

GAINESVILLE RESERVOIR SPRING MANAGEMENT REPORT FY 2009

Prepared by

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Introduction

Gainesville Reservoir was previously sampled in 1988, 1995, 1999, 2003 and 2006 (Haffner et. al. 2006). The catch per hour (CPH) of largemouth bass in 2006 was slightly below the lake average (64.7) but RSD and CPH of Q-P fish were equal to or greater than the 2003 sample. The abundance of largemouth bass \geq 380 mm, measured by either relative stock density (RSD) or catch per hour (CPH) failed to reach the statewide average. Growth and relative weights were satisfactory.

Methods

Largemouth bass were collected by electrofishing on March 24 and 26, 2009 at five randomly-selected locations according to the guidelines in the Alabama Reservoir Management Manual (1999).

Results and Discussion

Largemouth Bass

The CPH of largemouth bass (N=200) was 80.0, which represented the highest catch rate ever recorded at Gainesville Reservoir. This catch rate ranked well above the lake average of 64.7 and was greater than the statewide 75th percentile value of 77.0 (Table 2). The RSD of stock, quality and preferred-size fish was 56, 29 and 14 percent, respectively. The RSD values of stock and preferred-size fish were substantially greater than the 2006 collection and approximated lake averages. The abundance of bass \geq 380 mm at Gainesville Reservoir has consistently remained well below the statewide average. Mean relative weight (Wr) values of largemouth bass ranged from 97 to 104 and were above the lake and statewide average values (Table 2).

The largemouth bass collection included nine age classes (ages 1-8 and 10) with three strong year-classes (2006-2008) represented (Table 3). In 2009, growth rates of 1 to 5-year old largemouth bass were near or slightly below the lake average. Growth of 6 and 7-year old bass was similar to previous collections and was above the lake average (Figure 5).

Total annual mortality of largemouth bass (ages 2-10) was calculated to be 41% (adjusted $r^2=0.88$, $z= -0.5215$) (Figure 6).

Unfortunately, BAIT data was reported from only 37 anglers that fished in two tournaments at Gainesville Reservoir in 2008. The number of bass weighed-in/angler-day

was 3.96, similar to 2007, but was substantially greater than the statewide average of 3.06 (Abernethy 2009). The pounds of bass weighed-in/angler-day slipped to 6.37 in 2008, but was well above the statewide average of 5.79. One bass, five pounds or larger, was caught by tournament anglers in 2008. The average weight of bass weighed-in was slightly below the statewide average and the percent success of anglers at Gainesville Reservoir was slightly above the statewide average.

Creel Survey

One hundred and seventy eight anglers (91 parties) were interviewed during spring 2009. Bass and crappie anglers made up 36% and 46.1%, respectively, of all anglers surveyed (Table 4). Thirty two anglers (17.9%) that were interviewed were fishing for other species such as striped bass, bream, or catfish.

During 2009, bass anglers caught largemouth bass of all sizes at a rate of 1.01 fish/hour, and harvested bass at a rate of only 0.07 fish/hour. Bass tournament anglers had an identical catch rate (1.01 fish/hour), but reported a lower harvest rate of 0.03 fish/hour (Table 5).

The catch and harvest rate of crappie in Gainesville Reservoir was 2.10 and 1.21 fish/hour, respectively. Catch and harvest of "legal size" crappie (fish \geq 9 inches in length) was 1.40 and 1.21 fish/hour, respectively (Table 5). Catch and harvest rates for crappie on Gainesville Reservoir are generally higher than on many other reservoirs in District III, probably due to relatively strong year classes and good recruitment. In comparison, the catch and harvest rate of crappie (any size) at Lay Reservoir in 2008 was 0.25 and 0.15 fish/hour, respectively.

A total of 63 bass anglers (98.4%) surveyed caught one or more bass per trip while 46 (71.9%) caught five or more bass per trip. Only 10 (15.7%) of the 64 bass anglers interviewed harvested black bass (Table 7). Bass anglers expended a total of 469.3 hours of fishing effort during the 2009 creel survey while total effort (all anglers) was reported at 1,186.3 hours (Table 10).

Eighty two crappie anglers were interviewed at Gainesville Reservoir in 2009 having a total fishing effort of 574.8 hours. Seventy seven crappie anglers (93.9%) caught one or more crappie during their fishing trip and 62 (75.6%) caught five or more crappie per trip. Seventy two (87.8%) crappie anglers harvested one or more crappie per trip from Gainesville Reservoir while 46 (56%) anglers harvested five or more crappie (Table 9).

Aquatic Plants

Three exotic plant species have adversely impacted recreational activities on Gainesville Reservoir. Water hyacinths became established on the Tennessee-Tombigbee Waterway in the 1990's. In the winter of 2008-2009, the density of water hyacinths fell dramatically due to cold winter temperatures and flooding. During the summer of 2009, water hyacinth populations have expanded, but not at an alarming rate (Danny Hartley, USACE, personal communication). In 2005, Cuban bulrush became established. Floodwaters during the winter of 2008-2009 pushed mats of Cuban bulrush out of sloughs and backwater areas and downstream. Presently, Cuban bulrush is rapidly increasing in the backs of many sloughs but is being aggressively treated by the USACE (Danny Hartley, USACE, personal communication). Hydrilla has been found on the Waterway for nearly two decades. As a result of USACE control measures and floodwaters, hydrilla and Eurasian watermilfoil are not rapidly expanding their ranges but remains problematic (Danny Hartley, USACE, personal communication).

Summary

The CPH of largemouth bass during sampling work in 2009 represented the highest catch rate ever recorded from Gainesville Reservoir. The largemouth bass collection included nine age classes, but few fish older than age-4 were present in the sample. Fish age-5 and younger are growing relatively slowly and total annual mortality was 41%. Relative weight (W_r) values were at or above lake averages and statewide means. Gainesville Reservoir is a riverine impoundment that contains few creeks and backwater areas. Sampling in past years has been somewhat handicapped by fluctuating river levels and muddy water. However, river conditions in spring 2009 were ideal for sampling activities and a new record was set for electrofishing catch rates. The abundance of bass ≥ 380 mm at Gainesville Reservoir continues to remain well below the statewide average. The creel survey indicated that Gainesville Reservoir continues to be a popular area for recreational angling by the public. Percent success was relatively high with over 98% of bass anglers catching at least one or more bass per trip and 93.9% of all crappie anglers catching at least one crappie per trip.

Conclusions

1. Resample Gainesville Reservoir in 2012 and perform a creel survey.

2. Encourage the USACE to maintain an aggressive aquatic plant management program directed at preventing the spread of Cuban bulrush, water hyacinths, and hydrilla throughout the reservoir.
3. Encourage more local bass clubs to participate in the Bass Angler Information Team (BAIT) Program. BAIT data was reported from only 37 anglers that fished in two tournaments at Gainesville Reservoir during 2008.
4. Encourage the USACE to perform periodic, maintenance dredging at the mouths of major tributaries, in order to keep them open and accessible to anglers and boaters.
5. Data analysis indicates that there is currently no need to change or modify the black bass management regulations.

