

**Supplementary Data Table 1.** Literature sources and number of populations used to obtain bioenergetics input parameters (growth, mortality, initial population size and percent gizzard shad in diet) for the seven piscivore species.

| Piscivore Species | Input parameter         | Number of populations | Data sources   |
|-------------------|-------------------------|-----------------------|--|
| Largemouth bass   | Growth                  | 87                    | Ws Equation: Wege & Anderson 1978<br>Mraz et al. 1961; Bryant & Houser 1971; Zweiacker 1972; Olmstead 1974; Carlander 1977; Nieman & Clady 1979; Zdinak et al. 1980; Miller 1984; Jacobs et al. 1986; Whitworth 1989; Willis et al. 1990; Neumann et al. 1994; Johnson & Davis 1997; Schramm et al. 1999; Weathers et al. 2000; Leitner & Bulak 2008 |
|                   | Mortality               | 45                    | Carlander 1977; Forbes 1989; Raborn et al. 2003; Allen et al. 2008   |
|                   | Initial population size | 11                    | Jenkins 1957; Zweiacker 1972; Olmstead 1974; Woodrum 1978; Harris et al. 1979; Orth 1980; Zdinak et al. 1980; Bettoli et al. 1993; Kerley 1993; Neumann et al. 1994; Maceina et al. 1995   |
|                   | % Gizzard shad in diet  | 10                    | Jester 1971; Aggus 1972; Storck 1986; Wanjala et al. 1986; Horton & Gilliland 1990; Pope et al. 2001; Sammons & Maceina 2006   |
| White bass        | Growth                  | 38                    | Ws Equation: Brown & Murphy 1991<br>Yellayi & Kilambi 1976; Moen & Dewey 1980; Colvin 1993; Carlander 1997; Willis et al. 1997; Colvin 2002; Guy et al. 2002; Lovell & Maceina 2002  |
|                   | Mortality               | 23                    | Yellayi & Kilambi 1976; Colvin 1993; Muoneke 1994; Colvin 2002; Lovell & Maceina 2002; Schultz & Robinson 2002; Willis et al. 2002   |
|                   | Initial population size | 2                     | Orth 1980; Kerley 1993   |
|                   | % Gizzard shad in diet  | 6                     | Moser 1968; Jester 1971; Olmstead & Kilambi 1971; Germann & Bunch 1985; Hartman 1998; Olson et al. 2007  |
| Striped bass      | Growth                  | 22                    | Ws Equation: Brown & Murphy 1991<br>Scruggs 1957; Ware 1971; Crandall 1978; Axon 1979; Van Den Avyle & Higginbotham 1979; Kilambi & Zdinak 1981; Germann & Bunch 1983; Ebert et al. 1987; Carlander 1997; Schramm et al. 1999; Van Horn et al. 1999; Thompson 2006; Thompson et al. 2007   |

Supplementary Data Table 1 continued.

| Piscivore Species      | Input parameter         | Number of populations | Data sources  |
|------------------------|-------------------------|-----------------------|---|
| Striped bass continued | Mortality               | 5                     | Moore et al. 1991; Hightower et al. 2001; Young & Isely 2004; Thompson et al. 2007  |
|                        | Initial population size | 2                     | Axon 1979; Moore et al. 1991  |
|                        | % Gizzard shad in diet  | 9                     | Combs 1978; Ott & Malvestuto 1981; Borkowski & Snyder 1982; Germann 1982; Germann & Bunch 1985; Matthews et al. 1988; Slipke et al. 2000; Olson et al. 2007   |
| White crappie          | Growth                  | 64                    | Ws Equation: Neumann & Murphy 1991<br>Marcy 1954; Jenkins 1957; Carlander 1977; Sewell 1979; Cichra 1983; Mosher 1984; Parrish et al. 1986; Angyal et al. 1987; Colvin 1991; Muoneke et al. 1992; Guy & Willis 1995; Boxrucker 1999; Schramm et al. 1999; Sammons et al. 2002; Doyle et al. 2003; Parks & Driscoll 2003; Pope et al. 2004; Miller et al. 2008 |
|                        | Mortality               | 8                     | Angyal et al. 1987; Colvin 1991; Hammers & Miranda 1991; Boxrucker 1999   |
|                        | Initial population size | 8                     | Jenkins 1957; Olmstead 1974; Angyal et al. 1987; Miranda et al. 1990; Kerley 1993   |
|                        | % Gizzard shad in diet  | 3                     | Bolton 1985; Muoneke et al. 1992<br>Additional $\geq$ age-2 diet data collected by the authors from Lake Carl Blackwell, Oklahoma (33.3% gizzard shad, n=19)  |
| Flathead catfish       | Growth                  | 9                     | Ws Equation: Bister et al. 2000a<br>Jenkins 1952; McCoy 1953; Carroll & Hall 1964; Edmondson 1974; Layher & Boles 1979; Turner 1980   |
|                        | Mortality               | 4                     | Summerfelt & Turner 1972; Winkelman 2002  |
|                        | Initial population size | 4                     | Orth 1980; Kerley 1993; Winkelman 2002<br>An additional Schnabel mark-recapture population size estimate was completed (2008) by the authors for Lake Carl Blackwell, Oklahoma; N=2,545 (2,116-3,129)   |
|                        | % Gizzard shad in diet  | 8                     | Turner & Summerfelt 1970; Layher & Boles 1980; Jolley & Irwin 2003  |

Supplementary Data Table 1 continued.

| Piscivore Species | Input parameter         | Number of populations | Data sources  |
|-------------------|-------------------------|-----------------------|---|
| Blue catfish      | Growth                  | 17                    | Ws Equation: Muoneke & Pope 1999<br>Jenkins 1956; Graham 1999; Mauck & Boxrucker 2004;<br>Boxrucker & Kuklinski 2006  |
|                   | Mortality               | 6                     | Graham 1999; Mauck & Boxrucker 2004; Boxrucker &<br>Kuklinski 2006  |
|                   | Initial population size | 1                     | Schnabel mark-recapture population size estimate by<br>authors for Arcadia Lake, Oklahoma; N=10,501 (95% CI:<br>9,234-12,171 based on 12 sample dates with 2,200 marked<br>fish) = medium population size. Medium value increased<br>and decreased by 25% for high and low population size<br>values. |
|                   | % Gizzard shad in diet  | 4                     | Edds et al. 2002; Grist 2002; Jolley & Irwin 2003<br>Additional $\geq$ age-3 diet data collected by the authors from<br>Arcadia Lake, Oklahoma (96.1% gizzard shad, n=99)   |
| Saugeye           | Growth                  | 54                    | Ws Equation: Murphy et al. 1990<br>Kempinger & Carline 1977; Colby et al. 1979; Moss et al.<br>1985; Marwitz & Hubert 1995; Carlander 1997; Rabern<br>1998; Quist et al. 2003   |
|                   | Mortality               | 25                    | Colby et al. 1979; Carlander 1997; Kocovsky & Carline<br>2001; Quist et al. 2004  |
|                   | Initial population size | 9                     | Kempinger & Carline 1977; Colby et al. 1979; Carlander<br>1997; Kocovsky & Carline 2001   |
|                   | % Gizzard shad in diet  | 9                     | Jester 1971; Humphreys et al. 1984; Leeds 1988; Horton &<br>Gilliland 1990; Besler & Taylor 2002; Denlinger et al.<br>2006; Olson et al. 2007   |

<sup>a</sup> Distribution of  $W_r$  not included in reference; a  $W_r$  of 93 was used for the 50<sup>th</sup> percentile and a  $W_r$  of 88 for the 25<sup>th</sup> percentile. A  $W_r$  of 93 was chosen for the 50<sup>th</sup> percentile because 93 was the mode of all species ( $W_r = 93-95$ ). A  $W_r$  of 88 was chosen for the 25<sup>th</sup> percentile because 88 was the median of all species ( $W_r = 86-90$ ).

