



Minnesota Department of Natural Resources
Fisheries Management



STANDARD LAKE SURVEY REPORT

DRAFT VERSION - PRELIMINARY DATA (AS OF 02/25/2011)

Lake Name: Rice

Survey Type: Population Assessment

DOW Number: 66-0048-00

Survey ID Date: 07/15/2010

Lake Identification

Alternate Lake Name: N/A
Primary Lake Class ID: 43

DNR Sounding Map Number: N/A
Alternate Lake Class ID: N/A

Lake Location

Primary County: Rice

Nearest Town: Shieldsville

Legal Descriptions

Lake Center: Township - 110N Range - 22W Section - 17
PLS Section Lake Center: 11002217

All Legal Descriptions:

Rice County: Township - 110N Range - 22W Sections - 16, 17, 20, 21

Area Office

Area Name: Waterville
Region Name: Southern

ORG Code: F417
Region Number: 4

Lake Characteristics

| | |
|--|------------------------------------|
| Lake Area (planimetered acres): 323.00 | GIS Shoreline Length (miles): 4.38 |
| GIS Lake Area (acres): 330.62 | Maximum Fetch (miles): 1.00 |
| DOW Lake Area (acres): 330.00 | Fetch Orientation (degrees): 270 |
| Littoral Area (acres): 323.00 | USGS Quad Map Number: U16c |
| Area in MN (acres): 330.62 | USGS Quad 24K GIS Index: 4131 |
| Maximum Depth (feet): 6.7 | |
| Mean Depth (feet): 2.5 | |

Watershed Characteristics

Major Watershed

Name: Cannon River
Watershed Number: 39
Watershed size (acres): 940,540

Minor Watershed

Name: Cannon R
Watershed Number: 84
Watershed size (acres): 18,806

Surveys And Investigations

Initial Survey: 07/10/1995.
Re-Survey: 07/25/2005.
Population Assessment: 07/15/2010.
Special Assessment: 07/20/2005, 05/28/2003, 08/16/2000, 07/20/1949.
Dissolved Oxygen Check: 01/20/2010.

Net Catch Summary by Numbers for GN

Standard gill net sets

Number of Sets: 6
 First Set Date: 07/14/2010
 Last Lift Date: 07/20/2010
 Target Species: N/A

| Abbr | Species | Total Fish | Number Per Set | Quartiles for Lake Class 43* | | |
|-----------------|------------------|------------|----------------|--------------------------------|-------|--------|
| | | | | 25% | 50% | 75% |
| BIB | Bigmouth Buffalo | 1 | 0.17 | 0.75 | 2.58 | 6.96 |
| BLB | Black Bullhead | 457 | 76.17 | 30.34 | 75.58 | 150.62 |
| BLC | Black Crappie | 52 | 8.67 | 1.41 | 3.71 | 13.75 |
| BLG | Bluegill | 19 | 3.17 | N/A | N/A | N/A |
| BOF | Bowfin (Dogfish) | 9 | 1.50 | 0.17 | 0.35 | 0.54 |
| CAP | Common Carp | 6 | 1.00 | 1.00 | 3.33 | 13.75 |
| FRD | Freshwater Drum | 1 | 0.17 | 0.50 | 2.56 | 8.33 |
| GOS | Golden Shiner | 12 | 2.00 | 0.50 | 1.00 | 2.58 |
| LMB | Largemouth Bass | 17 | 2.83 | 0.20 | 0.50 | 1.50 |
| NOP | Northern Pike | 25 | 4.17 | 1.08 | 3.00 | 8.00 |
| PMK | Pumpkinseed | 7 | 1.17 | N/A | N/A | N/A |
| WAE | Walleye | 7 | 1.17 | 2.28 | 6.83 | 18.06 |
| WTS | White Sucker | 1 | 0.17 | 0.81 | 2.33 | 6.50 |
| YEB | Yellow Bullhead | 3 | 0.50 | 0.50 | 1.50 | 3.50 |
| YEP | Yellow Perch | 30 | 5.00 | 2.65 | 8.00 | 25.00 |
| Total Fish/Set: | | | 107.83 | * Quartiles for Number Per Set | | |

