

Creel and Lake Information

Lake Information

Lake Name: Bitter
Lake Code: UBS-Lake-409-800
Surface Area: 7,601.03 Hectares
County: Day
Start Date: 1/4/2019
End Date: 8/8/2019
Months Included: January, February, March, May, June, July, August, December

Table 1. Percent of angling parties interviewed primarily targeting a species (or any species) by month and overall for Bitter during 2018 - 2019. Any Species (ANY), Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP).

Year	Month	# of Interviews	Percent of Anglers Targeting					
			ANY	BLC	NOP	WAE	WHB	YEP
2018	May	78	0.0	0.0	0.0	98.7	1.3	0.0
	June	97	3.1	0.0	0.0	95.9	1.0	0.0
	July	54	0.0	0.0	1.9	96.3	1.9	0.0
	December	84	14.3	1.2	2.4	51.2	0.0	31.0
	Overall	313	4.8	0.3	1.0	84.7	1.0	8.3
2019	January	105	9.5	0.0	2.9	54.3	0.0	33.3
	February	54	22.2	0.0	0.0	61.1	0.0	16.7
	March	5	0.0	0.0	0.0	40.0	0.0	60.0
	May	32	3.1	0.0	0.0	65.6	31.3	0.0
	June	52	7.7	0.0	0.0	80.8	11.5	0.0
	July	58	3.4	0.0	0.0	93.1	1.7	1.7
	August	14	0.0	0.0	0.0	100.0	0.0	0.0
	Overall	320	9.1	0.0	0.9	69.7	5.3	15.0

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 Bitter (80% confidence interval).

Year	Month	# Interviews	Angler Hours	Angler Days	Trip Length (h)	Party Size	% SD Residents	% Boat or Shack	% Weekend/Holidays
2018	May	78	12,748 (6,786)	2,602	4.90	2.56 (0.75)	50.00	91	77
	June	97	30,732 (11,693)	5,401	5.69	2.72 (0.72)	39.18	97	33
	July	54	13,082 (5,729)	2,436	5.37	2.23	55.56	100	69
	Overall	229	56,562 (14,683)	10,652	5.31	2.50 (0.35)	46.72	96	56
2018-2019	December	84	15,727 (4,685)	2,788	5.64 (1.70)	1.84 (0.34)	79.76	75	65
	January	105	63,924 (15,437)	4,077	15.68 (1.59)	2.52 (0.72)	49.52	97	65
	February	54	16,624 (5,110)	575	28.90	2.59	31.48	100	81
	March	5	1,711 (979)	242	7.06	1.16	20.00	80	80
	Overall	248	97,986 (16,950)	6,359	15.41 (0.72)	2.01 (0.20)	55.24	90	69
2019	May	32	9,949 (4,106)	2,421	4.11 (0.61)	3.54 (1.44)	21.88	53	56
	June	52	10,120 (2,292)	1,843	5.49	2.51 (1.04)	50.00	88	69
	July	58	10,837 (4,340)	2,194	4.94	2.38 (0.43)	44.83	98	60
	August	11	6,738	1,893	3.56	2.00	28.57	100	21
	Overall	153	37,643 (6,399)	8,201	4.59 (0.17)	2.66 (0.49)	40.38	86	59

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

Lake	Month				Total
	May	June	July	August	
Bitter (Day)	9,949 (4,106)	10,120 (2,292)	10,837 (4,340)	6,738	37,643 (6,399)

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

Species	Month				Total
	May	June	July	August	
Black Crappie	0	11 (18)	0	0	11 (18)
Northern Pike	32 (52)	21 (11)	0	0	53 (53)
Walleye	1,446 (710)	1,414 (486)	1,572 (1,132)	175	4,607 (1,422)
White Bass	859 (744)	607 (310)	25 (18)	0	1,491 (806)
Yellow Perch	0	0	30 (43)	0	30 (43)
Total	2,337 (1,507)	2,053 (824)	1,627 (1,194)	175	6,193 (2,343)

Table 5a. Estimated monthly and overall angler catch rate per hour fished (C/h) for all anglers by species at Bitter (80% confidence interval). Abbreviations for species are as follows: Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP) and other species (Other).