Literature Cited

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Jenkins, R. M. 1967. The influence of some environmental factors on the standing crop and harvest of fishes in U.S. reservoirs. Pages 298-321 in Reservoir Fishery Resources Symposium. Southern Division American Fisheries Society, Bethesda, Maryland, USA.

Ryder, R. A. 1965. A method for estimating the potential fish production of north-temperate lakes. Transactions of the American Fisheries Society. 94:213-218.

Appendix A

Tables and Figures

Table 1. Morphometric, physical and chemical characteristics of Gainesville Reservoir.

| | |
|-----------------------------|---|
| Surface area | 6,400 acres |
| Drainage area | 7,142 sq. mi. |
| Full pool elevation | 109 feet-msl |
| Mean annual fluctuation | 3 feet |
| Shoreline distance | 200 miles |
| Shoreline development index | 17.8 |
| Mean depth | 6.7 feet |
| Maximum depth | 51 feet |
| Outlet depth | Surface |
| Thermocline depth | None |
| Stratification index | None |
| Total dissolved solids | 79 mg/l |
| Chlorophyll a | 9.7 mg/m ³ |
| Retention time | 2 days |
| Morphoedaphic index | 11.8 TDS/mean depth(ft) (Ryder 1965) |
| Growing season | 235 frost free days (Jenkins 1967) |
| Year of impoundment | 1978 |

Table 2. Incremental relative stock density (RSD) catch per hour (CPH) and relative weight (Wr) of largemouth bass from spring electrofishing surveys at Gainesville Reservoir.

| Year | No. of samples | Total effort | Substock | | | RSD S - Q | | | | RSD Q - P | | | | RSD P - M | | | | RSD M - T | | | | Total | |
|---------------------|----------------|--------------|----------|------|-----|-----------|------|------|----|-----------|------|------|----|-----------|-----|------|-----|-----------|-----|------|-----|-------|------|
| | | | No. | CPH | SSR | No. | CPE | Pct. | Wr | No. | CPE | Pct. | Wr | No. | CPE | Pct. | Wr | No. | CPE | Pct. | Wr | No. | CPH |
| 1988 | 6 | 2.77 | 20 | 7.2 | 20 | 59 | 21.3 | 58 | 87 | 31 | 11.2 | 30 | 90 | 10 | 3.6 | 10 | 93 | 2 | 0.7 | 2 | 97 | 122 | 44.0 |
| 1995 | 6 | 2.91 | 51 | 17.5 | 46 | 66 | 22.7 | 59 | 89 | 19 | 6.5 | 17 | 90 | 20 | 6.9 | 18 | 96 | 6 | 2.1 | 5 | 95 | 162 | 55.7 |
| 1999 | 4 | 2.04 | 31 | 15.2 | 25 | 67 | 32.8 | 54 | 86 | 41 | 20.1 | 33 | 89 | 10 | 4.9 | 8 | 95 | 5 | 2.4 | 4 | 90 | 154 | 75.4 |
| 2003 | 4 | 1.98 | 53 | 26.8 | 54 | 57 | 28.8 | 58 | 85 | 23 | 11.6 | 23 | 90 | 18 | 9.1 | 18 | 97 | 1 | 0.5 | 1 | 104 | 152 | 76.8 |
| 2006 | 5 | 2.38 | 31 | 13.0 | 30 | 49 | 20.6 | 48 | 90 | 42 | 17.6 | 41 | 95 | 10 | 4.2 | 10 | 91 | 2 | 0.8 | 2 | 101 | 134 | 56.2 |
| 2009 | 5 | 2.50 | 46 | 18.4 | 30 | 86 | 34.4 | 56 | 97 | 44 | 17.6 | 29 | 98 | 21 | 8.4 | 14 | 104 | 3 | 1.2 | 2 | 99 | 200 | 80.0 |
| Lake average | | | 16.3 | 34 | | 26.8 | 55 | 89 | | 14.1 | 29 | 92 | | 6.2 | 13 | 96 | | 1.3 | 3 | 98 | | 64.7 | |

| | | | | | | | | | | | | | | | |
|--------------------|------|----|------|----|----|------|----|----|------|----|----|-----|---|-----|------|
| Statewide average | 11.5 | 26 | 20.3 | 43 | 88 | 15.8 | 33 | 90 | 9.9 | 20 | 94 | 1.9 | 4 | 97 | 59.4 |
| Lower 25th percent | 3.9 | 11 | 10.8 | 33 | 84 | 8.6 | 26 | 85 | 4.5 | 13 | 89 | 0.7 | 2 | 92 | 28.5 |
| Upper 75th percent | 15.2 | 33 | 25.6 | 53 | 93 | 20.7 | 40 | 95 | 13.0 | 26 | 98 | 2.5 | 5 | 102 | 77.0 |

Table 3. Age composition and mean total length (mm) of largemouth bass from Gainesville Reservoir, March 2009.

| Age | Year Class | Number | Percent | CPE | Mean TL | SE | Range |
|--------------|------------|--------|---------|------|---------|----|-----------|
| 1 | 2008 | 48 | 24.0 | 19.2 | 155 | 5 | 87 - 212 |
| 2 | 2007 | 79 | 39.5 | 31.6 | 268 | 3 | 195 - 328 |
| 3 | 2006 | 49 | 24.5 | 19.6 | 321 | 6 | 232 - 412 |
| 4 | 2005 | 10 | 5.0 | 4.0 | 381 | 14 | 326 - 459 |
| 5 | 2004 | 7 | 3.5 | 2.8 | 433 | 15 | 388 - 482 |
| 6 | 2003 | 4 | 2.0 | 1.6 | 490 | 19 | 442 - 537 |
| 7 | 2002 | 1 | 0.5 | 0.4 | 546 | | |
| 8 | 2001 | 1 | 0.5 | 0.4 | 499 | | |
| 9 | 2000 | 0 | 0.0 | 0.0 | | | |
| 10 | 1999 | 1 | 0.5 | 0.4 | 510 | | |
| Total | | 200 | 100.0 | 80.0 | | | |

Table 4. Creel survey statistics of Gainesville Reservoir anglers, spring 2009.