Net Catch Summary by Weight for GN

Standard gill net sets

| Abbr | Species | Total Weight (Pounds) | Pounds Per Set | Mean Weight | Quartiles for Lake Class 43* | | |
|------------------------|------------------|-----------------------|----------------|-----------------------------|------------------------------|------|------|
| | | | | | 25% | 50% | 75% |
| BIB | Bigmouth Buffalo | 3.95 | 0.66 | 3.95 | N/A | N/A | N/A |
| BLB | Black Bullhead | 293.26 | 48.88 | 0.64 | 0.17 | 0.26 | 0.39 |
| BLC | Black Crappie | 13.74 | 2.29 | 0.26 | 0.16 | 0.25 | 0.35 |
| BLG | Bluegill | 1.63 | 0.27 | 0.09 | N/A | N/A | N/A |
| BOF | Bowfin (Dogfish) | 25.35 | 4.23 | 2.82 | 1.79 | 2.58 | 3.05 |
| CAP | Common Carp | 29.75 | 4.96 | 4.96 | 0.81 | 1.98 | 3.70 |
| FRD | Freshwater Drum | 5.26 | 0.88 | 5.26 | 0.40 | 0.82 | 1.67 |
| GOS | Golden Shiner | 1.03 | 0.17 | 0.09 | 0.08 | 0.10 | 0.11 |
| LMB | Largemouth Bass | 21.05 | 3.51 | 1.24 | 0.60 | 1.18 | 1.37 |
| NOP | Northern Pike | 82.77 | 13.80 | 3.31 | 1.82 | 2.50 | 3.35 |
| PMK | Pumpkinseed | 0.55 | 0.09 | 0.08 | N/A | N/A | N/A |
| WAE | Walleye | 28.94 | 4.82 | 4.13 | 1.01 | 1.53 | 2.30 |
| WTS | White Sucker | 3.16 | 0.53 | 3.16 | 0.93 | 1.58 | 2.02 |
| YEB | Yellow Bullhead | 2.19 | 0.36 | 0.73 | 0.31 | 0.53 | 0.73 |
| YEP | Yellow Perch | 4.98 | 0.83 | 0.17 | 0.13 | 0.21 | 0.31 |
| Total Pounds Fish/Set: | | | 86.27 | * Quartiles for Mean Weight | | | |

Net Catch Summary by Numbers for TN

Standard 3/4-in mesh, double frame trap net sets

Number of Sets: 9
 First Set Date: 07/14/2010
 Last Lift Date: 07/20/2010
 Target Species: N/A

| Abbr | Species | Total Fish | Number Per Set | Quartiles for Lake Class 43* | | |
|-----------------|------------------|------------|----------------|--------------------------------|-------|--------|
| | | | | 25% | 50% | 75% |
| BIB | Bigmouth Buffalo | 1 | 0.11 | 0.17 | 0.38 | 1.04 |
| BLB | Black Bullhead | 3 | 0.33 | 11.50 | 42.00 | 132.61 |
| BLC | Black Crappie | 41 | 4.56 | 1.17 | 4.88 | 20.50 |
| BLG | Bluegill | 906 | 100.67 | 1.17 | 3.89 | 20.00 |
| BOF | Bowfin (Dogfish) | 56 | 6.22 | 0.33 | 0.50 | 0.92 |
| CAP | Common Carp | 21 | 2.33 | 1.00 | 2.44 | 5.51 |
| FRD | Freshwater Drum | 1 | 0.11 | 0.23 | 0.92 | 3.25 |
| GOS | Golden Shiner | 39 | 4.33 | 0.22 | 0.50 | 1.10 |
| GSF | Green Sunfish | 2 | 0.22 | 0.15 | 0.25 | 1.94 |
| HSF | Hybrid Sunfish | 15 | 1.67 | N/A | N/A | N/A |
| LMB | Largemouth Bass | 19 | 2.11 | 0.23 | 0.38 | 0.67 |
| NOP | Northern Pike | 2 | 0.22 | N/A | N/A | N/A |
| PMK | Pumpkinseed | 237 | 26.33 | 0.26 | 1.35 | 4.92 |
| WAE | Walleye | 1 | 0.11 | 0.50 | 1.33 | 2.95 |
| WTS | White Sucker | 2 | 0.22 | 0.34 | 0.88 | 2.58 |
| YEB | Yellow Bullhead | 10 | 1.11 | 0.50 | 1.13 | 2.50 |
| YEP | Yellow Perch | 25 | 2.78 | 0.33 | 1.37 | 3.76 |
| Total Fish/Set: | | | 153.44 | * Quartiles for Number Per Set | | |

