

Creel and Lake Information

Lake Information

Lake Name: Stockade
Lake Code: MCS-Lake-12-000
Surface Area: 52.04 Hectares
County: Custer
Start Date: 5/11/2018
End Date: 7/28/2018
Months Included: May, June, July

Table 1. Percent of angling parties interviewed primarily targeting a species (or any species) by month and overall for Stockade during 2017 - 2018. Any Species (ANY), Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP).

Year	Month	# of Interviews	Percent of Anglers Targeting								
			ANY	BLB	BLC	BLG	NOP	RBT	SMB	WHC	YEP
2018	May	37	48.6	2.7	16.2	10.8	8.1	5.4	5.4	0.0	2.7
	June	18	72.2	0.0	5.6	5.6	0.0	5.6	5.6	5.6	0.0
	July	18	66.7	0.0	0.0	5.6	11.1	0.0	16.7	0.0	0.0
	Overall	73	58.9	1.4	9.6	8.2	6.8	4.1	8.2	1.4	1.4

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 Stockade (80% confidence interval).

Year	Month	# Interviews	Angler Hours	Angler Days	Trip Length (h)	Party Size	% SD Residents	% Boat or Shack	% Weekend/Holidays
2018	May	37	3,763 (888)	515	7.31 (4.10)	1.67 (0.43)	86.49	8	59
	June	18	2,904 (1,302)	1,338	2.17 (1.14)	2.42 (0.43)	72.22	17	17
	July	18	4,521 (903)	1,570	2.88 (1.13)	2.39 (0.59)	66.67	33	61
	Overall	73	11,189 (1,816)	2,703	4.14 (1.48)	2.16 (0.28)	78.08	16	49

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

Lake	Month			Total
	May	June	July	
Stockade (Custer)	3,763 (888)	2,904 (1,302)	4,521 (903)	11,189 (1,816)

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

Species	Month			Total
	May	June	July	
Black Bullhead	31 (23)	36 (39)	0	67 (45)
Black Crappie	143 (114)	84 (90)	377 (354)	604 (383)
Bluegill	129 (178)	333 (198)	0	463 (266)
Northern Pike	0	0	62 (51)	62 (51)
Rainbow Trout	0	0	0	0
Smallmouth Bass	0	159 (254)	0	159 (254)
White Crappie	0	0	0	0
Yellow Perch	57 (43)	72 (77)	251 (236)	381 (252)
Total	360 (358)	685 (658)	691 (641)	1,736 (1,251)

Table 5a. Estimated monthly and overall angler catch rate per hour fished (C/h) for all anglers by species at Stockade (80% confidence interval). Abbreviations for species are as follows: Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP) and other species (Other).

Year	Month	BLB	BLC	BLG	NOP	RBT	SMB	WHC	YEP
		C/h	C/h	C/h	C/h	C/h	C/h	C/h	C/h
2018	May	0.06 (0.06)	0.18	0.51	0.01	0.00	0.05 (0.01)	0.00	0.07
	June	0.23 (0.13)	0.06 (0.12)	0.42 (0.25)	0.00	0.00	0.17 (0.21)	0.00	0.05 (0.10)
	July	0.01 (<0.01)	0.19 (0.18)	0.75 (0.44)	0.04 (0.02)	0.00	0.04 (0.04)	0.02 (0.03)	0.20 (0.14)
	Overall	0.08 (0.03)	0.15 (0.08)	0.58 (0.17)	0.02 (<0.01)	0.00	0.08 (0.05)	0.01 (0.01)	0.12

Table 5b. Estimated monthly and overall angler harvest rate per hour fished (H/h) for all anglers by species at Stockade (80% confidence interval). Abbreviations for species are as follows: Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP) and other species (Other).

Year	Month	BLB	BLC	BLG	NOP	RBT	SMB	WHC	YEP
		H/h	H/h	H/h	H/h	H/h	H/h	H/h	H/h
2018	May	0.01 (<0.01)	0.04	0.03	0.00	0.00	0.00	0.00	0.02 (<0.01)
	June	0.01 (0.02)	0.03 (0.06)	0.11 (0.10)	0.00	0.00	0.05 (0.10)	0.00	0.02 (0.05)
	July	0.00	0.08 (0.08)	0.00	0.01 (<0.01)	0.00	0.00	0.00	0.06 (0.05)
	Overall	0.01 (<0.01)	0.05 (0.03)	0.04 (<0.01)	0.01 (<0.01)	0.00	0.01 (0.02)	0.00	0.03 (0.02)

Table 6a. Estimated monthly and overall angler catch rate per hour fished (C/h) only for anglers primarily targeting a species at Stockade. (80% confidence interval). Abbreviations for species are as follows: Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP) and Other Species (Other).