| Type | No. of Parties | Pct. of Parties | No. of Anglers | Pct. of Anglers | Fishing effort | |
|--------------------------------|----------------|-----------------|----------------|-----------------|-----------------|--------------|
| | | | | | Hours | Percent |
| Fished for bass | 36 | 39.6 | 64 | 36.0 | 469.25 | 39.6 |
| Fished for crappie | 43 | 47.3 | 82 | 46.1 | 574.75 | 48.5 |
| Fished for other species | 12 | 13.2 | 32 | 18.0 | 142.25 | 12.0 |
| Total | 91 | 100.0 | 178 | 100.0 | 1,186.25 | 100.0 |
| Non-tournament bass anglers | 15 | 16.5 | 23 | 12.9 | 130.50 | 11.0 |
| Tournament bass anglers | 21 | 23.1 | 41 | 23.0 | 338.75 | 28.6 |
| Totals for bass anglers | 36 | 39.6 | 64 | 36.0 | 469.25 | 39.6 |

Table 5. Catch per hour (CPH) and harvest per hour (HPH) of bass, crappie, and other species by Gainesville Reservoir anglers during the creel survey, spring 2009.

| | |
|--|------|
| CPH of all crappie by crappie anglers | 2.10 |
| HPH of all crappie by crappie anglers | 1.21 |
| CPH of all black bass by bass anglers | 1.01 |
| HPH of all black bass by bass anglers | 0.07 |
| CPH of all black bass by bass tournament anglers | 1.01 |
| HPH of all black bass by bass tournament anglers | 0.03 |
| CPH of all black bass by non-tournament bass anglers | 1.02 |
| HPH of all black bass by non-tournament bass anglers | 0.20 |
| CPH of all black bass by crappie anglers | 0.19 |
| HPH of all black bass by crappie anglers | 0.05 |
| CPH of all black bass by other anglers | 0.16 |
| HPH of all black bass by other anglers | 0.10 |
| CPH of black bass < 12" by bass anglers | 0.41 |
| HPH of black bass < 12" by bass anglers | 0.01 |
| CPH of black bass < 12" by bass tournament anglers | 0.40 |
| HPH of black bass < 12" by bass tournament anglers | 0.00 |
| CPH of black bass < 12" by non-tournament bass anglers | 0.44 |
| HPH of black bass < 12" by non-tournament bass anglers | 0.05 |
| CPH of black bass ≥ 12" by bass anglers | 0.60 |
| HPH of black bass ≥ 12" by bass anglers | 0.06 |
| CPH of black bass ≥ 12" by bass tournament anglers | 0.61 |
| HPH of black bass ≥ 12" by bass tournament anglers | 0.03 |
| CPH of black bass ≥ 12" by non-tournament bass anglers | 0.58 |
| HPH of black bass ≥ 12" by non-tournament bass anglers | 0.15 |
| CPH of crappie < 9" by crappie anglers | 0.70 |
| HPH of crappie < 9" by crappie anglers | 0.01 |
| CPH of crappie > 9" by crappie anglers | 1.40 |
| HPH of crappie > 9" by crappie anglers | 1.21 |
| CPH of all fish by all anglers | 0.93 |
| HPH of all fish by all anglers | 0.80 |

Table 6. The total number of largemouth and spotted bass, bass anglers estimated they caught and kept or released per trip during the Gainesville Reservoir creel survey, spring 2009.

| Number of bass caught | Bass anglers | |
|--------------------------|--------------|-------|
| | No. | Pct. |
| 0 | 1 | 1.6 |
| 1 | 3 | 4.7 |
| 2 | 3 | 4.7 |
| 3 | 7 | 10.9 |
| 4 | 4 | 6.3 |
| 5 | 9 | 14.1 |
| 6 - 9 | 22 | 34.4 |
| 10 or more | 15 | 23.4 |
| Total | 64 | 100.0 |

Table 7. The total number of largemouth and spotted bass, bass anglers harvested per trip during the Gainesville Reservoir creel survey, spring 2009.

| Number of bass harvested | Bass anglers | |
|-----------------------------|--------------|-------|
| | No. | Pct. |
| 0 | 54 | 84.4 |
| 1 | 1 | 1.6 |
| 2 | 0 | 0.0 |
| 3 | 4 | 6.3 |
| 4 | 3 | 4.7 |
| 5 | 2 | 3.1 |
| 6 - 9 | 0 | 0.0 |
| 10 or more | 0 | 0.0 |
| Total | 64 | 100.0 |

Table 8. The total number of black and white crappie, crappie anglers estimated they caught and kept or released per trip during the Gainesville Reservoir creel survey, spring 2009.

| Number of crappie caught | Crappie anglers | |
|-----------------------------|-----------------|-------|
| | No. | Pct. |
| 0 | 5 | 6.1 |
| 1 | 5 | 6.1 |
| 2 | 3 | 3.7 |
| 3 | 5 | 6.1 |
| 4 | 2 | 2.4 |
| 5 | 6 | 7.3 |
| 6 - 10 | 12 | 14.6 |
| 11 - 20 | 24 | 29.3 |
| 21 - 30 | 12 | 14.6 |
| > 30 | 8 | 9.8 |
| Total | 82 | 100.0 |

Table 9. The total number of black and white crappie, crappie anglers harvested per trip during the Gainesville Reservoir creel survey, spring 2009.

| Number of crappie caught | Crappie anglers | |
|--------------------------|-----------------|--------------|
| | No. | Pct. |
| 0 | 10 | 12.2 |
| 1 | 6 | 7.3 |
| 2 | 8 | 9.8 |
| 3 | 4 | 4.9 |
| 4 | 8 | 9.8 |
| 5 | 6 | 7.3 |
| 6 - 10 | 10 | 12.2 |
| 11 - 20 | 23 | 28.0 |
| 21 - 30 | 7 | 8.5 |
| Total | 82 | 100.0 |

Table 10. Fishing effort by survey day at Gainesville Reservoir, spring 2009.

| Date | Site* | Bass anglers | | | Crappie anglers | | | Other anglers | | | All anglers | | |
|--------------|-------|--------------|---------------|--------------|-----------------|---------------|--------------|---------------|---------------|--------------|-------------|----------------|--------------|
| | | No. | Hrs. | Pct. | No. | Hrs. | Pct. | No. | Hrs. | Pct. | No. | Hrs. | Pct. |
| 15-Mar | SW | 3 | 16.00 | 3.4 | 7 | 47.25 | 8.2 | 0 | 0.00 | 0.0 | 10 | 63.25 | 5.3 |
| 22-Mar | C | 0 | 0.00 | 0.0 | 10 | 60.00 | 10.4 | 4 | 16.00 | 11.2 | 14 | 76.00 | 6.4 |
| 4-Apr | V | 4 | 20.50 | 4.4 | 23 | 174.50 | 30.4 | 8 | 37.25 | 26.2 | 35 | 232.25 | 19.6 |
| 11-Apr | SW | 25 | 199.50 | 42.5 | 14 | 112.75 | 19.6 | 2 | 10.00 | 7.0 | 41 | 322.25 | 27.2 |
| 19-Apr | V | 2 | 18.00 | 3.8 | 2 | 8.00 | 1.4 | 0 | 0.00 | 0.0 | 4 | 26.00 | 2.2 |
| 25-Apr | C | 5 | 20.75 | 4.4 | 14 | 85.25 | 14.8 | 5 | 20.00 | 14.1 | 24 | 126.00 | 10.6 |
| 9-May | V | 16 | 124.00 | 26.4 | 2 | 17.00 | 3.0 | 0 | 0.00 | 0.0 | 18 | 141.00 | 11.9 |
| 30-May | V | 9 | 70.50 | 15.0 | 10 | 70.00 | 12.2 | 13 | 59.00 | 41.5 | 32 | 199.50 | 16.8 |
| Total | | 64 | 469.25 | 100.0 | 82 | 574.75 | 100.0 | 32 | 142.25 | 100.0 | 178 | 1186.25 | 100.0 |

