

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

2102-F-21-R-34

Name: Trophy Dam

County(ies): Stanley

Legal Description: T109N-R78W-Sec. 12

GPS: 44.25868°N 100.14769°W

Location from nearest town: 7 miles S and 9.5 miles E of Ft. Pierre

Date of present survey: June 25-26, 2014 (netting)

Date of last survey: None known

Most recent lake management plan: None done

Management classification: Unknown

Primary Game Species	Secondary and Other Species
Bluegill	Largemouth Bass

PHYSICAL DATA

Trophy Dam is located in Stanley County, South Dakota. The surrounding land and dam grade are owned and managed by the United States Department of Agriculture, Forest Service and is part of the Fort Pierre National Grasslands. Trophy Dam is a 2.5 acre pond that had a maximum depth at the time of survey of about 13 feet.

The main submergent vegetation was sago pondweed. The main emergent vegetation was cattails. There is very limited boat access and it would be limited to a canoe and 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 excellent with a secchi disc reading of 10 feet. A temperature and dissolved oxygen profile was the only other water quality measurements done this survey and the results can be found in Table 1.

Table 1. Water chemistry results from Trophy Dam, Stanley County, June 25, 2014.

Station	Depth (ft)	Temp (F)	DO (ppm)
A	0	73.4	8.9
A	2	73.4	8.4
A	4	73.4	8.2
A	6	73.4	8.8
A	8	70.7	8.8
A	10	69.4	8.3
A	12	66.7	8.3
A	13	66.7	8.2

BIOLOGICAL DATA

Methods:

Trophy Dam was sampled on June 25-26, 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 this survey season. Fish indices and statistics were completed using Winfin.

Results and Discussion:

Table 2. Total catch of 3, overnight ¾-inch frame nets at Trophy Dam, Stanley County, June 25-26, 2014.

Species	#	%	CPUE	80% C.I.	Mean CPUE*	PSD	RSD-P	Mean Wr
Bluegill	48	100	16.0	± 14.8	0.0	7	3	--

*First year survey

The first ever recorded inventory survey on Trophy Dam revealed a bluegill population exists. Most of the fish sampled were on the small side with a PSD of 7 and an RSD-P of 3. Figure 1 illustrates the length frequency histogram for the fish sampled this survey. Growth rates are good with means right on with statewide, regional and SLI means (Table 3). It will be interesting to see how this population changes over time.

One addition that would be good for Trophy Dam is the addition of a largemouth bass population. No bass were sampled in this survey, but most times they do not trap net very well and no electrofishing was done. It is suspected that a population does exist as a stocking of 50 juvenile bass were stocked in 2009. Additional surveys will start to shed more light on what is happening in Trophy Dam.

Figure 1. Length frequency histogram for bluegill sampled from Trophy Dam, Stanley County, 2014.

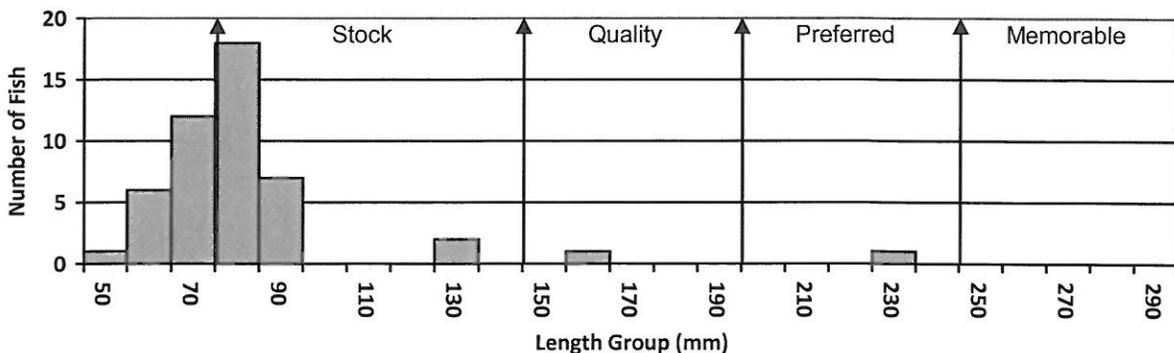


Table 3. Average back-calculated lengths (mm) for each age class of bluegill sampled from Trophy Dam, Stanley County, 2014.

Year Class	Age	N	Back-calculated Age				
			1	2	3	4	5
2013	1	43	58				
2012	2	2	37	106			
2011	3	1	32	58	138		
2009	5	1	44	92	161	187	232
All Classes		47	43	85	150	187	232
Statewide Mean			55	103	141	166	180
Region II Mean			52	97	134	164	180
SLI* Mean			53	101	138	163	180

*Small Lakes and Impoundments

RECOMMENDATIONS

1. Resurvey, when time allows, to further monitor the existing and any fish populations that may be stocked.
2. Attempt to electrofish to see what type of largemouth bass population exists.
3. Stock largemouth bass to establish a population if it is determined a population does not exist.