Year	Month	BLB	BLC	BLG	NOP	RBT	SMB	WHC	YEP
		C/h	C/h	C/h	C/h	C/h	C/h	C/h	C/h
2018	May	1.03	0.65 (0.31)	13.36	0.00	0.00	0.30	0.00	0.74
	June	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00
	July	0.00	0.00	0.83	0.00	0.00	0.11 (0.24)	0.00	0.00
	Overall	1.03	0.39 (0.18)	6.18	0.00	0.00	0.17 (0.04)	0.00	0.74

Table 6b. Estimated monthly and overall angler harvest rate per hour fished (H/h) only for anglers primarily targeting a species at Stockade. (80% confidence interval). Abbreviations for species are as follows: Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP) and Other Species (Other).

Year	Month	BLB	BLC	BLG	NOP	RBT	SMB	WHC	YEP
		H/h	H/h	H/h	H/h	H/h	H/h	H/h	H/h
2018	May	1.03	0.06 (0.05)	13.31	0.00	0.00	0.00	0.00	0.74
	June	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00
	July	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Overall	1.03	0.04 (0.03)	5.78	0.00	0.00	0.00	0.00	0.74

Table 7a. Estimated monthly and overall angler catch (C) for all anglers by species at Stockade (80% confidence interval). Abbreviations for species are as follows: Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP) and other species (Other).

Year	Month	BLB	BLC	BLG	NOP	RBT	SMB	WHC	YEP
		C	C	C	C	C	C	C	C
2018	May	228 (212)	684 (361)	1,922 (659)	23	0	194 (18)	0	267 (132)
	June	674 (92)	180 (175)	1,219 (279)	0	0	503 (457)	0	156 (149)
	July	37 (40)	862 (780)	3,394 (1,977)	162 (75)	0	199 (148)	111 (120)	884 (588)
	Overall	938 (234)	1,727 (877)	6,536 (2,102)	185 (75)	0	895 (481)	111 (120)	1,308 (621)

Table 7b. Estimated monthly and overall angler harvest (H) for all anglers by species at Stockade (80% confidence interval). Abbreviations for species are as follows: Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP) and other species (Other).

Year	Month	BLB	BLC	BLG	NOP	RBT	SMB	WHC	YEP
		H	H	H	H	H	H	H	H
2018	May	31 (23)	143 (114)	129 (178)	0	0	0	0	57 (43)
	June	36 (39)	84 (90)	333 (198)	0	0	159 (254)	0	72 (77)
	July	0	377 (354)	0	62 (51)	0	0	0	251 (236)
	Overall	67 (45)	604 (383)	463 (266)	62 (51)	0	159 (254)	0	381 (252)

Table 8. Estimated number and rate (number per hour) of Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP) caught and harvested by anglers during the summer and winter fisheries on Stockade, (80% confidence interval).

Black Bullhead

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2018	938 (234)	67 (45)	0.08 (0.03)	0.01 (<0.01)

Black Crappie

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2011	13,525 (2,488)	3,900 (1,959)	1.27 (0.42)	0.37 (0.19)
Summer	2013	0	0	0.00	0.00
Summer	2014	0	0	0.00	0.00
Summer	2018	1,727 (877)	604 (383)	0.15 (0.08)	0.05 (0.03)

Bluegill

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2011	7,232 (1,409)	1,452 (518)	0.68 (0.25)	0.14 (0.06)
Summer	2013	0	0	0.00	0.00
Summer	2014	0	0	0.00	0.00
Summer	2018	6,536 (2,102)	463 (266)	0.58 (0.17)	0.04 (<0.01)

Northern Pike

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2011	122 (64)	13 (9)	0.01 (<0.01)	<0.01 (<0.01)
Summer	2013	0	0	0.00	0.00
Summer	2014	0	0	0.00	0.00
Summer	2018	185 (75)	62 (51)	0.02 (<0.01)	0.01 (<0.01)

Rainbow Trout

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2014	0	0	0.00	0.00

Smallmouth Bass

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2011	152 (112)	0	0.01 (0.01)	0.00
Summer	2014	0	0	0.00	0.00
Summer	2018	895 (481)	159 (254)	0.08 (0.05)	0.01 (0.02)