**Supplementary Data Table 2.** Largemouth bass input parameters used in bioenergetics simulations. Low, medium and high parameters corresponded with the 10<sup>th</sup> percentile, median and 90<sup>th</sup> percentile of published values (see Supplementary Data Table 1 for sources). Initial population size estimates were paired with low (37.4%), medium (59.1%) and high (82.0%) annual mortality (A). Age-0 fish were not included in the model but are shown here to illustrate the interaction between total population size and mortality rates.

| Age                             | Annual growth increment (g) |         |         |         |         |         | Gizzard shad consumed<br>(percent by weight) |        |       | Initial population size (number ha <sup>-1</sup> ) |       |       |        |        |        |        |        |        |
|---------------------------------|-----------------------------|---------|---------|---------|---------|---------|--|--------|-------|--|-------|-------|--------|--------|--------|--------|--------|--------|
|                                 | Low                         |         | Medium  |         | High    |         |  |        |       | Low  |       |       | Medium |        |        | High   |        |        |
|                                 | Start                       | End     | Start   | End     | Start   | End     | Low  | Medium | High  | A  | A     | A     | A      | A      | A      | A      | A      | A      |
|                                 |                             |         |         |         |         |         |  |        |       | 37.4%  | 59.1% | 82.0% | 37.4%  | 59.1%  | 82.0%  | 37.4%  | 59.1%  | 82.0%  |
| 0                               | -                           | -       | -       | -       | -       | -       | -  | -      | -     | 2.44   | 3.82  | 5.30  | 421.57 | 66.01  | 915.75 | 170.81 | 267.36 | 371.04 |
| 1                               | 38.9                        | 47.6    | 51.0    | 146.0   | 76.5    | 340.4   | 2.6%   | 13.5%  | 63.9% | 1.53   | 1.88  | 0.95  | 43.84  | 27.22  | 27.38  | 106.93 | 110.24 | 66.79  |
| 2                               | 47.6                        | 107.5   | 146.0   | 343.9   | 340.4   | 750.6   | 0.4%   | 33.7%  | 71.2% | 0.96   | 0.79  | 0.17  | 27.44  | 11.43  | 4.93   | 66.94  | 46.30  | 12.02  |
| 3                               | 107.5                       | 227.1   | 343.9   | 579.0   | 750.6   | 1,188.8 | 2.3%   | 18.9%  | 69.9% | 0.60   | 0.33  | 0.03  | 17.18  | 4.80   | 0.89   | 41.90  | 19.45  | 2.16   |
| 4                               | 227.1                       | 348.5   | 579.0   | 812.6   | 1,188.8 | 1,535.6 | 2.3%   | 28.4%  | 73.6% | 0.37   | 0.14  | 0.01  | 10.75  | 2.02   | 0.16   | 26.23  | 8.17   | 0.39   |
| 5                               | 348.5                       | 490.8   | 812.6   | 1,188.7 | 1,535.6 | 1,918.9 | 2.4%   | 32.8%  | 73.6% | 0.23   | 0.06  | 0.00  | 6.73   | 0.85   | 0.03   | 16.42  | 3.43   | 0.07   |
| 6                               | 490.8                       | 628.9   | 1,188.7 | 1,465.0 | 1,918.9 | 2,354.6 | 2.4%   | 32.8%  | 73.6% | 0.15   | 0.02  | 0.00  | 4.21   | 0.36   | 0.01   | 10.28  | 1.44   | 0.01   |
| 7                               | 628.9                       | 715.2   | 1,465.0 | 1,599.5 | 2,354.6 | 2,417.9 | 2.4%   | 32.8%  | 73.6% | 0.09   | 0.01  | 0.00  | 2.64   | 0.15   | 0.00   | 6.43   | 0.61   | 0.00   |
| 8                               | 715.2                       | 1,147.0 | 1,599.5 | 1,714.2 | 2,417.9 | 3,040.1 | 2.4%   | 32.8%  | 73.6% | 0.06   | 0.00  | 0.00  | 1.65   | 0.06   | 0.00   | 4.03   | 0.25   | 0.00   |
| 9                               | 1,147.0                     | 1,578.9 | 1,714.2 | 1,648.0 | 3,040.1 | 3,662.3 | 2.4%   | 32.8%  | 73.6% | 0.04   | 0.00  | 0.00  | 1.03   | 0.03   | 0.00   | 2.52   | 0.11   | 0.00   |
| $\Sigma(\text{number ha}^{-1})$ |                             |         |         |         |         |         |  |        |       | 6.47   | 7.06  | 6.47  | 537.04 | 112.92 | 949.14 | 452.48 | 457.36 | 452.48 |

**Supplementary Data Table 3.** White bass input parameters used in bioenergetics simulations. Low, medium and high parameters corresponded with the 10<sup>th</sup> percentile, median and 90<sup>th</sup> percentile of published values (see Supplementary Data Table 1 for sources). Initial population size estimates were paired with low (38.2%), medium (62.4%) and high (79.4%) annual mortality (A). Age-0 fish were not included in the model but are shown here to illustrate the interaction between total population size and mortality rates.

| Age                             | Annual growth increment (g) |       |        |       |         |         | Gizzard shad consumed<br>(percent by weight) |        |       | Initial population size (number ha <sup>-1</sup> ) |       |       |        |       |       |       |       |       |
|---------------------------------|-----------------------------|-------|--------|-------|---------|---------|--|--------|-------|--|-------|-------|--------|-------|-------|-------|-------|-------|
|                                 | Low                         |       | Medium |       | High    |         | Low  | Medium | High  | Low  |       |       | Medium |       |       | High  |       |       |
|                                 | Start                       | End   | Start  | End   | Start   | End     |  |        |       | A  | A     | A     | A      | A     | A     | A     | A     | A     |
|                                 |                             |       |        |       |         |         | 38.2%  | 62.4%  | 79.4% | 38.2%  | 62.4% | 79.4% | 38.2%  | 62.4% | 79.4% |       |       |       |
| 0                               | -                           | -     | -      | -     | -       | -       | -  | -      | -     | 12.63  | 20.19 | 25.69 | 22.55  | 36.06 | 45.87 | 32.47 | 51.92 | 66.06 |
| 1                               | 22.1                        | 105.8 | 61.2   | 273.6 | 183.4   | 503.6   | 68.1%  | 76.1%  | 82.7% | 7.80   | 7.15  | 5.29  | 13.94  | 12.78 | 9.45  | 20.07 | 18.40 | 13.61 |
| 2                               | 105.8                       | 227.6 | 273.6  | 478.8 | 503.6   | 833.6   | 65.5%  | 73.4%  | 81.5% | 4.82   | 2.36  | 1.09  | 8.61   | 4.22  | 1.95  | 12.40 | 6.07  | 2.80  |
| 3                               | 227.6                       | 369.0 | 478.8  | 630.6 | 833.6   | 1,013.4 | 65.5%  | 73.4%  | 80.4% | 2.98   | 0.78  | 0.22  | 5.32   | 1.39  | 0.40  | 7.66  | 2.00  | 0.58  |
| 4                               | 369.0                       | 450.0 | 630.6  | 720.9 | 1,013.4 | 1,067.6 | 65.5%  | 73.4%  | 80.8% | 1.84   | 0.26  | 0.05  | 3.29   | 0.46  | 0.08  | 4.74  | 0.66  | 0.12  |
| 5                               | 450.0                       | 508.4 | 720.9  | 803.7 | 1,067.6 | 1,142.7 | 65.5%  | 74.0%  | 96.7% | 1.14   | 0.08  | 0.01  | 2.03   | 0.15  | 0.02  | 2.93  | 0.22  | 0.02  |
| 6                               | 508.4                       | 579.0 | 803.7  | 900.5 | 1,142.7 | 1,369.5 | 65.5%  | 75.4%  | 96.7% | 0.70   | 0.03  | 0.00  | 1.26   | 0.05  | 0.00  | 1.81  | 0.07  | 0.01  |
| 7                               | 579.0                       | 649.7 | 900.5  | 963.8 | 1,369.5 | 1,596.3 | 65.5%  | 75.4%  | 96.7% | 0.43   | 0.01  | 0.00  | 0.78   | 0.02  | 0.00  | 1.12  | 0.02  | 0.00  |
| $\Sigma(\text{number ha}^{-1})$ |                             |       |        |       |         |         |  |        |       | 32.36  | 30.87 | 32.36 | 57.78  | 55.12 | 57.78 | 83.20 | 79.37 | 83.20 |

**Supplementary Data Table 4.** Striped bass input parameters used in bioenergetics simulations. Low, medium and high parameters corresponded with the 10<sup>th</sup> percentile, median and 90<sup>th</sup> percentile of published values (see Supplementary Data Table 1 for sources). Initial population size estimates were paired with low (43.2%), medium (54.7%) and high (61.3%) annual mortality (A). Age-0 fish were not included in the model but are shown here to illustrate the interaction between total population size and mortality rates.

