

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

2102-F-21-R-45

Name: Twin Dams

County(ies): Stanley

Legal Description: T6N-R30E-Sec. 35

GPS: 44°26'24.32"N 100°27'24.87"W

Location from nearest town: 6 miles N and 1 mile W of Pierre

Date of present survey: June 5-7, 2012 (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	Northern Pike
Largemouth Bass	White Sucker
Yellow Perch	

PHYSICAL DATA

Twin Dams is located in Stanley County, South Dakota. The surrounding land and the dam grade are owned and managed by the United States Army Corp of Engineers. Twin Dams had a maximum depth of 21 feet at the time of the survey in 2012, but was about 6 feet low.

No emergent vegetation was found at Twin Dams. Twin Dams did contain submergent vegetation that consisted of a mixture of pondweeds that included largeleaf pondweed, milfoil and sago pondweed. No contour map or depth contour has ever been done.

CHEMICAL DATA

No pollution problems were evident at the time of the survey. A temperature and dissolved oxygen profile was the only water quality measurements done this survey and the results are found in Table 1.

Table 1. Water chemistry results from Twin Dams, Stanley County, June 5, 2012.

Station	Depth (ft)	Temp (F)	DO (ppm)
A	0	68.0	14.5
A	3	67.5	14.8
A	6	62.6	12.9
A	9	60.3	9.3
A	12	59.2	7.3
A	15	58.6	5.0
A	18	58.3	3.0
A	20	58.3	2.8

BIOLOGICAL DATA

Methods:

Twin Dams was sampled on June 5-7, 2012, with eight 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 eight, overnight ¾-inch frame nets at Twin Dams, Stanley County, June 5-7, 2012.

Species	#	%	CPUE	80% C.I.	Mean CPUE*	PSD	RSD-P	Mean Wr
Bluegill	307	74.0	38.4	± 16.6	0.0	15	1	117
Yellow Perch	78	18.8	9.8	± 4.1	0.0	74	10	90
Largemouth Bass	22	5.3	2.8	± 1.6	0.0	0	0	111
Northern Pike	5	1.2	0.6	± 0.5	0.0	--	--	92
White Sucker	3	0.7	0.4	± 0.5	0.0	--	--	101

* First recorded survey

Bluegill

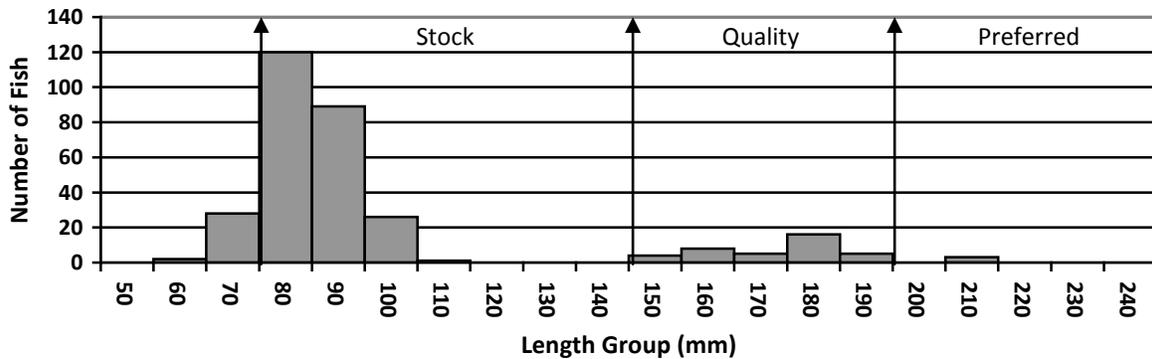
Bluegills are the dominant panfish species present in Twin Dams. The CPUE was 38.4 fish per net night. Not sure how high or low this is for the dam as this was the first recorded survey. Size is on the small side with a PSD of 15 and an RSD-P of 1. This can also be seen by looking at Figure 1 which illustrates the length frequency histogram for the bluegill sampled in 2012. Growth is good with means right on with statewide, regional and SLI means (Table 3). Condition is also good with a mean Wr of 117.

Table 3. Average back-calculated lengths (mm) for each age class of bluegill sampled from Twin Dams, Stanley County, 2012.

Year Class	Age	N	Back-calculated Age		
			1	2	3
2010	2	38	62	154	
2009	3	3	51	118	201
All Classes		41	57	136	201
Statewide Mean			55	103	141
Region II Mean			52	97	134
SLI* Mean			53	101	138

* Small Lakes and Impoundments

Figure 1. Length frequency histogram for bluegill sampled from Twin Dams, Stanley County, 2012.