* V = Vienna Landing C = Cochrane Access Area SW = S. W. Taylor Access Area

Table 11. Comments of Gainesville Reservoir anglers creel survey, spring 2009.

| | Bass Anglers | | Crappie Anglers | | Other Anglers | | All Anglers | |
|---|--------------|-------|-----------------|-------|---------------|-------|-------------|-------|
| | No. | % | No. | % | No. | % | No. | % |
| Comments on questions asked all anglers surveyed. | | | | | | | | |
| Harvests black bass they catch from this lake | 34 | 53.1 | 48 | 58.5 | 18 | 56.3 | 100 | 56.2 |
| Does not harvest black bass they catch from this lake | 30 | 46.9 | 34 | 41.5 | 14 | 43.8 | 78 | 43.8 |
| Harvests black bass they catch from this lake 5% of the times they catch black bass | 4 | 6.3 | 1 | 1.2 | 0 | 0.0 | 5 | 2.8 |
| Harvests black bass they catch from this lake 10% of the times they catch black bass | 17 | 26.6 | 12 | 14.6 | 3 | 9.4 | 32 | 18.0 |
| Harvests black bass they catch from this lake 15% of the times they catch black bass | 2 | 3.1 | 0 | 0.0 | 0 | 0.0 | 2 | 1.1 |
| Harvests black bass they catch from this lake 25% of the times they catch black bass | 0 | 0.0 | 3 | 3.7 | 3 | 9.4 | 6 | 3.4 |
| Harvests black bass they catch from this lake 50% of the times they catch black bass | 9 | 14.1 | 11 | 13.4 | 9 | 28.1 | 29 | 16.3 |
| Harvests black bass they catch from this lake 75% of the times they catch black bass | 0 | 0.0 | 2 | 2.4 | 0 | 0.0 | 2 | 1.1 |
| Harvests black bass they catch from this lake 100% of the times they catch black bass | 2 | 3.1 | 19 | 23.2 | 2 | 6.3 | 23 | 12.9 |
| Approves of 9 inch minimum length limit on crappie | 64 | 100.0 | 82 | 100.0 | 32 | 100.0 | 178 | 100.0 |
| Voluntary comments on angler's subject of choice. | | | | | | | | |
| Wants state to stock more fish on this reservoir | 0 | 0.0 | 2 | 2.4 | 2 | 6.3 | 4 | 2.2 |
| Complaint about fishing license expiring on August 31st | 0 | 0.0 | 2 | 2.4 | 0 | 0.0 | 2 | 1.1 |
| Complaint about cost of nonresident fishing license for Mississippi anglers | 2 | 3.1 | 1 | 1.2 | 0 | 0.0 | 3 | 1.7 |
| Believes we need more places to buy fishing license, too hard to find | 1 | 1.6 | 0 | 0.0 | 0 | 0.0 | 1 | 0.6 |
| Wants a length limit on black bass on this lake | 9 | 14.1 | 4 | 4.9 | 3 | 9.4 | 16 | 9.0 |
| Wants a slot limit on black bass on Lake Tuscaloosa | 0 | 0.0 | 2 | 2.4 | 0 | 0.0 | 2 | 1.1 |
| Wants the 14" length limit on black bass on Demopolis Lake lifted or changed | 8 | 12.5 | 0 | 0.0 | 0 | 0.0 | 8 | 4.5 |
| Wants to raise the minimum length limit on crappie on this lake | 0 | 0.0 | 15 | 18.3 | 3 | 9.4 | 18 | 10.1 |
| Does not want aquatic weeds sprayed on this lake | 1 | 1.6 | 0 | 0.0 | 0 | 0.0 | 1 | 0.6 |
| Wants aquatic weeds sprayed on this lake to keep areas open for fishing | 1 | 1.6 | 3 | 3.7 | 2 | 6.3 | 6 | 3.4 |
| Wants water hyacinths controlled without herbicides | 0 | 0.0 | 3 | 3.7 | 0 | 0.0 | 3 | 1.7 |
| Wants cuban bulrush controlled on this lake | 0 | 0.0 | 2 | 2.4 | 0 | 0.0 | 2 | 1.1 |
| Complaint about reckless driving by yachts and large boats leaving dangerous wakes | 2 | 3.1 | 0 | 0.0 | 0 | 0.0 | 2 | 1.1 |
| Complaint about reckless and discourteous driving on this lake with personal watercraft | 2 | 3.1 | 0 | 0.0 | 0 | 0.0 | 2 | 1.1 |
| Does not want hybrid striped bass stocked on this lake | 0 | 0.0 | 2 | 2.4 | 0 | 0.0 | 2 | 1.1 |
| Believes we need more law enforcement on this lake | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Volunteered that he/she appreciates creel survey and job ADCNR is doing. | 0 | 0.0 | 1 | 1.2 | 0 | 0.0 | 1 | 0.6 |
| Wants dredging done at mouths of sloughs and creeks and access areas | 3 | 4.7 | 4 | 4.9 | 0 | 0.0 | 7 | 3.9 |
| Want to be able to keep gut hooked crappie less than 9 inches | 0 | 0.0 | 0 | 0.0 | 2 | 6.3 | 2 | 1.1 |
| No comment | 41 | 64.1 | 49 | 59.8 | 22 | 68.8 | 112 | 62.9 |

Table 12. Catch per hour (CPH) and harvest per hour (HPH) of bass by bass anglers, and crappie by crappie anglers during spring creel surveys in District III.