Year	Month	BLC	NOP	WAE	WHB	YEP
		C/h	C/h	C/h	C/h	C/h
2018	May	<0.01 (<0.01)	0.04 (0.06)	0.55 (0.70)	0.15 (0.12)	<0.01 (<0.01)
	June	0.00	0.02 (0.02)	0.53 (0.41)	0.08 (0.08)	<0.01
	July	<0.01 (<0.01)	<0.01 (<0.01)	0.66 (0.65)	0.28 (0.26)	0.01 (0.01)
	Overall	<0.01 (<0.01)	0.02 (0.02)	0.57 (0.31)	0.14 (0.08)	<0.01 (<0.01)
2018- 2019	December	0.00	<0.01 (<0.01)	0.63 (0.39)	<0.01 (<0.01)	0.78 (0.34)
	January	0.00	<0.01 (<0.01)	0.25 (0.14)	0.00	0.20 (0.11)
	February	0.00	<0.01 (<0.01)	0.11 (0.05)	0.00	0.04 (0.02)
	March	0.00	0.00	0.02 (0.03)	0.00	0.03 (0.05)
	Overall	0.00	<0.01 (<0.01)	0.29 (0.11)	<0.01 (<0.01)	0.26 (0.09)
2019	May	0.00	0.01 (<0.01)	0.23 (0.13)	0.19 (0.30)	0.00
	June	<0.01 (<0.01)	0.02 (0.01)	0.37 (0.23)	0.11 (0.57)	<0.01 (<0.01)
	July	0.00	0.01 (<0.01)	0.70 (0.44)	0.12 (0.10)	<0.01 (<0.01)
	August	0.00	0.00	0.17	0.03	0.00
	Overall	<0.01 (<0.01)	0.01 (<0.01)	0.39 (0.13)	0.12 (0.17)	<0.01 (<0.01)

Table 5b. Estimated monthly and overall angler harvest rate per hour fished (H/h) for all anglers by species at Bitter (80% confidence interval). Abbreviations for species are as follows: Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP) and other species (Other).

Year	Month	BLC	NOP	WAE	WHB	YEP
		H/h	H/h	H/h	H/h	H/h
2018	May	<0.01 (<0.01)	<0.01 (<0.01)	0.31 (0.38)	0.04 (0.04)	0.00
	June	0.00	0.01 (<0.01)	0.21 (0.17)	<0.01 (<0.01)	0.00
	July	0.00	0.00	0.24 (0.24)	0.07	0.01 (<0.01)
	Overall	<0.01 (<0.01)	<0.01 (<0.01)	0.24 (0.14)	0.03	<0.01 (<0.01)
2018- 2019	December	0.00	<0.01 (<0.01)	0.09 (0.05)	<0.01 (<0.01)	0.18 (0.10)
	January	0.00	<0.01 (<0.01)	0.04 (0.03)	0.00	0.07 (0.04)
	February	0.00	<0.01 (<0.01)	0.02 (0.02)	0.00	0.01 (<0.01)
	March	0.00	0.00	0.00	0.00	0.00
	Overall	0.00	<0.01 (<0.01)	0.05 (0.02)	<0.01 (<0.01)	0.07 (0.03)
2019	May	0.00	<0.01 (<0.01)	0.15 (0.12)	0.09 (0.20)	0.00
	June	<0.01 (<0.01)	<0.01 (<0.01)	0.14 (0.08)	0.06 (0.42)	0.00
	July	0.00	0.00	0.15 (0.12)	<0.01 (<0.01)	<0.01 (<0.01)
	August	0.00	0.00	0.03	0.00	0.00
	Overall	<0.01 (<0.01)	<0.01 (<0.01)	0.12 (0.05)	0.04 (0.10)	<0.01 (<0.01)

Table 6a. Estimated monthly and overall angler catch rate per hour fished (C/h) only for anglers primarily targeting a species at Bitter. (80% confidence interval). Abbreviations for species are as follows: Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP) and Other Species (Other).

Year	Month	BLC	NOP	WAE	WHB	YEP
		C/h	C/h	C/h	C/h	C/h
2018	May	0.00	0.00	0.47 (0.26)	0.32	0.00
	June	0.00	0.00	0.55 (0.45)	0.00	0.00
	July	0.00	0.00	0.73 (0.21)	9.09	0.00
	Overall	0.00	0.00	0.54 (0.18)	4.97	0.00
2018- 2019	December	0.00	0.15	0.81 (0.54)	0.00	1.61 (8.68)
	January	0.00	<0.01 (0.02)	0.27 (0.52)	0.00	0.33 (0.55)
	February	0.00	0.00	0.12 (0.13)	0.00	0.40 (0.50)
	March	0.00	0.00	0.00	0.00	0.07
	Overall	0.00	0.04 (0.01)	0.48 (0.29)	0.00	0.87 (3.69)
2019	May	0.00	0.00	0.27 (0.24)	0.35 (0.05)	0.00
	June	0.00	0.00	0.36 (0.38)	0.32 (6.04)	0.00
	July	0.00	0.00	0.72 (0.42)	0.00	0.00
	August	0.00	0.00	0.17 (0.33)	0.00	0.00
	Overall	0.00	0.00	0.39 (0.17)	0.25 (2.60)	0.00

Table 6b. Estimated monthly and overall angler harvest rate per hour fished (H/h) only for anglers primarily targeting a species at Bitter. (80% confidence interval). Abbreviations for species are as follows: Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP) and Other Species (Other).

