

## SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

2102-F-21-R-47

**Name:** Military Dam

**County(ies):** Stanley

**Legal Description:** T3N-R31E-Sec. 7

**GPS:** 44°13'50.85"N 100°26'06.20"W

**Location from nearest town:** 8 miles S and 5 miles W of Fort Pierre

**Date of present survey:** June 17-18, 2014 (netting)

**Date of last survey:** June 28-30, 2011 (netting)

**Most recent lake management plan:** None done

**Management classification:** Unknown

| Primary Game Species | Secondary and Other Species |
|----------------------|-----------------------------|
| Bluegill             | Yellow Perch                |
| Largemouth Bass      | Northern Pike               |

### PHYSICAL DATA

Military Dam is located in Stanley County, South Dakota. The surrounding land and the dam grade are owned and managed by the United States Department of Agriculture, Forest Service and is part of the Fort Pierre National Grasslands. Military Dam is a 3.5 acre pond that had a maximum depth at the time of survey in 2011 of about 15 feet. The dam was full and running over at the time of the survey.

Emergent vegetation consisted of bulrushes and cattails. Submergent vegetation consisted of coontail and sago pondweed, with potentially another species mixed in. There is very limited boat access that is limited to a canoe or small duck boat that can be loaded and unloaded by hand. Good ice fishing opportunities do exist. No contour map or depth contour has ever been done.

### CHEMICAL DATA

No pollution problems were evident at the time of the survey. Water clarity was fair with a secchi disc reading of 28 inches. A temperature and dissolved oxygen profile was the only other water quality measurements done this survey and the results are found in Table 1.

**Table 1.** Water chemistry results from Military Dam, Stanley County, June 17, 2014.

| Station | Depth (ft) | Temp (F) | DO (ppm) |
|---------|------------|----------|----------|
| A       | 0          | 71.4     | 8.8      |
| A       | 1          | 71.4     | 9.0      |
| A       | 2          | 71.2     | 8.6      |
| A       | 3          | 70.7     | 7.9      |
| A       | 4          | 70.0     | 7.2      |
| A       | 5          | 69.1     | 6.2      |
| A       | 6          | 68.5     | 5.3      |
| A       | 7          | 67.6     | 4.3      |
| A       | 8          | 67.6     | 3.3      |
| A       | 9          | 66.2     | 0.5      |
| A       | 10         | 65.7     | 0.3      |
| A       | 11         | 65.3     | 0.3      |

### **BIOLOGICAL DATA**

**Methods:**

Military Dam was sampled on June 17-18, 2014, with three overnight trap net sets. The trap nets have 3ft x 5ft frames, 60ft leads, and ¾ inch knotted mesh. No experimental gill nets or electrofishing was done during this survey. Fish indices and statistics were completed using Winfin.

**Results and Discussion:**

**Trap Net Catch**

**Table 2.** Total catch of 3, overnight ¾-inch frame nets at Military Dam, Stanley County, June 17-18, 2014.

| Species      | # | %     | CPUE | 80% C.I. | Mean CPUE* | PSD | RSD-P | Mean Wr |
|--------------|---|-------|------|----------|------------|-----|-------|---------|
| Yellow Perch | 1 | 100.0 | 0.33 | ± 0.63   | 2.5        | --  | --    | --      |

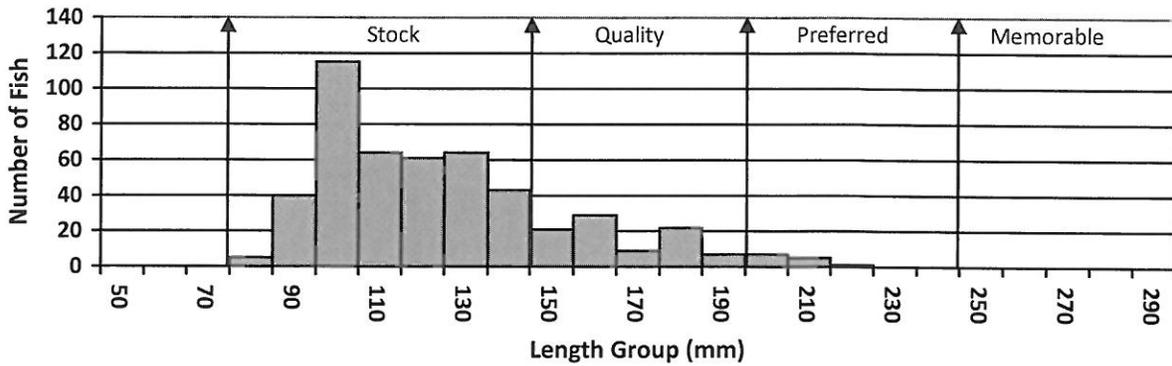
\* One year (2011)

**Fish populations**

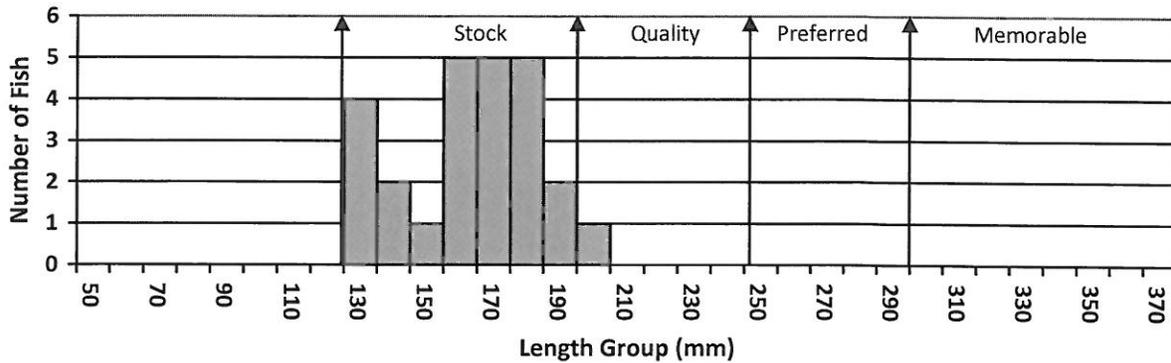
Military Dam was reported to have had a winterkill during the past winter of 2013-14. A number of dead fish were seen through the ice. So the lake was surveyed this summer to see what, if anything was left in the lake to get the populations restarted. After setting three nets for one night and only catching one yellow perch, it was determined that the lake suffered a total kill. Figures 1 and 2 illustrate the length frequency histograms for the bluegill and yellow perch

populations that were sampled during the 2011 survey. A stocking of 48 adult largemouth bass and 150 adult bluegills was made during the summer of 2014 to help get the fish populations going again.

**Figure 1.** Length frequency histogram for bluegill sampled from Military Dam, Stanley County, 2011.



**Figure 2.** Length frequency histogram for yellow perch sampled from Military Dam, Stanley County, 2011.



### RECOMMENDATIONS

1. Resurvey, when time allows, to further monitor the fish populations and to continually collect trend data on the pond.
2. Attempt to electrofish to see what type of largemouth bass population exists, if any.
3. Make any stockings or transfers out if need to help the fish populations.