

**SOUTH HOLSTON RESERVOIR  
CREEL SURVEY 2007**

MONTHLY ANGLING EFFORT FOR ALL ANGLERS - 2007

LAKE=SOUTH HOLSTON

| MONTH                 | ANGLER<br>HOURS | RELATIVE<br>STANDARD<br>ERROR | HOURS<br>PER<br>ACRE | ANGLER<br>TRIPS | TRIPS<br>PER<br>ACRE | PERCENT<br>EFFORT |
|-----------------------|-----------------|-------------------------------|----------------------|-----------------|----------------------|-------------------|
| 01 JANUARY            | 6850            | 13.3                          | 1.1                  | 1049            | 0.2                  | 5.6               |
| 02 FEBRUARY           | 6944            | 23.1                          | 1.1                  | 1028            | 0.2                  | 5.7               |
| 03 MARCH              | 10851           | 16.6                          | 1.7                  | 1772            | 0.3                  | 8.9               |
| 04 APRIL              | 11188           | 24.6                          | 1.8                  | 1762            | 0.3                  | 9.2               |
| 05 MAY                | 12628           | 16.0                          | 2.0                  | 1988            | 0.3                  | 10.4              |
| 06 JUNE               | 12612           | 22.3                          | 2.0                  | 1958            | 0.3                  | 10.3              |
| 07 JULY               | 16656           | 15.3                          | 2.6                  | 2525            | 0.4                  | 13.7              |
| 08 AUGUST             | 8865            | 9.0                           | 1.4                  | 1369            | 0.2                  | 7.3               |
| 09 SEPTEMBER          | 10775           | 20.1                          | 1.7                  | 1632            | 0.3                  | 8.8               |
| 10 OCTOBER            | 7719            | 15.0                          | 1.2                  | 1213            | 0.2                  | 6.3               |
| 11 NOVEMBER           | 7839            | 13.7                          | 1.2                  | 1229            | 0.2                  | 6.4               |
| 12 DECEMBER           | 8999            | 23.6                          | 1.4                  | 1341            | 0.2                  | 7.4               |
| -----<br><b>TOTAL</b> | <b>121926</b>   |                               |                      | <b>18866</b>    |                      |                   |

MONTHLY CATCH STATISTICS FOR ALL ANGLERS - 2007

LAKE=SOUTH HOLSTON

| MONTH        | NUMBER<br>FISH<br>CAUGHT | RSE<br>FOR<br>CATCH | FISH<br>CAUGHT<br>PER HOUR | RSE FOR<br>CATCH<br>RATE | NUMBER<br>FISH<br>HARVESTED | RSE<br>FOR<br>HARVEST | FISH<br>HARVESTED<br>PER HOUR | RSE FOR<br>HARVEST<br>RATE |
|--------------|--------------------------|---------------------|----------------------------|--------------------------|-----------------------------|-----------------------|-------------------------------|----------------------------|
| 01 JANUARY   | 1096                     | 21.7                | 0.16                       | 16.7                     | 137                         | 30.4                  | 0.02                          | 34.1                       |
| 02 FEBRUARY  | 1805                     | 27.5                | 0.26                       | 14.7                     | 347                         | 55.6                  | 0.05                          | 51.8                       |
| 03 MARCH     | 1736                     | 22.3                | 0.16                       | 15.0                     | 434                         | 31.8                  | 0.04                          | 28.0                       |
| 04 APRIL     | 1119                     | 34.8                | 0.10                       | 23.9                     | 224                         | 44.4                  | 0.02                          | 35.1                       |
| 05 MAY       | 1515                     | 28.2                | 0.12                       | 22.7                     | 126                         | 44.0                  | 0.01                          | 30.9                       |
| 06 JUNE      | 1640                     | 39.4                | 0.13                       | 31.9                     | 252                         | 34.4                  | 0.02                          | 28.9                       |
| 07 JULY      | 2165                     | 27.9                | 0.13                       | 22.4                     | 333                         | 41.9                  | 0.02                          | 50.4                       |
| 08 AUGUST    | 1064                     | 37.1                | 0.12                       | 36.5                     | 177                         | 20.1                  | 0.02                          | 16.2                       |
| 09 SEPTEMBER | 2586                     | 39.6                | 0.24                       | 33.7                     | 216                         | 42.3                  | 0.02                          | 39.9                       |
| 10 OCTOBER   | 2084                     | 34.1                | 0.27                       | 30.6                     | 1389                        | 54.3                  | 0.18                          | 52.0                       |
| 11 NOVEMBER  | 1568                     | 22.2                | 0.20                       | 17.0                     | 314                         | 51.8                  | 0.04                          | 48.5                       |
| 12 DECEMBER  | 1530                     | 35.7                | 0.17                       | 26.0                     | 180                         | 77.6                  | 0.02                          | 62.4                       |
| -----        | -----                    |                     |                            |                          | -----                       |                       |                               |                            |
| <b>TOTAL</b> | <b>19908</b>             |                     |                            |                          | <b>4129</b>                 |                       |                               |                            |