Year	Month	BLC	NOP	WAE	WHB	YEP
		H/h	H/h	H/h	H/h	H/h
2018	May	0.00	0.00	0.34 (0.13)	0.32	0.00
	June	0.00	0.00	0.20 (0.13)	0.00	0.00
	July	0.00	0.00	0.23 (0.16)	7.27	0.00
	Overall	0.00	0.00	0.29 (0.09)	3.99	0.00
2018- 2019	December	0.00	0.15	0.14 (0.13)	0.00	0.35 (1.05)
	January	0.00	<0.01 (0.02)	0.05 (0.12)	0.00	0.13 (0.25)
	February	0.00	0.00	0.03 (0.07)	0.00	0.06 (0.12)
	March	0.00	0.00	0.00	0.00	0.00
	Overall	0.00	0.04 (0.01)	0.08 (0.07)	0.00	0.20 (0.45)
2019	May	0.00	0.00	0.17 (0.21)	0.33 (0.06)	0.00
	June	0.00	0.00	0.15 (0.15)	0.32 (5.13)	0.00
	July	0.00	0.00	0.15 (0.22)	0.00	0.00
	August	0.00	0.00	0.03 (0.10)	0.00	0.00
	Overall	0.00	0.00	0.14 (0.10)	0.25 (2.21)	0.00

Table 7a. Estimated monthly and overall angler catch (C) for all anglers by species at Bitter (80% confidence interval). Abbreviations for species are as follows: Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP) and other species (Other).

Year	Month	BLC	NOP	WAE	WHB	YEP
		C	C	C	C	C
2018	May	13 (18)	487 (372)	7,017 (4,674)	1,888 (1,173)	13 (16)
	June	0	759 (385)	16,309 (6,840)	2,581 (1,603)	40 (42)
	July	52 (67)	42 (42)	8,691 (4,453)	3,661 (2,673)	171 (127)
	Overall	65 (69)	1,288 (537)	32,017 (9,405)	8,131 (3,331)	224 (134)
2018- 2019	December	0	45 (44)	9,905 (4,012)	7 (11)	12,209 (3,298)
	January	0	149 (59)	16,222 (5,669)	0	12,764 (6,067)
	February	0	81 (64)	1,897 (583)	0	585 (422)
	March	0	0	39 (54)	0	59 (81)
	Overall	0	275 (97)	28,063 (6,970)	7 (11)	25,618 (6,919)
2019	May	0	58 (74)	2,323 (788)	1,864 (1,050)	0
	June	11 (18)	163 (79)	3,746 (1,442)	1,082 (444)	21 (38)
	July	0	78 (48)	7,594 (3,480)	1,315 (908)	42 (47)
	August	0	0	1,140	175	0
	Overall	11 (18)	299 (118)	14,802 (3,848)	4,436 (1,457)	63 (60)

Table 7b. Estimated monthly and overall angler harvest (H) for all anglers by species at Bitter (80% confidence interval). Abbreviations for species are as follows: Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP) and other species (Other).

Year	Month	BLC	NOP	WAE	WHB	YEP
		H	H	H	H	H
2018	May	13 (18)	13 (18)	3,965 (2,473)	499 (378)	0
	June	0	223 (134)	6,338 (3,063)	102 (53)	0
	July	0	0	3,166 (1,563)	911 (928)	124 (91)
	Overall	13 (18)	236 (135)	13,470 (4,236)	1,511 (1,003)	124 (91)
2018- 2019	December	0	22 (32)	1,473 (532)	7 (11)	2,773 (1,329)
	January	0	62 (37)	2,753 (1,403)	0	4,459 (2,761)
	February	0	75 (64)	379 (329)	0	90 (63)
	March	0	0	0	0	0
	Overall	0	160 (80)	4,605 (1,536)	7 (11)	7,323 (3,064)
2019	May	0	32 (52)	1,446 (710)	859 (744)	0
	June	11 (18)	21 (11)	1,414 (486)	607 (310)	0
	July	0	0	1,572 (1,132)	25 (18)	30 (43)
	August	0	0	175	0	0
	Overall	11 (18)	53 (53)	4,607 (1,422)	1,491 (806)	30 (43)

Table 8. Estimated number and rate (number per hour) of Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP) caught and harvested by anglers during the summer and winter fisheries on Bitter, (80% confidence interval).

Black Crappie

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2015	21 (10)	16 (10)	<0.01 (<0.01)	<0.01 (<0.01)
Summer	2016	56 (50)	17 (13)	<0.01 (<0.01)	<0.01 (<0.01)
Summer	2017	21 (40)	21 (40)	<0.01 (<0.01)	<0.01 (<0.01)
Summer	2018	65 (69)	13 (18)	<0.01 (<0.01)	<0.01 (<0.01)
Summer	2019	11 (18)	11 (18)	<0.01 (<0.01)	<0.01 (<0.01)
Winter	2011-2012	986	360	0.01	<0.01
Winter	2012-2013	87	87	<0.01	<0.01
Winter	2013-2014	439	439	0.01	0.01
Winter	2014-2015	112	112	<0.01	<0.01
Winter	2015-2016	62	62	<0.01	<0.01
Winter	2016-2017	24	24	<0.01	<0.01

