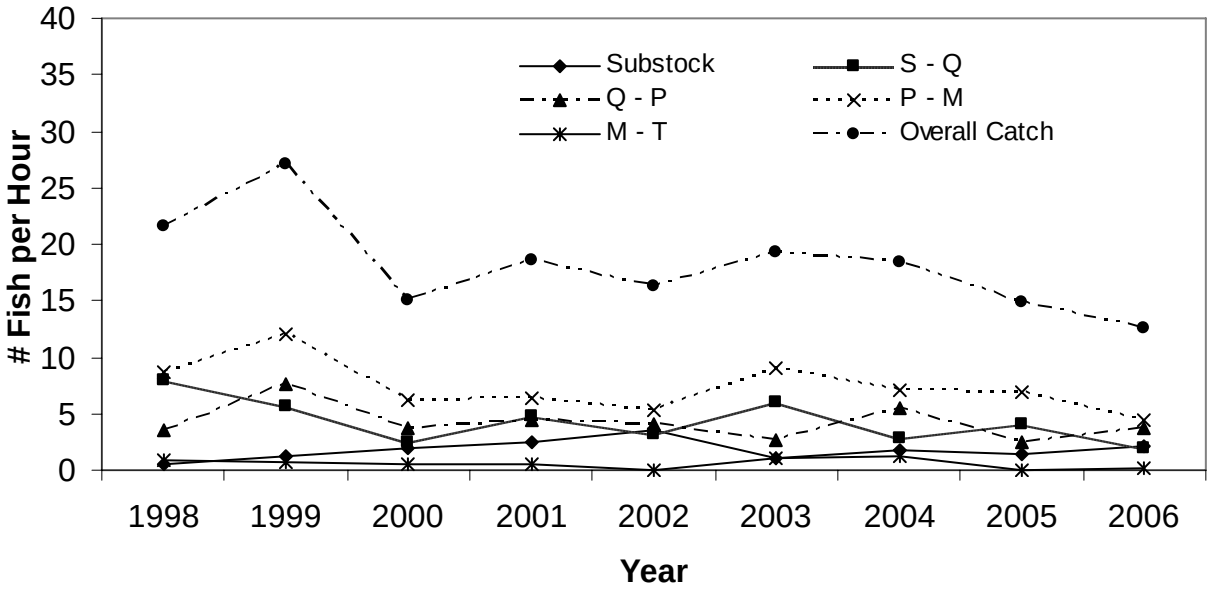



Figure 2. Largemouth bass CPUE by incremental length category in South Holston Reservoir, 1998 - 2006.

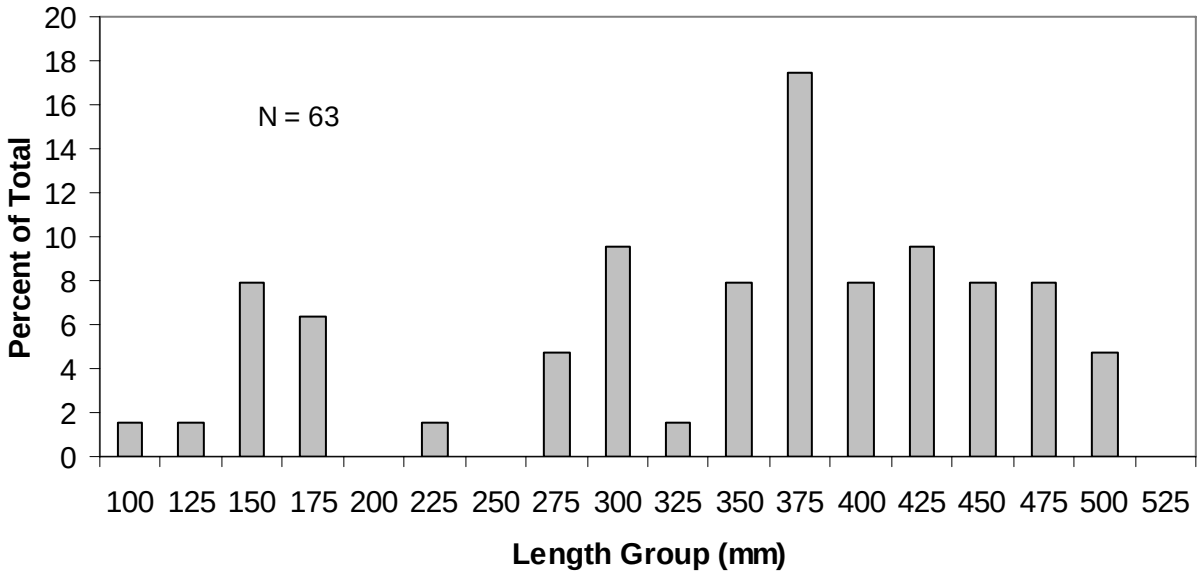



Figure 3. Largemouth bass length frequency by percent in South Holston Reservoir, spring 2006.

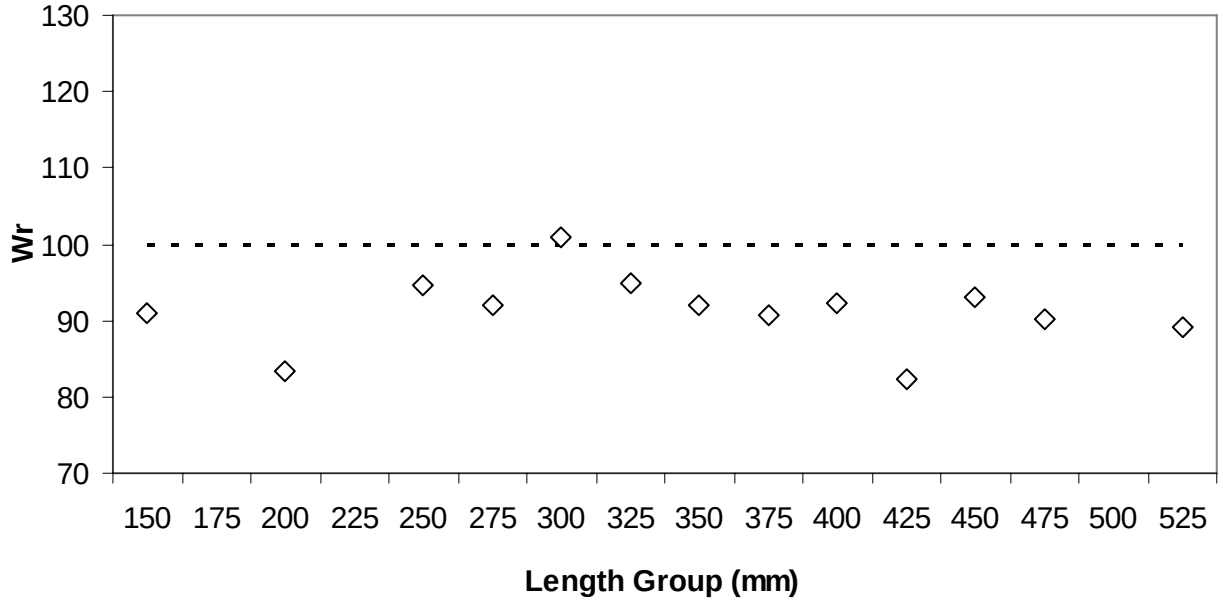



Figure 4. Largemouth bass mean relative weights (Wr) in South Holston Reservoir, spring 2006.

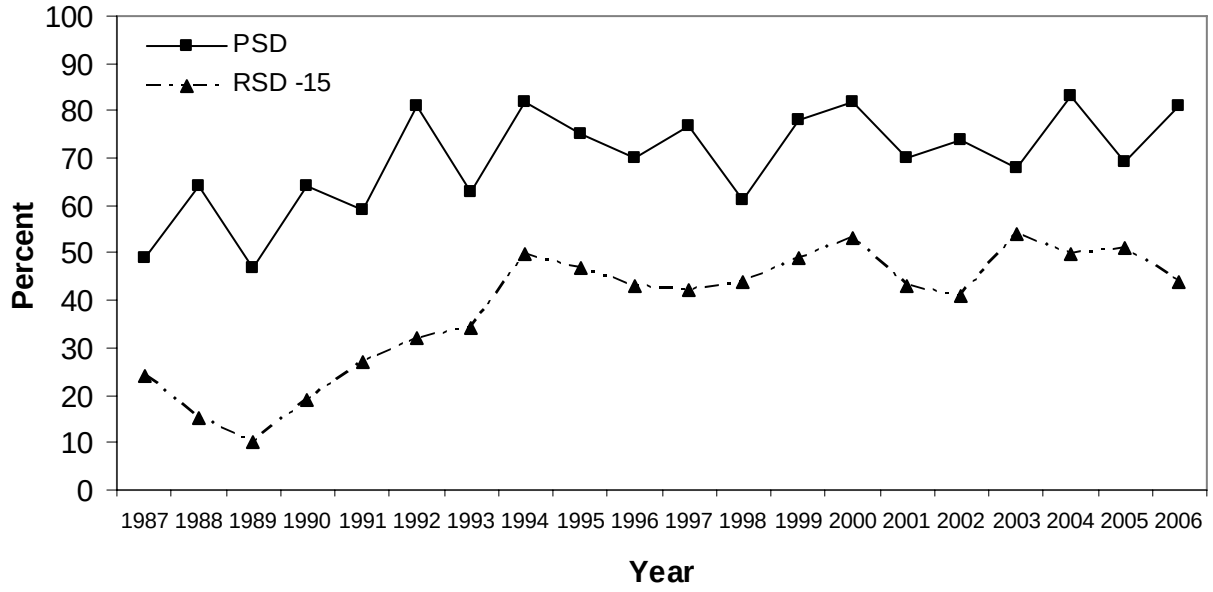



Figure 5. Largemouth bass traditional PSD and RSD -15 values in South Holston Reservoir 1987 – 2006.

## *Smallmouth Bass*

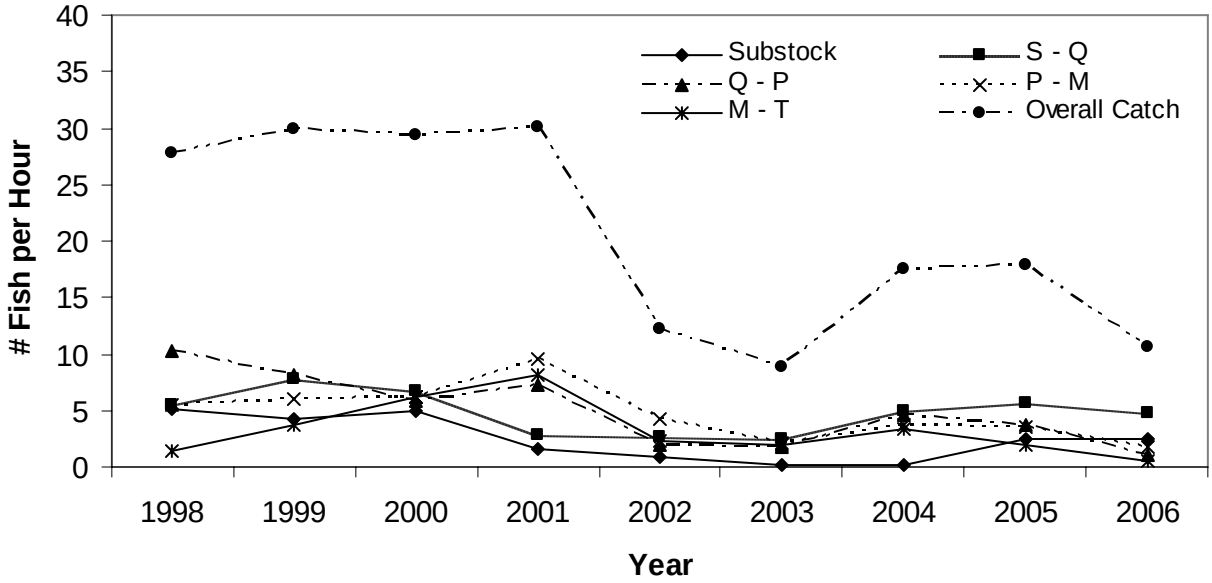



Figure 6. Smallmouth bass CPUE by incremental length category in South Holston Reservoir, 1998 - 2006.

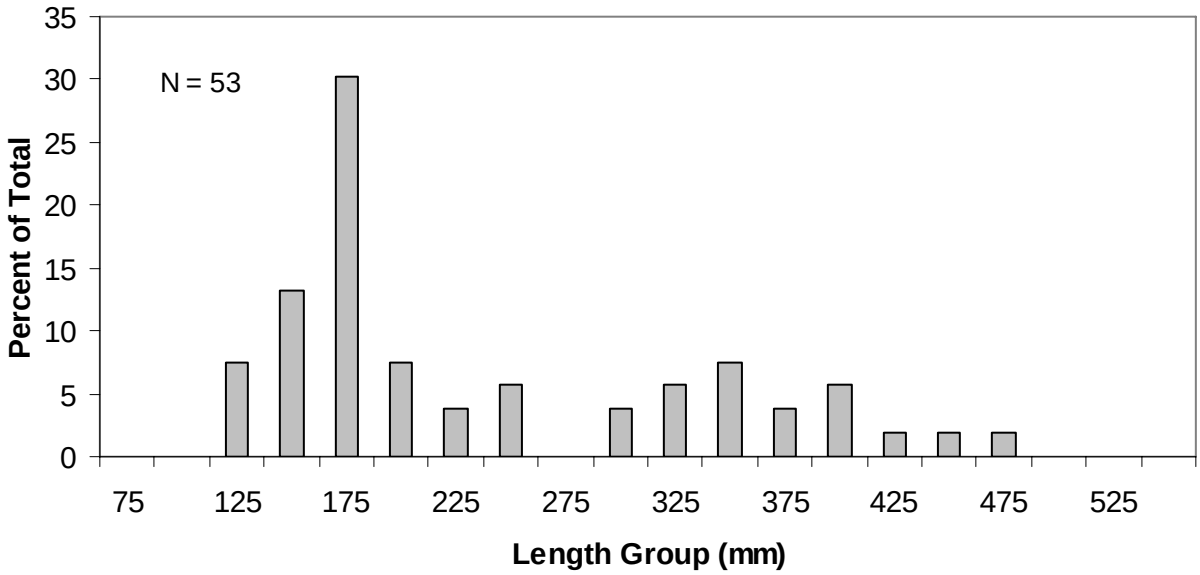



Figure 7. Smallmouth bass length frequency by percent in South Holston Reservoir, spring 2006.