**SUMMARY OF SPECIES CATCH STATISTICS - 2007**

**LAKE=SOUTH HOLSTON**

| <b>SPECIES</b>   | <b>TOTAL<br/>NUMBER<br/>FISH<br/>CAUGHT</b> | <b>RSE<br/>FOR<br/>CATCH</b> | <b>SPECIES<br/>CATCH<br/>COMPOSITION<br/>(%)</b> | <b>INTENDED<br/>NUMBER<br/>CAUGHT</b> | <b>TOTAL<br/>NUMBER<br/>FISH<br/>HARVESTED</b> | <b>RSE<br/>FOR<br/>HARVEST</b> | <b>SPECIES<br/>HARVEST<br/>COMPOSITION<br/>(%)</b> | <b>INTENDED<br/>NUMBER<br/>HARVESTED</b> | <b>% OF<br/>CAUGHT<br/>FISH<br/>RELEASED</b> | <b>AVERAGE<br/>WEIGHT<br/>(LBS)</b> | <b>NUMBER<br/>FISH<br/>RECORDED</b> |
|------------------|---|------------------------------|--|---------------------------------------|--|--------------------------------|--|--|--|-------------------------------------|-------------------------------------|
| CHANNEL CATFISH  | 741   | 91.2                         | 3.7  | 456                                   | 483  | 96.5                           | 11.7   | 446                                      | 34.8   | 2.93                                | 13                                  |
| FLATHEAD CATFISH | 85  | 186.7                        | 0.4  | 57                                    | 85   | 186.7                          | 2.1  | 57                                       | 0.0  | 10.73                               | 3                                   |
| MUSKELLUNGE      | 66  | 467.3                        | 0.3  | 0                                     | 0  | .                              | 0.0  | 0  | 100.0  | .                                   | 0                                   |
| RAINBOW TROUT    | 587   | 97.4                         | 2.9  | 281                                   | 251  | 76.5                           | 6.1  | 251                                      | 57.2   | 1.65                                | 8                                   |
| BROWN TROUT      | 370   | 146.2                        | 1.8  | 44                                    | 36   | 351.2                          | 0.9  | 36                                       | 90.3   | 1.70                                | 1                                   |
| BLUEGILL         | 1343  | 78.7                         | 6.7  | 746                                   | 209  | 85.8                           | 5.1  | 149                                      | 84.4   | 0.26                                | 7                                   |
| SMALLMOUTH BASS  | 11527                                       | 11.0                         | 57.2   | 11346                                 | 1632   | 29.8                           | 39.5   | 1559                                     | 85.8   | 2.44                                | 45                                  |
| LARGEMOUTH BASS  | 3741  | 22.1                         | 18.6   | 3692                                  | 422  | 59.6                           | 10.2   | 422                                      | 88.7   | 2.11                                | 10                                  |
| BLACK CRAPPIE    | 670   | 112.6                        | 3.3  | 542                                   | 417  | 129.7                          | 10.1   | 417                                      | 37.8   | 0.89                                | 12                                  |
| WALLEYE          | 1009  | 59.8                         | 5.0  | 584                                   | 598  | 57.8                           | 14.5   | 598                                      | 40.7   | 3.35                                | 18                                  |