Northern Pike

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2010	2,585 (1,259)	279 (264)	0.11 (0.07)	0.01 (0.01)
Summer	2012	23,879 (5,626)	3,528 (844)	0.17 (0.06)	0.03 (<0.01)
Summer	2013	24,009 (13,880)	1,188 (873)	0.23 (0.22)	0.01 (0.01)
Summer	2014	13,204 (3,886)	1,863 (710)	0.17 (0.09)	0.02 (0.01)
Summer	2015	5,226 (1,568)	607 (245)	0.12 (0.06)	0.01 (<0.01)
Summer	2016	3,939 (995)	379 (143)	0.04 (0.01)	<0.01 (<0.01)
Summer	2017	1,594 (399)	439 (169)	0.02 (<0.01)	0.01 (<0.01)
Summer	2018	1,288 (537)	236 (135)	0.02 (0.02)	<0.01 (<0.01)
Summer	2019	299 (118)	53 (53)	0.01 (<0.01)	<0.01 (<0.01)
Winter	2009-2010	14	12	<0.01	<0.01
Winter	2010-2011	218	172	0.03	0.03
Winter	2011-2012	1,137	716	0.01	0.01
Winter	2012-2013	4,055	2,443	0.05	0.03
Winter	2013-2014	3,060	775	0.04	0.01
Winter	2014-2015	2,009	763	0.02	0.01
Winter	2015-2016	1,632	888	0.01	<0.01
Winter	2016-2017	95	94	<0.01	<0.01
Winter	2018-2019	275 (97)	160 (80)	<0.01 (<0.01)	<0.01 (<0.01)

Walleye

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2010	6,782 (2,551)	3,579 (1,437)	0.29 (0.16)	0.16 (0.09)
Summer	2012	140,773 (25,439)	60,235 (11,062)	1.03 (0.36)	0.44 (0.16)
Summer	2013	134,718 (69,010)	26,861 (13,404)	1.29 (0.99)	0.26 (0.20)
Summer	2014	104,940 (36,865)	10,348 (3,068)	1.37 (0.76)	0.14 (0.07)
Summer	2015	107,186 (34,334)	9,813 (3,230)	2.37 (1.28)	0.22 (0.11)
Summer	2016	148,229 (35,864)	63,441 (15,166)	1.32 (0.60)	0.57 (0.26)
Summer	2017	42,158 (10,298)	24,602 (5,423)	0.51 (0.20)	0.30 (0.11)
Summer	2018	32,017 (9,405)	13,470 (4,236)	0.57 (0.31)	0.24 (0.14)
Summer	2019	14,802 (3,848)	4,607 (1,422)	0.39 (0.13)	0.12 (0.05)
Winter	2009-2010	117	16	0.02	<0.01
Winter	2010-2011	406	74	0.06	0.01
Winter	2011-2012	15,711	1,078	0.18	0.01
Winter	2012-2013	43,130	684	0.55	0.01
Winter	2013-2014	41,460	1,318	0.48	0.02
Winter	2014-2015	17,084	747	0.19	0.01
Winter	2015-2016	23,902	11,764	0.11	0.06
Winter	2016-2017	7,379	2,316	0.06	0.02
Winter	2018-2019	28,063 (6,970)	4,605 (1,536)	0.29 (0.11)	0.05 (0.02)

White Bass

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2010	188 (266)	0	0.01 (0.01)	0.00
Summer	2012	6,565 (3,025)	657 (880)	0.05 (0.03)	<0.01 (<0.01)
Summer	2013	4,600 (2,115)	98	0.04 (0.02)	<0.01 (<0.01)
Summer	2014	7,138 (962)	5,635 (485)	0.09 (0.03)	0.07 (0.02)
Summer	2015	4,330 (2,388)	1,427 (1,444)	0.10 (0.06)	0.03 (0.03)
Summer	2016	2,001 (558)	492 (160)	0.02 (<0.01)	<0.01 (<0.01)
Summer	2017	2,553 (1,315)	1,187 (979)	0.03 (0.02)	0.01 (0.01)
Summer	2018	8,131 (3,331)	1,511 (1,003)	0.14 (0.08)	0.03
Summer	2019	4,436 (1,457)	1,491 (806)	0.12 (0.17)	0.04 (0.10)
Winter	2011-2012	209	209	<0.01	<0.01
Winter	2016-2017	410	0	<0.01	0.00
Winter	2018-2019	7 (11)	7 (11)	<0.01 (<0.01)	<0.01 (<0.01)

Yellow Perch

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2010	222 (172)	191 (172)	0.01 (<0.01)	0.01 (<0.01)
Summer	2012	17,228 (4,985)	13,035 (3,595)	0.13 (0.05)	0.10 (0.04)
Summer	2013	1,782 (836)	1,310 (680)	0.02 (0.01)	0.01 (<0.01)
Summer	2014	544 (354)	225 (169)	0.01 (<0.01)	<0.01 (<0.01)
Summer	2015	87 (53)	66 (46)	<0.01 (<0.01)	<0.01 (<0.01)
Summer	2016	877 (328)	693 (296)	0.01 (<0.01)	0.01 (<0.01)
Summer	2017	324 (186)	139 (45)	<0.01 (<0.01)	<0.01 (<0.01)
Summer	2018	224 (134)	124 (91)	<0.01 (<0.01)	<0.01 (<0.01)
Summer	2019	63 (60)	30 (43)	<0.01 (<0.01)	<0.01 (<0.01)
Winter	2009-2010	225	147	0.04	0.03
Winter	2010-2011	8,737	4,853	1.28	0.71
Winter	2011-2012	45,343	38,069	0.52	0.44
Winter	2012-2013	37,365	24,945	0.48	0.32
Winter	2013-2014	27,751	22,107	0.32	0.25
Winter	2014-2015	21,707	18,363	0.24	0.20
Winter	2015-2016	5,212	1,347	0.02	0.01
Winter	2016-2017	9,450	6,443	0.08	0.05
Winter	2018-2019	25,618 (6,919)	7,323 (3,064)	0.26 (0.09)	0.07 (0.03)