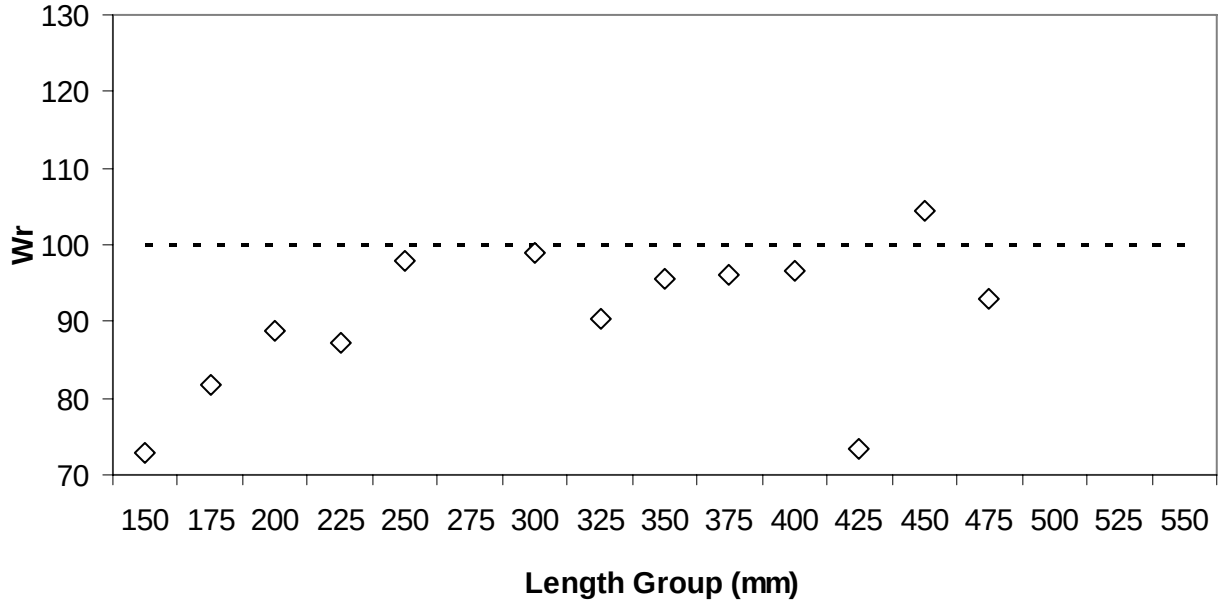



Figure 8. Smallmouth bass mean relative weights (Wr) in South Holston Reservoir, spring 2006.

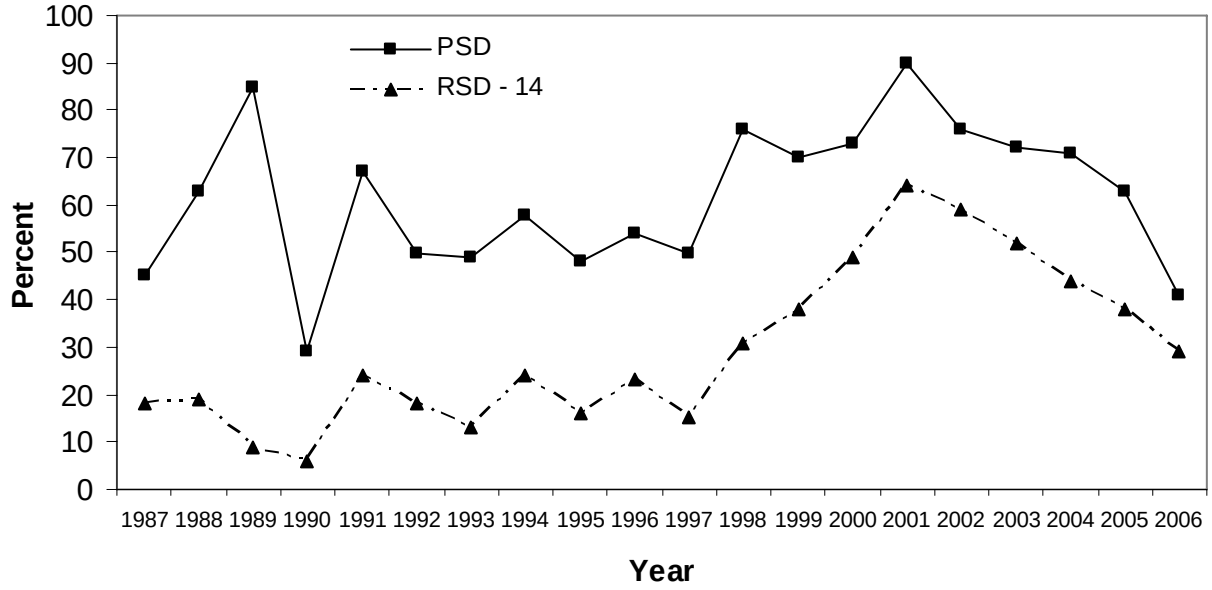



Figure 9. Smallmouth bass traditional PSD and RSD - 14 values in South Holston Reservoir 1987 – 2006.

## *Black Crappie*

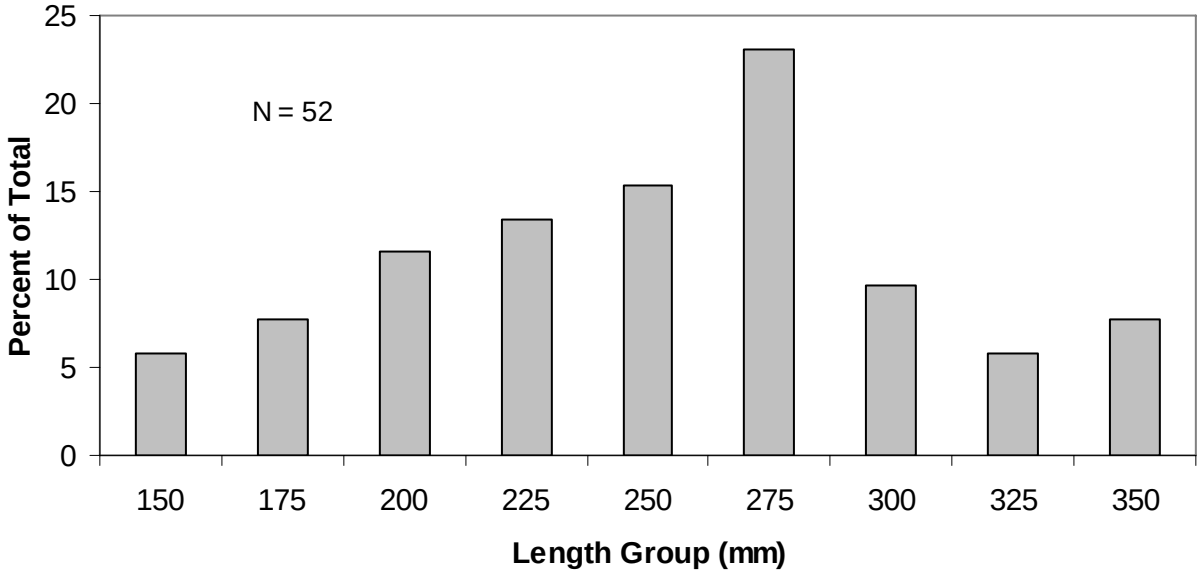



Figure 10. Black crappie length frequency by percent in South Holston Reservoir, spring 2006.

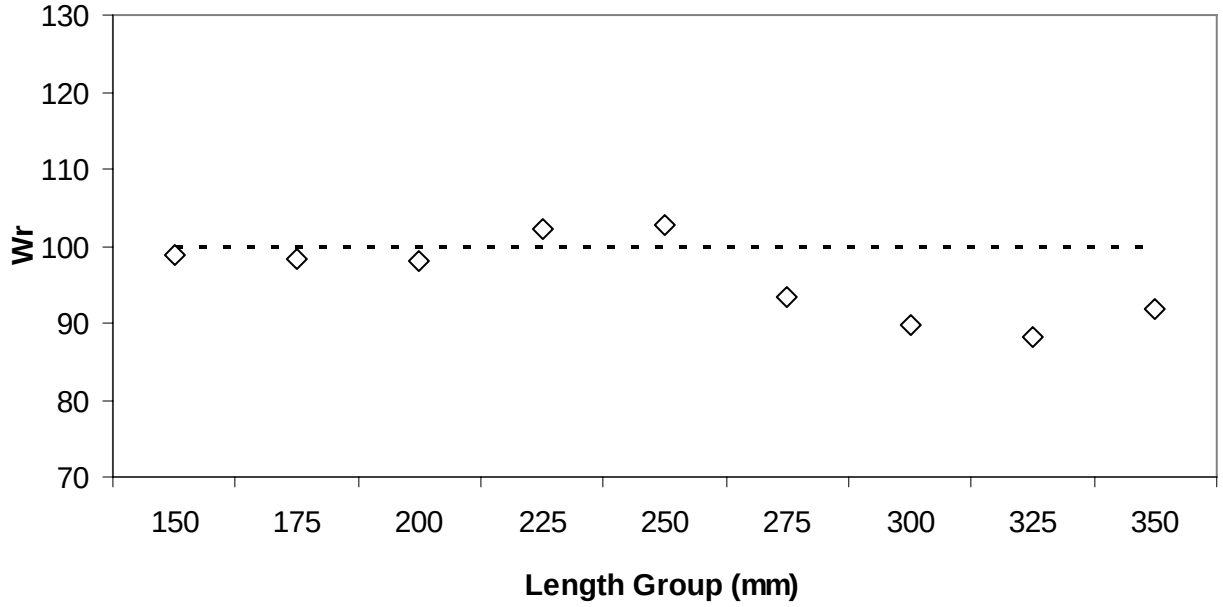



Figure 11. Black crappie mean relative weights (Wr) in South Holston Reservoir, spring 2006.

### *Clupeid Species*

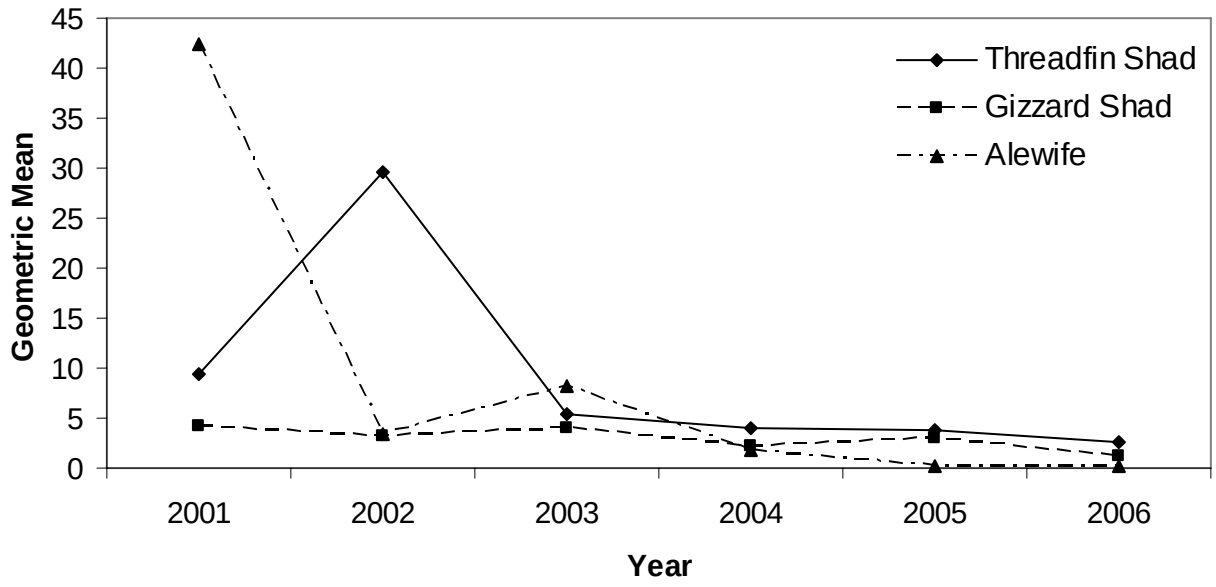



Figure 12. Geometric means of clupeid catch in surface set - experimental gill nets in South Holston Reservoir, 2001 - 2006.

Appendix A
Water Quality

Table A1. South Holston Reservoir, water quality summary at SFHRM 51, July 6, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 26.4 | 320 | 10.0 | HRM51 | | 1020 |
| 1 | 26.4 | 322 | 10.0 | | | |
| 2 | 26.4 | 323 | 10.0 | | | |
| 3 | 26.4 | 323 | 10.0 | | | |
| 4 | 26.4 | 323 | 10.1 | | | |
| 5 | 23.8 | 324 | 16.5 | | | |
| 6 | 21.8 | 330 | 14.5 | | | |
| 7 | 19.7 | 327 | 13.1 | | | |
| 8 | 18.7 | 322 | 13.1 | | | |
| 9 | 17.6 | 325 | 9.4 | | | |
| 10 | 17.2 | 324 | 7.7 | | | |
| 11 | 16.4 | 324 | 6.4 | | | |
| 12 | 15.6 | 326 | 6.0 | | | |
| 13 | 15.1 | 325 | 5.5 | | | |
| 14 | 14.4 | 327 | 5.5 | | | |
| 15 | 14.0 | 327 | 5.5 | | | |
| 16 | 12.9 | 329 | 5.9 | | | |
| 17 | 12.2 | 330 | 6.2 | | | |
| 18 | 11.7 | 330 | 6.6 | | | |
| 19 | 11.1 | 329 | 7.0 | | | |
| 20 | 10.4 | 328 | 7.5 | | | |
| 21 | 9.9 | 327 | 7.8 | | | |
| 22 | 9.5 | 326 | 8.0 | | | |
| 23 | 9.0 | 326 | 8.3 | | | |
| 24 | 8.7 | 325 | 8.5 | | | |
| 25 | 8.5 | 323 | 8.5 | | | |
| 26 | 8.3 | 323 | 8.5 | | | |
| 27 | 8.1 | 322 | 8.6 | | | |
| 28 | 7.9 | 321 | 8.6 | | | |
| 29 | 7.8 | 321 | 8.6 | | | |
| 30 | 7.7 | 321 | 8.6 | | | |

Table A2. South Holston Reservoir, water quality summary at SFHRM 55, July 6, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 26.6 | 307 | 9.6 | HRM55 | 3.0 | 1103 |
| 1 | 26.6 | 316 | 9.7 | | | |
| 2 | 26.6 | 318 | 9.7 | | | |
| 3 | 26.6 | 319 | 9.7 | | | |
| 4 | 25.8 | 326 | 10.8 | | | |
| 5 | 23.1 | 329 | 15.4 | | | |
| 6 | 21.0 | 336 | 11.5 | | | |
| 7 | 19.4 | 329 | 7.9 | | | |
| 8 | 18.5 | 334 | 7.3 | | | |
| 9 | 17.7 | 331 | 6.4 | | | |
| 10 | 16.9 | 327 | 4.5 | | | |
| 11 | 16.4 | 327 | 4.7 | | | |
| 12 | 15.8 | 325 | 4.9 | | | |
| 13 | 15.3 | 324 | 4.9 | | | |
| 14 | 14.7 | 326 | 5.0 | | | |
| 15 | 14.0 | 327 | 5.2 | | | |
| 16 | 13.1 | 328 | 5.4 | | | |
| 17 | 12.4 | 326 | 6.0 | | | |
| 18 | 11.9 | 327 | 6.4 | | | |
| 19 | 11.2 | 326 | 7.1 | | | |
| 20 | 10.4 | 328 | 7.5 | | | |
| 21 | 9.9 | 327 | 8.1 | | | |
| 22 | 9.5 | 327 | 8.3 | | | |
| 23 | 9.1 | 325 | 8.6 | | | |
| 24 | 8.8 | 324 | 8.7 | | | |
| 25 | 8.6 | 324 | 8.6 | | | |
| 26 | 8.3 | 323 | 8.5 | | | |
| 27 | 8.1 | 323 | 8.5 | | | |
| 28 | 8.0 | 322 | 8.5 | | | |
| 29 | 7.8 | 322 | 8.4 | | | |
| 30 | 7.7 | 322 | 8.5 | | | |