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

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      | 3106         | 24.5                 | 480          | 2.5            | 0.12                   |                        | 0.12                      |                          | 9                    |
| RAINBOW TROUT    | 368          | 78.9                 | 58           | 0.3            | 0.00                   |                        | 0.00                      |                          | 3                    |
| ANY TROUT        | 10099        | 15.7                 | 1574         | 8.3            | 0.08                   | 95.5                   | 0.06                      | 100.8                    | 53                   |
| ANY SUNFISH      | 792          | 56.5                 | 120          | 0.6            | 1.52                   |                        | 0.35                      |                          | 2                    |
| ANY BLACK BASS   | 64527        | 6.8                  | 9989         | 52.9           | 0.26                   | 16.5                   | 0.01                      | 105.7                    | 309                  |
| SMALLMOUTH BASS  | 4376         | 21.7                 | 669          | 3.6            | 0.25                   | 27.9                   | 0.14                      | 61.2                     | 27                   |
| LARGEMOUTH BASS  | 280          | 97.9                 | 42           | 0.2            | 0.25                   |                        | 0.25                      |                          | 1                    |
| ANY CRAPPIE      | 7564         | 17.3                 | 1174         | 6.2            | 0.13                   | 78.6                   | 0.09                      | 79.0                     | 47                   |
| WALLEYE          | 21543        | 10.9                 | 3335         | 17.7           | 0.04                   | 77.4                   | 0.04                      | 85.8                     | 102                  |
| ANY SPECIES      | 9271         | 15.9                 | 1427         | 7.6            | 0.11                   | 102.9                  | 0.03                      | 188.4                    | 52                   |
| -----<br>TOTAL   | 121926       |                      | 18868        |                |                        |                        |                           |                          |                      |

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

LAKE=SOUTH HOLSTON

| <b>TARGET<br/>GROUP</b> | <b>SPECIES WITHIN<br/>TARGET<br/>GROUPS</b> | <b>RELATIVE<br/>CATCH<br/>RATE</b> | <b>RELATIVE<br/>HARVEST<br/>RATE</b> |
|-------------------------|---|------------------------------------|--------------------------------------|
| ANY CATFISH             | CHANNEL CATFISH                             | 0.11                               | 0.11                                 |
|                         | FLATHEAD CATFISH                            | 0.01                               | 0.01                                 |
| ANY TROUT               | RAINBOW TROUT                               | 0.07                               | 0.05                                 |
|                         | BROWN TROUT                                 | 0.01                               | 0.01                                 |
| ANY SUNFISH             | BLUEGILL                                    | 1.52                               | 0.35                                 |
| ANY BLACK BASS          | SMALLMOUTH BASS                             | 0.16                               | 0.02                                 |
|                         | LARGEMOUTH BASS                             | 0.05                               | 0.01                                 |
|                         | LARGEMOUTH BASS                             | 0.05                               | 0.01                                 |
| ANY CRAPPIE             | BLACK CRAPPIE                               | 0.13                               | 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<br>EFFORT BY<br>TOURNAMENT<br>ANGLERS | CATCH RATE<br>FOR<br>TOURNAMENT<br>ANGLERS | # OF<br>INTERVIEWS<br>(TOURNAMENT) | CATCH RATE<br>FOR<br>NON-TOURNAMENT<br>ANGLERS | # OF<br>INTERVIEWS<br>(NON-TOURNAMENT) |
|--------------|--|--|------------------------------------|--|--|
| 01 JANUARY   | 14   | 0.32                                       | 6                                  | 0.27   | 26                                     |
| 02 FEBRUARY  | 17   | 0.32                                       | 4                                  | 0.28   | 20                                     |
| 03 MARCH     | 0  |  | 0                                  | 0.22   | 32                                     |
| 04 APRIL     | 0  |  | 0                                  | 0.22   | 25                                     |
| 05 MAY       | 7  | 0.21                                       | 3                                  | 0.23   | 29                                     |
| 06 JUNE      | 28   | 0.41                                       | 4                                  | 0.19   | 21                                     |
| 07 JULY      | 0  |  | 0                                  | 0.27   | 33                                     |
| 08 AUGUST    | 0  |  | 0                                  | 0.14   | 21                                     |
| 09 SEPTEMBER | 27   | 0.35                                       | 5                                  | 0.32   | 24                                     |
| 10 OCTOBER   | 0  |  | 0                                  | 0.27   | 25                                     |
| 11 NOVEMBER  | 0  |  | 0                                  | 0.29   | 31                                     |
| 12 DECEMBER  | 37   | 0.41                                       | 7                                  | 0.27   | 21                                     |