| Reservoir / Year | Bass anglers | | | | Crappie anglers | | | |
|--------------------|--------------|----------------|------|------|-----------------|----------------|------|------|
| | Number | Effort (hours) | CPH | HPH | Number | Effort (hours) | CPH | HPH |
| Bankhead / 1996 | 326 | 2208 | 0.77 | 0.10 | 96 | 457 | 0.79 | 0.47 |
| Warrior / 2000 | 188 | 1169 | 0.53 | 0.07 | 89 | 362 | 1.09 | 0.65 |
| Aliceville / 2002 | 259 | 1710 | 0.59 | 0.07 | 115 | 549 | 0.63 | 0.40 |
| Gainesville / 2003 | 178 | 1274 | 0.77 | 0.06 | 145 | 828 | 1.88 | 0.82 |
| Tuscaloosa / 2004 | 178 | 799 | 0.70 | 0.05 | 226 | 984 | 1.76 | 0.52 |
| Aliceville / 2006 | 168 | 1048 | 0.54 | 0.03 | 95 | 572 | 1.47 | 0.76 |
| Demopolis / 2007 | 79 | 428 | 0.76 | 0.01 | 119 | 705 | 2.63 | 0.92 |
| Lay / 2008 | 240 | 1423 | 0.57 | 0.02 | 87 | 365 | 0.25 | 0.17 |
| Gainesville / 2009 | 64 | 469 | 1.01 | 0.07 | 82 | 575 | 2.10 | 1.21 |
| Average | 187 | 1170 | 0.69 | 0.05 | 117 | 599 | 1.40 | 0.66 |

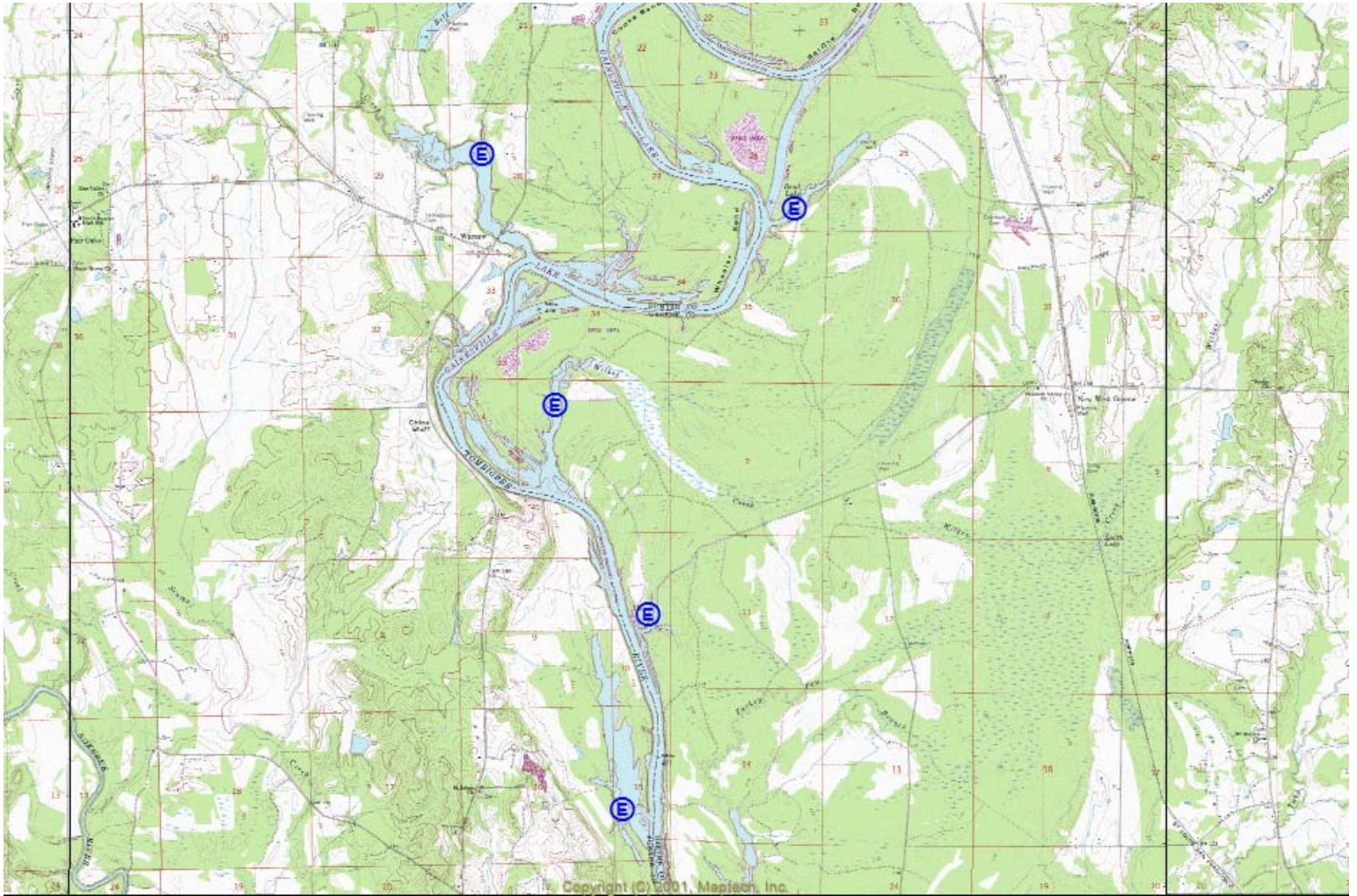


Figure 1. Electrofishing sites at Gainesville Reservoir, March 2009.