Net Catch Summary by Weight for TN

Standard 3/4-in mesh, double frame trap net sets

| Abbr | Species | Total Weight (Pounds) | Pounds Per Set | Mean Weight | Quartiles for Lake Class 43* | | |
|------------------------|------------------|-----------------------|----------------|-----------------------------|------------------------------|------|------|
| | | | | | 25% | 50% | 75% |
| BIB | Bigmouth Buffalo | 4.79 | 0.53 | 4.79 | 2.56 | 3.75 | 5.83 |
| BLB | Black Bullhead | 1.93 | 0.21 | 0.64 | 0.18 | 0.28 | 0.40 |
| BLC | Black Crappie | 2.95 | 0.33 | 0.07 | 0.22 | 0.34 | 0.50 |
| BLG | Bluegill | 89.94 | 9.99 | 0.10 | 0.13 | 0.24 | 0.39 |
| BOF | Bowfin (Dogfish) | 104.66 | 11.63 | 1.87 | 2.71 | 3.31 | 3.78 |
| CAP | Common Carp | 75.93 | 8.44 | 3.62 | 1.42 | 2.92 | 4.58 |
| FRD | Freshwater Drum | 4.45 | 0.49 | 4.45 | 0.28 | 0.60 | 0.95 |
| GOS | Golden Shiner | 2.52 | 0.28 | 0.06 | 0.06 | 0.10 | 0.10 |
| GSF | Green Sunfish | 0.09 | 0.01 | 0.05 | 0.09 | 0.11 | 0.24 |
| HSF | Hybrid Sunfish | 1.62 | 0.18 | 0.11 | N/A | N/A | N/A |
| LMB | Largemouth Bass | 7.17 | 0.80 | 0.38 | 0.30 | 0.85 | 1.53 |
| NOP | Northern Pike | 7.17 | 0.80 | 3.58 | N/A | N/A | N/A |
| PMK | Pumpkinseed | 20.28 | 2.25 | 0.09 | 0.08 | 0.12 | 0.20 |
| WAE | Walleye | 5.51 | 0.61 | 5.51 | 0.82 | 1.44 | 2.28 |
| WTS | White Sucker | 8.24 | 0.92 | 4.12 | 1.05 | 1.47 | 2.04 |
| YEB | Yellow Bullhead | 11.02 | 1.22 | 1.10 | 0.31 | 0.48 | 0.67 |
| YEP | Yellow Perch | 2.03 | 0.23 | 0.08 | 0.11 | 0.18 | 0.30 |
| Total Pounds Fish/Set: | | | 38.92 | * Quartiles for Mean Weight | | | |