White Crappie

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2018	111 (120)	0	0.01 (0.01)	0.00

Yellow Perch

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2011	7,222 (2,184)	2,752 (1,745)	0.68 (0.19)	0.26 (0.18)
Summer	2013	0	0	0.00	0.00
Summer	2014	0	0	0.00	0.00
Summer	2018	1,308 (621)	381 (252)	0.12	0.03 (0.02)
Winter	2013-2014	0	0	0.00	0.00

Table 9. The number of fish harvested with each species by length group (mm) for the winter and summer fisheries at Stockade. Abbreviations for species are as follows: Black Bullhead (BLB), Black Crappie (BLC), Bluegill (BLG), Northern Pike (NOP), Rainbow Trout (RBT), Smallmouth Bass (SMB), White Crappie (WHC), Yellow Perch (YEP).

Figure 2. South Dakota county of residence for winter and summer resident anglers fishing Stockade, South Dakota between May 2018 and July 2018.

Summer 2018

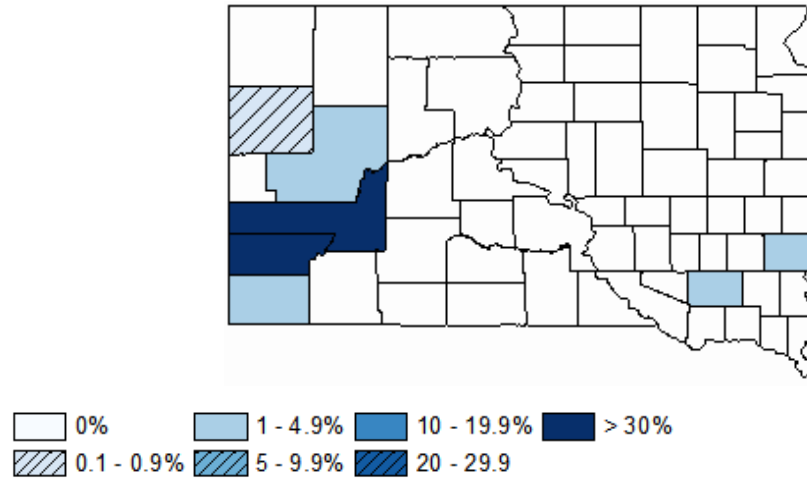


Table 10. Number of parties interviewed that harvested (or caught) a specified number of fish totaled over selected strata for a species.

Angler Harvest	Summer 2018							
	Counts							
	BLB (n=73)	BLC (n=73)	BLG (n=73)	NOP (n=73)	RBT (n=73)	SMB (n=73)	WHC (n=73)	YEP (n=73)
0.00	70	67	66	71	73	72	73	68
0.20	1	0	0	0	0	0	0	0
0.33	0	0	0	2	0	0	0	0
0.50	0	0	3	0	0	0	0	1
0.60	1	0	0	0	0	0	0	0
1.00	0	0	1	0	0	0	0	0
1.20	0	0	0	0	0	0	0	1
1.33	0	0	1	0	0	0	0	1
1.40	0	2	0	0	0	0	0	0
1.50	0	1	0	0	0	1	0	0
1.60	0	0	1	0	0	0	0	0
2.00	0	2	0	0	0	0	0	0
2.50	0	0	1	0	0	0	0	0
3.00	1	0	0	0	0	0	0	0
3.33	0	0	0	0	0	0	0	1
4.00	0	0	0	0	0	0	0	1
5.00	0	1	0	0	0	0	0	0

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

Question: What is the method of angling?

Response	Summer 2018 (n = 3)
Bait	33%
Spin	67%

Question: Considering all factors, how satisfied are you with your fishing trip today?

Response	Summer 2018 (n = 3)
Slightly Satisfied	33%
Neutral/No Opinion	33%
Slightly Dissatisfied	33%

Question: The current trout regulation for this lake is five trout per day with only one over 14-inches, do you support this regulation?

Response	Summer 2018 (n = 3)
No Opinion	67%
Yes	33%

Question: Would you support special regulations for Norther Pike?

Response	Summer 2018 (n = 70)
No	21%
No Opinion	53%
Yes	26%

Question: Would you support special regulations for Norther Pike?

Response	Summer 2018 (n = 3)
No	33%
No Opinion	33%
Yes	33%