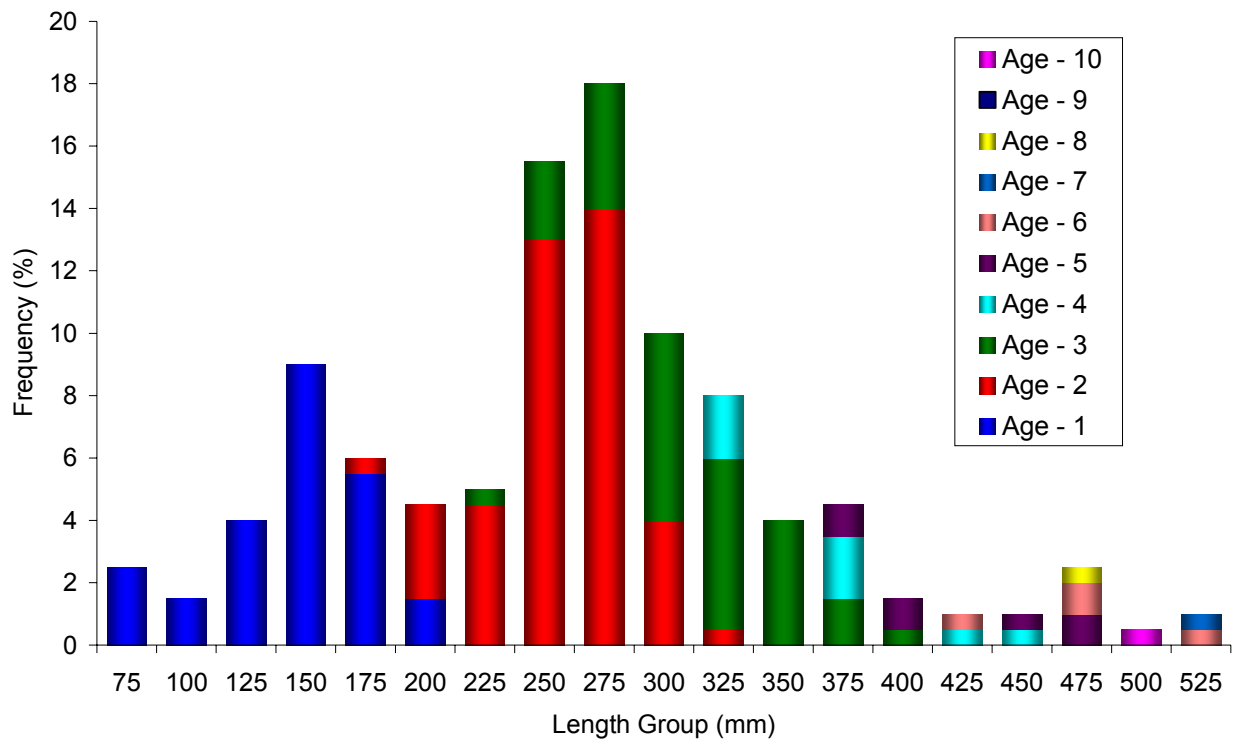


Figure 2. Length at age frequency of largemouth bass (N=200) at Gainesville Reservoir, March 2009.

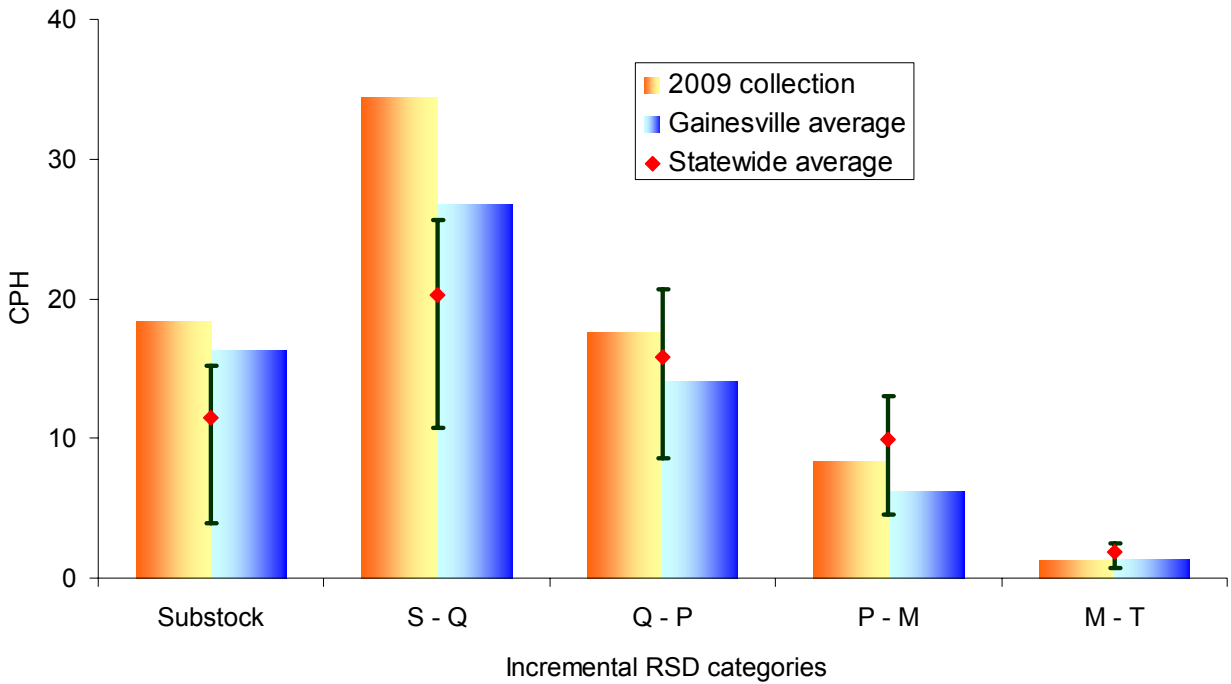


Figure 3. Catch per hour (CPH) of largemouth bass (N=200) at Gainesville Reservoir, March 2009, and the lake and statewide averages. Error bars represent the 25th and 75th percentile of CPH values, statewide.

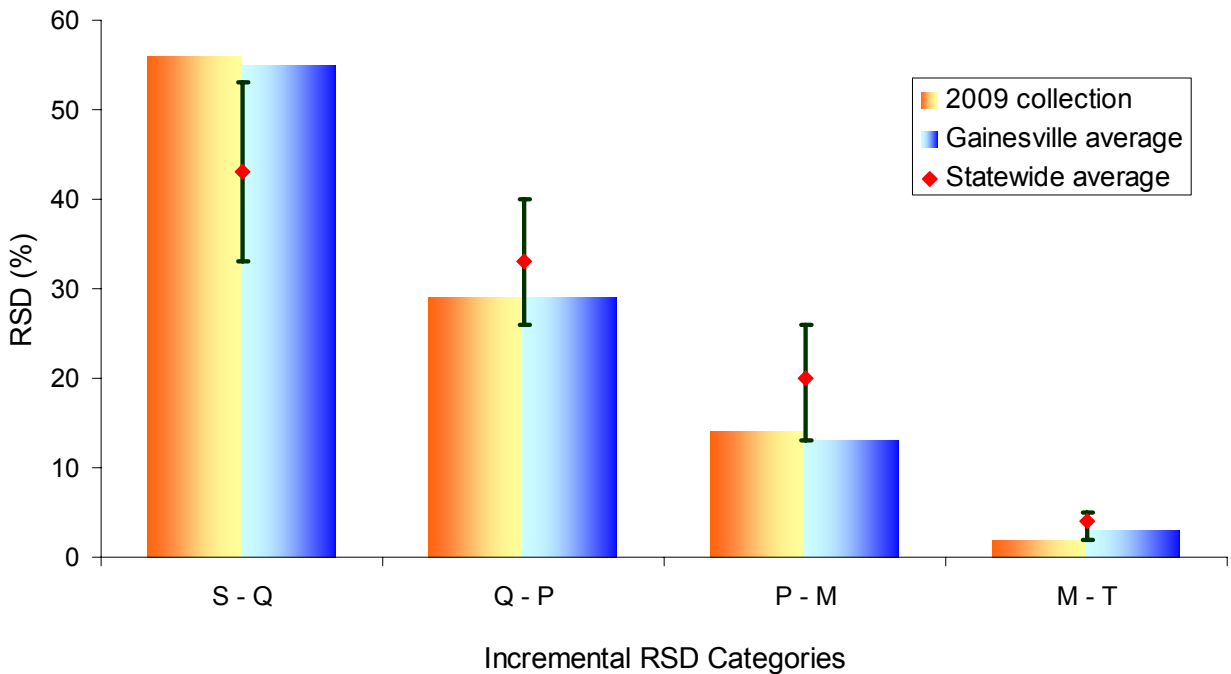


Figure 4. Relative stock density (RSD) of largemouth bass (N=200) at Gainesville Reservoir, March 2009, and the lake and statewide averages. Error bars represent the 25th and 75th percentile of RSD values, statewide.