| Age                             | Annual growth increment (g) |         |         |         |          |          | Gizzard shad consumed (percent by weight) |        |       | Initial population size (number ha <sup>-1</sup> ) |      |      |        |       |       |       |       |       |
|---------------------------------|-----------------------------|---------|---------|---------|----------|----------|---|--------|-------|--|------|------|--------|-------|-------|-------|-------|-------|
|                                 | Low                         |         | Medium  |         | High     |          | Low                                       | Medium | High  | Low  |      |      | Medium |       |       | High  |       |       |
|                                 | Start                       | End     | Start   | End     | Start    | End      |   |        |       | A  | A    | A    | A      | A     | A     | A     | A     | A     |
|                                 | 43.2%                       | 54.7%   | 61.3%   | 43.2%   | 54.7%    | 61.3%    | 43.2%                                     | 54.7%  | 61.3% |  |      |      |        |       |       |       |       |       |
| 0                               | -                           | -       | -       | -       | -        | -        | -   | -      | -     | 2.41   | 3.03 | 3.38 | 9.22   | 11.58 | 12.94 | 16.04 | 20.13 | 22.50 |
| 1                               | 53.8                        | 335.7   | 202.1   | 853.0   | 375.2    | 1,244.3  | 44.5%                                     | 69.0%  | 93.7% | 1.37   | 1.33 | 1.31 | 5.24   | 5.08  | 5.01  | 9.11  | 8.84  | 8.72  |
| 2                               | 335.7                       | 816.8   | 853.0   | 1,531.5 | 1,244.3  | 2,387.3  | 64.5%                                     | 70.2%  | 91.5% | 0.78   | 0.53 | 0.51 | 2.97   | 2.05  | 1.94  | 5.17  | 3.56  | 3.38  |
| 3                               | 816.8                       | 1,629.3 | 1,531.5 | 2,256.7 | 2,387.3  | 3,648.4  | 64.5%                                     | 71.5%  | 91.5% | 0.44   | 0.22 | 0.20 | 1.69   | 0.82  | 0.75  | 2.94  | 1.43  | 1.31  |
| 4                               | 1,629.3                     | 1,797.9 | 2,256.7 | 3,074.8 | 3,648.4  | 5,257.0  | 64.6%                                     | 77.4%  | 91.5% | 0.25   | 0.09 | 0.08 | 0.96   | 0.33  | 0.29  | 1.67  | 0.58  | 0.51  |
| 5                               | 1,797.9                     | 2,493.2 | 3,074.8 | 3,891.7 | 5,257.0  | 6,783.3  | 64.6%                                     | 77.4%  | 91.5% | 0.14   | 0.03 | 0.03 | 0.54   | 0.13  | 0.11  | 0.95  | 0.23  | 0.20  |
| 6                               | 2,493.2                     | 2,678.2 | 3,891.7 | 5,307.5 | 6,783.3  | 10,023.0 | 64.6%                                     | 77.4%  | 91.5% | 0.08   | 0.01 | 0.01 | 0.31   | 0.05  | 0.04  | 0.54  | 0.09  | 0.08  |
| 7                               | 2,678.2                     | 2,863.3 | 5,307.5 | 6,539.8 | 10,023.0 | 13,262.8 | 64.6%                                     | 77.4%  | 91.5% | 0.05   | 0.01 | 0.00 | 0.18   | 0.02  | 0.02  | 0.31  | 0.04  | 0.03  |
| $\Sigma(\text{number ha}^{-1})$ |                             |         |         |         |          |          |   |        |       | 5.52   | 5.25 | 5.52 | 21.11  | 20.07 | 21.11 | 36.71 | 34.90 | 36.71 |

**Supplementary Data Table 5.** White crappie input parameters used in bioenergetics simulations. Low, medium and high parameters corresponded with the 10<sup>th</sup> percentile, median and 90<sup>th</sup> percentile of published values (see Supplementary Data Table 1 for sources). Initial population size estimates were paired with low (34.9%), medium (69.0%) and high (89.1%) annual mortality (A). Age-0 fish were not included in the model but are shown here to illustrate the interaction between total population size and mortality rates.

| Age                             | Annual growth increment (g) |       |        |       |       |       | Gizzard shad consumed<br>(percent by weight) |        |       | Initial population size (number ha <sup>-1</sup> ) |        |        |        |        |        |          |          |          |   |
|---------------------------------|-----------------------------|-------|--------|-------|-------|-------|--|--------|-------|--|--------|--------|--------|--------|--------|----------|----------|----------|---|
|                                 | Low                         |       | Medium |       | High  |       |  |        |       | Low  |        |        | Medium |        |        | High     |          |          |   |
|                                 | Start                       | End   | Start  | End   | Start | End   | Low  | Medium | High  | A  | A      | A      | A      | A      | A      | A        | A        | A        | A |
|                                 |                             |       |        |       |       |       | 34.9%  | 69.0%  | 89.1% | 34.9%  | 69.0%  | 89.1%  | 34.9%  | 69.0%  | 89.1%  | 34.9%    | 69.0%    | 89.1%    |   |
| 0                               | -                           | -     | -      | -     | -     | -     | -  | -      | -     | 55.92  | 107.58 | 138.05 | 238.82 | 459.42 | 589.53 | 638.93   | 1,229.13 | 1,577.21 |   |
| 1                               | 15.1                        | 23.4  | 23.2   | 54.0  | 87.1  | 140.3 | 8.5%   | 17.0%  | 34.0% | 36.39  | 26.59  | 15.05  | 155.39 | 113.54 | 64.26  | 415.72   | 303.76   | 171.92   |   |
| 2                               | 23.4                        | 44.8  | 54.0   | 140.5 | 140.3 | 296.6 | 33.3%  | 67.3%  | 72.9% | 23.68  | 5.85   | 1.64   | 101.10 | 24.98  | 7.00   | 270.49   | 66.83    | 18.74    |   |
| 3                               | 44.8                        | 91.5  | 140.5  | 260.3 | 296.6 | 464.5 | 33.3%  | 57.9%  | 72.9% | 15.40  | 1.29   | 0.18   | 65.78  | 5.50   | 0.76   | 175.99   | 14.70    | 2.04     |   |
| 4                               | 91.5                        | 145.1 | 260.3  | 363.8 | 464.5 | 637.3 | 33.3%  | 57.9%  | 72.9% | 10.02  | 0.28   | 0.02   | 42.80  | 1.21   | 0.08   | 114.51   | 3.23     | 0.22     |   |
| 5                               | 145.1                       | 223.2 | 363.8  | 424.3 | 637.3 | 763.5 | 33.3%  | 57.9%  | 72.9% | 6.52   | 0.06   | 0.00   | 27.85  | 0.27   | 0.01   | 74.51    | 0.71     | 0.02     |   |
| 6                               | 223.2                       | 300.7 | 424.3  | 522.6 | 763.5 | 864.6 | 33.3%  | 57.9%  | 72.9% | 4.24   | 0.01   | 0.00   | 18.12  | 0.06   | 0.00   | 48.48    | 0.16     | 0.00     |   |
| 7                               | 300.7                       | 378.2 | 522.6  | 620.7 | 864.6 | 965.7 | 33.3%  | 57.9%  | 72.9% | 2.76   | 0.00   | 0.00   | 11.79  | 0.01   | 0.00   | 31.54    | 0.03     | 0.00     |   |
| $\Sigma(\text{number ha}^{-1})$ |                             |       |        |       |       |       |  |        |       | 154.94   | 141.67 | 154.94 | 661.65 | 604.98 | 661.65 | 1,770.15 | 1,618.56 | 1,770.15 |   |

**Supplementary Data Table 6.** Flathead catfish input parameters used in bioenergetics simulations. Low, medium and high parameters corresponded with the 10<sup>th</sup> percentile, median and 90<sup>th</sup> percentile of published values (see Supplementary Data Table 1 for sources). Initial population size estimates were paired with low (10.7%), medium (26.3%) and high (43.6%) annual mortality (A). Age-0 fish were not included in the model but are shown to illustrate the interaction between total population size and mortality rates.

