

Creel and Lake Information

Lake Information

Lake Name: Belle Fourche Reservoir

Lake Code: LBF-Lake-768-000

Surface Area: 2,658.83 Hectares

County: Butte

Start Date: 1/3/2019

End Date: 5/16/2019

Months Included: January, February, March, April, May, June, July, September, October

Table 1. Percent of angling parties interviewed primarily targeting a species (or any species) by month and overall for Belle Fourche Reservoir during 2018 - 2019. Any Species (ANY), Walleye (WAE), White Crappie (WHC).

Year	Month	# of Interviews	Percent of Anglers Targeting		
			ANY	WAE	WHC
2018	May	45	11.1	86.7	0.0
	June	52	11.5	88.5	0.0
	July	30	43.3	56.7	0.0
	September	22	27.3	72.7	0.0
	October	14	21.4	71.4	7.1
	Overall	163	20.2	78.5	0.6
2019	January	2	0.0	100.0	0.0
	February	1	0.0	100.0	0.0
	March	4	0.0	100.0	0.0
	April	9	0.0	100.0	0.0
	May	1	0.0	100.0	0.0
	Overall	17	0.0	100.0	0.0

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 Belle Fourche Reservoir (80% confidence interval).

Year	Month	# Interviews	Angler Hours	Angler Days	Trip Length (h)	Party Size	% SD Residents	% Boat or Shack	% Weekend/Holidays
2018	May	45	15,257 (4,310)	3,033	5.03	2.29 (0.49)	93.33	71	53
	June	52	13,863 (4,835)	2,651	5.23	2.16	82.69	100	29
	July	30	14,508 (3,454)	4,680	3.10	2.70	96.67	100	70
	September	22	2,872 (1,174)	648	4.43	1.50	100.00	100	86
	Overall	149	46,500 (7,434)	10,473	4.44	2.17 (0.12)	91.28	91	53
2018-2019	October	14	2,222 (1,384)	518	4.29	1.55	85.71	100	50
	January	2	955 (461)	191	5.00	1.32	100.00	50	50
	February	1	310 (253)	248	1.25	1.00	100.00	0	100
	March	4	790 (478)	185	4.28	2.00	100.00	0	100
	Overall	21	4,278 (1,556)	1,038	4.12	1.46	90.48	71	62
2019	April	9	2,864 (2,416)	835	3.43	1.51 (0.31)	88.89	33	67
	May	1	327	93	3.50	2.00	100.00	0	0
	Overall	10	3,190 (2,416)	922	3.46	1.72 (0.18)	90.00	30	60

Table 3. Estimated fishing pressure (angler hours) by month during the summer season 2019 daylight period on Belle Fourche Reservoir (80% confidence interval).

Lake	Month			Total
	April	May	October	
Belle Fourche Reservoir (Butte)	2,864 (2,416)	327	2,222 (1,384)	3,190 (2,416)

Table 4. Estimated number of fish harvested, by species and month, for the summer season 2019 daylight period on Belle Fourche Reservoir (80% confidence interval).

Species	Month
	Total
Walleye	0
White Crappie	0
Total	0

Table 5a. Estimated monthly and overall angler catch rate per hour fished (C/h) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Walleye (WAE), White Crappie (WHC) and other species (Other).

Year	Month	WAE	WHC
		C/h	C/h
2018	May	0.75 (0.44)	0.00
	June	0.84 (0.57)	0.00
	July	0.67 (0.38)	0.00
	September	0.01 (<0.01)	0.00
	Overall	0.71 (0.24)	0.00
2018- 2019	October	0.02 (0.03)	0.00
	January	0.07	0.00
	Overall	0.03 (0.02)	0.00
2019	April	0.13 (0.15)	0.00
	May	0.14	0.00
	Overall	0.13 (0.13)	0.00

Table 5b. Estimated monthly and overall angler harvest rate per hour fished (H/h) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Walleye (WAE), White Crappie (WHC) and other species (Other).

Year	Month	WAE	WHC
		H/h	H/h
2018	May	0.22 (0.11)	0.00
	June	0.31 (0.20)	0.00
	July	0.17 (0.11)	0.00
	September	0.00	0.00
	Overall	0.22 (0.07)	0.00
2018- 2019	October	0.01 (0.02)	0.00
	January	0.00	0.00
	Overall	0.01 (0.01)	0.00
2019	April	0.00	0.00
	May	0.00	0.00
	Overall	0.00	0.00

Table 6a. Estimated monthly and overall angler catch rate per hour fished (C/h) only for anglers primarily targeting a species at Belle Fourche Reservoir. (80% confidence interval). Abbreviations for species are as follows: Walleye (WAE), White Crappie (WHC) and Other Species (Other).

