Creel and Lake Information

Lake Information

Lake Name: Belle Fourche Reservoir

Lake Code: LBF-Lake-768-000

Surface Area: 2,658.83 Hectares

County: Butte

Start Date: 5/13/2018

End Date: 10/30/2018

Months Included: May, June, July, September

Table 1. Percent of angling parties interviewed primarily targeting a species (or any species) by month and overall for Belle Fourche Reservoir during 2017 - 2018. Any Species (ANY), Channel Catfish (CCF), Walleye (WAE).

| | | | Percent of Anglers Targeting | | |
|------|-----------|--------------------|---------------------------------|-----|------|
| Year | Month | # of Interviews | ANY | CCF | WAE |
| 2018 | May | 45 | 11.1 | 2.2 | 86.7 |
| | June | 52 | 11.5 | 0.0 | 88.5 |
| | July | 30 | 43.3 | 0.0 | 56.7 |
| | September | 22 | 27.3 | 0.0 | 72.7 |
| | Overall | 149 | 20.1 | 0.7 | 79.2 |

Table 2. Monthly and overall number of interviews, angler hours, angler days, mean trip length, mean party size, percent of parties interviewed that were South Dakota residents, percent of angling activity from a boat or shack and percent of angling activity that occurred on weekends and holidays at Belle Fourche Reservoir (80% confidence interval).

| Year | Month | # Interviews | Angler Hours | Angler Days | Trip Length (h) | Party Size | % SD Residents | % Boat or Shack | % Weekend/ Holidays |
|------|-----------|--------------|-------------------|----------------|--------------------|----------------|-------------------|--------------------|------------------------|
| 2018 | May | 45 | 15,257 (4,310) | 3,033 | 5.03 | 2.29 (0.49) | 93.33 | 71 | 53 |
| | June | 52 | 13,863 (4,835) | 2,651 | 5.23 | 2.16 | 82.69 | 100 | 29 |
| | July | 30 | 14,508 (3,454) | 4,680 | 3.10 | 2.70 | 96.67 | 100 | 70 |
| | September | 22 | 2,872 (1,174) | 648 | 4.43 | 1.50 | 100.00 | 100 | 86 |
| | Overall | 149 | 46,500 (7,434) | 10,473 | 4.44 | 2.17 (0.12) | 91.28 | 91 | 53 |

Table 3. Estimated fishing pressure (angler hours) by month during the summer season 2018 daylight period on Belle Fourche Reservoir (80% confidence interval).

| | Month | | | | | |
|---------------------------------|-------------------|-------------------|-------------------|------------------|------------------|-------------------|
| Lake | May | June | July | August | Septembe r | Total |
| Belle Fourche Reservoir (Butte) | 15,257 (4,310) | 13,863 (4,835) | 14,508 (3,454) | 3,496 (2,284) | 2,872 (1,174) | 49,997 (7,777) |

Table 4. Estimated number of fish harvested, by species and month, for the summer season 2018 daylight period on Belle Fourche Reservoir (80% confidence interval).

| | | Month | | | | |
|-----------------|----------------|------------------|------------------|-------------------|--|--|
| Species | May | June | July | Total | | |
| Channel Catfish | 0 | 0 | 0 | 0 | | |
| Walleye | 3,366 (993) | 4,252 (1,627) | 2,402 (1,470) | 10,020 (2,407) | | |
| Total | 3,366 (993) | 4,252 (1,627) | 2,402 (1,470) | 10,020 (2,407) | | |

Table 5a. Estimated monthly and overall angler catch rate per hour fished (C/h) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Channel Catfish (CCF), Walleye (WAE) and other species (Other).

| | | CCF | WAE |
|------|-----------|------------------|-----------------|
| Year | Month | C/h | C/h |
| 2018 | May | 0.00 | 0.75 (0.44) |
| | June | 0.00 | 0.84 (0.57) |
| | July | 0.00 | 0.67 (0.38) |
| | September | 0.01 (0.02) | 0.01 (<0.01) |
| | Overall | <0.01 (<0.01) | 0.71 (0.24) |