Table A3. South Holston Reservoir, water quality summary at SFHRM 58, July 6, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 26.7 | 310 | 9.5 | HRM58 | 2.4 | 1150 |
| 1 | 26.7 | 318 | 9.6 | | | |
| 2 | 26.6 | 321 | 9.7 | | | |
| 3 | 26.5 | 322 | 9.7 | | | |
| 4 | 26.0 | 328 | 10.7 | | | |
| 5 | 23.2 | 356 | 9.2 | | | |
| 6 | 21.0 | 353 | 5.8 | | | |
| 7 | 19.5 | 344 | 3.8 | | | |
| 8 | 18.7 | 335 | 3.0 | | | |
| 9 | 17.9 | 332 | 2.6 | | | |
| 10 | 17.2 | 332 | 2.1 | | | |
| 11 | 16.3 | 330 | 3.2 | | | |
| 12 | 15.5 | 328 | 3.8 | | | |
| 13 | 15.1 | 327 | 4.0 | | | |
| 14 | 14.6 | 327 | 4.2 | | | |
| 15 | 14.0 | 325 | 4.4 | | | |
| 16 | 13.1 | 325 | 4.8 | | | |
| 17 | 12.4 | 323 | 5.4 | | | |
| 18 | 11.7 | 324 | 5.9 | | | |
| 19 | 11.2 | 326 | 6.3 | | | |
| 20 | 10.5 | 328 | 6.7 | | | |
| 21 | 10.1 | 327 | 7.1 | | | |
| 22 | 9.3 | 328 | 7.4 | | | |
| 23 | 9.0 | 327 | 7.5 | | | |
| 24 | 8.7 | 326 | 7.6 | | | |
| 25 | 8.5 | 326 | 7.6 | | | |
| 26 | 8.1 | 326 | 7.5 | | | |
| 27 | 8.1 | 325 | 7.4 | | | |
| 28 | 8.0 | 324 | 7.3 | | | |
| 29 | 7.7 | 325 | 7.2 | | | |
| 30 | 7.5 | 348 | 7.4 | | | |

Table A4. South Holston Reservoir, water quality summary at SFHRM 64, July 6, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 26.8 | 328 | 10.3 | HRM64 | 2.4 | 1315 |
| 1 | 26.7 | 328 | 10.4 | | | |
| 2 | 26.5 | 329 | 10.5 | | | |
| 3 | 26.1 | 334 | 10.4 | | | |
| 4 | 25.5 | 342 | 10.4 | | | |
| 5 | 23.9 | 353 | 9.4 | | | |
| 6 | 22.5 | 354 | 7.7 | | | |
| 7 | 20.1 | 342 | 5.7 | | | |
| 8 | 19.0 | 331 | 5.3 | | | |
| 9 | 17.8 | 332 | 2.9 | | | |
| 10 | 16.7 | 336 | 2.3 | | | |
| 11 | 16.3 | 334 | 2.3 | | | |
| 12 | 15.3 | 334 | 2.6 | | | |
| 13 | 14.9 | 332 | 2.9 | | | |
| 14 | 14.5 | 335 | 2.9 | | | |
| 15 | 13.4 | 331 | 3.5 | | | |
| 16 | 12.9 | 328 | 4.0 | | | |
| 17 | 12.0 | 330 | 4.1 | | | |
| 18 | 11.4 | 327 | 4.6 | | | |
| 19 | 10.9 | 327 | 5.3 | | | |
| 20 | 10.4 | 329 | 5.8 | | | |
| 21 | 9.8 | 331 | 6.0 | | | |
| 22 | 9.3 | 331 | 6.4 | | | |
| 23 | 9.0 | 331 | 6.6 | | | |
| 24 | 8.6 | 331 | 6.6 | | | |
| 25 | 8.5 | 330 | 6.7 | | | |
| 26 | 8.5 | 329 | 6.4 | | | |
| 27 | Bottom | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |

Table A5. South Holston Reservoir, water quality summary at SFHRM 51, August 1, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 27.9 | 363 | 9.0 | HRM51 | 3.3 | 1020 |
| 1 | 27.7 | 362 | 9.1 | | | |
| 2 | 27.3 | 362 | 9.2 | | | |
| 3 | 27.2 | 361 | 9.2 | | | |
| 4 | 26.9 | 361 | 9.4 | | | |
| 5 | 26.5 | 360 | 9.5 | | | |
| 6 | 25.3 | 360 | 11.9 | | | |
| 7 | 23.3 | 367 | 11.6 | | | |
| 8 | 21.6 | 374 | 6.9 | | | |
| 9 | 20.0 | 369 | 5.1 | | | |
| 10 | 19.1 | 366 | 3.6 | | | |
| 11 | 18.1 | 364 | 3.8 | | | |
| 12 | 16.9 | 363 | 3.6 | | | |
| 13 | 16.5 | 359 | 3.2 | | | |
| 14 | 15.9 | 359 | 3.1 | | | |
| 15 | 15.3 | 358 | 3.0 | | | |
| 16 | 14.8 | 357 | 3.3 | | | |
| 17 | 14.0 | 353 | 3.8 | | | |
| 18 | 13.6 | 342 | 4.1 | | | |
| 19 | 12.8 | 342 | 4.5 | | | |
| 20 | 12.3 | 341 | 5.2 | | | |
| 21 | 11.7 | 343 | 5.7 | | | |
| 22 | 11.1 | 344 | 6.0 | | | |
| 23 | 10.5 | 341 | 6.7 | | | |
| 24 | 10.1 | 339 | 7.1 | | | |
| 25 | 9.8 | 338 | 7.3 | | | |
| 26 | 9.3 | 338 | 7.5 | | | |
| 27 | 8.9 | 338 | 7.7 | | | |
| 28 | 8.5 | 337 | 7.8 | | | |
| 29 | 8.2 | 336 | 7.8 | | | |
| 30 | 8.1 | 335 | 7.8 | | | |

Table A6. South Holston Reservoir, water quality summary at SFHRM 55, August 1, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 28.3 | 342 | 9.0 | HRM55 | 3.3 | 1115 |
| 1 | 27.8 | 347 | 9.0 | | | |
| 2 | 27.5 | 350 | 9.0 | | | |
| 3 | 27.3 | 351 | 9.2 | | | |
| 4 | 26.8 | 354 | 9.2 | | | |
| 5 | 26.6 | 355 | 9.1 | | | |
| 6 | 24.9 | 368 | 7.9 | | | |
| 7 | 22.9 | 371 | 8.1 | | | |
| 8 | 21.5 | 371 | 6.0 | | | |
| 9 | 20.2 | 370 | 2.9 | | | |
| 10 | 19.0 | 364 | 2.1 | | | |
| 11 | 17.9 | 362 | 2.0 | | | |
| 12 | 17.2 | 360 | 2.5 | | | |
| 13 | 16.7 | 359 | 2.7 | | | |
| 14 | 15.9 | 359 | 2.6 | | | |
| 15 | 15.3 | 359 | 2.7 | | | |
| 16 | 14.5 | 360 | 3.0 | | | |
| 17 | 13.8 | 358 | 3.4 | | | |
| 18 | 13.4 | 356 | 3.7 | | | |
| 19 | 12.7 | 355 | 4.2 | | | |
| 20 | 12.1 | 358 | 4.9 | | | |
| 21 | 11.6 | 359 | 5.6 | | | |
| 22 | 11.1 | 359 | 6.1 | | | |
| 23 | 10.6 | 358 | 6.5 | | | |
| 24 | 10.1 | 358 | 7.0 | | | |
| 25 | 9.6 | 357 | 7.1 | | | |
| 26 | 9.2 | 357 | 7.2 | | | |
| 27 | 8.9 | 355 | 7.1 | | | |
| 28 | 8.6 | 356 | 7.1 | | | |
| 29 | 8.4 | 355 | 7.0 | | | |
| 30 | 8.2 | 355 | 7.2 | | | |

Table A7. South Holston Reservoir, water quality summary at SFHRM 58, August 1, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 28.5 | 359 | 8.4 | HRM58 | **2.5** | **1230** |
| 1 | 27.8 | 361 | 8.6 | | | |
| 2 | 27.7 | 360 | 8.6 | | | |
| 3 | 27.2 | 360 | 8.9 | | | |
| 4 | 26.7 | 361 | 9.1 | | | |
| 5 | 26.5 | 362 | 9.0 | | | |
| 6 | 25.4 | 377 | 6.1 | | | |
| 7 | 23.4 | 389 | 3.7 | | | |
| 8 | 21.6 | 382 | 2.1 | | | |
| 9 | 20.5 | 377 | 1.0 | | | |
| 10 | 18.6 | 369 | 0.9 | | | |
| 11 | 18.0 | 364 | 0.8 | | | |
| 12 | 17.2 | 363 | 0.8 | | | |
| 13 | 16.5 | 361 | 1.2 | | | |
| 14 | 15.8 | 359 | 1.6 | | | |
| 15 | 15.1 | 359 | 2.1 | | | |
| 16 | 14.5 | 357 | 2.5 | | | |
| 17 | 14.0 | 356 | 2.7 | | | |
| 18 | 13.5 | 355 | 3.1 | | | |
| 19 | 12.9 | 353 | 3.4 | | | |
| 20 | 12.1 | 354 | 3.8 | | | |
| 21 | 11.4 | 356 | 4.5 | | | |
| 22 | 11.1 | 356 | 5.1 | | | |
| 23 | 10.4 | 357 | 5.4 | | | |
| 24 | 10.1 | 357 | 5.5 | | | |
| 25 | 9.8 | 356 | 5.6 | | | |
| 26 | 9.2 | 358 | 5.8 | | | |
| 27 | 8.9 | 357 | 5.9 | | | |
| 28 | 8.6 | 358 | 5.9 | | | |
| 29 | 8.3 | 357 | 5.8 | | | |
| 30 | 8.1 | 356 | 5.4 | | | |

Table A8. South Holston Reservoir, water quality summary at SFHRM 64, August 1, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 28.6 | 357 | 10.8 | HRM64 | 1.6 | 1330 |
| 1 | 27.8 | 359 | 11.4 | | | |
| 2 | 27.4 | 359 | 11.6 | | | |
| 3 | 27.0 | 361 | 11.5 | | | |
| 4 | 26.7 | 362 | 10.3 | | | |
| 5 | 26.3 | 364 | 8.7 | | | |
| 6 | 25.1 | 382 | 5.7 | | | |
| 7 | 23.1 | 397 | 3.9 | | | |
| 8 | 21.4 | 384 | 2.0 | | | |
| 9 | 20.0 | 373 | 0.6 | | | |
| 10 | 18.7 | 368 | 0.4 | | | |
| 11 | 17.9 | 364 | 0.1 | | | |
| 12 | 17.1 | 363 | 0.1 | | | |
| 13 | 16.2 | 366 | 0.1 | | | |
| 14 | 15.7 | 363 | 0.5 | | | |
| 15 | 15.2 | 361 | 0.9 | | | |
| 16 | 14.7 | 358 | 1.4 | | | |
| 17 | 14.1 | 359 | 1.7 | | | |
| 18 | 13.6 | 358 | 1.9 | | | |
| 19 | 12.8 | 357 | 2.3 | | | |
| 20 | 12.1 | 355 | 2.9 | | | |
| 21 | 11.5 | 355 | 3.5 | | | |
| 22 | 10.9 | 356 | 4.1 | | | |
| 23 | 10.6 | 358 | 4.2 | | | |
| 24 | 10.2 | 359 | 4.2 | | | |
| 25 | 9.8 | 363 | 2.2 | | | |
| 26 | 9.4 | 365 | 1.5 | | | |
| 27 | 9.0 | 365 | 1.3 | | | |
| 28 | 8.8 | 381 | 0.7 | | | |
| 29 | Bottom | | | | | |
| 30 | | | | | | |

Table A9. South Holston Reservoir, water quality summary at SFHRM 51, September 7, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 25.1 | 321 | 8.6 | HRM51 | 2.5 | 1015 |
| 1 | 25.1 | 322 | 8.6 | | | |
| 2 | 25.1 | 322 | 8.6 | | | |
| 3 | 25.1 | 322 | 8.6 | | | |
| 4 | 25.1 | 323 | 8.6 | | | |
| 5 | 25.1 | 323 | 8.6 | | | |
| 6 | 25.1 | 323 | 8.6 | | | |
| 7 | 25.1 | 324 | 8.5 | | | |
| 8 | 25.1 | 324 | 8.5 | | | |
| 9 | 23.4 | 350 | 1.7 | | | |
| 10 | 21.9 | 347 | 0.4 | | | |
| 11 | 20.9 | 341 | 0.4 | | | |
| 12 | 19.5 | 334 | 0.8 | | | |
| 13 | 18.6 | 332 | 0.9 | | | |
| 14 | 17.7 | 330 | 0.8 | | | |
| 15 | 17.0 | 328 | 0.7 | | | |
| 16 | 16.4 | 328 | 0.7 | | | |
| 17 | 15.9 | 328 | 0.8 | | | |
| 18 | 15.4 | 326 | 1.1 | | | |
| 19 | 14.9 | 324 | 1.4 | | | |
| 20 | 14.5 | 326 | 1.6 | | | |
| 21 | 14.1 | 327 | 1.8 | | | |
| 22 | 13.5 | 328 | 2.1 | | | |
| 23 | 12.9 | 329 | 2.6 | | | |
| 24 | 12.5 | 329 | 2.9 | | | |
| 25 | 12.1 | 329 | 3.5 | | | |
| 26 | 11.5 | 330 | 4.0 | | | |
| 27 | 10.9 | 331 | 4.3 | | | |
| 28 | 10.5 | 330 | 4.5 | | | |
| 29 | 10.1 | 331 | 4.8 | | | |
| 30 | 9.6 | 330 | 5.0 | | | |

Table A10. South Holston Reservoir, water quality summary at SFHRM 55, September 7, 2006.