| Age                             | Annual growth increment (g) |         |          |          |          |          | Gizzard shad consumed<br>(percent by weight) |        |       | Initial population size (number ha <sup>-1</sup> ) |            |            |            |            |            |            |            |            |
|---------------------------------|-----------------------------|---------|----------|----------|----------|----------|--|--------|-------|--|------------|------------|------------|------------|------------|------------|------------|------------|
|                                 | Low                         |         | Medium   |          | High     |          |  |        |       | Low  |            |            | Medium     |            |            | High       |            |            |
|                                 | Start                       | End     | Start    | End      | Start    | End      | Low  | Medium | High  | A<br>10.7%   | A<br>26.3% | A<br>43.6% | A<br>10.7% | A<br>26.3% | A<br>43.6% | A<br>10.7% | A<br>26.3% | A<br>43.6% |
| 0                               | -                           | -       | -        | -        | -        | -        | -  | -      | -     | 0.05   | 0.09       | 0.15       | 0.25       | 0.49       | 0.80       | 0.45       | 0.90       | 1.47       |
| 1                               | 17.6                        | 53.0    | 38.1     | 147.5    | 122.7    | 480.6    | 0.0%   | 0.0%   | 0.0%  | 0.04   | 0.06       | 0.09       | 0.22       | 0.34       | 0.45       | 0.41       | 0.63       | 0.83       |
| 2                               | 53.0                        | 102.8   | 147.5    | 444.5    | 480.6    | 1,275.0  | 0.0%   | 0.0%   | 0.0%  | 0.04   | 0.05       | 0.05       | 0.20       | 0.26       | 0.25       | 0.36       | 0.48       | 0.47       |
| 3                               | 102.8                       | 284.5   | 444.5    | 1,157.0  | 1,275.0  | 2,584.1  | 0.0%   | 28.1%  | 56.1% | 0.03   | 0.04       | 0.03       | 0.18       | 0.20       | 0.14       | 0.32       | 0.36       | 0.26       |
| 4                               | 284.5                       | 765.2   | 1,157.0  | 2,301.4  | 2,584.1  | 3,774.1  | 0.0%   | 28.8%  | 57.7% | 0.03   | 0.03       | 0.02       | 0.16       | 0.15       | 0.08       | 0.29       | 0.28       | 0.15       |
| 5                               | 765.2                       | 1,371.3 | 2,301.4  | 3,469.0  | 3,774.1  | 6,686.2  | 50.3%  | 61.3%  | 95.3% | 0.03   | 0.02       | 0.01       | 0.14       | 0.11       | 0.05       | 0.26       | 0.21       | 0.08       |
| 6                               | 1,371.3                     | 2,033.5 | 3,469.0  | 4,618.5  | 6,686.2  | 9,686.5  | 50.3%  | 69.0%  | 95.3% | 0.02   | 0.02       | 0.00       | 0.12       | 0.09       | 0.03       | 0.23       | 0.16       | 0.05       |
| 7                               | 2,033.5                     | 2,647.4 | 4,618.5  | 6,044.9  | 9,686.5  | 11,722.0 | 50.3%  | 69.0%  | 95.3% | 0.02   | 0.01       | 0.00       | 0.11       | 0.07       | 0.01       | 0.21       | 0.12       | 0.03       |
| 8                               | 2,647.4                     | 4,320.8 | 6,044.9  | 7,474.4  | 11,722.0 | 13,609.7 | 50.3%  | 69.0%  | 95.3% | 0.02   | 0.01       | 0.00       | 0.10       | 0.05       | 0.01       | 0.18       | 0.09       | 0.02       |
| 9                               | 4,320.8                     | 4,787.1 | 7,474.4  | 8,621.2  | 13,609.7 | 15,601.1 | 50.3%  | 69.0%  | 95.3% | 0.02   | 0.01       | 0.00       | 0.09       | 0.04       | 0.00       | 0.16       | 0.07       | 0.01       |
| 10                              | 4,787.1                     | 5,118.4 | 8,621.2  | 10,967.1 | 15,601.1 | 16,962.3 | 50.3%  | 69.0%  | 95.3% | 0.02   | 0.01       | 0.00       | 0.08       | 0.03       | 0.00       | 0.15       | 0.05       | 0.00       |
| 11                              | 5,118.4                     | 6,394.0 | 10,967.1 | 12,699.9 | 16,962.3 | 17,664.4 | 50.3%  | 69.0%  | 95.3% | 0.01   | 0.00       | 0.00       | 0.07       | 0.02       | 0.00       | 0.13       | 0.04       | 0.00       |
| 12                              | 6,394.0                     | 7,669.6 | 12,699.9 | 11,809.0 | 17,664.4 | 18,366.6 | 50.3%  | 69.0%  | 95.3% | 0.01   | 0.00       | 0.00       | 0.06       | 0.02       | 0.00       | 0.12       | 0.03       | 0.00       |
| 13                              | 7,669.6                     | 8,945.3 | 11,809.0 | 13,633.3 | 18,366.6 | 19,068.7 | 50.3%  | 69.0%  | 95.3% | 0.01   | 0.00       | 0.00       | 0.06       | 0.01       | 0.00       | 0.10       | 0.02       | 0.00       |
| $\Sigma(\text{number ha}^{-1})$ |                             |         |          |          |          |          |  |        |       | 0.35   | 0.35       | 0.35       | 1.83       | 1.87       | 1.83       | 3.38       | 3.45       | 3.38       |



**Supplementary Data Table 7.** Blue catfish input parameters used in bioenergetics simulations. Low, medium and high parameters corresponded with the 10<sup>th</sup> percentile, median and 90<sup>th</sup> percentile of published values (see Supplementary Data Table 1 for sources). Initial population size estimates were paired with low (15.4%), medium (31.3%) and high (49.5%) annual mortality (A). Age-0 fish were not included in the model but are shown to illustrate the interaction between total population size and mortality rates.