Table 5b. Estimated monthly and overall angler harvest rate per hour fished (H/h) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Channel Catfish (CCF), Walleye (WAE) and other species (Other).

| | | CCF | WAE |
|------|-----------|------|----------------|
| Year | Month | H/h | H/h |
| 2018 | May | 0.00 | 0.22 (0.11) |
| | June | 0.00 | 0.31 (0.20) |
| | July | 0.00 | 0.17 (0.11) |
| | September | 0.00 | 0.00 |
| | Overall | 0.00 | 0.22 (0.07) |

Table 6a. Estimated monthly and overall angler catch rate per hour fished (C/h) only for anglers primarily targeting a species at Belle Fourche Reservoir. (80% confidence interval). Abbreviations for species are as follows: Channel Catfish (CCF), Walleye (WAE) and Other Species (Other).

| | | CCF | WAE |
|------|-----------|------|----------------|
| Year | Month | C/h | C/h |
| 2018 | May | 0.00 | 0.80 (0.15) |
| | June | 0.00 | 0.92 (1.59) |
| | July | 0.00 | 1.18 (1.02) |
| | September | 0.00 | 0.00 |
| | Overall | 0.00 | 0.74 (0.41) |

Table 6b. Estimated monthly and overall angler harvest rate per hour fished (H/h) only for anglers primarily targeting a species at Belle Fourche Reservoir. (80% confidence interval). Abbreviations for species are as follows: Channel Catfish (CCF), Walleye (WAE) and Other Species (Other).

| | | CCF | WAE |
|------|-----------|------|----------------|
| Year | Month | H/h | H/h |
| 2018 | May | 0.00 | 0.24 (0.09) |
| | June | 0.00 | 0.35 (0.34) |
| | July | 0.00 | 0.32 (0.45) |
| | September | 0.00 | 0.00 |
| | Overall | 0.00 | 0.23 (0.13) |

Table 7a. Estimated monthly and overall angler catch (C) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Channel Catfish (CCF), Walleye (WAE) and other species (Other).

| | | CCF | WAE |
|------|-----------|------------|-------------------|
| Year | Month | С | С |
| 2018 | May | 0 | 11,452 (3,743) |
| | June | 0 | 11,711 (4,993) |
| | July | 0 | 9,760 (4,494) |
| | September | 32 (42) | 16 (21) |
| | Overall | 32 (42) | 32,940 (7,690) |

Table 7b. Estimated monthly and overall angler harvest (H) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Channel Catfish (CCF), Walleye (WAE) and other species (Other).

| | | CCF | WAE |
|------|-----------|-----|-------------------|
| Year | Month | Н | Н |
| 2018 | May | 0 | 3,366 (993) |
| | June | 0 | 4,252 (1,627) |
| | July | 0 | 2,402 (1,470) |
| | September | 0 | 0 |
| | Overall | 0 | 10,020 (2,407) |

Table 8. Estimated number and rate (number per hour) of Channel Catfish (CCF), Walleye (WAE) caught and harvested by anglers during the summer and winter fisheries on Belle Fourche Reservoir, (80% confidence interval).

Channel Catfish

| Season | Year | Catch | Harvest | Catch Rate | Harvest Rate |
|--------|-----------|----------------|--------------|------------------|------------------|
| Summer | 2009 | 1,238 (392) | 781 (287) | 0.01 (<0.01) | 0.01 (<0.01) |
| Summer | 2010 | 86 (53) | 62 (48) | 0.01 (<0.01) | 0.01 (<0.01) |
| Summer | 2012 | 695 (441) | 563 (431) | 0.01 (<0.01) | 0.01 (<0.01) |
| Summer | 2018 | 32 (42) | 0 | <0.01 (<0.01) | 0.00 |
| Winter | 2009-2010 | 6 (5) | 6 (4) | <0.01 (<0.01) | <0.01 (<0.01) |