Table 9. The number of fish harvested with each species by length group (mm) for the winter and summer fisheries at Bitter. Abbreviations for species are as follows: Black Crappie (BLC), Northern Pike (NOP), Walleye (WAE), White Bass (WHB), Yellow Perch (YEP).

Summer 2018					
Length Group (mm)	BLC (N=1)	NOP (N=9)	WAE (N=572)	WHB (N=17)	YEP (N=6)
210			3		
220					
230			2		
240			2		
250					1
260					
270			1		1
280			4		2
290			6	1	1
300			6		1
310			11	2	
320			21	2	
330	1		9		
340			17	1	
350			14		
360			17		
370			19	1	
380			44	1	
390			40		
400			51		
410			55	1	
420			40	4	
430			49	1	
440			35	2	
450			34		
460			24	1	
470			17		
480			14		
490			15		
500			6		
510			4		
520			4		
530			1		
540			3		
550			1		
560			1		
570		1			
580			1		
590		1			
600					
610					
620					
630		1	1		
640					
650					
660					
670					
680		1			
690					
700					
710					
720		1			
730		1			
740					
750					
760		1			
770					
780					
790		1			
800					
810					
820					
830					
840		1			

Winter 2018-2019					
Length Group (mm)	BLC (N=0)	NOP (N=4)	WAE (N=68)	WHB (N=0)	YEP (N=112)

180			1
190			6
200			12
210			8
220			9
230			17
240			9
250		1	15
260			7
270		1	7
280			6
290			9
300		2	2
310		3	2
320		8	1
330		4	1
340		5	
350		4	
360		8	
370		6	
380		7	
390		2	
400		2	
410		2	
420		3	
430		4	
440		1	
450		1	
460			
470			
480		1	
490			
500			
510		2	
520			
530			
540			
550			
560		1	
650	1		
660			
670			
680			
690			
700			
710	1		
720			
730			
740			
750			
760			
770			
780			
790			
800			
810			
820	1		
830			
840			
850			
860			
870			
880			
890			
900			
910			
920			
930			
940			
950			
960			
970			
980			
990			

1000
1010
1020
1030
1040
1050
1060
1070

1

Summer 2019

Length Group (mm)	BLC (N=0)	NOP (N=0)	WAE (N=176)	WHB (N=42)	YEP (N=2)
250					1
260					
270					1
300			1	1	
310			2	1	
320			1	3	
330			3	1	
340			12	4	
350			6	6	
360			12	6	
370			15	6	
380			24		
390			9		
400			7	2	
410			7	2	
420			9	2	
430			12	1	
440			5	3	
450			9	2	
460			9	2	
470			3		
480			8		
490			3		
500			5		
510			4		
520			2		
530			4		
540			1		
550			1		
560			1		
570					
580			1		

Figure 1a. Length frequency of angler-harvested Walleye measured by the creel clerk during creel surveys on Bitter.