| Depth (m) | 25.2 | 321 | 8.4 | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 25.2 | 320 | 8.4 | HRM55 | 2.3 | 1102 |
| 1 | 25.1 | 321 | 8.4 | | | |
| 2 | 25.1 | 321 | 8.4 | | | |
| 3 | 25.1 | 321 | 8.4 | | | |
| 4 | 25.1 | 322 | 8.3 | | | |
| 5 | 25.0 | 323 | 8.3 | | | |
| 6 | 25.0 | 323 | 8.3 | | | |
| 7 | 25.0 | 324 | 8.2 | | | |
| 8 | 23.2 | 355 | 0.7 | | | |
| 9 | 21.9 | 351 | 0.5 | | | |
| 10 | 20.5 | 340 | 0.4 | | | |
| 11 | 19.5 | 333 | 0.4 | | | |
| 12 | 18.7 | 332 | 0.4 | | | |
| 13 | 17.9 | 328 | 0.2 | | | |
| 14 | 17.1 | 329 | 0.2 | | | |
| 15 | 16.5 | 329 | 0.2 | | | |
| 16 | 16.0 | 329 | 0.4 | | | |
| 17 | 15.5 | 328 | 0.6 | | | |
| 18 | 15.1 | 328 | 1.0 | | | |
| 19 | 14.5 | 328 | 1.2 | | | |
| 20 | 14.0 | 328 | 1.3 | | | |
| 21 | 13.4 | 328 | 1.8 | | | |
| 22 | 12.9 | 328 | 2.3 | | | |
| 23 | 12.4 | 329 | 2.7 | | | |
| 24 | 12.1 | 330 | 3.2 | | | |
| 25 | 11.5 | 330 | 3.6 | | | |
| 26 | 11.1 | 330 | 4.0 | | | |
| 27 | 10.7 | 330 | 4.2 | | | |
| 28 | 10.1 | 331 | 4.5 | | | |
| 29 | 9.7 | 330 | 4.6 | | | |
| 30 | 25.2 | 321 | 8.4 | | | |

Table A11. South Holston Reservoir, water quality summary at SFHRM 58, September 7, 2006.

| Depth (m) | Temp © | Cond | DO | Site | Secchi (m) | Time |
|---|---|---|---|---|---|---|
| 0 | 25.2 | 323 | 7.2 | HRM58 | 2.0 | 1135 |
| 1 | 25.0 | 324 | 7.8 | | | |
| 2 | 25.0 | 325 | 7.8 | | | |
| 3 | 24.9 | 325 | 7.7 | | | |
| 4 | 24.9 | 326 | 7.7 | | | |
| 5 | 24.9 | 326 | 7.7 | | | |
| 6 | 24.9 | 327 | 7.7 | | | |
| 7 | 24.9 | 327 | 7.7 | | | |
| 8 | 24.9 | 328 | 7.7 | | | |
| 9 | 22.9 | 361 | 0.4 | | | |
| 10 | 21.9 | 361 | 0.3 | | | |
| 11 | 20.9 | 350 | 0.3 | | | |
| 12 | 20.1 | 347 | 0.2 | | | |
| 13 | 18.7 | 336 | 0.2 | | | |
| 14 | 17.9 | 334 | 0.2 | | | |
| 15 | 17.2 | 333 | 0.2 | | | |
| 16 | 16.7 | 332 | 0.2 | | | |
| 17 | 16.2 | 332 | 0.2 | | | |
| 18 | 15.6 | 331 | 0.2 | | | |
| 19 | 15.0 | 331 | 0.3 | | | |
| 20 | 14.7 | 330 | 0.4 | | | |
| 21 | 14.0 | 330 | 0.7 | | | |
| 22 | 13.3 | 330 | 1.1 | | | |
| 23 | 13.0 | 328 | 1.4 | | | |
| 24 | 12.6 | 328 | 1.7 | | | |
| 25 | 12.1 | 328 | 1.9 | | | |
| 26 | 11.2 | 330 | 2.2 | | | |
| 27 | 10.9 | 330 | 2.4 | | | |
| 28 | 10.4 | 332 | 2.6 | | | |
| 29 | 9.9 | 332 | 2.6 | | | |
| 30 | 9.5 | 332 | 2.7 | | | |

No measurements taken at SFHRM 64 in September 2006.

Figure A1. S. Holston Reservoir water quality data at HRM 51, July 2006.

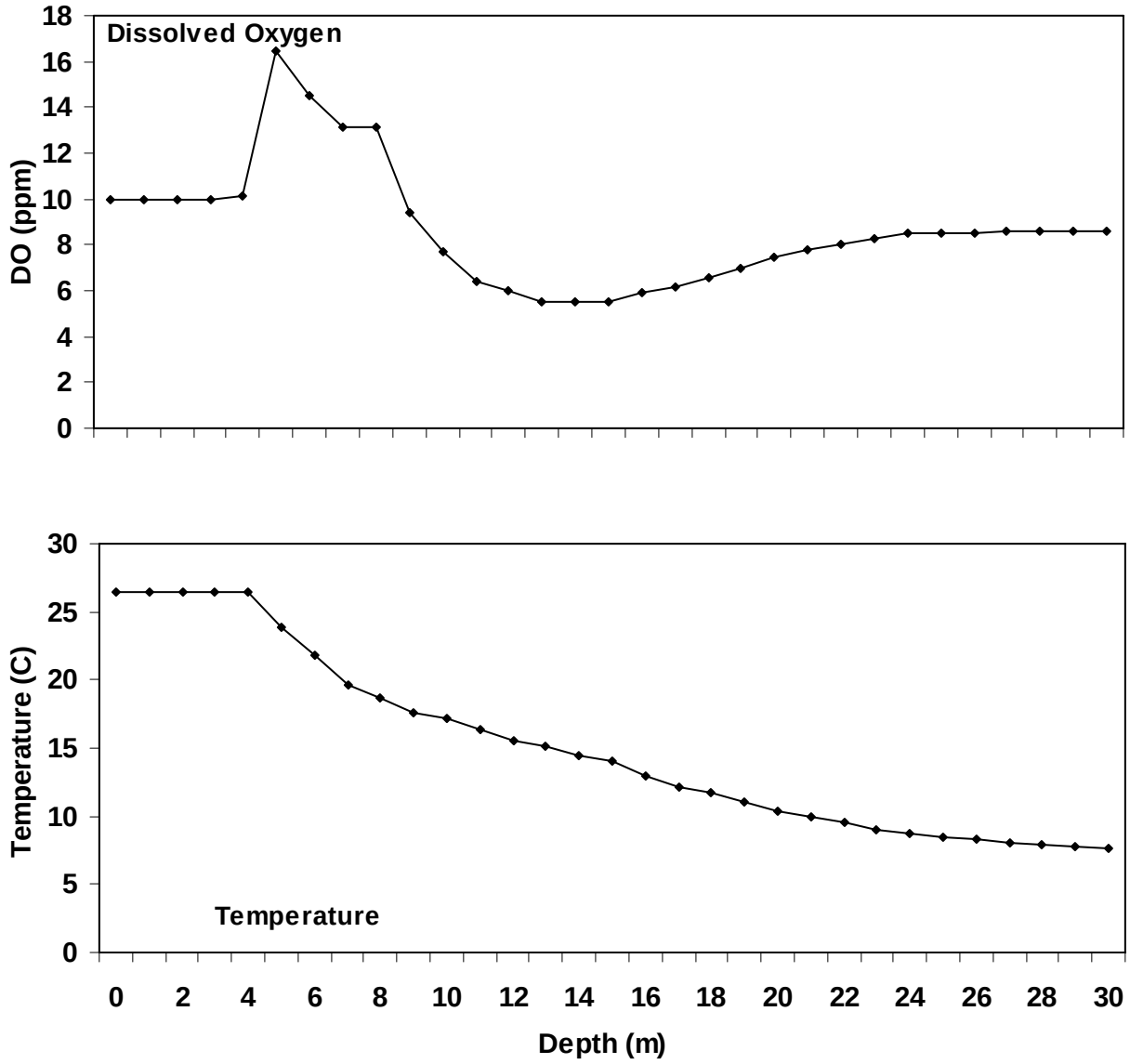


Figure A2. S. Holston Reservoir water quality data at HRM 55, July 2006.

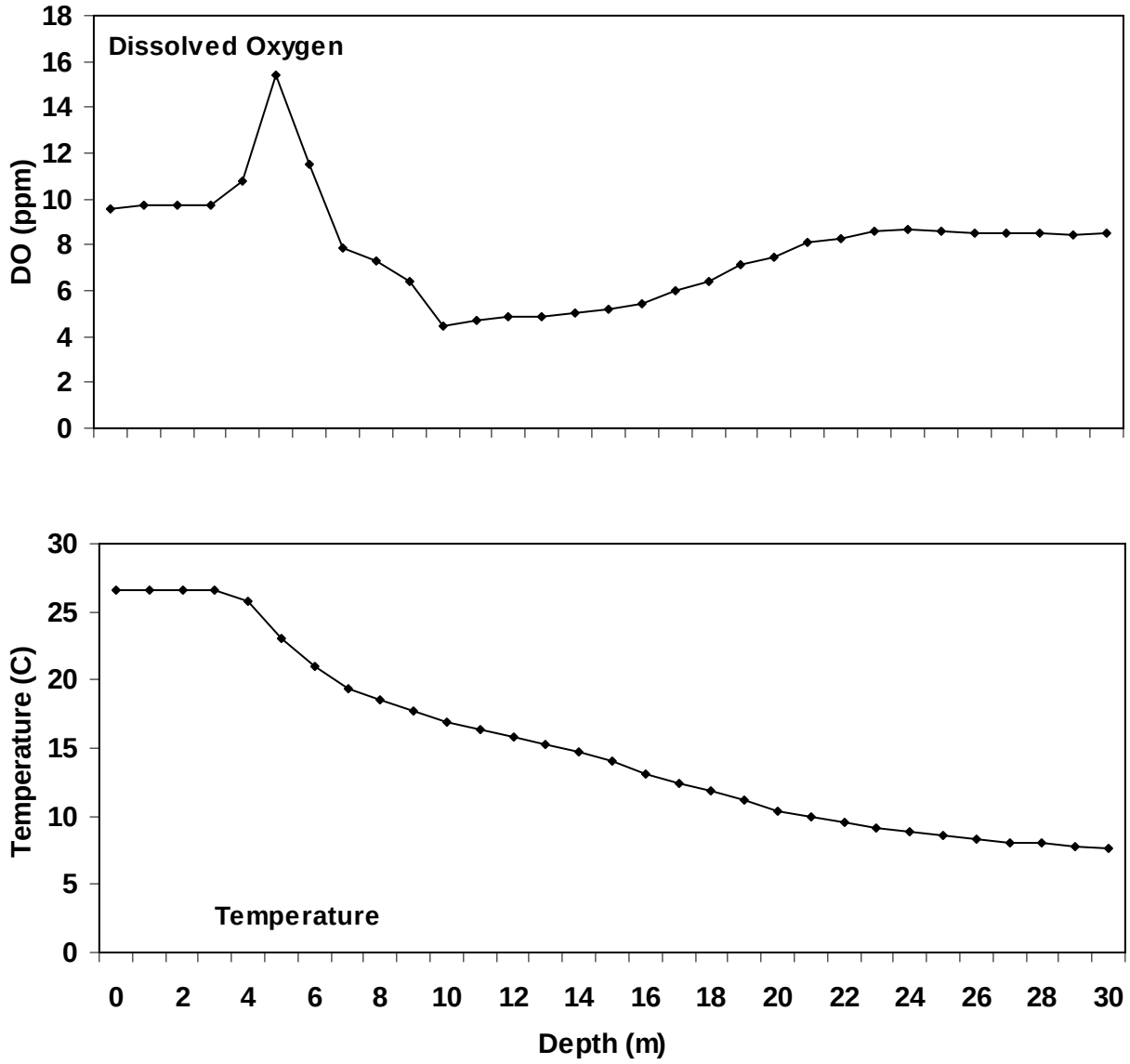


Figure A3. S. Holston Reservoir water quality data at HRM 58, July 2006.

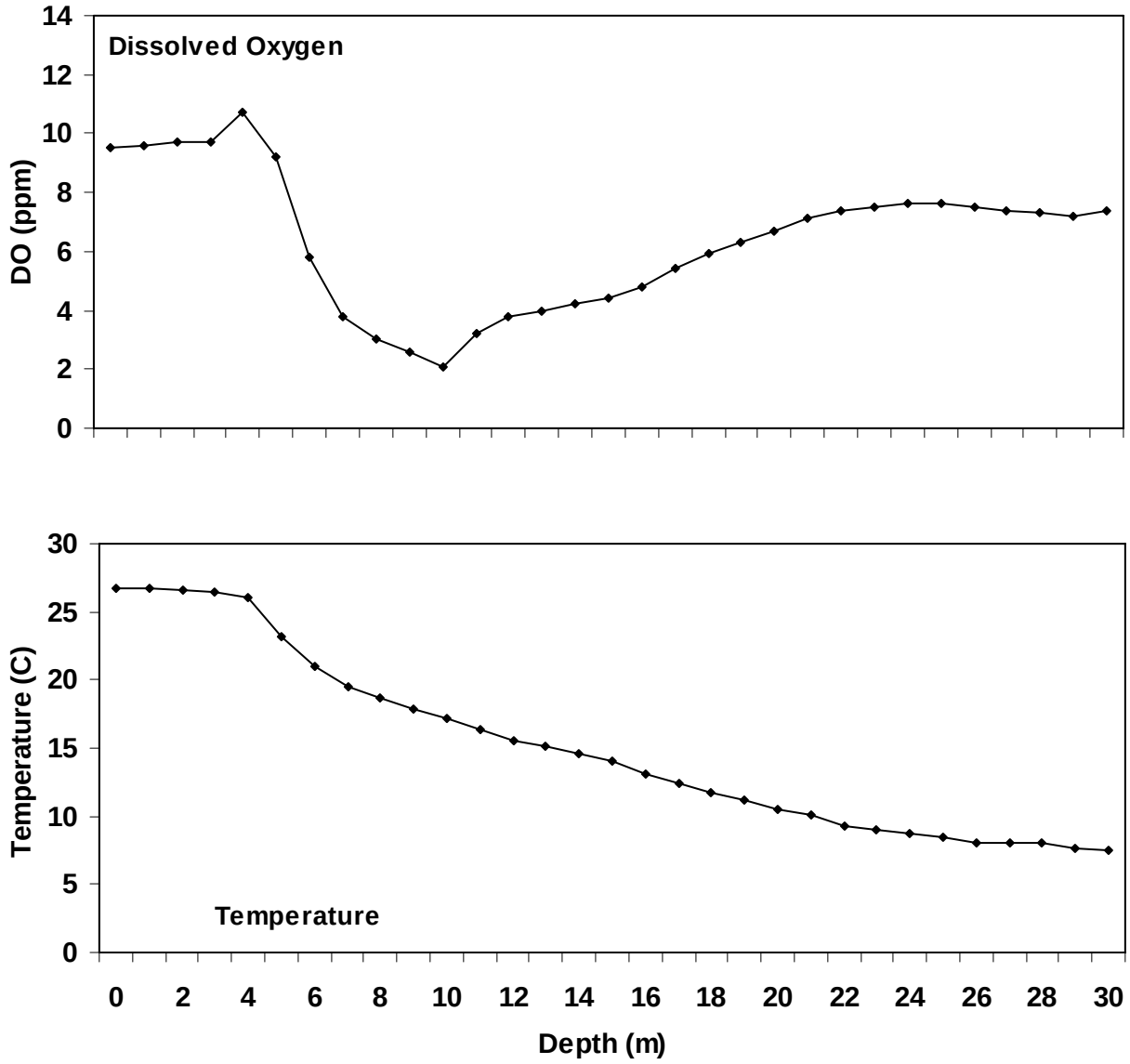


Figure A4. S. Holston Reservoir water quality data at HRM 64, July 2006.