Year	Month	WAE	WHC
		C/h	C/h
2018	May	0.80 (0.15)	0.00
	June	0.92 (1.59)	0.00
	July	1.18 (1.02)	0.00
	September	0.00	0.00
	Overall	0.74 (0.41)	0.00
2018- 2019	October	0.03 (0.09)	0.00
	January	0.04	0.00
	February	0.00	0.00
	March	0.00	0.00
	Overall	0.03 (0.04)	0.00
2019	April	0.37 (0.39)	0.00
	May	0.14	0.00
	Overall	0.27 (0.23)	0.00

Table 6b. Estimated monthly and overall angler harvest rate per hour fished (H/h) only for anglers primarily targeting a species at Belle Fourche Reservoir. (80% confidence interval). Abbreviations for species are as follows: Walleye (WAE), White Crappie (WHC) and Other Species (Other).

Year	Month	WAE	WHC
		H/h	H/h
2018	May	0.24 (0.09)	0.00
	June	0.35 (0.34)	0.00
	July	0.32 (0.45)	0.00
	September	0.00	0.00
	Overall	0.23 (0.13)	0.00
2018- 2019	October	0.02 (0.04)	0.00
	January	0.00	0.00
	February	0.00	0.00
	March	0.00	0.00
	Overall	0.01 (0.01)	0.00
2019	April	0.00	0.00
	May	0.00	0.00
	Overall	0.00	0.00

Table 7a. Estimated monthly and overall angler catch (C) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Walleye (WAE), White Crappie (WHC) and other species (Other).

Year	Month	WAE	WHC
		C	C
2018	May	11,452 (3,743)	0
	June	11,711 (4,993)	0
	July	9,760 (4,494)	0
	September	16 (21)	0
	Overall	32,940 (7,690)	0
2018- 2019	October	48 (54)	0
	January	70	0
	Overall	118 (54)	0
2019	April	375 (262)	0
	May	47	0
	Overall	422 (262)	0

Table 7b. Estimated monthly and overall angler harvest (H) for all anglers by species at Belle Fourche Reservoir (80% confidence interval). Abbreviations for species are as follows: Walleye (WAE), White Crappie (WHC) and other species (Other).

Year	Month	WAE	WHC
		H	H
2018	May	3,366 (993)	0
	June	4,252 (1,627)	0
	July	2,402 (1,470)	0
	September	0	0
	Overall	10,020 (2,407)	0
2018- 2019	October	33 (48)	0
	January	0	0
	Overall	33 (48)	0
2019	April	0	0
	May	0	0
	Overall	0	0

Table 8. Estimated number and rate (number per hour) of Walleye (WAE), White Crappie (WHC) caught and harvested by anglers during the summer and winter fisheries on Belle Fourche Reservoir, (80% confidence interval).

Walleye

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2010	1,173 (450)	223 (89)	0.10 (0.05)	0.02 (<0.01)
Summer	2012	16,957 (2,339)	7,328 (945)	0.29 (0.07)	0.13 (0.03)
Summer	2018	32,940 (7,690)	10,020 (2,407)	0.71 (0.24)	0.22 (0.07)
Summer	2019	422 (262)	0	0.13 (0.13)	0.00
Winter	2009-2010	220 (71)	108 (56)	0.01 (<0.01)	0.01 (<0.01)
Winter	2018-2019	118 (54)	33 (48)	0.03 (0.02)	0.01 (0.01)

White Crappie

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2012	222 (88)	126 (73)	<0.01 (<0.01)	<0.01 (<0.01)

Table 9. The number of fish harvested with each species by length group (mm) for the winter and summer fisheries at Belle Fourche Reservoir. Abbreviations for species are as follows: Walleye (WAE), White Crappie (WHC).

Summer 2018		
Length Group (mm)	WAE (N=9)	WHC (N=0)
360	1	
370	3	
380		
390		
400		
410		
420		
430		
440	1	
450		
460	1	
470		
480	3	
Winter 2018-2019		
Length Group (mm)	WAE (N=1)	WHC (N=0)
490	1	

Figure 2. South Dakota county of residence for winter and summer resident anglers fishing Belle Fourche Reservoir, South Dakota between May 2018 and May 2019.