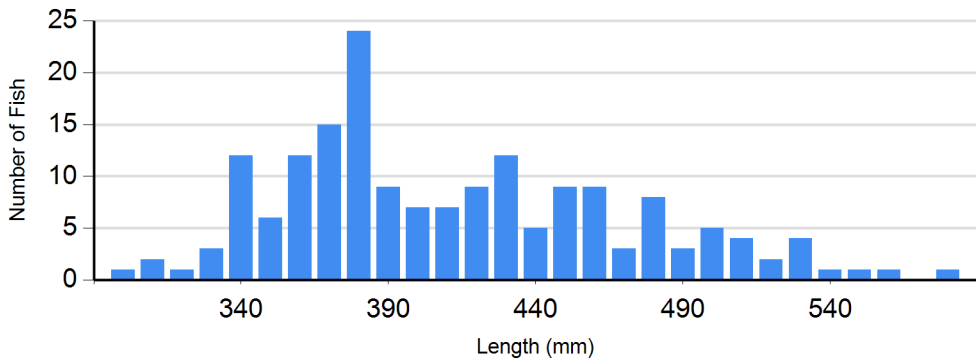
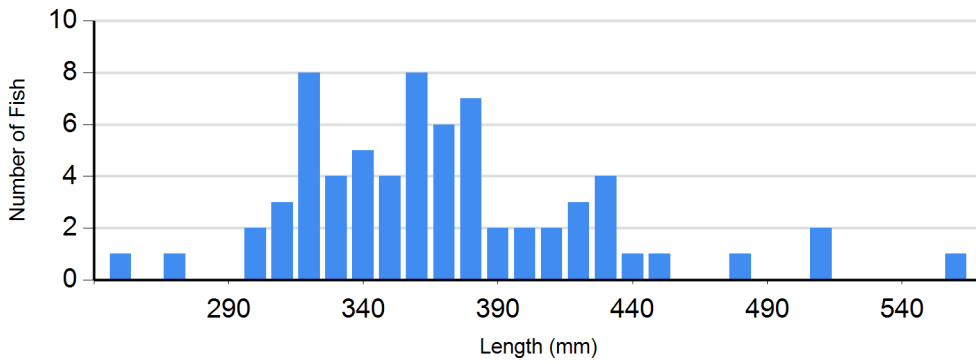
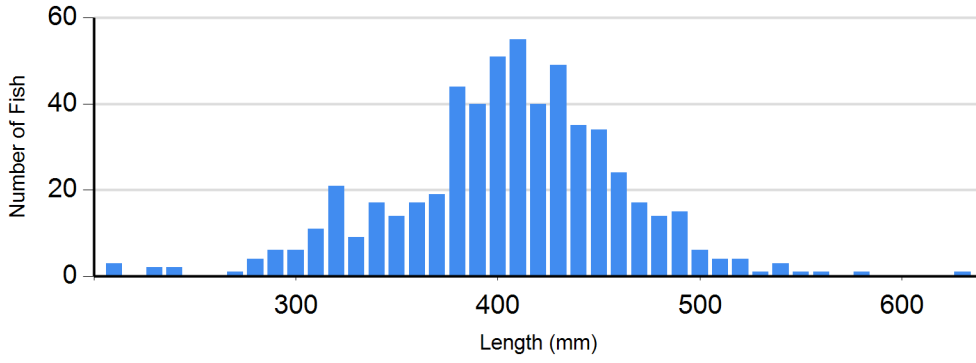


Figure 1b. Length frequency of angler-harvested White Bass measured by the creel clerk during creel surveys on Bitter.

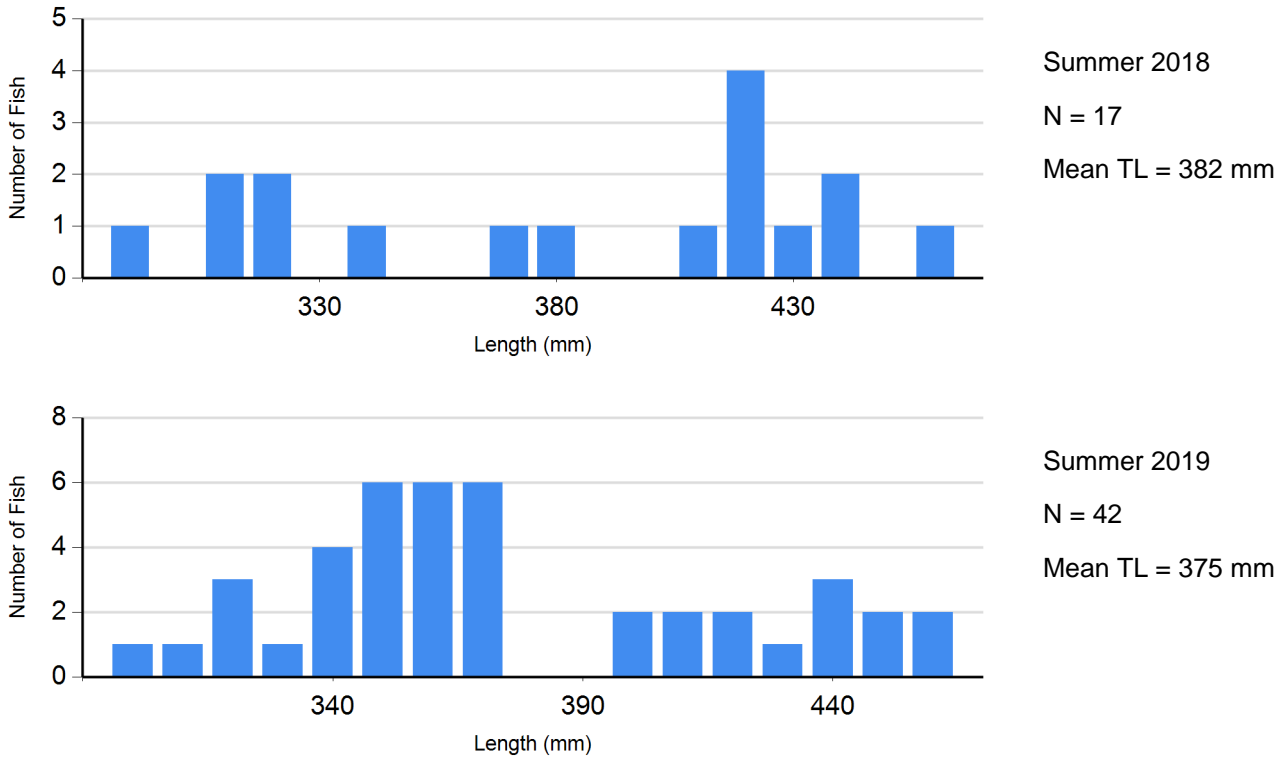


Figure 1c. Length frequency of angler-harvested Yellow Perch measured by the creel clerk during creel surveys on Bitter.