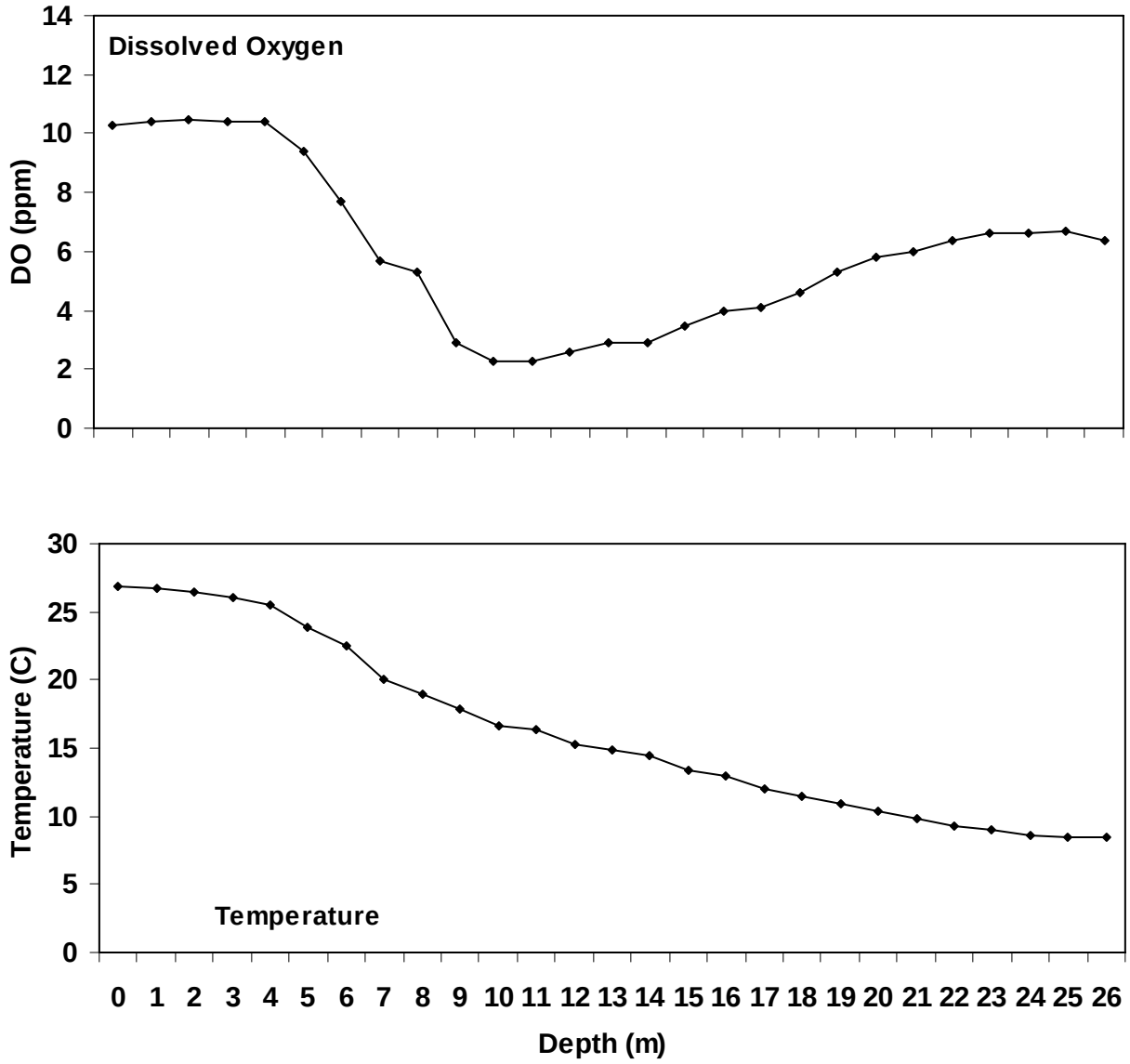


Figure A4. S. Holston Reservoir water quality data at HRM 51, August 2006.

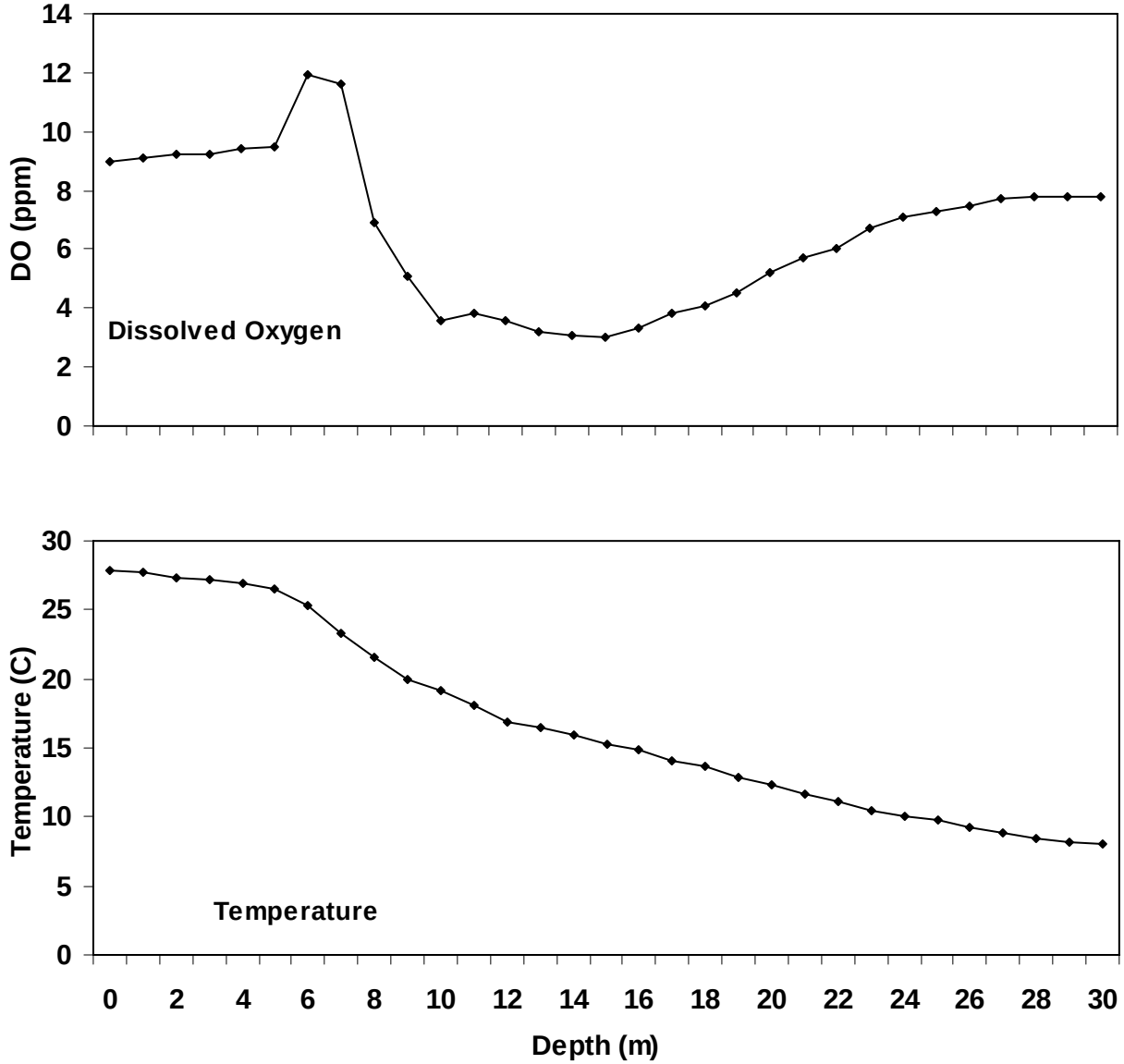


Figure A5. S. Holston Reservoir water quality data at HRM 55, August 2006.

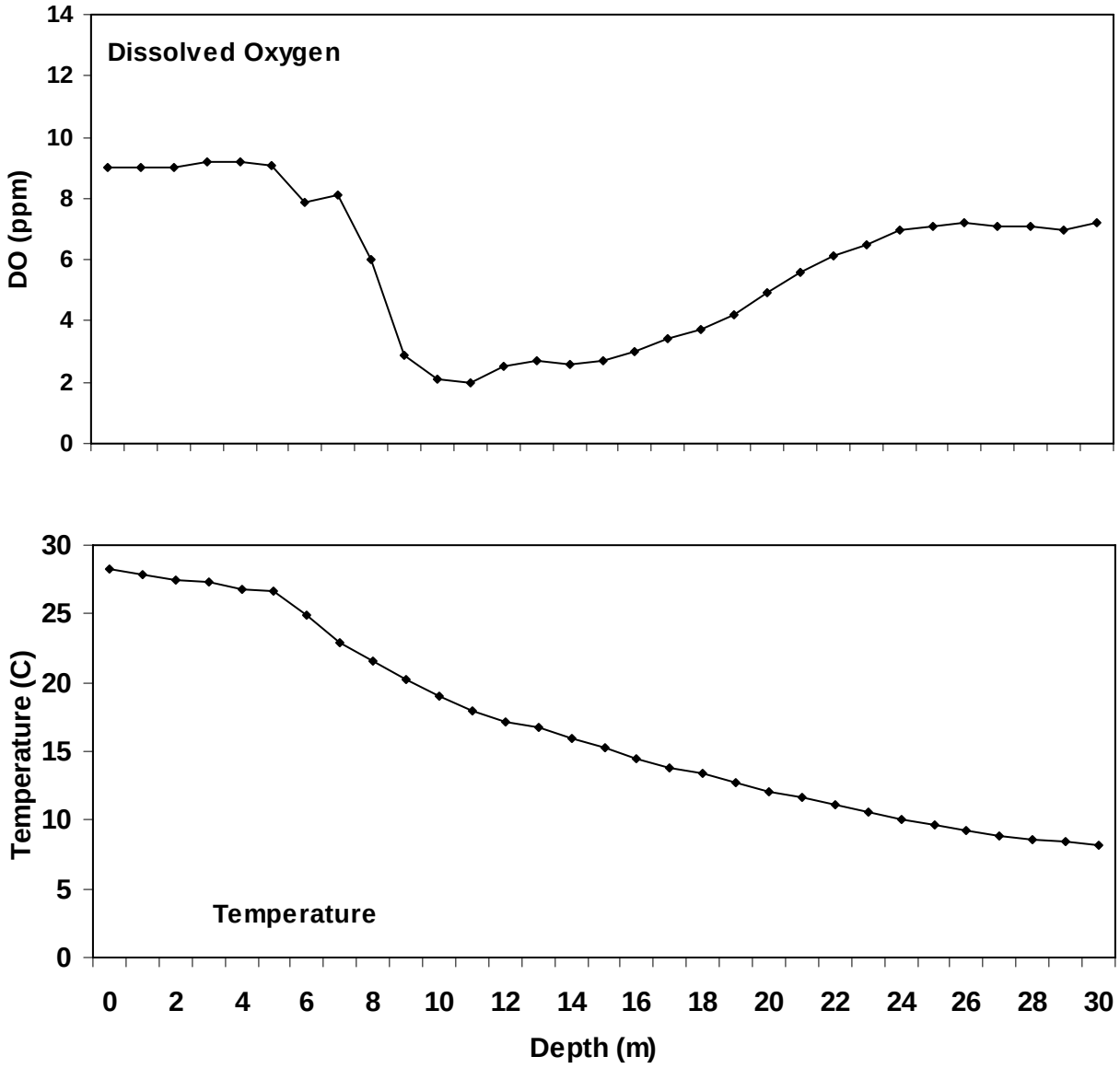


Figure A6. S. Holston Reservoir water quality data at HRM 58, August 2006.

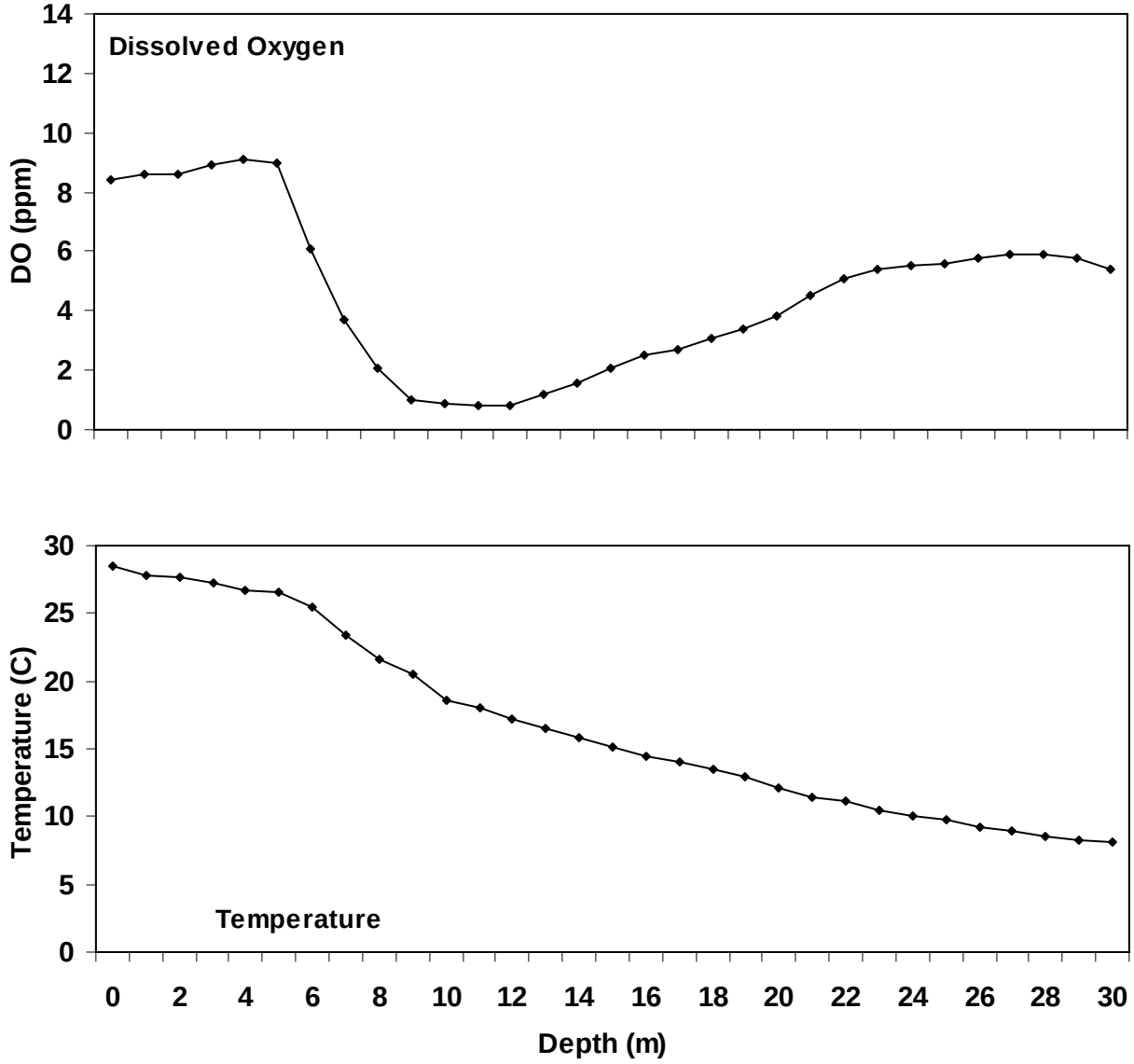


Figure A7. S. Holston Reservoir water quality data at HRM 64, August 2006.