Walleye

| Season | Year | Catch | Harvest | Catch Rate | Harvest Rate |
|--------|-----------|-------------------|-------------------|-----------------|-----------------|
| Summer | 2009 | 39,144 (5,011) | 12,706 (1,693) | 0.35 (0.08) | 0.11 (0.03) |
| Summer | 2010 | 1,173 (450) | 223 (89) | 0.10 (0.05) | 0.02 (<0.01) |
| Summer | 2012 | 16,957 (2,339) | 7,328 (945) | 0.29 (0.07) | 0.13 (0.03) |
| Summer | 2018 | 32,940 (7,690) | 10,020 (2,407) | 0.71 (0.24) | 0.22 (0.07) |
| Winter | 2009-2010 | 220 (71) | 108 (56) | 0.01 (<0.01) | 0.01 (<0.01) |

Table 9. The number of fish harvested with each species by length group (mm) for the winter and summer fisheries at Belle Fourche Reservoir. Abbreviations for species are as follows: Channel Catfish (CCF), Walleye (WAE).

| Summer 2018 | | |
|-------------------|--------------|--------------|
| Length Group (mm) | CCF (N=0) | WAE (N=9) |
| 360 | | 1 |
| 370 | | 3 |
| 380 | | |
| 390 | | |
| 400 | | |
| 410 | | |
| 420 | | |
| 430 | | |
| 440 | | 1 |
| 450 | | |
| 460 | | 1 |
| 470 | | |
| 480 | | 3 |

Figure 2. South Dakota county of residence for winter and summer resident anglers fishing Belle Fourche Reservoir, South Dakota between May 2018 and October 2018.

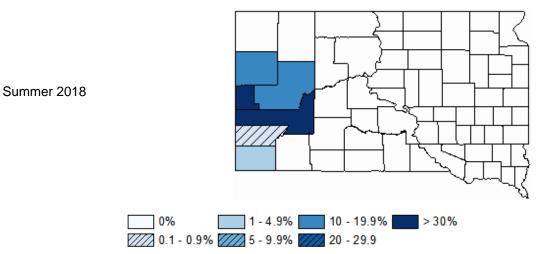


Table 10. Number of parties interviewed that harvested (or caught) a specified number of fish totaled over selected strata for a species.

| Summer 2018 | Counts | |
|----------------|----------------|----------------|
| Angler Harvest | CCF (n=149) | WAE (n=149) |
| 0.00 | 149 | 75 |
| 0.25 | 0 | 1 |
| 0.33 | 0 | 3 |
| 0.50 | 0 | 3 |
| 0.67 | 0 | 4 |
| 0.75 | 0 | 1 |
| 1.00 | 0 | 13 |
| 1.33 | 0 | 4 |
| 1.50 | 0 | 5 |
| 1.67 | 0 | 3 |
| 2.00 | 0 | 8 |
| 2.33 | 0 | 1 |
| 2.50 | 0 | 3 |
| 3.00 | 0 | 6 |
| 3.33 | 0 | 1 |
| 3.50 | 0 | 2 |
| 3.67 | 0 | 1 |
| 4.00 | 0 | 9 |
| 4.33 | 0 | 1 |
| 5.00 | 0 | 3 |
| 7.00 | 0 | 1 |
| 8.00 | 0 | 1 |

Table 11 The number (N) and percent of total interviews in supplemental-response categories by question asked during interviews at Belle Fourche Reservoir.

Question: What is the method of angling?

| Response | Summer 2018 (n = 149) |
|--|----------------------------|
| Bait | 91% |
| Spin | 9% |
| Question: Considering all factors, how satisfied are you wit | h your fishing trip today? |
| Response | Summer 2018 (n = 149) |
| Very Satisfied | 26% |
| Moderately Satisfied | 34% |
| Slightly Satisfied | 18% |
| Neutral/No Opinion | 7% |
| Slightly Dissatisfied | 9% |
| Moderately Dissatisfied | 4% |
| Very Dissatisfied | 1% |