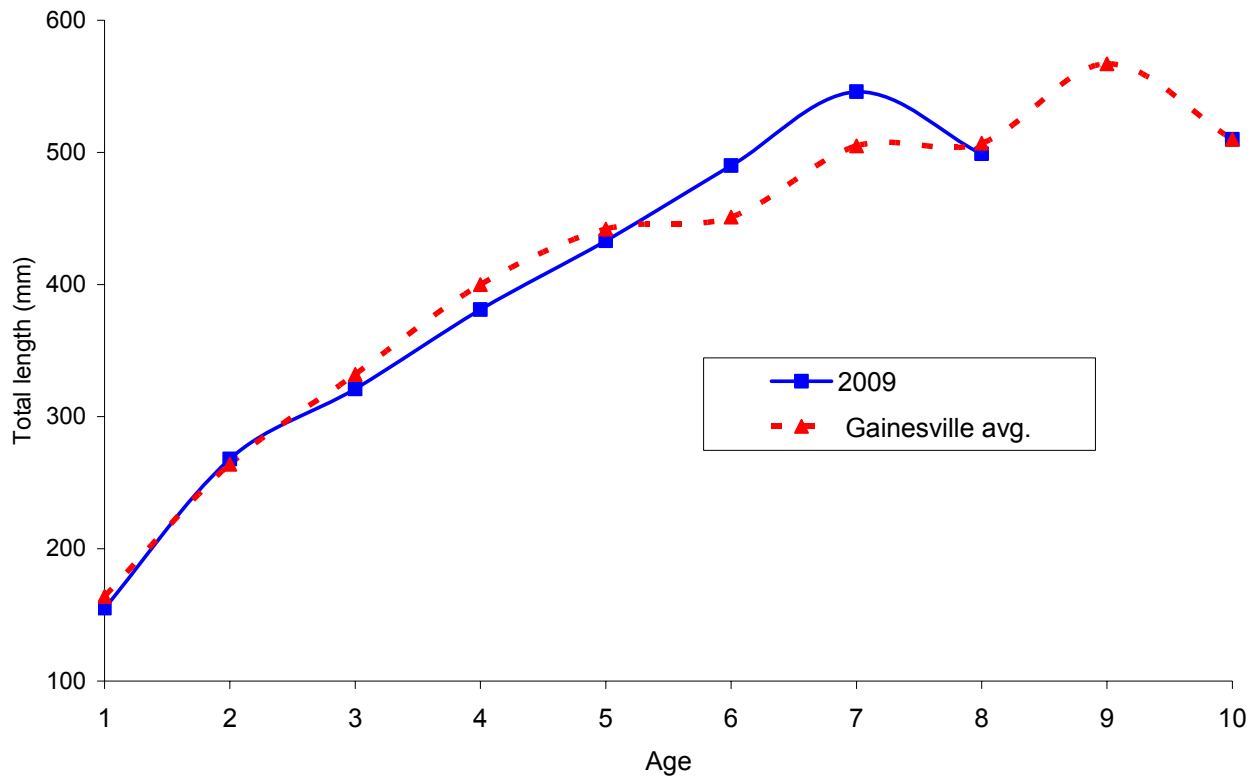


Figure 5. Growth of largemouth bass at Gainesville Reservoir.

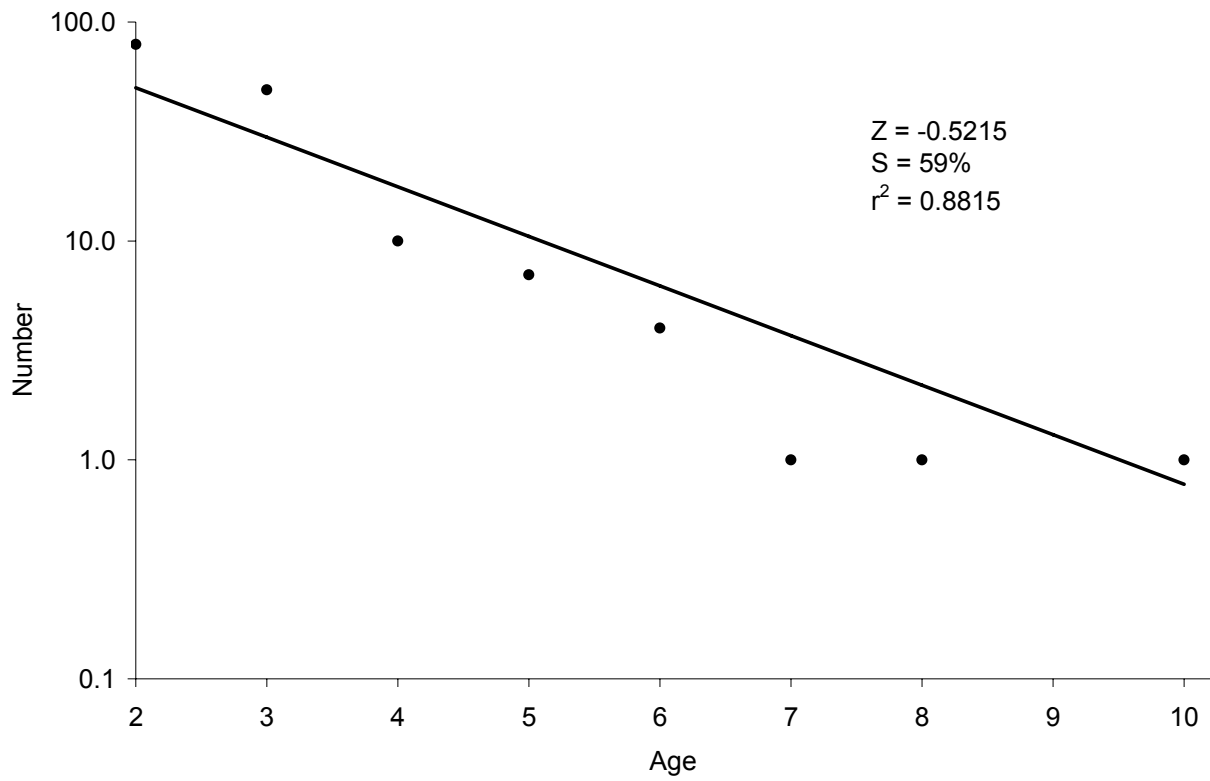


Figure 6. Catch curve regression and annual survival (S) of largemouth bass (N=200) at Gainesville Reservoir, March 2009.