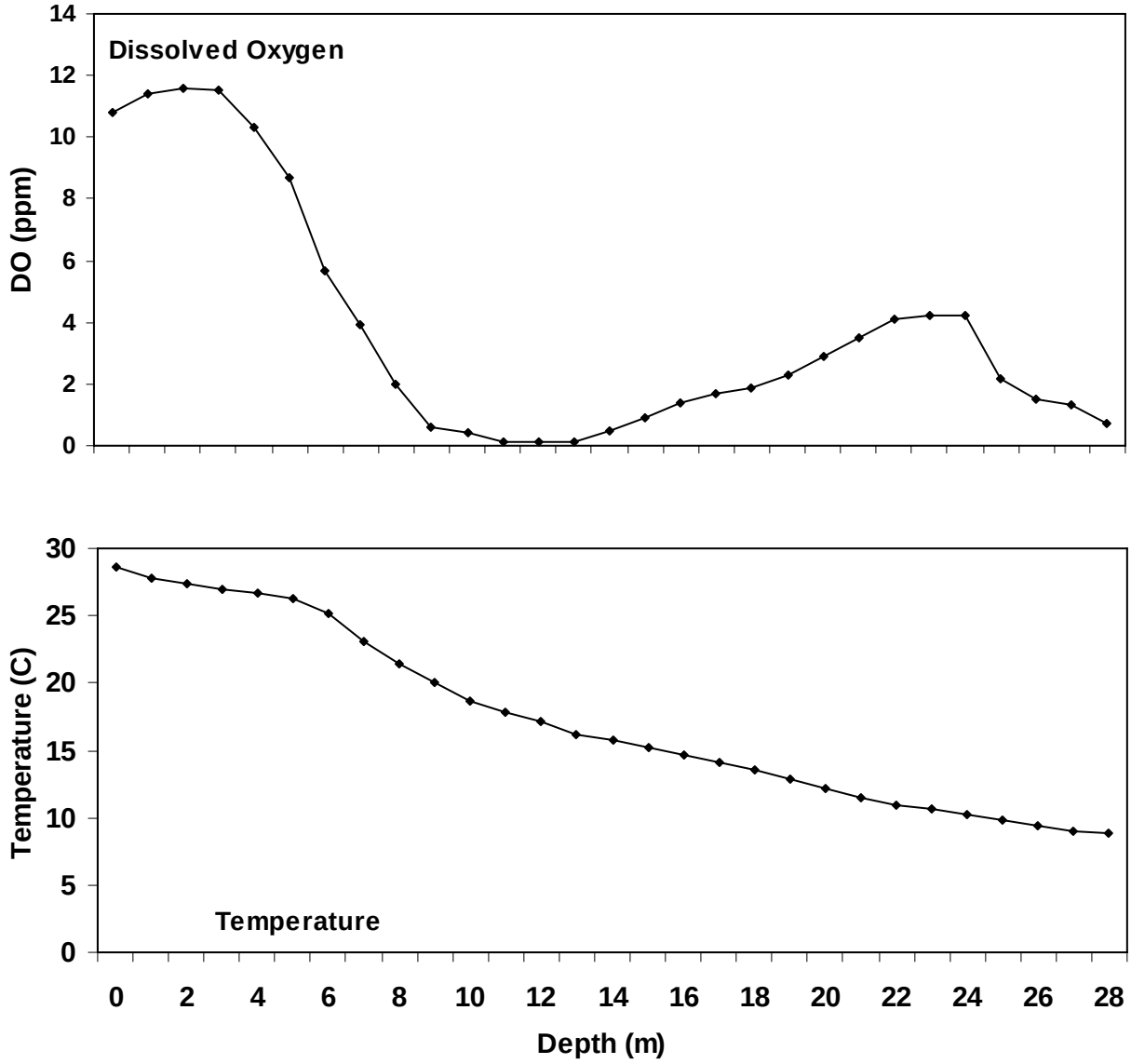


Figure A8. S. Holston Reservoir water quality data at HRM 51, September 2006.

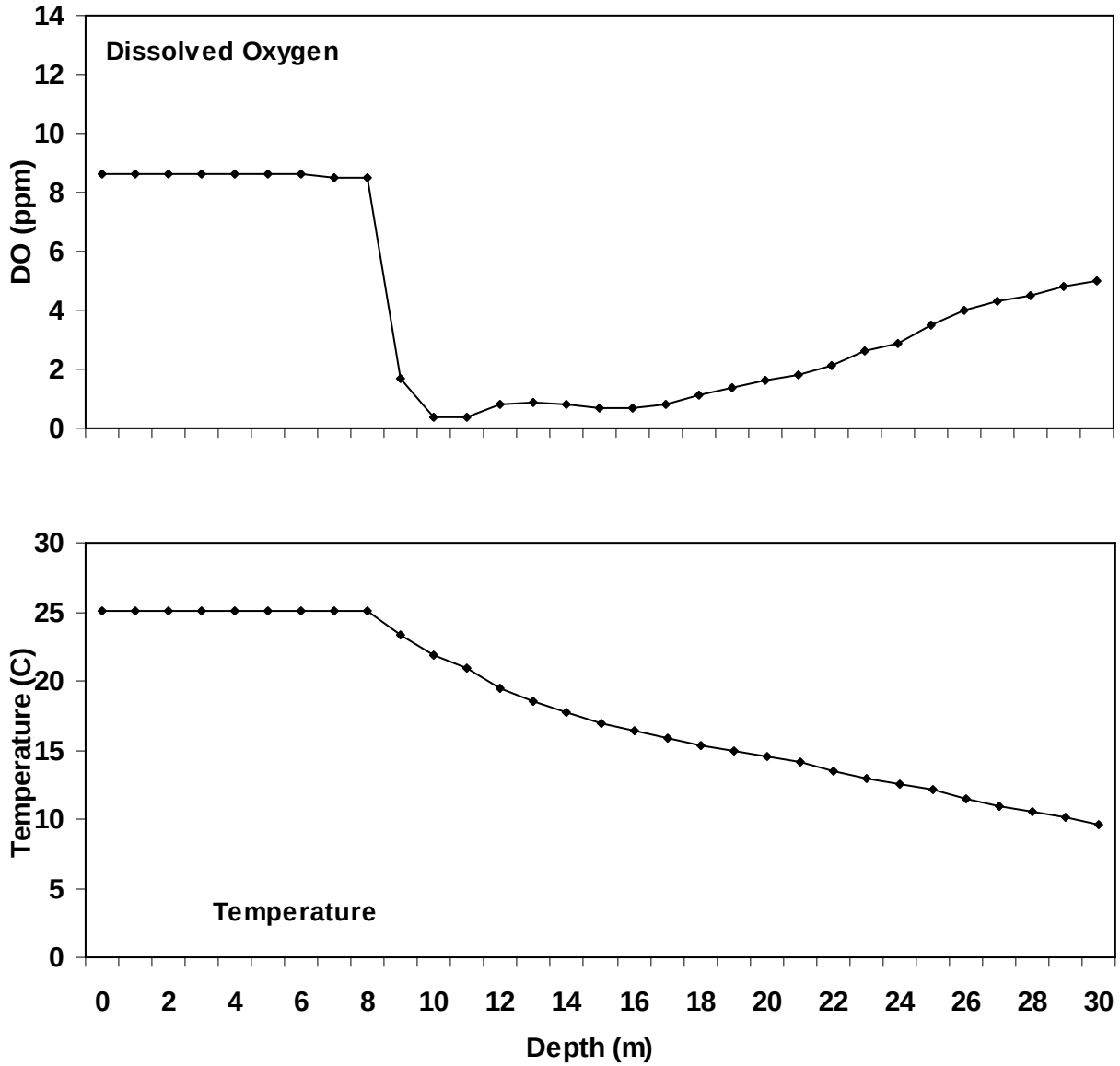


Figure A9. S. Holston Reservoir water quality data at HRM 55, September 2006.

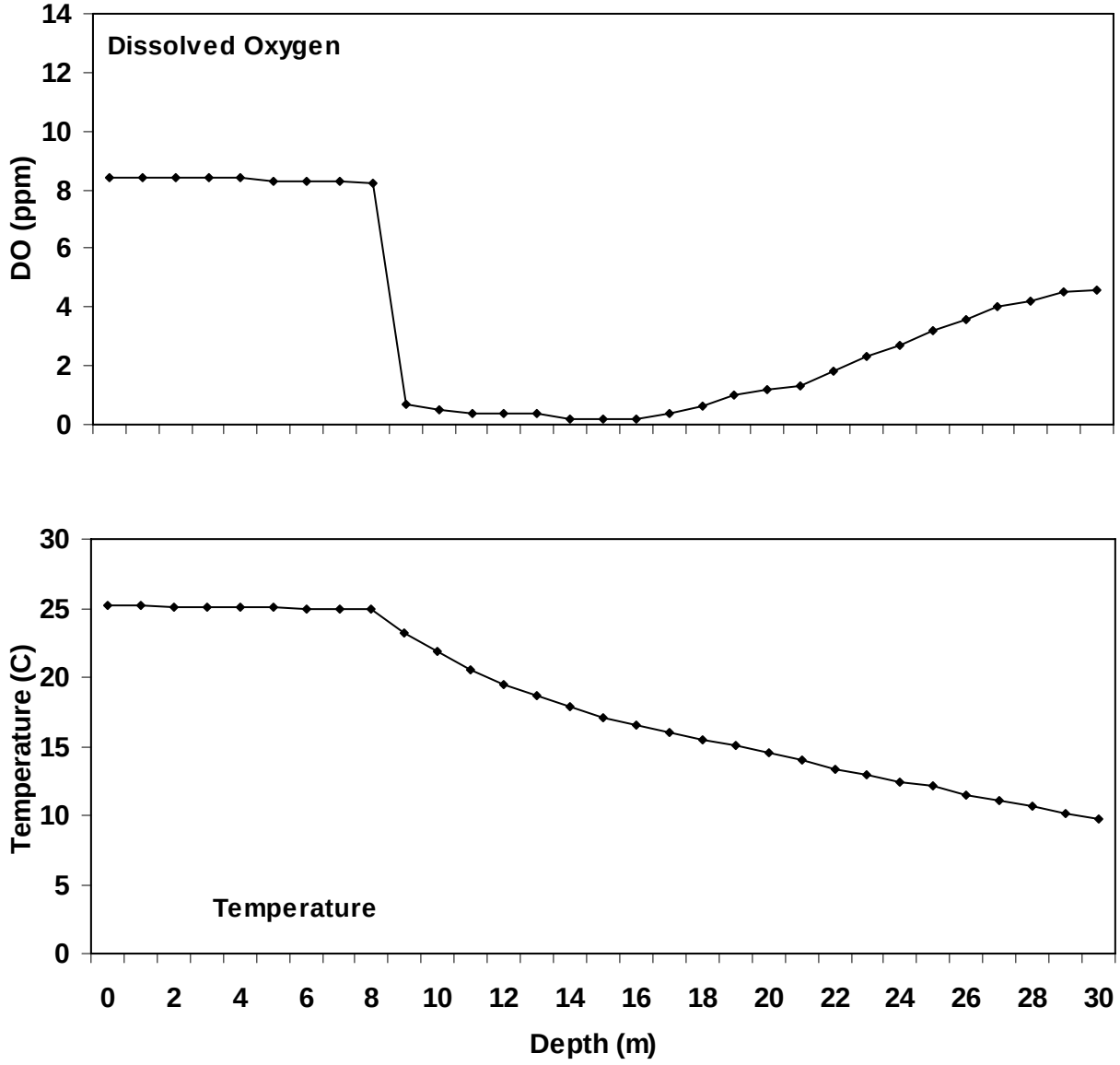
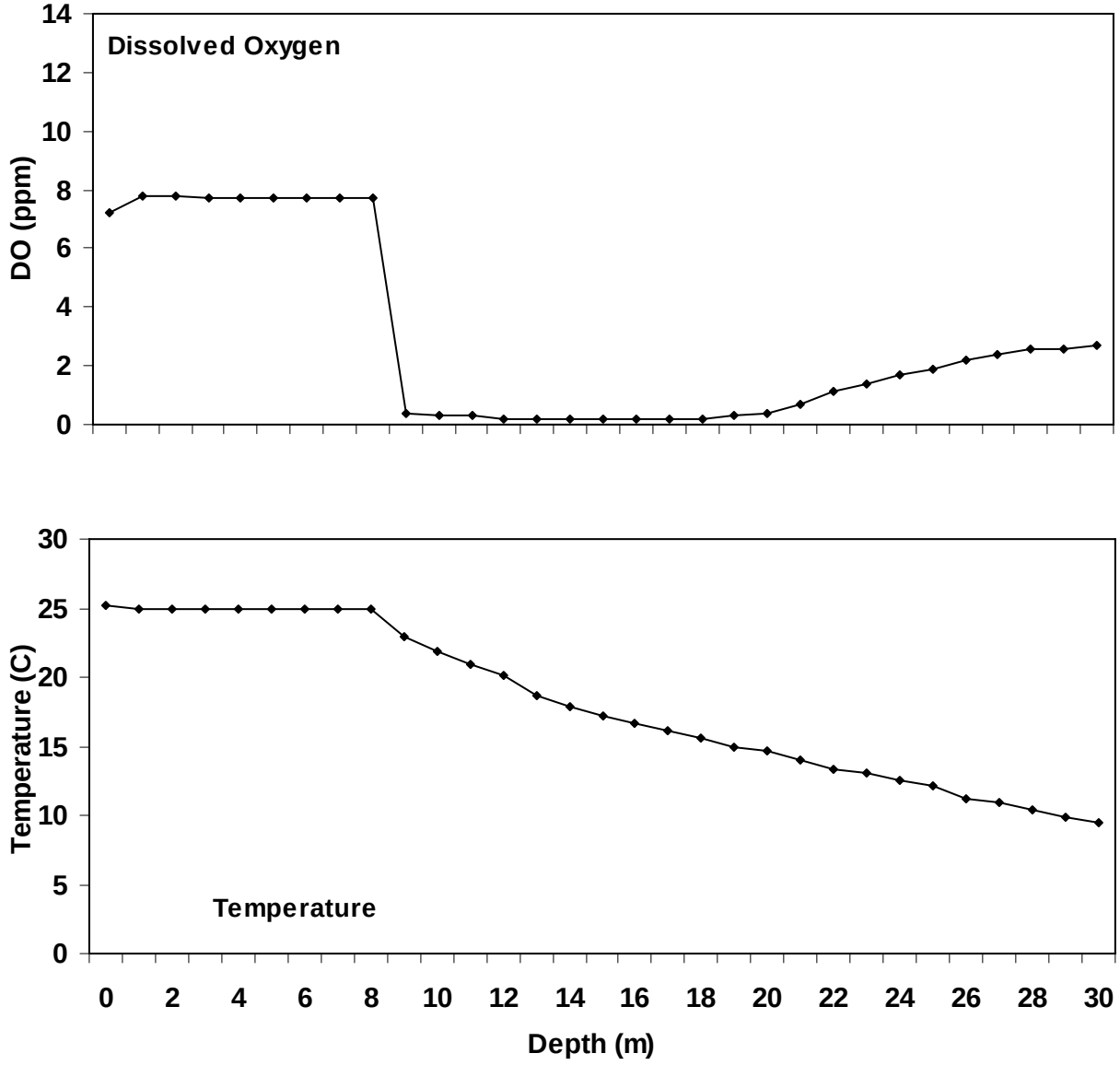


Figure A10. S. Holston Reservoir water quality data at HRM 58, September 2006.