Length Frequency Distribution For GN

Standard gill net sets

(Field work conducted between 07/14/2010 and 07/20/2010)

| | <u>BIB</u> | <u>BLB</u> | <u>BLC</u> | <u>BLG</u> | <u>BOF</u> | <u>CAP</u> | <u>FRD</u> | <u>GOS</u> | <u>LMB</u> | <u>NOP</u> | <u>PMK</u> | <u>WAE</u> | <u>WTS</u> | <u>YEB</u> | <u>YEP</u> |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| < 3.00 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3.00 - 3.49 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3.50 - 3.99 | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - | - |
| 4.00 - 4.49 | - | - | 2 | 2 | - | - | - | - | - | - | 2 | - | - | - | - |
| 4.50 - 4.99 | - | 1 | 8 | 6 | - | - | - | - | - | - | 4 | - | - | - | - |
| 5.00 - 5.49 | - | - | 7 | 5 | - | - | - | - | - | - | 1 | - | - | - | 1 |
| 5.50 - 5.99 | - | - | 16 | 2 | - | - | - | 3 | - | - | - | - | - | - | 6 |
| 6.00 - 6.49 | - | - | 5 | - | - | - | - | 9 | 2 | - | - | - | - | - | 8 |
| 6.50 - 6.99 | - | 2 | 3 | 1 | 1 | - | - | - | 2 | - | - | - | - | - | 5 |
| 7.00 - 7.49 | - | - | - | - | 1 | - | - | - | 1 | - | - | - | - | 1 | 2 |
| 7.50 - 7.99 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | 3 |
| 8.00 - 8.49 | - | 2 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | 2 |
| 8.50 - 8.99 | - | 8 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9.00 - 9.49 | - | 20 | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 9.50 - 9.99 | - | 52 | 2 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 10.00 - 10.49 | - | 149 | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 10.50 - 10.99 | - | 139 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11.00 - 11.49 | - | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11.50 - 11.99 | - | 15 | 4 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12.00 - 12.99 | - | 4 | 2 | - | - | - | - | - | 1 | - | - | - | - | - | - |
| 13.00 - 13.99 | - | 2 | - | - | - | - | - | - | 3 | - | - | - | - | - | - |
| 14.00 - 14.99 | - | - | - | - | - | - | - | - | 2 | - | - | - | - | 1 | - |
| 15.00 - 15.99 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 16.00 - 16.99 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - |
| 17.00 - 17.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 18.00 - 18.99 | 1 | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - |
| 19.00 - 19.99 | - | - | - | - | - | 1 | - | - | - | - | - | 1 | 1 | - | - |
| 20.00 - 20.99 | - | - | - | - | 1 | 3 | - | - | - | - | - | 2 | - | - | - |
| 21.00 - 21.99 | - | - | - | - | - | - | - | - | - | 1 | - | 2 | - | - | - |
| 22.00 - 22.99 | - | - | - | - | 2 | - | 1 | - | - | 2 | - | 1 | - | - | - |
| 23.00 - 23.99 | - | - | - | - | - | - | - | - | - | 4 | - | - | - | - | - |
| 24.00 - 24.99 | - | - | - | - | 1 | 2 | - | - | - | 5 | - | - | - | - | - |
| 25.00 - 25.99 | - | - | - | - | 1 | - | - | - | - | 6 | - | 1 | - | - | - |
| 26.00 - 26.99 | - | - | - | - | - | - | - | - | - | 3 | - | - | - | - | - |
| 27.00 - 27.99 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - |
| 28.00 - 28.99 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - |
| 29.00 - 29.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 30.00 - 30.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 31.00 - 31.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 32.00 - 32.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 33.00 - 33.99 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - |
| 34.00 - 34.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 35.00 - 35.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| = > 36.00 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | <u>BIB</u> | <u>BLB</u> | <u>BLC</u> | <u>BLG</u> | <u>BOF</u> | <u>CAP</u> | <u>FRD</u> | <u>GOS</u> | <u>LMB</u> | <u>NOP</u> | <u>PMK</u> | <u>WAE</u> | <u>WTS</u> | <u>YEB</u> | <u>YEP</u> |
| Total | 1 | 457 | 52 | 18 | 9 | 6 | 1 | 12 | 17 | 25 | 7 | 7 | 1 | 3 | 30 |
| Min. Length | 18.90 | 4.72 | 4.33 | 3.94 | 6.50 | 19.29 | 22.40 | 5.63 | 6.10 | 16.14 | 4.06 | 19.88 | 19.57 | 7.28 | 5.39 |
| Max. Length | 18.90 | 13.62 | 12.60 | 6.69 | 25.00 | 24.84 | 22.40 | 6.46 | 15.94 | 33.98 | 5.39 | 25.00 | 19.57 | 14.45 | 10.04 |
| Mean Length | 18.90 | 10.40 | 6.66 | 4.93 | 18.36 | 21.84 | 22.40 | 6.14 | 11.62 | 24.77 | 4.67 | 21.59 | 19.57 | 10.00 | 6.87 |
| # Measured | 1 | 372 | 52 | 18 | 9 | 6 | 1 | 11 | 16 | 25 | 7 | 7 | 1 | 3 | 30 |
| No Lengths for | 0 | 85 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish

STANDARD LAKE SURVEY REPORT
POPULATION ASSESSMENT DATED 07/15/2010 FOR DOW NUMBER 66-0048-00

DRAFT

Length Frequency Distribution For TN

Standard 3/4-in mesh, double frame trap net sets

(Field work conducted between 07/14/2010 and 07/20/2010)

| | <u>BIB</u> | <u>BLB</u> | <u>BLC</u> | <u>BLG</u> | <u>BOF</u> | <u>CAP</u> | <u>FRD</u> | <u>GOS</u> | <u>GSF</u> | <u>HSF</u> | <u>LMB</u> | <u>NOP</u> | <u>PMK</u> | <u>WAE</u> | <u>WTS</u> |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| < 3.00 | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - | - |
| 3.00 - 3.49 | - | - | - | 35 | - | - | - | - | - | - | - | - | 23 | - | - |
| 3.50 - 3.99 | - | - | 1 | 14 | - | 6 | - | - | 1 | - | - | - | 33 | - | - |
| 4.00 - 4.49 | - | 1 | 9 | 156 | - | 5 | - | 1 | 1 | - | - | - | 43 | - | - |
| 4.50 - 4.99 | - | - | 9 | 258 | - | - | - | 5 | - | 6 | - | - | 60 | - | - |
| 5.00 - 5.49 | - | - | 10 | 191 | - | - | - | 10 | - | 6 | - | - | 46 | - | - |
| 5.50 - 5.99 | - | - | 7 | 85 | 2 | - | - | 17 | - | 3 | 1 | - | 26 | - | - |
| 6.00 - 6.49 | - | - | 5 | 91 | 16 | - | - | 4 | - | - | - | - | 4 | - | - |
| 6.50 - 6.99 | - | - | - | 50 | 10 | - | - | 2 | - | - | - | - | 3 | - | - |
| 7.00 - 7.49 | - | - | - | 21 | 6 | - | - | - | - | - | 6 | - | - | - | - |
| 7.50 - 7.99 | - | - | - | 3 | - | - | - | - | - | - | 6 | - | - | - | - |
| 8.00 - 8.49 | - | - | - | - | 2 | - | - | - | - | - | 2 | - | - | - | - |
| 8.50 - 8.99 | - | - | - | - | 1 | - | - | - | - | - | 2 | - | - | - | - |
| 9.00 - 9.49 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9.50 - 9.99 | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - |
| 10.00 - 10.49 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 10.50 - 10.99 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11.00 - 11.49 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11.50 - 11.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 12.00 - 12.99 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 13.00 - 13.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 14.00 - 14.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 15.00 - 15.99 | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - |
| 16.00 - 16.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 17.00 - 17.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 18.00 - 18.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 19.00 - 19.99 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - |
| 20.00 - 20.99 | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | 1 |
| 21.00 - 21.99 | - | - | - | - | 2 | 1 | 1 | - | - | - | - | - | - | - | - |
| 22.00 - 22.99 | - | - | - | - | 2 | - | - | - | - | - | - | - | - | - | 1 |
| 23.00 - 23.99 | - | - | - | - | 4 | - | - | - | - | - | - | - | - | - | - |
| 24.00 - 24.99 | - | - | - | - | 1 | 1 | - | - | - | - | - | 1 | - | 1 | - |
| 25.00 - 25.99 | - | - | - | - | 3 | 3 | - | - | - | - | - | 1 | - | - | - |
| 26.00 - 26.99 | - | - | - | - | 2 | 2 | - | - | - | - | - | - | - | - | - |
| 27.00 - 27.99 | - | - | - | - | 1 | 1 | - | - | - | - | - | - | - | - | - |
| 28.00 - 28.99 | - | - | - | - | 2 | 1 | - | - | - | - | - | - | - | - | - |
| 29.00 - 29.99 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - |
| 30.00 - 30.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 31.00 - 31.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 32.00 - 32.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 33.00 - 33.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 34.00 - 34.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 35.00 - 35.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| = > 36.00 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | <u>BIB</u> | <u>BLB</u> | <u>BLC</u> | <u>BLG</u> | <u>BOF</u> | <u>CAP</u> | <u>FRD</u> | <u>GOS</u> | <u>GSF</u> | <u>HSF</u> | <u>LMB</u> | <u>NOP</u> | <u>PMK</u> | <u>WAE</u> | <u>WTS</u> |
| Total | 1 | 3 | 41 | 906 | 56 | 21 | 1 | 39 | 2 | 15 | 19 | 2 | 238 | 1 | 2 |
| Min. Length | 20.16 | 4.25 | 3.82 | 2.99 | 5.83 | 3.62 | 21.26 | 4.49 | 3.82 | 4.53 | 5.79 | 24.61 | 3.11 | 24.21 | 20.55 |
| Max. Length | 20.16 | 12.72 | 6.30 | 7.99 | 29.53 | 28.66 | 21.26 | 6.65 | 4.17 | 5.98 | 15.59 | 25.67 | 6.50 | 24.21 | 22.05 |
| Mean Length | 20.16 | 9.28 | 5.10 | 4.96 | 12.79 | 14.12 | 21.26 | 5.55 | 4.00 | 5.13 | 8.15 | 25.14 | 4.62 | 24.21 | 21.30 |
| # Measured | 1 | 3 | 41 | 238 | 56 | 21 | 1 | 37 | 2 | 15 | 19 | 2 | 178 | 1 | 2 |
| No Lengths for | 0 | 0 | 0 | 668 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 59 | 0 | 0 |

Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish

Length Frequency Distribution For TN (Continued)

Standard 3/4-in mesh, double frame trap net sets

(Field work conducted between 07/14/2010 and 07/20/2010)

| | <u>YEB</u> | <u>YEP</u> |
|---------------|------------|------------|
| < 3.00 | - | - |
| 3.00 - 3.49 | - | - |
| 3.50 - 3.99 | - | - |
| 4.00 - 4.49 | - | - |
| 4.50 - 4.99 | - | - |
| 5.00 - 5.49 | - | 7 |
| 5.50 - 5.99 | - | 17 |
| 6.00 - 6.49 | - | 1 |
| 6.50 - 6.99 | 1 | - |
| 7.00 - 7.49 | - | - |
| 7.50 - 7.99 | - | - |
| 8.00 - 8.49 | - | - |
| 8.50 - 8.99 | - | - |
| 9.00 - 9.49 | 1 | - |
| 9.50 - 9.99 | - | - |
| 10.00 - 10.49 | 1 | - |
| 10.50 - 10.99 | - | - |
| 11.00 - 11.49 | 1 | - |
| 11.50 - 11.99 | - | - |
| 12.00 - 12.99 | 2 | - |
| 13.00 - 13.99 | 2 | - |
| 14.00 - 14.99 | 1 | - |
| 15.00 - 15.99 | 1 | - |
| 16.00 - 16.99 | - | - |
| 17.00 - 17.99 | - | - |
| 18.00 - 18.99 | - | - |
| 19.00 - 19.99 | - | - |
| 20.00 - 20.99 | - | - |
| 21.00 - 21.99 | - | - |
| 22.00 - 22.99 | - | - |
| 23.00 - 23.99 | - | - |
| 24.00 - 24.99 | - | - |
| 25.00 - 25.99 | - | - |
| 26.00 - 26.99 | - | - |
| 27.00 - 27.99 | - | - |
| 28.00 - 28.99 | - | - |
| 29.00 - 29.99 | - | - |
| 30.00 - 30.99 | - | - |
| 31.00 - 31.99 | - | - |
| 32.00 - 32.99 | - | - |
| 33.00 - 33.99 | - | - |
| 34.00 - 34.99 | - | - |
| 35.00 - 35.99 | - | - |
| = > 36.00 | - | - |