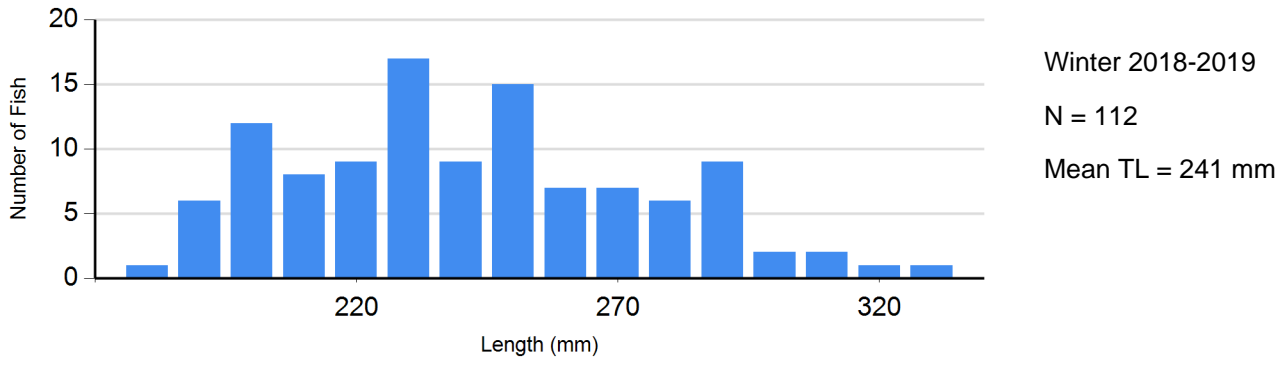


Figure 2. South Dakota county of residence for winter and summer resident anglers fishing Bitter, South Dakota between May 2018 and August 2019.