Appendix B
South Holston Daily Elevations

Table B1. S. Holston Reservoir elevation data for 2006. Data is courtesy of TVA.

| Elevation | Month | Day | Elevation | Month | Day | Elevation | Month | Day |
|---|---|---|---|---|---|---|---|---|
| 1704.25 | January | 1 | 1709.81 | February | 24 | 1721.45 | April | 19 |
| 1704.42 | January | 2 | 1710.25 | February | 25 | 1721.76 | April | 20 |
| 1704.54 | January | 3 | 1710.58 | February | 26 | 1722.02 | April | 21 |
| 1704.75 | January | 4 | 1710.51 | February | 27 | 1722.55 | April | 22 |
| 1704.94 | January | 5 | 1710.64 | February | 28 | 1723.04 | April | 23 |
| 1704.90 | January | 6 | 1710.86 | March | 1 | 1723.45 | April | 24 |
| 1705.03 | January | 7 | 1711.04 | March | 2 | 1723.83 | April | 25 |
| 1705.15 | January | 8 | 1711.20 | March | 3 | 1724.59 | April | 26 |
| 1705.25 | January | 9 | 1711.35 | March | 4 | 1726.03 | April | 27 |
| 1705.15 | January | 10 | 1711.50 | March | 5 | 1726.91 | April | 28 |
| 1705.24 | January | 11 | 1711.67 | March | 6 | 1727.46 | April | 29 |
| 1705.25 | January | 12 | 1711.82 | March | 7 | 1727.82 | April | 30 |
| 1705.35 | January | 13 | 1711.96 | March | 8 | 1728.01 | May | 1 |
| 1705.47 | January | 14 | 1712.11 | March | 9 | 1728.11 | May | 2 |
| 1705.41 | January | 15 | 1712.25 | March | 10 | 1728.22 | May | 3 |
| 1705.34 | January | 16 | 1712.31 | March | 11 | 1728.32 | May | 4 |
| 1705.12 | January | 17 | 1712.43 | March | 12 | 1728.48 | May | 5 |
| 1706.04 | January | 18 | 1712.68 | March | 13 | 1728.63 | May | 6 |
| 1706.53 | January | 19 | 1713.00 | March | 14 | 1728.78 | May | 7 |
| 1706.68 | January | 20 | 1713.29 | March | 15 | 1728.85 | May | 8 |
| 1707.09 | January | 21 | 1713.49 | March | 16 | 1728.91 | May | 9 |
| 1707.45 | January | 22 | 1713.73 | March | 17 | 1728.90 | May | 10 |
| 1707.03 | January | 23 | 1713.92 | March | 18 | 1728.84 | May | 11 |
| 1707.19 | January | 24 | 1714.08 | March | 19 | 1728.97 | May | 12 |
| 1707.35 | January | 25 | 1714.22 | March | 20 | 1729.10 | May | 13 |
| 1707.24 | January | 26 | 1714.12 | March | 21 | 1729.25 | May | 14 |
| 1707.07 | January | 27 | 1714.30 | March | 22 | 1729.24 | May | 15 |
| 1707.21 | January | 28 | 1714.49 | March | 23 | 1729.27 | May | 16 |
| 1707.39 | January | 29 | 1714.72 | March | 24 | 1729.29 | May | 17 |
| 1707.44 | January | 30 | 1714.91 | March | 25 | 1729.36 | May | 18 |
| 1707.48 | January | 31 | 1715.09 | March | 26 | 1729.49 | May | 19 |
| 1707.47 | February | 1 | 1715.17 | March | 27 | 1729.83 | May | 20 |
| 1707.63 | February | 2 | 1715.30 | March | 28 | 1730.03 | May | 21 |
| 1707.78 | February | 3 | 1715.44 | March | 29 | 1729.86 | May | 22 |
| 1708.28 | February | 4 | 1715.39 | March | 30 | 1729.97 | May | 23 |
| 1708.84 | February | 5 | 1715.56 | March | 31 | 1730.01 | May | 24 |
| 1708.97 | February | 6 | 1715.75 | April | 1 | 1729.74 | May | 25 |
| 1708.79 | February | 7 | 1715.89 | April | 2 | 1729.60 | May | 26 |
| 1708.65 | February | 8 | 1716.16 | April | 3 | 1729.94 | May | 27 |
| 1708.49 | February | 9 | 1716.39 | April | 4 | 1730.14 | May | 28 |
| 1708.29 | February | 10 | 1716.63 | April | 5 | 1730.20 | May | 29 |
| 1708.15 | February | 11 | 1716.85 | April | 6 | 1729.98 | May | 30 |
| 1708.33 | February | 12 | 1717.12 | April | 7 | 1729.66 | May | 31 |
| 1707.95 | February | 13 | 1717.89 | April | 8 | 1729.27 | June | 1 |
| 1707.48 | February | 14 | 1718.67 | April | 9 | 1729.00 | June | 2 |
| 1707.63 | February | 15 | 1719.16 | April | 10 | 1729.15 | June | 3 |
| 1707.77 | February | 16 | 1719.55 | April | 11 | 1729.27 | June | 4 |
| 1707.99 | February | 17 | 1719.84 | April | 12 | 1729.23 | June | 5 |
| 1708.06 | February | 18 | 1720.09 | April | 13 | 1729.33 | June | 6 |
| 1708.16 | February | 19 | 1720.31 | April | 14 | 1729.43 | June | 7 |
| 1708.22 | February | 20 | 1720.50 | April | 15 | 1729.34 | June | 8 |
| 1708.30 | February | 21 | 1720.69 | April | 16 | 1729.25 | June | 9 |
| 1708.61 | February | 22 | 1720.90 | April | 17 | 1729.30 | June | 10 |
| 1709.20 | February | 23 | 1721.11 | April | 18 | 1729.39 | June | 11 |

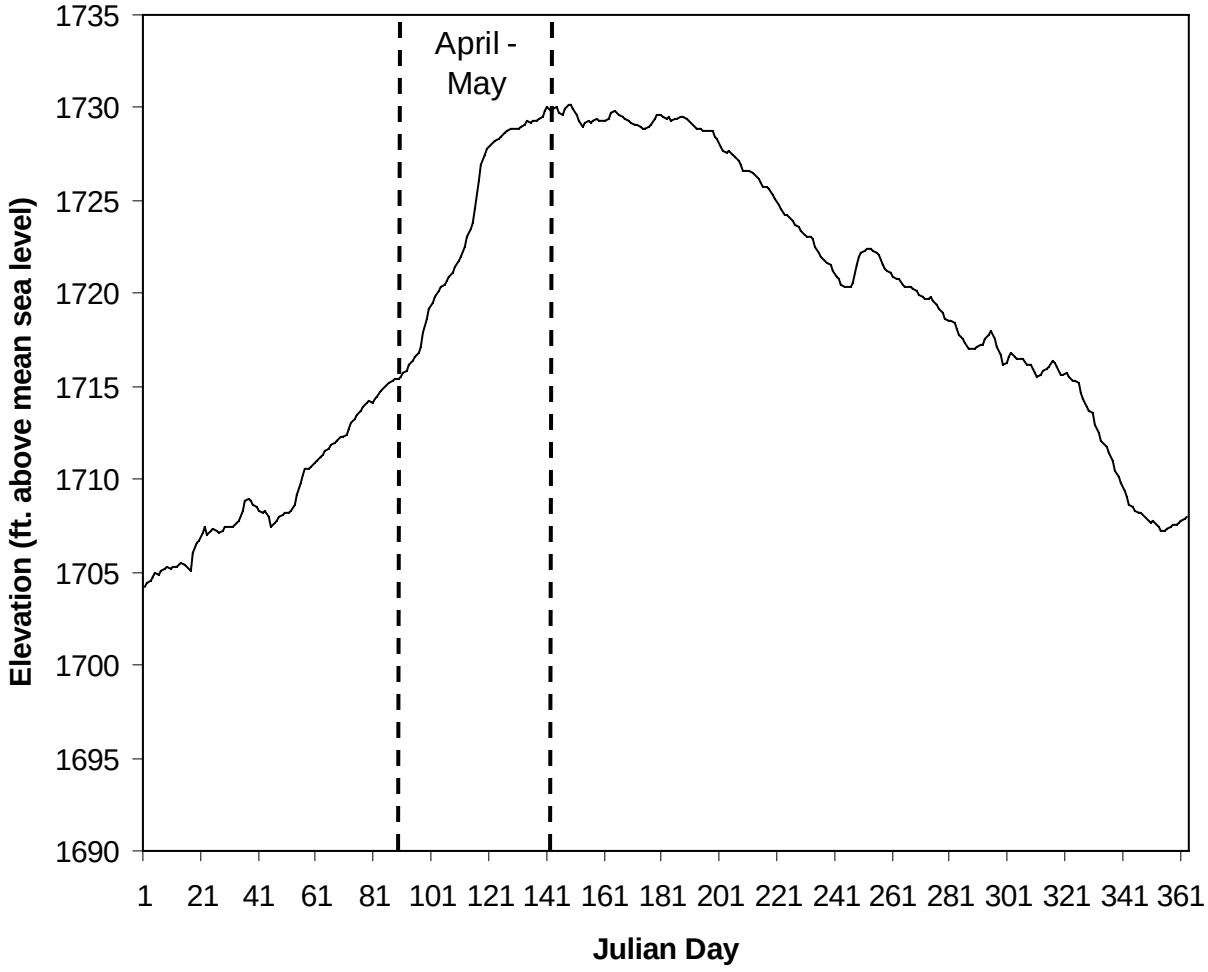
Table B1. Continued.

| Elevation | Month | Day | Elevation | Month | Day | Elevation | Month | Day |
|---|---|---|---|---|---|---|---|---|
| 1729.69 | June | 12 | 1725.71 | August | 5 | 1719.87 | September | 28 |
| 1729.88 | June | 13 | 1725.64 | August | 6 | 1719.70 | September | 29 |
| 1729.77 | June | 14 | 1725.33 | August | 7 | 1719.70 | September | 30 |
| 1729.61 | June | 15 | 1725.08 | August | 8 | 1719.81 | October | 1 |
| 1729.47 | June | 16 | 1724.80 | August | 9 | 1719.60 | October | 2 |
| 1729.36 | June | 17 | 1724.55 | August | 10 | 1719.37 | October | 3 |
| 1729.33 | June | 18 | 1724.26 | August | 11 | 1719.14 | October | 4 |
| 1729.21 | June | 19 | 1724.22 | August | 12 | 1718.95 | October | 5 |
| 1729.11 | June | 20 | 1724.17 | August | 13 | 1718.65 | October | 6 |
| 1729.04 | June | 21 | 1723.95 | August | 14 | 1718.57 | October | 7 |
| 1729.00 | June | 22 | 1723.74 | August | 15 | 1718.51 | October | 8 |
| 1728.89 | June | 23 | 1723.59 | August | 16 | 1718.41 | October | 9 |
| 1728.83 | June | 24 | 1723.40 | August | 17 | 1718.08 | October | 10 |
| 1728.93 | June | 25 | 1723.18 | August | 18 | 1717.80 | October | 11 |
| 1729.12 | June | 26 | 1723.10 | August | 19 | 1717.54 | October | 12 |
| 1729.36 | June | 27 | 1723.03 | August | 20 | 1717.32 | October | 13 |
| 1729.63 | June | 28 | 1722.91 | August | 21 | 1716.97 | October | 14 |
| 1729.62 | June | 29 | 1722.55 | August | 22 | 1716.98 | October | 15 |
| 1729.48 | June | 30 | 1722.19 | August | 23 | 1717.05 | October | 16 |
| 1729.45 | July | 1 | 1721.96 | August | 24 | 1717.14 | October | 17 |
| 1729.50 | July | 2 | 1721.73 | August | 25 | 1717.20 | October | 18 |
| 1729.33 | July | 3 | 1721.67 | August | 26 | 1717.28 | October | 19 |
| 1729.36 | July | 4 | 1721.59 | August | 27 | 1717.51 | October | 20 |
| 1729.45 | July | 5 | 1721.25 | August | 28 | 1717.79 | October | 21 |
| 1729.55 | July | 6 | 1720.92 | August | 29 | 1717.97 | October | 22 |
| 1729.53 | July | 7 | 1720.74 | August | 30 | 1717.55 | October | 23 |
| 1729.40 | July | 8 | 1720.52 | August | 31 | 1717.16 | October | 24 |
| 1729.32 | July | 9 | 1720.34 | September | 1 | 1716.72 | October | 25 |
| 1729.14 | July | 10 | 1720.37 | September | 2 | 1716.17 | October | 26 |
| 1729.01 | July | 11 | 1720.41 | September | 3 | 1716.27 | October | 27 |
| 1728.85 | July | 12 | 1720.60 | September | 4 | 1716.55 | October | 28 |
| 1728.82 | July | 13 | 1721.53 | September | 5 | 1716.79 | October | 29 |
| 1728.79 | July | 14 | 1721.95 | September | 6 | 1716.56 | October | 30 |
| 1728.72 | July | 15 | 1722.17 | September | 7 | 1716.51 | October | 31 |
| 1728.77 | July | 16 | 1722.32 | September | 8 | 1716.51 | November | 1 |
| 1728.77 | July | 17 | 1722.43 | September | 9 | 1716.43 | November | 2 |
| 1728.47 | July | 18 | 1722.37 | September | 10 | 1716.18 | November | 3 |
| 1728.32 | July | 19 | 1722.27 | September | 11 | 1716.15 | November | 4 |
| 1727.93 | July | 20 | 1722.16 | September | 12 | 1716.13 | November | 5 |
| 1727.71 | July | 21 | 1722.09 | September | 13 | 1715.74 | November | 6 |
| 1727.58 | July | 22 | 1721.55 | September | 14 | 1715.47 | November | 7 |
| 1727.64 | July | 23 | 1721.33 | September | 15 | 1715.61 | November | 8 |
| 1727.48 | July | 24 | 1721.22 | September | 16 | 1715.82 | November | 9 |
| 1727.32 | July | 25 | 1721.07 | September | 17 | 1715.97 | November | 10 |
| 1727.14 | July | 26 | 1720.88 | September | 18 | 1716.10 | November | 11 |
| 1726.93 | July | 27 | 1720.77 | September | 19 | 1716.37 | November | 12 |
| 1726.65 | July | 28 | 1720.74 | September | 20 | 1716.24 | November | 13 |
| 1726.58 | July | 29 | 1720.51 | September | 21 | 1716.05 | November | 14 |
| 1726.60 | July | 30 | 1720.41 | September | 22 | 1715.62 | November | 15 |
| 1726.54 | July | 31 | 1720.33 | September | 23 | 1715.60 | November | 16 |
| 1726.37 | August | 1 | 1720.41 | September | 24 | 1715.74 | November | 17 |
| 1726.15 | August | 2 | 1720.24 | September | 25 | 1715.56 | November | 18 |
| 1725.95 | August | 3 | 1720.11 | September | 26 | 1715.31 | November | 19 |
| 1725.72 | August | 4 | 1719.96 | September | 27 | 1715.29 | November | 20 |