| | <u>YEB</u> | <u>YEP</u> |
|----------------|------------|------------|
| Total | 10 | 25 |
| Min. Length | 6.89 | 5.12 |
| Max. Length | 15.47 | 6.10 |
| Mean Length | 12.07 | 5.63 |
| # Measured | 10 | 22 |
| No Lengths for | 0 | 3 |

Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish

Other Species

| Gear Type (1) | Other Species (Gender) (2) | Total Num | Number Measured | Length (inches) Min - Mean - Max | Number Weighed | Weight (pounds) Min - Mean - Max |
|----------------------|-----------------------------------|------------------|------------------------|---|-----------------------|---|
| TN | Painted Turtle | 14 | 1 | 5.00 | 0 | N/A |
| | Snapping Turtle | 7 | 3 | 13.78 - 17.61 - 24.41 | 0 | N/A |

(1) Key to sampling gear abbreviations:

TN = Standard 3/4-in mesh, double frame trap net sets

(2) Gender: If identified and reported.

Discussion

Rice Lake in Rice County is a 323 acre lake located southwest of Shieldsville. The lake is accessible by the public by stepping off Kasson Trail onto the west end of the lake where the Cannon River enters. Maximum depth in Rice Lake doesn't exceed 6 feet. Rice Lake was surveyed the week of July 15, 2010.

Black bullhead overwhelmed the gill net catch. 76 black bullheads were caught per gill net lift. Black bullheads were small, averaging 6.7 inches. Black bullhead declined from the 2005 survey, wherein 202 fish were caught per gill net lift.

Black crappie abundance dropped considerably from 2005 to 2010, with gill netted crappies dropping from 35 to 8.7 and trap netted crappies dropping from 22 to 4.6 respectively. Quality (8"), Preferred (10"), Memorable (12"), and Trophy (15") stocks of black crappie in all gears dropped since 2005. In 2005, all gear PSD-8 was 54%, PSD-10 was 39%, PSD-12 was 6%, and PSD-15 was 1%. In 2010, all gear PSD-8 was 12%, PSD-10 was 9%, PSD-12 was 2%, and PSD-15 was 0%. Black crappie abundance and size structure fell sharply in five years.

Bluegill abundance has increased as size structure decreased since 2005. 2010 net returns for bluegill came in at 3 fish per gill net set and 100 fish per trap net set. In 2005, those values were 8 and 14 respectively. Average size of bluegill in 2010 among all gears was 5 inches.

Largemouth bass are usually not well sampled in passive gears (trap nets and gill nets) and are better sampled using electrofishing, but the 2010 population assessment turned up largemouth bass between 6 and 16 inches. Several year classes are present, and growth appears to be good. Very little development around the lake has left lakeshores, vegetation, and fallen timber intact to be used as cover by bass and other fish species.

Northern pike are popular with winter spearing anglers on Rice Lake. Pike averaged 4 fish per gill net lift and ranged from 16 to 34 inches. Average pike size was 24 inches.

Walleye fry were stocked in 2005 and 2009. Eight walleyes were caught in the assessment in trap and gill nets, a low level of abundance for this type of lake. Walleye ranged between 20 and 25 inches.

Pumpkinseeds are coming on strong in Rice Lake. Pumpkinseed averaged 26 fish per trap net lift. However, the fish were small, averaging 4.6 inches in length. Only 4 pumpkinseeds total were caught in the 2005 survey. Pumpkinseeds may be exploiting niche availability in a reduced abundance panfish population.