| Age                             | Annual growth increment (g) |         |         |         |          |          | Gizzard shad consumed<br>(percent by weight) |        |        | Initial population size (number ha <sup>-1</sup> ) |            |            |            |            |            |            |            |            |
|---------------------------------|-----------------------------|---------|---------|---------|----------|----------|--|--------|--------|--|------------|------------|------------|------------|------------|------------|------------|------------|
|                                 | Low                         |         | Medium  |         | High     |          |  |        |        | Low  |            |            | Medium     |            |            | High       |            |            |
|                                 | Start                       | End     | Start   | End     | Start    | End      | Low  | Medium | High   | A<br>15.4%   | A<br>31.3% | A<br>49.5% | A<br>15.4% | A<br>31.3% | A<br>49.5% | A<br>15.4% | A<br>31.3% | A<br>49.5% |
| 0                               | -                           | -       | -       | -       | -        | -        | -  | -      | -      | 1.77   | 3.35       | 5.29       | 2.36       | 4.47       | 7.06       | 2.95       | 5.59       | 8.82       |
| 1                               | 27.2                        | 36.9    | 31.5    | 76.5    | 46.8     | 154.5    | 2.5%   | 7.2%   | 19.5%  | 1.50   | 2.21       | 2.67       | 1.99       | 2.95       | 3.56       | 2.49       | 3.68       | 4.46       |
| 2                               | 36.9                        | 95.3    | 76.5    | 181.3   | 154.5    | 394.3    | 2.5%   | 7.2%   | 15.8%  | 1.27   | 1.57       | 1.35       | 1.69       | 2.09       | 1.80       | 2.11       | 2.62       | 2.25       |
| 3                               | 95.3                        | 185.9   | 181.3   | 332.3   | 394.3    | 772.2    | 7.2%   | 63.3%  | 96.0%  | 1.07   | 1.11       | 0.68       | 1.43       | 1.49       | 0.91       | 1.78       | 1.86       | 1.14       |
| 4                               | 185.9                       | 192.7   | 332.3   | 565.2   | 772.2    | 1,311.6  | 7.2%   | 63.3%  | 100.0% | 0.91   | 0.79       | 0.34       | 1.21       | 1.06       | 0.46       | 1.51       | 1.32       | 0.57       |
| 5                               | 192.7                       | 381.7   | 565.2   | 817.6   | 1,311.6  | 2,598.1  | 22.0%  | 89.2%  | 97.9%  | 0.77   | 0.56       | 0.17       | 1.02       | 0.75       | 0.23       | 1.28       | 0.94       | 0.29       |
| 6                               | 381.7                       | 493.9   | 817.6   | 1,196.7 | 2,598.1  | 4,198.1  | 22.0%  | 91.0%  | 97.9%  | 0.65   | 0.40       | 0.09       | 0.86       | 0.53       | 0.12       | 1.08       | 0.66       | 0.15       |
| 7                               | 493.9                       | 511.3   | 1,196.7 | 1,591.1 | 4,198.1  | 6,206.9  | 22.0%  | 91.0%  | 97.9%  | 0.55   | 0.28       | 0.04       | 0.73       | 0.38       | 0.06       | 0.91       | 0.47       | 0.07       |
| 8                               | 511.3                       | 667.7   | 1,591.1 | 2,029.0 | 6,206.9  | 8,215.8  | 22.0%  | 91.0%  | 97.9%  | 0.46   | 0.20       | 0.02       | 0.62       | 0.27       | 0.03       | 0.77       | 0.34       | 0.04       |
| 9                               | 667.7                       | 824.1   | 2,029.0 | 2,064.7 | 8,215.8  | 10,224.6 | 22.0%  | 91.0%  | 97.9%  | 0.39   | 0.14       | 0.01       | 0.52       | 0.19       | 0.02       | 0.65       | 0.24       | 0.02       |
| 10                              | 824.1                       | 980.4   | 2,064.7 | 3,178.2 | 10,224.6 | 12,233.4 | 22.0%  | 91.0%  | 97.9%  | 0.33   | 0.10       | 0.01       | 0.44       | 0.14       | 0.01       | 0.55       | 0.17       | 0.01       |
| 11                              | 980.4                       | 1,136.8 | 3,178.2 | 4,251.0 | 12,233.4 | 14,242.2 | 22.0%  | 91.0%  | 97.9%  | 0.28   | 0.07       | 0.00       | 0.37       | 0.10       | 0.00       | 0.47       | 0.12       | 0.00       |
| 12                              | 1,136.8                     | 1,293.2 | 4,251.0 | 5,917.3 | 14,242.2 | 16,251.0 | 22.0%  | 91.0%  | 97.9%  | 0.24   | 0.05       | 0.00       | 0.32       | 0.07       | 0.00       | 0.40       | 0.09       | 0.00       |
| 13                              | 1,293.2                     | 1,449.6 | 5,917.3 | 2,644.1 | 16,251.0 | 18,259.8 | 22.0%  | 91.0%  | 97.9%  | 0.20   | 0.04       | 0.00       | 0.27       | 0.05       | 0.00       | 0.34       | 0.06       | 0.00       |
| 14                              | 1,449.6                     | 1,606.0 | 2,644.1 | 5,552.5 | 18,259.8 | 20,268.7 | 22.0%  | 91.0%  | 97.9%  | 0.17   | 0.03       | 0.00       | 0.23       | 0.03       | 0.00       | 0.28       | 0.04       | 0.00       |
| 15                              | 1,606.0                     | 1,762.4 | 5,552.5 | 6,704.2 | 20,268.7 | 22,277.5 | 22.0%  | 91.0%  | 97.9%  | 0.14   | 0.02       | 0.00       | 0.19       | 0.02       | 0.00       | 0.24       | 0.03       | 0.00       |
| $\Sigma(\text{number ha}^{-1})$ |                             |         |         |         |          |          |  |        |        | 10.69  | 10.93      | 10.69      | 14.26      | 14.58      | 14.26      | 17.82      | 18.22      | 17.82      |

**Supplementary Data Table 8.** Saugeye input parameters used in bioenergetics simulations. Low, medium and high parameters corresponded with the 10<sup>th</sup> percentile, median and 90<sup>th</sup> percentile of published values (see Supplementary Data Table 1 for sources). Initial population size estimates were paired with low (32.8%), medium (50.9%) and high (69.7%) annual mortality (A). Age-0 fish were not included in the model but are shown here to illustrate the interaction between total population size and mortality rates.

| Age | Annual growth increment (g)         |         |         |         |         |         | Gizzard shad consumed<br>(percent by weight) |        |       | Initial population size (number ha <sup>-1</sup> ) |       |       |        |        |        |        |        |        |       |       |       |
|-----|-------------------------------------|---------|---------|---------|---------|---------|--|--------|-------|--|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
|     | Low                                 |         | Medium  |         | High    |         |  |        |       | Low  |       |       | Medium |        |        | High   |        |        |       |       |       |
|     | Start                               | End     | Start   | End     | Start   | End     | Low  | Medium | High  | A  | A     | A     | A      | A      | A      | A      | A      | A      | A     |       |       |
|     |                                     |         |         |         |         |         |  |        |       | 32.8%  | 50.9% | 69.7% | 32.8%  | 50.9%  | 69.7%  | 32.8%  | 50.9%  | 69.7%  | 32.8% | 50.9% | 69.7% |
| 0   | -                                   | -       | -       | -       | -       | -       | -  | -      | -     | 8.47   | 12.98 | 17.77 | 41.21  | 63.14  | 86.47  | 93.48  | 143.20 | 196.13 |       |       |       |
| 1   | 32.5                                | 98.1    | 65.9    | 255.1   | 182.0   | 601.8   | 29.6%  | 80.4%  | 94.3% | 5.69   | 6.38  | 5.38  | 27.69  | 31.03  | 26.20  | 62.82  | 70.38  | 59.43  |       |       |       |
| 2   | 98.1                                | 224.8   | 255.1   | 590.3   | 601.8   | 1,135.0 | 52.9%  | 80.4%  | 94.3% | 3.82   | 3.19  | 1.63  | 18.61  | 15.52  | 7.94   | 42.21  | 35.19  | 18.01  |       |       |       |
| 3   | 224.8                               | 403.5   | 590.3   | 942.9   | 1,135.0 | 1,800.5 | 57.7%  | 78.7%  | 94.3% | 2.57   | 1.59  | 0.49  | 12.51  | 7.76   | 2.41   | 28.37  | 17.60  | 5.46   |       |       |       |
| 4   | 403.5                               | 562.9   | 942.9   | 1,327.6 | 1,800.5 | 2,326.6 | 57.7%  | 80.1%  | 94.3% | 1.73   | 0.80  | 0.15  | 8.40   | 3.88   | 0.73   | 19.06  | 8.80   | 1.65   |       |       |       |
| 5   | 562.9                               | 715.0   | 1,327.6 | 1,730.5 | 2,326.6 | 2,927.9 | 57.7%  | 80.1%  | 94.3% | 1.16   | 0.40  | 0.05  | 5.65   | 1.94   | 0.22   | 12.81  | 4.40   | 0.50   |       |       |       |
| 6   | 715.0                               | 933.6   | 1,730.5 | 2,094.0 | 2,927.9 | 3,464.6 | 57.7%  | 80.1%  | 94.3% | 0.78   | 0.20  | 0.01  | 3.80   | 0.97   | 0.07   | 8.61   | 2.20   | 0.15   |       |       |       |
| 7   | 933.6                               | 1,040.7 | 2,094.0 | 2,263.5 | 3,464.6 | 4,026.6 | 57.7%  | 80.1%  | 94.3% | 0.52   | 0.10  | 0.00  | 2.55   | 0.48   | 0.02   | 5.78   | 1.10   | 0.05   |       |       |       |
| 8   | 1,040.7                             | 1,151.0 | 2,263.5 | 1,924.9 | 4,026.6 | 4,211.1 | 57.7%  | 80.1%  | 94.3% | 0.35   | 0.05  | 0.00  | 1.71   | 0.24   | 0.01   | 3.89   | 0.55   | 0.01   |       |       |       |
| 9   | 1,151.0                             | 1,256.7 | 1,924.9 | 1,968.5 | 4,211.1 | 4,293.7 | 57.7%  | 80.1%  | 94.3% | 0.24   | 0.02  | 0.00  | 1.15   | 0.12   | 0.00   | 2.61   | 0.27   | 0.00   |       |       |       |
| 10  | 1,256.7                             | 1,362.3 | 1,968.5 | 1,930.5 | 4,293.7 | 4,376.4 | 57.7%  | 80.1%  | 94.3% | 0.16   | 0.01  | 0.00  | 0.77   | 0.06   | 0.00   | 1.76   | 0.14   | 0.00   |       |       |       |
|     | $\Sigma$ (number ha <sup>-1</sup> ) |         |         |         |         |         |  |        |       | 25.50  | 25.72 | 25.50 | 124.06 | 125.14 | 124.06 | 281.39 | 283.83 | 281.39 |       |       |       |