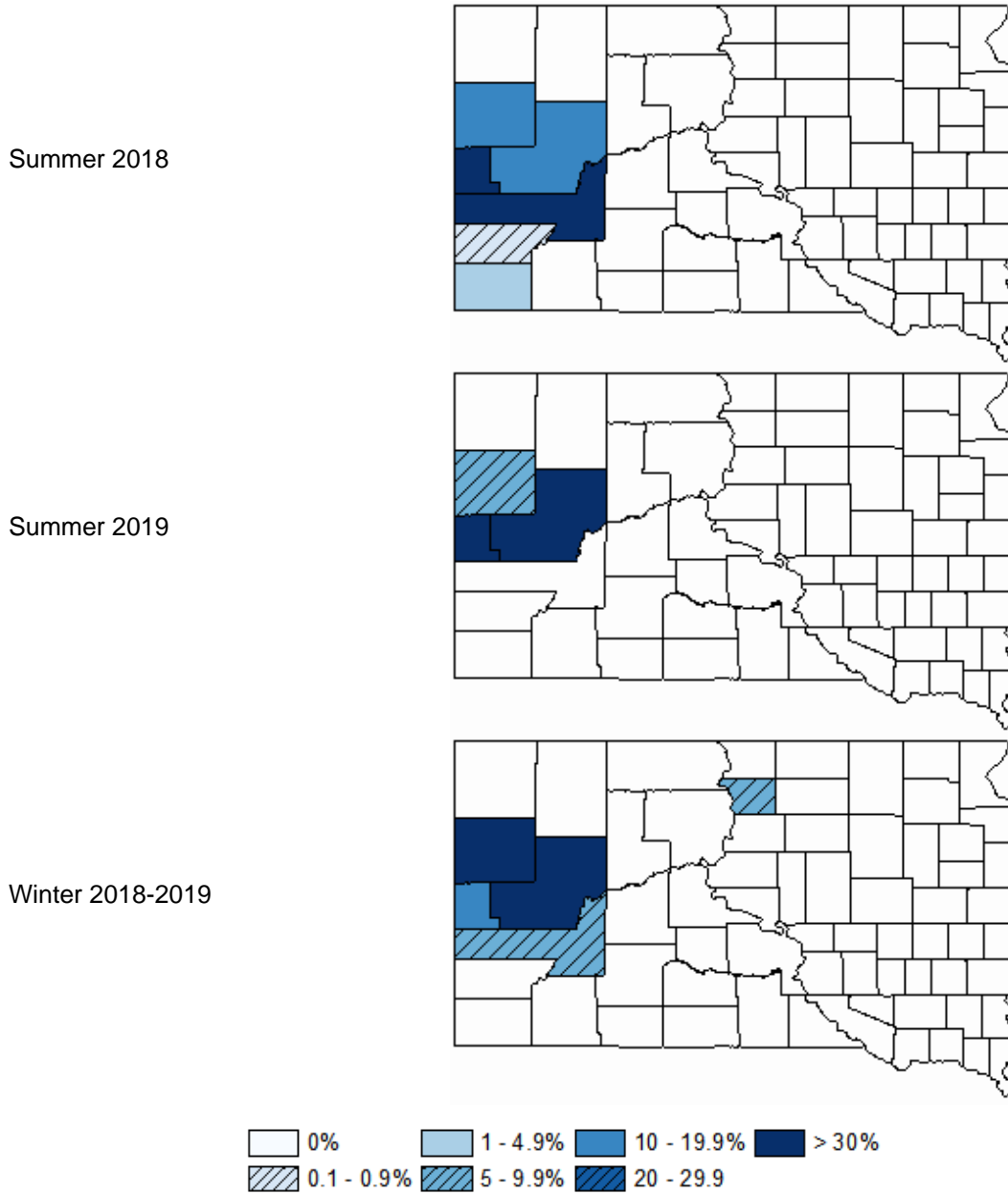


Table 10. Number of parties interviewed that harvested (or caught) a specified number of fish totaled over selected strata for a species.

Summer 2018 Angler Harvest	Counts	
	WAE (n=149)	WHC (n=149)
0.00	75	149
0.25	1	0
0.33	3	0
0.50	3	0
0.67	4	0
0.75	1	0
1.00	13	0
1.33	4	0
1.50	5	0
1.67	3	0
2.00	8	0
2.33	1	0
2.50	3	0
3.00	6	0
3.33	1	0
3.50	2	0
3.67	1	0
4.00	9	0
4.33	1	0
5.00	3	0
7.00	1	0
8.00	1	0

Summer 2019	Counts	
	WAE (n=10)	WHC (n=10)
Angler Harvest		
0.00	10	10

Winter 2018- 2019	Counts	
	WAE (n=21)	WHC (n=21)
Angler Harvest		
0.00	20	21
0.50	1	0

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

Question: What is the method of angling?

Response	Summer 2018 (n = 149)
Bait	91%
Spin	9%

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

Response	Summer 2018 (n = 149)
Very Satisfied	26%
Moderately Satisfied	34%
Slightly Satisfied	18%
Neutral/No Opinion	7%
Slightly Dissatisfied	9%
Moderately Dissatisfied	4%
Very Dissatisfied	1%