Yellow perch were mostly unchanged from the 2005 assessment. Perch averaged 5 fish per gill net lift and 3 fish per trap net lift. Gill netted perch averaged 7 inches in length. Perch up to 10 inches were observed.

Other fish observed in the survey include bigmouth buffalo, bowfin (dogfish), common carp, freshwater drum, golden shiner, green sunfish, hybrid sunfish, white sucker, yellow bullhead.

Anglers can help maintain or improve the quality of fishing by practicing selective harvest. Selective harvest allows for the harvest of smaller fish for table fare, but encourages release of medium- to large-sized fish. Releasing these fish can help maintain balance in the fish community in Albert Lea Lake and provide anglers the opportunity to catch more and larger fish in the future.

Shoreline areas on the land and into the shallow water provide essential habitat for fish and wildlife that live in or near Minnesota's lakes. Overdeveloped shorelines cannot support the fish, wildlife, and clean water that are associated with natural undeveloped lakes. Shoreline habitat consists of aquatic plants, woody plants, and natural lake bottom soils.

Plants in the water and at the water's edge provide habitat, prevent erosion, and absorb excess nutrients. Shrubs, trees, and woody debris such as fallen trees or limbs provide good habitat both above and below the water and should be left in place. By leaving a buffer strip of natural vegetation along the shoreline, property owners can reduce erosion, help maintain water quality, and provide habitat and travel corridors for wildlife.

Status Of The Fishery

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Approval Dates And Notices

Date Approved By Waterville Area Fisheries Supervisor: _____

Date Approved By Southern Region Fisheries Manager: _____

This Draft version of the Standard Lake Survey Report contains preliminary data (as of 02/25/2011), and is therefore subject to change at any time.



Minnesota Department of Natural Resources

By accepting the data in this report, the user agrees the data will be used for personal benefit and not for profit. Any other uses or publication of the data needs the consent of the Department. The Minnesota Department of Natural Resources assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on the data.

REPORT OVERVIEW - FOR OFFICE USE ONLY

(This page is not part of the Standard Lake Survey Report and should be discarded)

Lake Name: Rice

Survey Type: Population Assessment

DOW Number: 66-0048-00

Survey ID Date: 07/15/2010

Survey Status: Field Work Complete

The following 24 (of 31) report components are not included in this report:

1. Lake Access
2. Current Water Level
3. Benchmark And Gauge Descriptions / Locations
4. Water Level History*
5. Water Level History - Readings*
6. Water Level History - Station Summary*
7. Lake Inlets
8. Additional Inlet Information
9. Lake Outlets
10. Additional Outlet Information
11. Water Control Structure (Dam)
12. Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations
13. Resorts And Campgrounds
14. Fish Spawning Conditions
15. Erosion And Pollution
16. Fish Diseases And Parasites
17. Aquatic Vegetation And Shoalwater Substrates
18. Dissolved Oxygen And Temperature Profile Of Lake Water
19. Field Measurements Of Water Quality
20. Laboratory Analysis Of Water Chemistry
21. Length At Capture With Last Incremental Length*
22. Back-Calculated Lengths
23. Age Class Frequency Distributions
24. Water Quality (Winter Observations) (added to revision 01/21/2010)

* Water Level History report: This data has not yet been migrated into the Fisheries LSM database. On 01/08/2009, two additional Water Level History report components (Readings and Station Summary) were added.

* Length At Capture With Last Incremental Length report: The following criteria must be met for a report to be generated:

1. The fish species must have an assigned body scale constant.
2. Fish must have an "official" age assigned.
3. Fish must have a digitized measurement marked for back calculation use.

Note: The data source for Length and Age Class Frequency Distribution tables is updated twice daily - once at noon and once overnight. Any changes to the data made after noon on 02/25/2011 may not be reflected in the Distribution tables until 02/26/2011.

The following survey component was flagged to be specifically excluded from this report: TN - 6