## References

- Aggus L.R. (1972) Food of angler harvested largemouth bass, spotted and smallmouth bass in Bull Shoals Reservoir. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **26**, 501-505.
- Allen M.S., Walters C.J. & Myers R. (2008) Temporal trends in largemouth bass mortality, with fishery implications. *North American Journal of Fisheries Management* **28**, 418-427.
- Angyal R., Glass R. & Maughan O.E. (1987) The characteristics of the white crappie population of Sooner Lake, Oklahoma. *Proceedings of the Oklahoma Academy of Science* **67**, 1-10.
- Axon J.R. (1979) An evaluation of striped bass introductions in Herrington Lake. *Kentucky Department of Fish and Wildlife Resources, Fisheries Bulletin* **63**, 1-33.
- Besler D.A. & Taylor W.E. (2002) *Lake James Walleye Investigation Survey Summary 2001*. North Carolina Wildlife Resources Commission, Division of Fisheries. 11 pp.
- Bettoli P.W., Maceina M.J., Noble R.L. & Betsill R.K. (1993) Response of a reservoir fish community to aquatic vegetation removal. *North American Journal of Fisheries Management* **13**, 110-124.
- Bister T.J., Willis D.W., Brown M.L., Jordan S.M., Neumann R.M., Quist M.C. & Guy C.S. (2000) Proposed standard weight ( $W_r$ ) equations and standard length categories for 18 warmwater nongame and riverine fish species. *North American Journal of Fisheries Management* **20**, 570-574.
- Bolton B.D. (1985) *A Comparison of Stomach Contents of Largemouth Bass and White Crappie from Turbid and Clear Portions of Thunderbird Reservoir, Oklahoma*. MSc Thesis, Norman, OK: University of Oklahoma, 32 pp.
- Borkowski W.K. & Snyder L.E. (1982) Evaluation of white bass X striped bass hybrids in a hypereutrophic Florida lake. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **36**, 74-82.
- Boxrucker J. (1999) Changes in crappie population structure following restrictive harvest regulations. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **53**, 80-90.
- Boxrucker J. & Kuklinski K. (2006) Abundance, growth, and mortality of selected Oklahoma blue catfish populations: implications for management of trophy fisheries. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **60**, 152-156.

- Brown M.L. & Murphy B.R. (1991) Standard weights ( $W_s$ ) for striped bass, white bass, and hybrid striped bass. *North American Journal of Fisheries Management* **11**, 451-467.
- Bryant H.E. & Houser A. (1971) Population estimates and growth of largemouth bass in Beaver and Bull Shoals Reservoirs. In: G.E. Hall (ed) *Reservoir Fisheries and Limnology*. Bethesda, MD: American Fisheries Society, Special Publication 8, pp. 349-357.
- Carlander K.D. (1977) *Handbook of Freshwater Fishery Biology*, Vol. 2. Ames, IA: Iowa State University Press, 431 pp.
- Carlander K.D. (1997) *Handbook of Freshwater Fishery Biology*, Vol. 3. Ames, IA: Iowa State University Press, 397 pp.
- Carroll B.B. & Hall G.E. (1964) Growth of catfishes in Norris Reservoir, Tennessee. *Journal of the Tennessee Academy of Science* **39**, 86-91.
- Cichra C.E. (1983) *Population Structure of White Crappie in Flood Prevention Lakes of North-Central Texas*. Doctoral dissertation, College Station, TX: Texas A&M University, 122 pp.
- Colby P.J., McNicol R.E. & Ryder R.A. (1979) *Synopsis of Biological Data on the Walleye Stizostedion v. vitreum (Mitchill 1818)*, Rome, Italy: FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis 119, 139 pp.
- Colvin M.A. (1991) Population characteristics and angler harvest of white crappies in four large Missouri reservoirs. *North American Journal of Fisheries Management* **11**, 572-584.
- Colvin M.A. (1993) *Ecology and Management of White Bass: A Literature Review*. Missouri Department of Conservation, Dingell-Johnson Project F-1-R-42, Study I-31, Job 1, Final Report. 62 pp.
- Colvin M.A. (2002) Population and fishery characteristics of white bass in four large Missouri reservoirs. *North American Journal of Fisheries Management* **22**, 677-689.
- Combs D.L. (1978) Food habits of adult striped bass from Keystone Reservoir and its tailwater. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **32**, 571-575.
- Crandall P.S. (1978) Evaluation of striped bass X white bass hybrids in a heated Texas reservoir. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **32**, 588-598.

- Denlinger J.C.S., Hale R.S. & Stein R.A. (2006) Seasonal consumptive demand and prey use by stocked saugeyes in Ohio reservoirs. *Transactions of the American Fisheries Society* **135**, 12-27.
- Doyle W.J., Toetz D.W. & Payton M.E. (2003) Comparison of growth, condition and population structure of white crappie in Lake Carl Blackwell, 1984-1985 to 1998. *Proceedings of the Oklahoma Academy of Science* **83**, 23-29.
- Ebert D.J., Shirley K.E. & Farwick J.J. (1987) Evaluation of *Morone* hybrids in a small, shallow, warmwater impoundment. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **41**, 55-62.
- Edds D.R., Matthews W.J. & Gelwick F.P. (2002) Resource use by large catfishes in a reservoir: is there evidence for interactive segregation and innate differences? *Journal of Fish Biology* **60**, 739-750.
- Edmondson J.P., Jr. (1974) *Food Habits, Age and Growth of Flathead Catfish, Pylodictis olivaris (Rafinesque), in Bluestone Reservoir, West Virginia*. MSc Thesis, Morgantown, WV: West Virginia University, 78 pp.
- Forbes L.S. (1989) Spawning, growth, and mortality of three introduced fishes at Creston, British Columbia. *Canadian Field Naturalist* **103**, 520-523.
- Germann J.F. (1982) Food habits of *Morone* hybrid bass in Clarks Hill Reservoir, Georgia. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **36**, 53-61.
- Germann J.F. & Bunch Z.E. (1983) Age, growth, and survival of *Morone* Hybrids in Clarks Hill Reservoir, Georgia. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **37**, 267-275.
- Germann J.F. & Bunch Z.E. (1985) Comparison of white bass and hybrid bass food habits, Clarks Hill Reservoir. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **39**, 200-206.
- Graham K. (1999) A review of the biology and management of blue catfish. In: E.R. Irwin, W.A. Hubert, C.F. Rabeni, H.L. Schramm, Jr. & T. Coon (eds) *Catfish 2000: Proceedings of the International Ictalurid Symposium*. Bethesda, MD: American Fisheries Society, Symposium 24, pp. 37-49.

- Grist J.D. (2002) *Analysis of a Blue Catfish Population in a Southeastern Reservoir: Lake Norman, North Carolina*. MSc Thesis, Blacksburg, VA: Virginia Polytechnic Institute and State University, 118 pp.
- Guy C.S., Schultz R.D. & Cox C.A. (2002) Variation in gonad development, growth, and condition of white bass in Fall River Reservoir, Kansas. *North American Journal of Fisheries Management* **22**, 643-651.
- Guy C.S. & Willis D.W. (1995) Growth of crappies in South Dakota waters. *Journal of Freshwater Ecology* **10**, 151-161.
- Hammers B.E. & Miranda L.E. (1991) Comparison of methods for estimating age, growth, and related population characteristics of white crappies. *North American Journal of Fisheries Management* **11**, 492-498.
- Harris F.A., Ager L.M. & Hayes E. (1979) Comparison of various mark-recapture techniques for estimating abundance of largemouth bass in Barkley Lake, Kentucky. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **33**, 703-709.
- Hartman K.J. (1998) Diets of white bass in the Ohio waters of Lake Erie during June-October 1988. *Transactions of the American Fisheries Society* **127**, 323-328.
- Hightower J.E., Jackson J.R. & Pollock K.H. (2001) Use of telemetry methods to estimate natural and fishing mortality of striped bass in Lake Gaston, North Carolina. *Transactions of the American Fisheries Society* **130**, 557-567.
- Horton R.A. & Gilliland E.R. (1990) Diet overlap between saugeye and largemouth bass in Thunderbird Reservoir, Oklahoma. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **44**, 98-104.
- Humphreys M., Wilson J.L. & Peterson D.C. (1984) Growth and food habits of young of year walleye X sauger hybrids in Cherokee Reservoir, Tennessee. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **38**, 413-420.
- Jacobs R.P., Benz G.W. & Beckwith E.E., Jr. (1986) *Statewide Largemouth Bass Research and Management: Stock Assessment of Largemouth Bass (*Micropterus salmoides*) in Selected Lakes with Special Reference to the 305mm Minimum Size Limit*. Connecticut Department of Environmental Protection, Bureau of Fisheries. 94 pp.
- Jenkins R.M. (1952) Growth of the flathead catfish, *Pilodictis olivaris*, in Grand Lake (Lake O' The Cherokees), Oklahoma. *Proceedings of the Oklahoma Academy of Science* **33**, 11-20.

