

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

2102-F-21-R-47

Name: Mickelson Pond **County(ies):** Hughes
Legal Description: T111N-R79W **GPS:** 44°22'52.6"N 100°19'59.8"W
Location from nearest town: North edge of the town of Pierre

Date of present survey: June 16-18, 2014 (netting)

Date of last survey: July 31, 2000 (netting)

Most recent lake management plan: None done

Management classification: Unknown

Primary Game Species	Secondary and Other Species
Bluegill	Largemouth Bass
	Black Bullhead
	Common Carp

PHYSICAL DATA

Mickelson Pond was constructed by the city of Pierre in 1995. The pond was built to provide area youth and elderly a place to fish that was within walking distance of their homes. Currently, no special regulations are in place on this pond.

Mickelson Pond is located on the north side of 4th street in Pierre, SD. The pond is located in Hilgers Gulch and the outflow flows into a second pond on the south side of 4th street and eventually into Capitol Lake.

Mickelson Pond is classified as warm-water permanent. Surface area encompasses 4.6 acres with a mean depth of 10-12 feet and a maximum depth of 18-20 feet. Due to the high sedimentation load this pond receives, the maximum depth of the pond is now approximately 12-13 feet.

CHEMICAL DATA

Field observations of water quality and pollution problems:

No pollution problems were evident at the time of the survey. Water clarity was fair with a secchi disc reading of 2.5 feet. Other water quality characteristics were measured in the field on June 16, 2014, using a HACH water quality kit and a Hanna multiparameter meter. Results are found in Table 1.

Table 1. Water chemistry results from Mickelson Pond, Hughes County, June 16, 2014.

Station	Depth (ft)	Temp (F)	DO (ppm)	CO2 (ppm)	ALK (mg/L)	HRD (mg/L)	pH	Cond. (µS/cm)	TDS (ppm)	Sal.	ORP	Secchi (ft)
A	Surface	70.6	6.00	55.4	280	927	8.40	3158	1584	1.66	-133.8	2.5
A	12.0	63.5	2.00	107.2	310	1162	7.93	3980	1986	2.11	-151.6	

BIOLOGICAL DATA

Methods:

Mickelson Pond was sampled on June 16-18, 2014, with eight overnight trap nets 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 season. Fish indices and statistics were completed using Winfin.

Results and Discussion:

Trap Net Catch

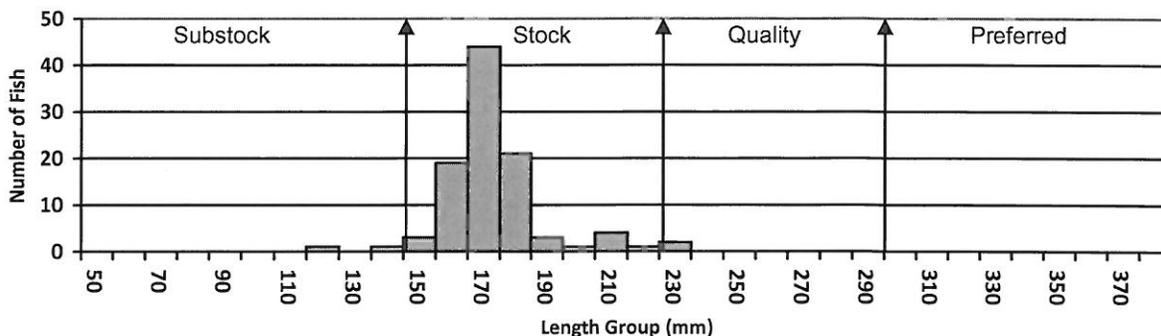
Table 2. Total catch of eight, overnight ¾-inch frame nets at Mickelson Pond, Hughes County, June 16-18, 2014.

Species	#	%	CPUE	80% C.I.	Mean CPUE	PSD	RSD-P	Mean Wr
Black Bullhead	331	91.2	41.4	± 18.1	0.0	2	0	82
Bluegill	22	6.1	2.8	± 1.8	0.0	100	32	103
Common Carp	10	2.7	1.3	± 0.7	0.0	--	--	112

Fish populations

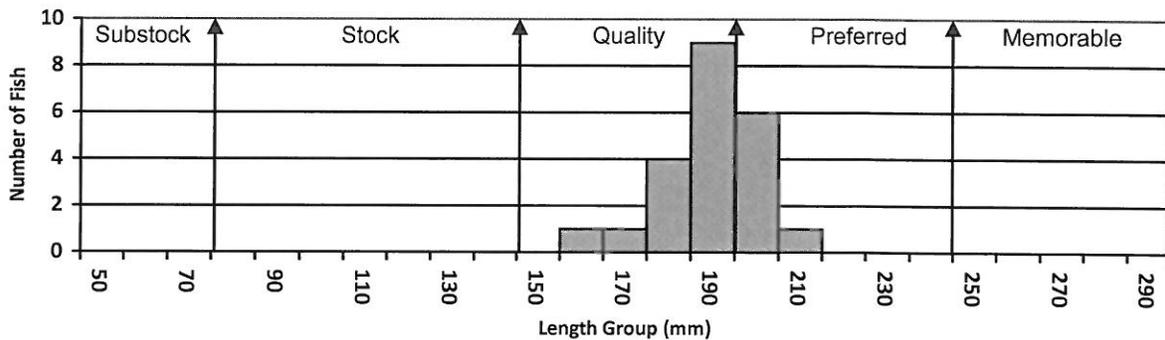
Mickelson Pond was netting this summer to check on what fish populations if any were present in the lake. There were only three species sampled with black bullhead be the dominant species. Their CPUE was 41.4 fish per net night. Size was small with a PSD of 2 and an RSD-P of 0. Figure 1 also shows that the fish sampled were small. Condition was also on the low side with a mean Wr of 82. Their population is too dense and needs to be reduced. The addition of a predator species should help to reduce their numbers as well as some manual removal.

Figure 1. Length frequency histogram for black bullhead sampled from Mickelson Pond, Hughes County, 2014.



Bluegills were the next most abundant species sampled. Their CPUE was 2.8 fish per net night. Figure 2 illustrates the length frequency histogram for the fish sampled this survey. The thing with this population is that these fish were just stocked into the system before the survey. It is good to see that a good number of them have survived for a short time anyways. Hopefully their numbers will continue to grow on their own with another stocking or two to help boost numbers.

Figure 2. Length frequency histogram for bluegill sampled from Mickelson Pond, Hughes County, 2014.



Common carp were the only other species sampled this survey. Their CPUE was 1.3 fish per net night. Their density is not too high right now and should not be really affecting anything in the lake at this time. Not much can be said about the population with the low numbers sampled.

Table 3. Stocking records for Mickelson Pond, Hughes County.

Year	Number	Species	Size
1995	1,500	Largemouth Bass	Fingerling
1998	50	Largemouth Bass	Adult
2000	310	Bluegill	Adult
2001	60	Bluegill	Adult
2009	150	Largemouth Bass	Adult
2014	200	Bluegill	Adult
2014	500	Largemouth Bass	Fingerling

RECOMMENDATIONS

1. Resurvey in 2017 to monitor the fish populations
2. Continue to stock bluegill of all sized to establish a population.
3. Continue to stock largemouth bass to establish a population.
4. Attempt to do some manual removal of black bullhead and common carp to reduce their number. This will increase their size and allow for other species to excel as well.