Table B1. Continued.

| Elevation | Month | Day |
|---|---|---|
| 1715.21 | November | 21 |
| 1714.66 | November | 22 |
| 1714.29 | November | 23 |
| 1713.90 | November | 24 |
| 1713.71 | November | 25 |
| 1713.53 | November | 26 |
| 1712.91 | November | 27 |
| 1712.48 | November | 28 |
| 1712.07 | November | 29 |
| 1711.93 | November | 30 |
| 1711.78 | December | 1 |
| 1711.42 | December | 2 |
| 1711.04 | December | 3 |
| 1710.49 | December | 4 |
| 1710.13 | December | 5 |
| 1709.77 | December | 6 |
| 1709.37 | December | 7 |
| 1709.02 | December | 8 |
| 1708.64 | December | 9 |
| 1708.48 | December | 10 |
| 1708.32 | December | 11 |
| 1708.15 | December | 12 |
| 1708.18 | December | 13 |
| 1708.01 | December | 14 |
| 1707.82 | December | 15 |
| 1707.63 | December | 16 |
| 1707.71 | December | 17 |
| 1707.61 | December | 18 |
| 1707.49 | December | 19 |
| 1707.27 | December | 20 |
| 1707.20 | December | 21 |
| 1707.32 | December | 22 |
| 1707.46 | December | 23 |
| 1707.51 | December | 24 |
| 1707.60 | December | 25 |
| 1707.67 | December | 26 |
| 1707.77 | December | 27 |
| 1707.88 | December | 28 |
| 1707.96 | December | 29 |
| 1708.12 | December | 30 |
| 1708.34 | December | 31 |

Figure B1. S. Holston Reservoir daily reservoir elevations for 2006 (TVA data).



Appendix C
Creel

## MONTHLY ANGLING EFFORT FOR ALL ANGLERS - 2006

**LAKE=SOUTH HOLSTON**

| MONTH | ANGLER HOURS | RELATIVE STANDARD ERROR | HOURS PER ACRE | ANGLER TRIPS | TRIPS PER ACRE | PERCENT EFFORT |
|---|---|---|---|---|---|---|
| 01 JANUARY | 12958 | 19.1 | 2.0 | 1947 | 0.3 | 10.4 |
| 02 FEBRUARY | 6050 | 14.6 | 1.0 | 929 | 0.1 | 4.8 |
| 03 MARCH | 8019 | 17.6 | 1.3 | 1236 | 0.2 | 6.4 |
| 04 APRIL | 10582 | 15.1 | 1.7 | 1645 | 0.3 | 8.5 |
| 05 MAY | 24626 | 55.0 | 3.9 | 3824 | 0.6 | 19.7 |
| 06 JUNE | 8125 | 14.7 | 1.3 | 1229 | 0.2 | 6.5 |
| 07 JULY | 11815 | 9.4 | 1.9 | 1822 | 0.3 | 9.5 |
| 08 AUGUST | 9163 | 7.9 | 1.4 | 1415 | 0.2 | 7.3 |
| 09 SEPTEMBER | 9392 | 12.1 | 1.5 | 1459 | 0.2 | 7.5 |
| 10 OCTOBER | 9925 | 14.4 | 1.6 | 1525 | 0.2 | 7.9 |
| 11 NOVEMBER | 7913 | 15.9 | 1.2 | 1172 | 0.2 | 6.3 |
| 12 DECEMBER | 6341 | 16.7 | 1.0 | 995 | 0.2 | 5.1 |
| **TOTAL** | **124909** | | | **19198** | | |

## MONTHLY CATCH STATISTICS FOR ALL ANGLERS - 2006

**LAKE=SOUTH HOLSTON**

| 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 | 1944 | 25.9 | 0.15 | 16.9 | 130 | 59.4 | 0.01 | 57.1 |
| 02 FEBRUARY | 726 | 30.6 | 0.12 | 26.7 | 121 | 42.9 | 0.02 | 42.8 |
| 03 MARCH | 1363 | 31.8 | 0.17 | 26.7 | 241 | 41.7 | 0.03 | 38.9 |
| 04 APRIL | 2222 | 38.0 | 0.21 | 35.2 | 423 | 43.7 | 0.04 | 40.9 |
| 05 MAY | 2955 | 62.0 | 0.12 | 24.2 | 739 | 61.5 | 0.03 | 25.6 |
| 06 JUNE | 731 | 50.4 | 0.09 | 45.7 | 163 | 38.9 | 0.02 | 34.8 |
| 07 JULY | 3426 | 28.0 | 0.29 | 26.2 | 354 | 82.1 | 0.03 | 71.3 |
| 08 AUGUST | 1741 | 22.1 | 0.19 | 20.7 | 183 | 34.3 | 0.02 | 36.1 |
| 09 SEPTEMBER | 3287 | 25.9 | 0.35 | 22.7 | 564 | 45.9 | 0.06 | 40.8 |
| 10 OCTOBER | 1886 | 29.1 | 0.19 | 25.6 | 99 | 59.7 | 0.01 | 47.6 |
| 11 NOVEMBER | 1503 | 28.3 | 0.19 | 22.7 | 79 | 26.7 | 0.01 | 24.0 |
| 12 DECEMBER | 1205 | 33.2 | 0.19 | 28.9 | 127 | 52.1 | 0.02 | 43.1 |
| **TOTAL** | **22989** | | | | **3223** | | | |

## SUMMARY OF SPECIES CATCH STATISTICS - 2006

### LAKE=SOUTH HOLSTON

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CHANNEL CATFISH | 594 | 120.9 | 2.6 | 309 | 240 | 83.9 | 7.4 | 240 | 59.6 | 2.85 | 9 |
| RAINBOW TROUT | 423 | 113.4 | 1.8 | 181 | 127 | 117.9 | 3.9 | 127 | 70.0 | 1.54 | 6 |
| BROWN TROUT | 32 | 545.2 | 0.1 | 0 | 0 | . | 0.0 | 0 | 100.0 | . | 0 |
| BLUEGILL | 2592 | 49.1 | 11.2 | 1054 | 255 | 70.0 | 7.9 | 255 | 90.2 | 0.23 | 9 |
| SMALLMOUTH BASS | 13155 | 12.7 | 57.0 | 12891 | 1027 | 23.7 | 31.9 | 1027 | 92.2 | 2.64 | 43 |
| LARGEMOUTH BASS | 4163 | 23.8 | 18.0 | 3943 | 338 | 48.5 | 10.5 | 338 | 91.9 | 2.05 | 11 |
| BLACK CRAPPIE | 696 | 108.1 | 3.0 | 585 | 447 | 104.4 | 13.9 | 447 | 35.8 | 0.94 | 15 |
| WALLEYE | 1421 | 54.9 | 6.2 | 916 | 789 | 46.9 | 24.5 | 789 | 44.5 | 3.32 | 22 |

## SUMMARY OF FISHING EFFORT AND CATCH RATES FOR INTENDED SPECIES GROUPS - 2006

**LAKE=SOUTH HOLSTON**

| 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 | 851 | 45.5 | 132 | 0.7 | 0.18 | 51.0 | 0.18 | 51.0 | 6 |
| RAINBOW TROUT | 1722 | 33.4 | 262 | 1.4 | 0.13 | 44.9 | 0.13 | 44.9 | 11 |
| ANY TROUT | 6565 | 20.6 | 1005 | 5.3 | 0.03 | 200.8 | 0.01 | 349.3 | 32 |
| ANY SUNFISH | 233 | 90.0 | 36 | 0.2 | 4.61 | | 1.51 | | 2 |
| ANY BLACK BASS | 66909 | 12.1 | 10277 | 53.6 | 0.26 | 14.9 | 0.01 | 79.3 | 309 |
| SMALLMOUTH BASS | 8495 | 16.6 | 1305 | 6.8 | 0.19 | 36.0 | 0.09 | 74.2 | 46 |
| ANY CRAPPIE | 11595 | 25.1 | 1789 | 9.3 | 0.12 | 68.7 | 0.09 | 77.5 | 63 |
| WALLEYE | 17580 | 17.1 | 2704 | 14.1 | 0.08 | 61.5 | 0.06 | 63.3 | 81 |
| ANY SPECIES | 10958 | 19.8 | 1687 | 8.8 | 0.19 | 69.0 | 0.05 | 166.1 | 65 |
| **TOTAL** | **124908** | | **19197** | | | | | | |

## SUMMARY OF RELATIVE SPECIES CATCH RATES WITHIN TARGET GROUPS - 2006

**LAKE=SOUTH HOLSTON**

| TARGET GROUP | SPECIES WITHIN TARGET GROUPS | RELATIVE CATCH RATE | RELATIVE HARVEST RATE |
|---|---|---|---|
| ANY CATFISH | | | |
| | CHANNEL CATFISH | 0.18 | 0.18 |
| ANY TROUT | | | |
| | RAINBOW TROUT | 0.03 | 0.01 |
| | BROWN TROUT | 0.00 | 0.00 |
| ANY SUNFISH | | | |
| | BLUEGILL | 4.61 | 1.51 |
| ANY BLACK BASS | | | |
| ANY BLACK BASS | | | |
| | SMALLMOUTH BASS | 0.17 | 0.01 |
| | LARGEMOUTH BASS | 0.05 | 0.00 |
| ANY CRAPPIE | | | |
| | BLACK CRAPPIE | 0.12 | 0.09 |

## 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=SOUTH HOLSTON**

| 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 | 12 | 0.33 | 4 | 0.24 | 47 |
| 02 FEBRUARY | 0 | | 0 | 0.23 | 26 |
| 03 MARCH | 0 | | 0 | 0.27 | 23 |
| 04 APRIL | 0 | | 0 | 0.19 | 26 |
| 05 MAY | 0 | | 0 | 0.23 | 30 |
| 06 JUNE | 0 | | 0 | 0.23 | 16 |
| 07 JULY | 0 | | 0 | 0.28 | 38 |
| 08 AUGUST | 0 | | 0 | 0.26 | 24 |
| 09 SEPTEMBER | 0 | | 0 | 0.37 | 28 |
| 10 OCTOBER | 0 | | 0 | 0.30 | 36 |
| 11 NOVEMBER | 0 | | 0 | 0.30 | 29 |
| 12 DECEMBER | 0 | | 0 | 0.25 | 28 |

## SUMMARY OF TRIP EXPENDITURES AND CONSUMER SURPLUS FOR INTENDED SPECIES - 2006

**LAKE=SOUTH HOLSTON**

| INTENDED SPECIES | TOTAL TRIP EXPENDITURES | TOTAL CONSUMER SURPLUS | TOTAL VALUE BY ANGLERS | NUMBER OF INTERVIEWS |
|---|---|---|---|---|
| ANY CATFISH | 2090 | 530 | 2620 | 6 |
| RAINBOW TROUT | 2460 | 2230 | 4680 | 11 |
| ANY TROUT | 9780 | 9810 | 19590 | 32 |
| ANY SUNFISH | 290 | 450 | 740 | 2 |
| ANY BLACK BASS | 134640 | 91350 | 226000 | 309 |
| SMALLMOUTH BASS | 12400 | 10720 | 23120 | 46 |
| ANY CRAPPIE | 17840 | 17310 | 35150 | 63 |
| WALLEYE | 33010 | 23250 | 56260 | 81 |
| ANY SPECIES | 9940 | 16080 | 26020 | 65 |
| **TOTAL** | **222450** | **171730** | **394180** | **615** |

# SUMMARY OF SOCIOLOGICAL QUESTIONS - 2006

## LAKE=SOUTH HOLSTON

### DISTRIBUTION OF STATES OF RESIDENCE OF INTERVIEWED ANGLERS

| STATE | NUMBER ANGLERS INTERVIEWED | PERCENT CONTRIBUTION |
|---|---|---|
| TN | 719 | 70.9 |
| VA | 264 | 26.0 |
| OTHERS | 31 | 3.1 |

### DISTRIBUTION OF COUNTIES OF RESIDENCE OF INTERVIEWED ANGLERS

| COUNTY | NUMBER ANGLERS INTERVIEWED | PERCENT CONTRIBUTION |
|---|---|---|
| CARTER | 72 | 10.0 |
| JOHNSON | 63 | 8.8 |
| SULLIVAN | 517 | 71.8 |
| WASHINGTON | 56 | 7.8 |
| OTHERS IN TN | 11 | 1.5 |
| 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 | 794 | 78.3 |
| B) 26-100 | 204 | 20.1 |
| C) 101-250 | 14 | 1.4 |
| D) > 250 | 2 | 0.2 |

### DISTRIBUTION OF REASONS WHY INTERVIWED ANGLERS MADE THE TRIP

| REASON FOR TRIP | NUMBER ANGLERS INTERVIEWED | PERCENT CONTRIBUTION |
|---|---|---|
| A) FISHING | 614 | 100 |

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

| NUMBER DAYS IN TRIP | NUMBER ANGLERS INTERVIEWED | PERCENT CONTRIBUTION |
|---|---|---|
| A) 1 | 612 | 99.5 |
| B) 2-5 | 3 | 0.5 |