- Jenkins R.M. (1956) Growth of blue catfish (*Ictalurus furcatus*) in Lake Texoma. *The Southwestern Naturalist* **1**, 166-173.
- Jenkins R.M. (1957) The effect of gizzard shad on the fish population of a small Oklahoma Lake. *Transactions of the American Fisheries Society* **85**, 58-74.
- Jester D.B. (1971) Effects of commercial fishing, species introductions, and drawdown control on fish populations in Elephant Butte Reservoir, New Mexico. In: G.E. Hall (ed) *Reservoir Fisheries and Limnology*. Bethesda, MD: American Fisheries Society, Special Publication 8, pp. 265-285.
- Johnson R.L. & Davis R.M. (1997) Age, growth and condition of largemouth bass, *Micropterus salmoides*, of Lake Ashbaugh, Arkansas. *Journal of the Arkansas Academy of Science* **51**, 95-102.
- Jolley J.C. & Irwin E.R. (2003) Food habits of catfishes in tailwater and reservoir habitats in a section of the Coosa River, Alabama. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **57**, 124-140.
- Kempinger J.J. & Carline R.F. (1977) Dynamics of the walleye (*Stizostedion vitreum vitreum*) population in Escanaba Lake, Wisconsin, 1955-72. *Journal of the Fisheries Research Board of Canada* **34**, 1800-1811.
- Kerley B.L. (1993) *Chickamauga Reservoir 1992 Fisheries Monitoring Cove Rotenone Results*. Tennessee Valley Authority, River Basin Operations Water Resources. 66 pp.
- Kilambi R.V. & Zdinak A. (1981) The biology of striped bass, *Morone saxatilis*, in Beaver Reservoir, Arkansas. *Proceedings of the Arkansas Academy of Science* **35**, 43-45.
- Kocovsky P.M. & Carline R.F. (2001) Dynamics of the unexploited walleye population of Pymatuning Sanctuary, Pennsylvania, 1997-1998. *North American Journal of Fisheries Management* **21**, 178-187.
- Layher W.G. & Boles R.J. (1979) Growth of *Pylodictis olivaris* (Rafinesque) in a Kansas reservoir. *Transactions of the Kansas Academy of Science* **82**, 36-48.
- Layher W.G. & Boles R.J. (1980) Food habits of the flathead catfish, *Pylodictis olivaris* (Rafinesque), in relation to length and season in a large Kansas reservoir. *Transactions of the Kansas Academy of Science* **83**, 200-214.

- Leeds L.G. (1988) Growth and food habits of saugeye (walleye x sauger hybrids) in Thunderbird Reservoir, Oklahoma. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **42**, 243-248.
- Leitner J. & Bulak J. (2008) Performance differences between two endemic stocks of largemouth bass in South Carolina. *North American Journal of Fisheries Management* **28**, 516-522.
- Lovell R.G. & Maceina M.J. (2002) Population assessment and minimum length limit evaluations for white bass in four Alabama reservoirs. *North American Journal of Fisheries Management* **22**, 609-619.
- Maceina M.J., Wrenn W.B. & Lowery D.R. (1995) Estimating harvestable largemouth bass abundance in a reservoir with an electrofishing catch depletion technique. *North American Journal of Fisheries Management* **15**, 103-109.
- Marcy D.E. (1954) The food and growth of the white crappie, *Pomoxis annularis*, in Pymatuning Lake, Pennsylvania and Ohio. *Copeia* **1954**, 236-239.
- Marwitz T.D. & Hubert W.A. (1995) Descriptions of walleye stocks in high-elevation reservoirs, Wyoming. *Prairie Naturalist* **27**, 101-114.
- Matthews W.J., Hill L.G., Edds D.R., Hoover J.J. & Heger T.G. (1988) Trophic ecology of striped bass, *Morone saxatilis*, in a freshwater reservoir (Lake Texoma, U.S.A). *Journal of Fish Biology* **33**, 273-288.
- Mauck P. & Boxrucker J. (2004) Abundance, growth, and mortality of the Lake Texoma blue catfish population: implications for management. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **58**, 57-65.
- McCoy H.A. (1953) The rate of growth of flathead catfish in twenty-one Oklahoma lakes. *Proceedings of the Oklahoma Academy of Science* **34**, 47-52.
- Miller L.M., McInerney M.C. & Roloff J. (2008) Crappie hybridization in southern Minnesota lakes and its effects on growth estimates. *North American Journal of Fisheries Management* **28**, 1120-1131.
- Miller S.J. (1984) Age and growth of largemouth bass in Lake Shelbyville, Illinois. *Transactions of the Illinois State Academy of Science* **77**, 249-260.
- Miranda L.E., Holder J.C. & Schorr M.S. (1990) Comparison of methods for estimating relative abundance of white crappie. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **44**, 89-97.



- Moen T.E. & Dewey M.R. (1980) Growth and year class composition of white bass (*Morone chrysops*) in Degray Lake, Arkansas. *Proceedings of the Arkansas Academy of Science* **34**, 125-126.
- Moore C.M., Neves R.J. & Ney J.J. (1991) Survival and abundance of stocked striped bass in Smith Mountain Lake, Virginia. *North American Journal of Fisheries Management*, 393-399.
- Moser B.B. (1968) *Food Habits of the White Bass in Lake Texoma with Special Reference to the Threadfin Shad*. MSc Thesis, Norman, OK: University of Oklahoma, 319 pp.
- Mosher T.D. (1984) Responses of white crappie and black crappie to threadfin shad introductions in a lake containing gizzard shad. *North American Journal of Fisheries Management* **4**, 365-370.
- Moss J.L., Harders F. & Tucker W.H. (1985) Age and growth of walleye in Alabama. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **39**, 74-79.
- Mraz D., Kmiotek S. & Frankenberger L. (1961) *The Largemouth Bass: Its Life History, Ecology and Management*. Wisconsin Conservation Department, Publication 232. 13 pp.
- Muoneke M.I. (1994) Dynamics of a heavily exploited Texas white bass population. *North American Journal of Fisheries Management* **14**, 415-422.
- Muoneke M.I., Henry C.C. & Maughan O.E. (1992) Population structure and food habits of white crappie *Pomoxis annularis* Rafinesque in a turbid Oklahoma reservoir. *Journal of Fish Biology* **41**, 647-654.
- Muoneke M.I. & Pope K.L. (1999) Development and evaluation of a standard weight ( $W_s$ ) equation for blue catfish. *North American Journal of Fisheries Management* **19**, 878-879.
- Murphy B.R., Brown M.L. & Springer T.A. (1990) Evaluation of the relative weight ( $W_r$ ) index, with new applications to walleye. *North American Journal of Fisheries Management* **10**, 85-97.
- Neumann R.M. & Murphy B.R. (1991) Evaluation of the relative weight ( $W_r$ ) index for assessment of white crappie and black crappie populations. *North American Journal of Fisheries Management* **11**, 543-555.
- Neumann R.M., Willis D.W. & Mann D.D. (1994) Evaluation of largemouth bass slot length limits in two small South Dakota impoundments. *Prairie Naturalist* **26**, 15-35.