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

LAKE=SOUTH HOLSTON

| <b>INTENDED<br/>SPECIES</b> | <b>TOTAL<br/>TRIP<br/>EXPENDITURES</b> | <b>TOTAL<br/>CONSUMER<br/>SURPLUS</b> | <b>TOTAL<br/>VALUE<br/>BY ANGLERS</b> | <b>NUMBER<br/>OF<br/>INTERVIEWS</b> |
|-----------------------------|--|---------------------------------------|---------------------------------------|-------------------------------------|
| ANY CATFISH                 | 2960                                   | 1770                                  | 4730                                  | 9                                   |
| RAINBOW TROUT               | 780                                    | 870                                   | 1650                                  | 3                                   |
| ANY TROUT                   | 12740                                  | 13250                                 | 25990                                 | 53                                  |
| ANY SUNFISH                 | 530                                    | 420                                   | 960                                   | 1                                   |
| ANY BLACK BASS              | 136890                                 | 73650                                 | 210540                                | 308                                 |
| SMALLMOUTH BASS             | 6160                                   | 5350                                  | 11510                                 | 27                                  |
| LARGEMOUTH BASS             | 1270                                   | 210                                   | 1490                                  | 1                                   |
| ANY CRAPPIE                 | 11200                                  | 11800                                 | 23000                                 | 47                                  |
| WALLEYE                     | 37930                                  | 32060                                 | 69990                                 | 102                                 |
| ANY SPECIES                 | 6180                                   | 14020                                 | 20200                                 | 51                                  |
| -----<br><b>TOTAL</b>       | <b>216640</b>                          | <b>153400</b>                         | <b>370060</b>                         | <b>602</b>                          |

**SUMMARY OF SOCIOLOGICAL QUESTIONS - 2007**

**LAKE=SOUTH HOLSTON**

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

| <b>STATE</b> | <b>NUMBER<br/>ANGLERS<br/>INTERVIEWED</b> | <b>PERCENT<br/>CONTRIBUTION</b> |
|--------------|---|---------------------------------|
| TN           | 758                                       | 73.2                            |
| VA           | 262                                       | 25.3                            |
| OTHERS       | 16  | 1.5                             |

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

| <b>COUNTY</b> | <b>NUMBER<br/>ANGLERS<br/>INTERVIEWED</b> | <b>PERCENT<br/>CONTRIBUTION</b> |
|---------------|---|---------------------------------|
| CARTER        | 59  | 7.8                             |
| JOHNSON       | 83  | 11.0                            |
| SULLIVAN      | 555                                       | 73.6                            |
| WASHINGTON    | 53  | 7.0                             |
| OTHERS IN TN  | 4   | 0.5                             |

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

| <b>ONE-WAY<br/>MILES<br/>TRAVELED</b> | <b>NUMBER<br/>ANGLERS<br/>INTERVIEWED</b> | <b>PERCENT<br/>CONTRIBUTION</b> |
|---------------------------------------|---|---------------------------------|
| A) 0-25                               | 880                                       | 84.9                            |
| B) 26-100                             | 140                                       | 13.5                            |
| C) 101-250                            | 9   | 0.9                             |
| D) > 250                              | 7   | 0.7                             |

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

| <b>REASON<br/>FOR<br/>TRIP</b> | <b>NUMBER<br/>ANGLERS<br/>INTERVIEWED</b> | <b>PERCENT<br/>CONTRIBUTION</b> |
|--------------------------------|---|---------------------------------|
| A) FISHING                     | 601                                       | 99.5                            |
| B) VACATION                    | 3   | 0.5                             |

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

| <b>NUMBER<br/>DAYS<br/>IN TRIP</b> | <b>NUMBER<br/>ANGLERS<br/>INTERVIEWED</b> | <b>PERCENT<br/>CONTRIBUTION</b> |
|------------------------------------|---|---------------------------------|
| A) 1                               | 601                                       | 99.3                            |
| B) 2-5                             | 4   | 0.7                             |