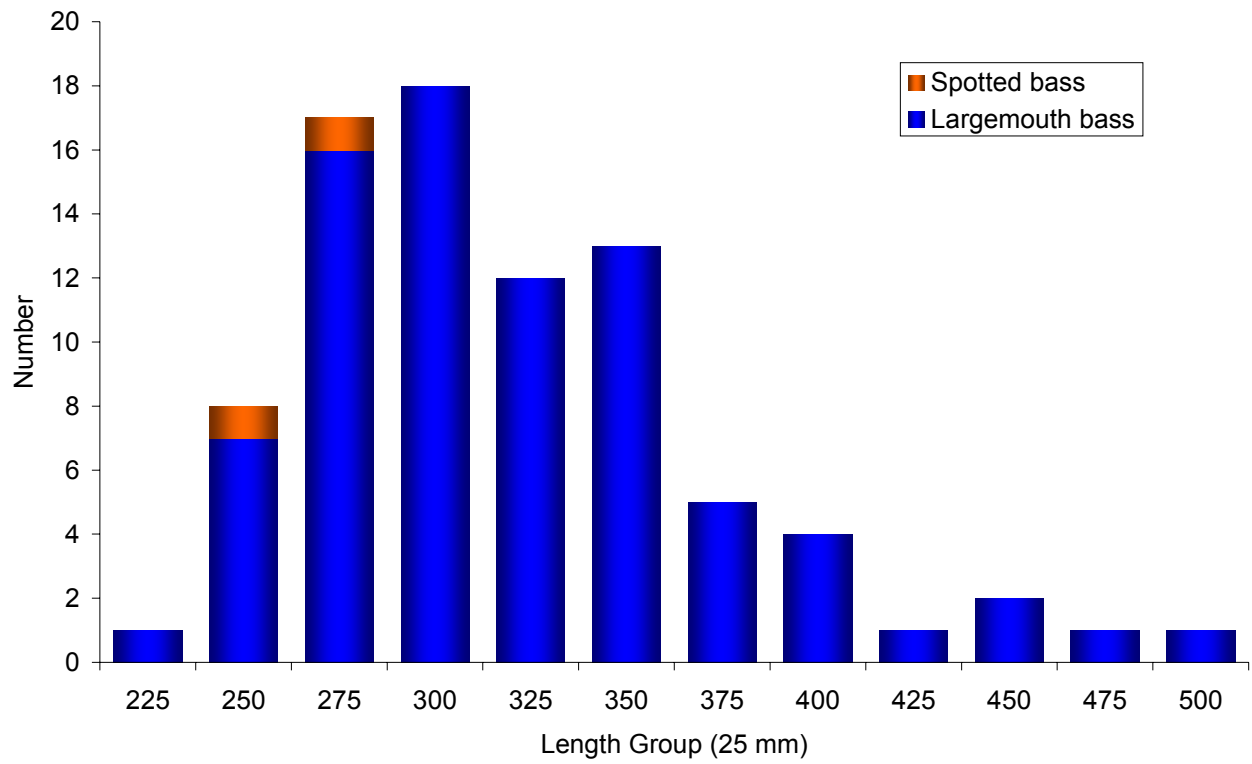


Figure 7. Length frequency distribution of largemouth bass (N=81) and spotted bass (N=2) harvested by anglers at Gainesville Reservoir, March - May, 2009.

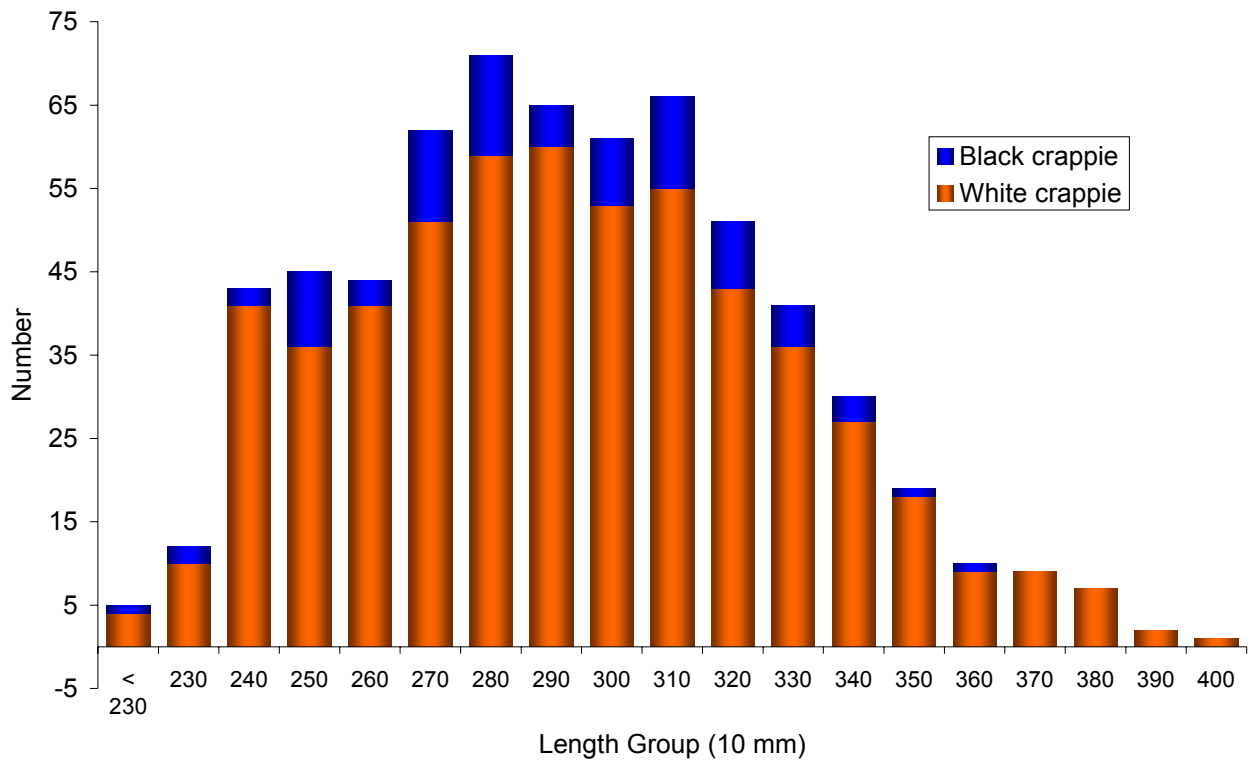


Figure 8. Length frequency distribution of black crappie (N=82) and white crappie (N=562) harvested by anglers at Gainesville, March - May, 2009.