- Nieman D.A. & Clady M.D. (1979) Florida and northern largemouth bass: growth and survival in a heated reservoir. *Proceedings of the Oklahoma Academy of Science* **59**, 47-50.
- Olmstead L.L. (1974) *The Ecology of Largemouth Bass (Micropterus salmoides) and Spotted Bass (Micropterus punctulatus) in Lake Fort Smith, Arkansas*. Doctoral dissertation, Fayetteville, AR: University of Arkansas, 134 pp.
- Olmstead L.L. & Kilambi R.V. (1971) Interrelationships between environmental factors and feeding biology of white bass of Beaver Reservoir, Arkansas. In: G.E. Hall (ed) *Reservoir Fisheries and Limnology*. Bethesda, MD: American Fisheries Society, Special Publication 8, pp. 397-409.
- Olson N.W., Guy C.S. & Koupal K.D. (2007) Interactions among three top-level predators in a polymictic Great Plains reservoir. *North American Journal of Fisheries Management* **27**, 268-278.
- Orth D.J. (1980) Changes in the fish community of Lake Carl Blackwell, Oklahoma (1967-77) and a test of the reproductive guild concept. *Proceedings of the Oklahoma Academy of Science* **60**, 10-17.
- Ott R.A., Jr. & Malvestuto S.P. (1981) The striped bass X white bass hybrid in West Point Reservoir. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **35**, 641-646.
- Parks J.O. & Driscoll M.T. (2003) Evaluation of a 254-mm minimum length limit, 25-fish daily bag limit on crappies at Sam Rayburn Reservoir, Texas. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **57**, 1-16.
- Parrish D.L., Forsythe T.D. & Timmons T.J. (1986) Growth and condition comparisons of white crappie in two similar large reservoirs. *Journal of the Tennessee Academy of Science* **63**, 92-95.
- Pope K.L., Brown M.L., Duffy W.G. & Michaletz P.H. (2001) A caloric-based evaluation of diet indices for largemouth bass. *Environmental Biology of Fishes* **61**, 329-339.
- Pope K.L., Wilde G.R. & Durham B.W. (2004) Age-specific patterns in density-dependent growth of white crappie, *Pomoxis annularis*. *Fisheries Management and Ecology* **11**, 33-38.
- Quist M.C., Guy C.S., Schultz R.D. & Stephen J.L. (2003) Latitudinal comparisons of walleye growth in North America and factors influencing growth of walleyes in Kansas reservoirs. *North American Journal of Fisheries Management* **23**, 677-692.

- Quist M.C., Stephen J.L., Guy C.S. & Schultz R.D. (2004) Age structure and mortality of walleyes in Kansas reservoirs: Use of mortality caps to establish realistic management objectives. *North American Journal of Fisheries Management* **24**, 90-1002.
- Rabern D.A. (1998) *Evaluation of Walleye Introductions into Lakes Burton and Seed*. Georgia Department of Natural Resources, Wildlife Resources Division. 78 pp.
- Raborn S.W., Miranda L.E. & Driscoll M.T. (2003) Modeling predation as a source of mortality for piscivorous fishes in a southeastern U.S. reservoir. *Transactions of the American Fisheries Society* **132**, 560-575.
- Sammons S.M., Isermann D.A. & Bettoli P.W. (2002) Variation in population characteristics and gear selection between black and white crappies in Tennessee reservoirs: potential effects on management decisions. *North American Journal of Fisheries Management* **22**, 863-869.
- Sammons S.M. & Maceina M.J. (2006) Changes in diet and food consumption of largemouth bass following large-scale hydrilla reduction in Lake Seminole, Georgia. *Hydrobiologia* **560**, 109-120.
- Schramm H.L., Jr., Kraai J.E. & Munger C.R. (1999) Intensive stocking of striped bass to restructure a gizzard shad population in a eutrophic Texas reservoir. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **53**, 180-192.
- Schultz R.D. & Robinson D.A. (2002) Exploitation and mortality rates of white bass in Kansas reservoirs. *North American Journal of Fisheries Management* **22**, 652-658.
- Scruggs G.D., Jr. (1957) Reproduction of resident striped bass in Santee-Cooper Reservoir, South Carolina. *Transactions of the American Fisheries Society* **85**, 144-159.
- Sewell S.A. (1979) Age and growth of white crappie, *Pomoxis annularis* Rafinesque, from a flood-created pond in Mississippi County, Arkansas. *Proceedings of the Arkansas Academy of Science* **33**, 90-91.
- Slipke J.W., Smith S.M. & Maceina M.J. (2000) Food habits of striped bass and their influence on crappie in Weiss Lake, Alabama. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **54**, 88-96.
- Storck T.W. (1986) Importance of gizzard shad in the diet of largemouth bass in Lake Shelbyville, Illinois. *Transactions of the American Fisheries Society* **115**, 21-27.

- Summerfelt R.C. & Turner P.R. (1972) Rate of loss of ring and spaghetti tags on flathead catfish, *Pylodictis olivaris* (Rafinesque). *Proceedings of the Annual Conference Southeastern Association of Game and Fish Commissioners* **26**, 421-425.
- Thompson J.S. (2006) *The Influence of Temperature and Forage Availability on Growth and Habitat Selection of a Pelagic Piscivore*. Doctoral dissertation, Raleigh, NC: North Carolina State University, 249 pp.
- Thompson J.S., Waters D.S., Rice J.A. & Hightower J.E. (2007) Seasonal natural and fishing mortality of striped bass in a southeastern reservoir. *North American Journal of Fisheries Management* **27**, 681-694.
- Turner P.R. (1980) Procedures for age determination and growth rate calculations for flathead catfish. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **34**, 253-262.
- Turner P.R. & Summerfelt R.C. (1970) Food habits of adult flathead catfish, *Pylodictus olivaris* (Rafinesque), in Oklahoma reservoirs. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **24**, 387-401.
- Van Den Avyle M.J. & Higginbotham B.J. (1979) Growth, survival and distribution of striped bass stocked into Watts Bar Reservoir, Tennessee. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **33**, 361-370.
- Van Horn S.L., Baker B.K. & Rash M. (1999) Growth and condition response of Lake Norman striped bass to increased stocking rates and more restrictive harvest regulations. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **53**, 193-199.
- Wanjala B.S., Tash J.C., Matter W.J. & Ziebell C.D. (1986) Food and habitat use by different sizes of largemouth bass (*Micropterus salmoides*) in Alamo Lake, Arizona. *Journal of Freshwater Ecology* **3**, 359-369.
- Ware F.J. (1971) Some early life history of Florida's inland striped bass. *Proceedings of the Annual Conference Southeastern Association of Game and Fish Commissioners* **24**, 439-447.
- Weathers K.C., Newman M.J., Partridge D. & Wright R. (2000) Fish population and angler responses to a 406-mm minimum length limit for largemouth bass on Lake Eufaula, Alabama-Georgia. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **54**, 28-38.

- Wege G.J. & Anderson R.O. (1978) Relative weight ( $W_r$ ): a new index of condition for largemouth bass. In: G.D. Novinger & J.G. Dillard (eds) *New Approaches to the Management of Small Impoundments*. Bethesda, MD: North Central Division, American Fisheries Society, Special Publication No. 5, pp. 79-91.
- Whitworth W.R. (1989) Evaluation of largemouth bass growth estimates obtained from angler-collected scale samples. *North American Journal of Fisheries Management* **9**, 116-119.
- Willis D.W., Beck H.D., Soupier C.A., Johnson B.A., Simpson G.D. & Wickstrom G.A. (1997) White bass growth in South Dakota waters. *Prairie Naturalist* **29**, 111-118.
- Willis D.W., Milewski C.L. & Guy C.S. (1990) Growth of largemouth and smallmouth bass in South Dakota waters. *Prairie Naturalist* **22**, 265-269.
- Willis D.W., Paukert C.P. & Blackwell B.G. (2002) Biology of white bass in eastern South Dakota glacial lakes. *North American Journal of Fisheries Management* **22**, 627-636.
- Winkelman D. (2002) *Evaluation of the Flathead Catfish Population and Fishery on Lake Carl Blackwell, OK, with Emphasis on the Effects of Noodling*. Oklahoma Department of Wildlife Conservation. 39 pp.
- Woodrum J.E. (1978) Comparison of rotenone and electrofishing population estimates to lake draining. *Proceedings of the Annual Conference Southeastern Association of Fish and Wildlife Agencies* **32**, 634-638.
- Yellayi R.R. & Kilambi R.V. (1976) Population dynamics of white bass in Beaver Reservoir, Arkansas. *Proceedings of the Annual Conference Southeastern Association of Game and Fish Commissioners* **29**, 172-189.
- Young S.P. & Isely J.J. (2004) Temporal and spatial estimates of adult striped bass mortality from telemetry and transmitter return data. *North American Journal of Fisheries Management* **24**, 1112-1119.
- Zdinak A., Jr., Kilambi R.V., Galloway M., McClanahan J.D. & Duffe C. (1980) Estimated growth and standing crop of largemouth bass (*Micropterus salmoides*) from Lake Elmdale. *Arkansas Academy of Science Proceedings* **34**, 101-103.
- Zweiacker P.L. (1972) *Population Dynamics of Largemouth Bass in an 808-hectare Oklahoma Reservoir*. Doctoral dissertation, Stillwater, OK: Oklahoma State University, 138 pp.