Yellow Perch

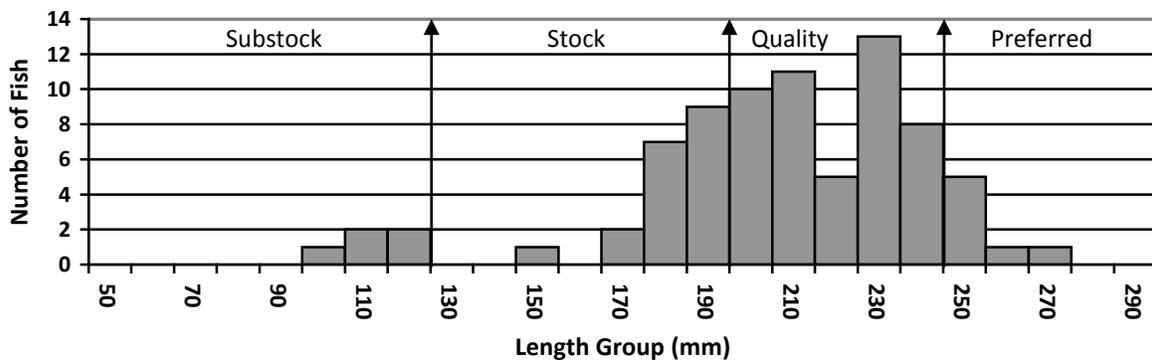
Yellow perch were the second most dominant panfish species sampled this survey. The CPUE was 9.8 fish per net night. Again, not sure how this rates for the population as it is the first recorded survey. Size is good with a PSD of 74 with an RSD-P of 10 (Table 2). This can also be seen by looking at the length frequency histogram in Figure 2. There are a good number of fish in or near the sizes that anglers would be willing to harvest. Growth is good with means right on with statewide, regional and SLI means (Table 4). Condition is fine with a mean Wr of 90.

Table 4. Average back-calculated lengths (mm) for each age class of yellow perch sampled from Twin Dams, Stanley County, 2012.

Year Class	Age	N	Back-calculated Age			
			1	2	3	4
2009	3	67	102	151	201	
2008	4	3	90	145	195	218
All Classes		70	96	148	198	218
Statewide Mean			86	145	190	220
Region II Mean			91	152	196	219
SLI* Mean			87	142	185	205

* Small Lakes and Impoundments

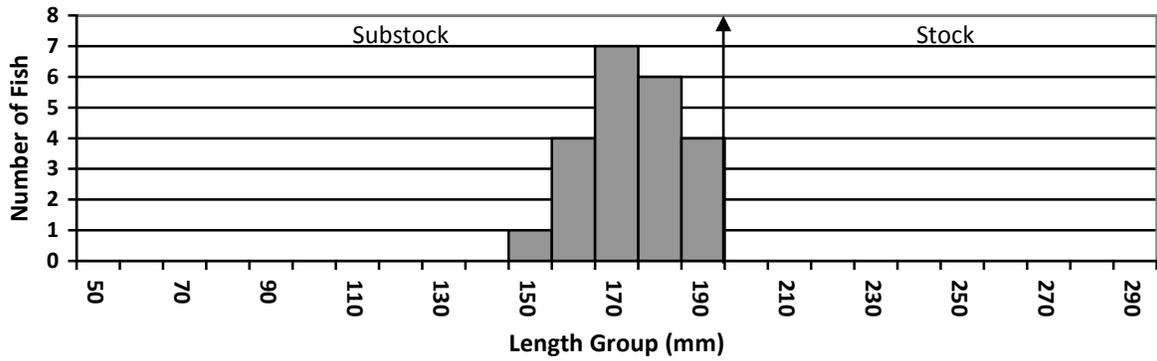
Figure 2. Length frequency histogram for yellow perch sampled from Twin Dams, Stanley County, 2012.



Other species

Largemouth bass, northern pike, and white sucker were the only other species sampled this survey. Northern pike and white sucker were both sampled in too small of numbers to make any inferences about their populations. A fair number of largemouth bass were sampled considering that only trap netting was done. The CPUE was 2.8 fish per net night. Figure 3 illustrates the length frequency histogram for the fish sampled this survey and they all look to be young fish.

Figure 3. Length frequency histogram for largemouth bass sampled from Twin Dams, Stanley County, 2012.



RECOMMENDATIONS

1. Resurvey, when time allows, to further monitor the fish populations and to continually collect trend data on the pond.
2. Resurvey the pond with electrofishing to adequately sample the largemouth bass population, if possible.