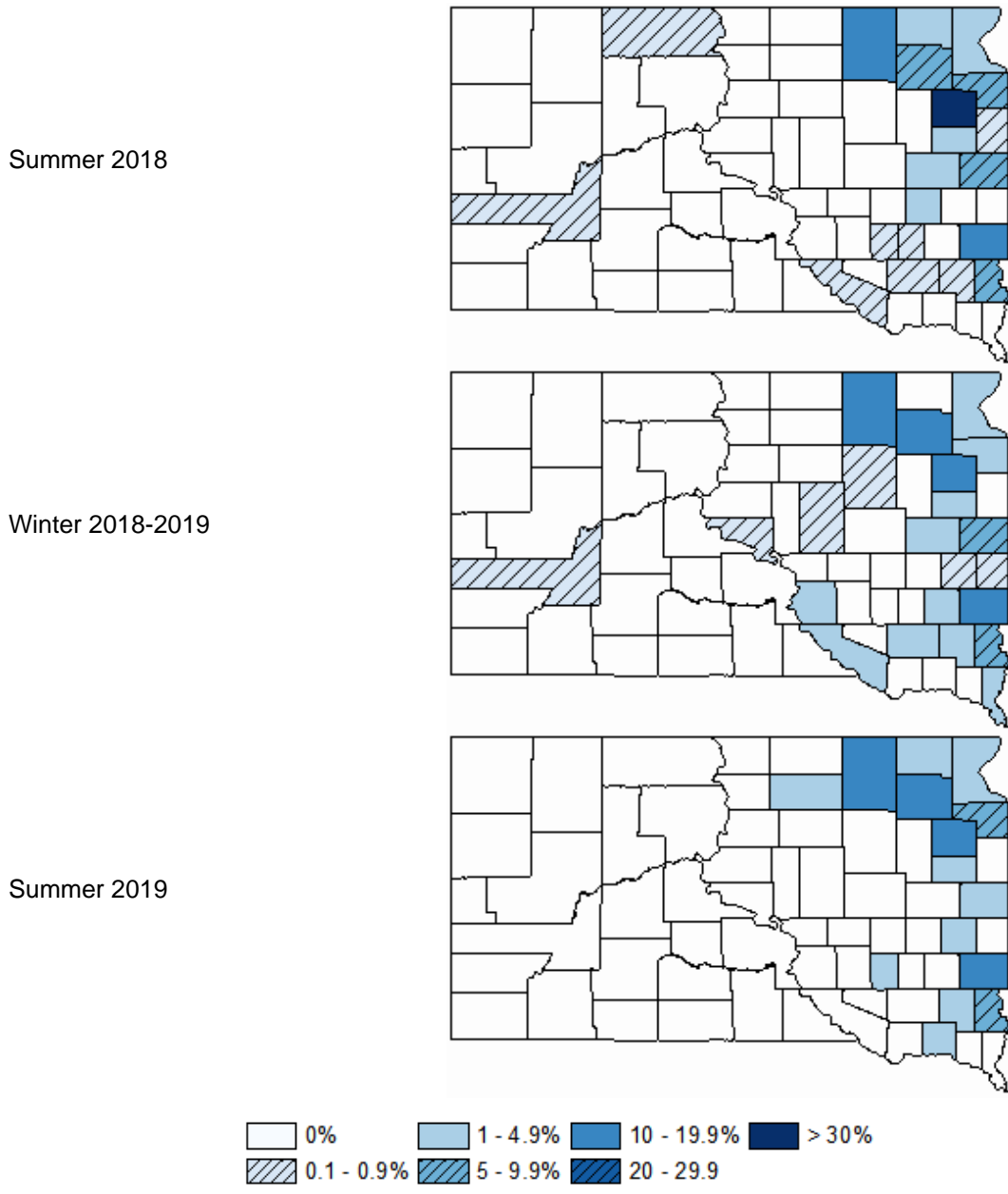


Table 10. Number of parties interviewed that harvested (or caught) a specified number of fish totaled over selected strata for a species.

Angler Harvest	Counts				
	BLC (n=229)	NOP (n=229)	WAE (n=229)	WHB (n=229)	YEP (n=229)
0.00	228	218	80	215	224
0.20	0	0	2	0	0
0.25	1	3	3	0	0
0.33	0	3	4	5	1
0.40	0	1	0	0	0
0.50	0	4	21	0	2
0.60	0	0	1	0	0
0.67	0	0	3	1	0
0.75	0	0	2	0	0
1.00	0	0	17	3	2
1.25	0	0	1	0	0
1.33	0	0	6	0	0
1.50	0	0	11	0	0
1.67	0	0	4	0	0
1.75	0	0	1	0	0
2.00	0	0	13	2	0
2.33	0	0	2	0	0
2.40	0	0	2	0	0
2.50	0	0	4	0	0
2.86	0	0	0	1	0
3.00	0	0	7	0	0
3.25	0	0	1	0	0
3.33	0	0	1	0	0
3.50	0	0	3	0	0
3.67	0	0	3	0	0
4.00	0	0	36	1	0
4.50	0	0	1	0	0
20.00	0	0	0	1	0

Angler Harvest	Counts				
	BLC (n=156)	NOP (n=156)	WAE (n=156)	WHB (n=156)	YEP (n=156)
0.00	155	154	94	138	155
0.20	0	0	0	1	0
0.25	0	0	1	0	0
0.33	0	0	2	2	1
0.50	1	2	6	1	0
0.67	0	0	4	0	0
0.75	0	0	0	1	0
0.83	0	0	1	0	0
1.00	0	0	11	3	0
1.20	0	0	0	1	0
1.25	0	0	1	0	0
1.33	0	0	1	0	0
1.50	0	0	4	0	0
1.67	0	0	2	2	0
1.75	0	0	0	1	0
2.00	0	0	8	0	0
2.33	0	0	3	0	0
2.50	0	0	3	0	0
2.60	0	0	0	1	0
2.67	0	0	0	1	0
3.00	0	0	3	1	0
3.25	0	0	0	1	0
3.33	0	0	2	1	0
3.50	0	0	1	0	0
3.67	0	0	1	0	0
4.00	0	0	8	0	0
6.25	0	0	0	1	0

Winter 2018-2019

Counts

Angler Harvest	BLC (n=248)	NOP (n=248)	WAE (n=248)	WHB (n=248)	YEP (n=248)
0.00	248	237	164	247	176
0.20	0	1	0	0	0
0.25	0	1	3	1	7
0.33	0	4	5	0	5
0.40	0	0	1	0	0
0.50	0	4	17	0	9
0.67	0	0	3	0	4
0.75	0	0	1	0	1
1.00	0	1	14	0	6
1.25	0	0	1	0	0
1.33	0	0	1	0	0
1.50	0	0	4	0	2
1.67	0	0	0	0	1
2.00	0	0	9	0	6
2.50	0	0	1	0	3
2.67	0	0	1	0	0
2.75	0	0	1	0	0
3.00	0	0	5	0	6
3.33	0	0	2	0	1
3.50	0	0	1	0	0
3.67	0	0	0	0	1
4.00	0	0	8	0	2
4.67	0	0	0	0	1
5.00	0	0	1	0	3
6.00	0	0	3	0	3
7.00	0	0	1	0	2
7.50	0	0	0	0	1
8.00	0	0	1	0	1
8.50	0	0	0	0	1
9.00	0	0	0	0	1
10.00	0	0	0	0	1
12.50	0	0	0	0	1
13.00	0	0	0	0	1
14.00	0	0	0	0	1
15.00	0	0	0	0	1

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

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

Response	Summer 2019 (n = 145)
Very Satisfied	45%
Moderately Satisfied	13%
Slightly Satisfied	22%
Neutral/No Opinion	8%
Slightly Dissatisfied	5%
Moderately Dissatisfied	3%
Very Dissatisfied	3%