

Creel and Lake Information

Lake Information

Lake Name: Horsethief
Lake Code: MCS-Lake-8-000
Surface Area: 6.89 Hectares
County: Pennington
Start Date: 5/16/2018
End Date: 9/26/2018
Months Included: May, June, July, August, September

Table 1. Percent of angling parties interviewed primarily targeting a species (or any species) by month and overall for Horsethief during 2017 - 2018. Any Species (ANY), Brown Trout (BNT), Rainbow Trout (RBT).

Year	Month	# of Interviews	Percent of Anglers Targeting		
			ANY	BNT	RBT
2018	May	24	62.5	16.7	20.8
	June	45	37.8	11.1	51.1
	July	74	43.2	8.1	48.6
	August	42	76.2	2.4	21.4
	September	26	50.0	3.8	46.2
	Overall	211	51.7	8.1	40.3

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 Horsethief (80% confidence interval).

Year	Month	# Interviews	Angler Hours	Angler Days	Trip Length (h)	Party Size	% SD Residents	% Boat or Shack	% Weekend/Holidays
2018	May	24	3,345 (1,535)	1,859	1.80	2.40	62.50	0	67
	June	45	2,609 (891)	929	2.81	2.40	64.44	0	31
	July	74	7,862 (3,634)	3,971	1.98 (0.38)	3.66 (0.86)	71.62	5	58
	August	42	1,610 (590)	660	2.44 (0.57)	2.78 (0.70)	69.05	7	36
	September	26	2,569 (614)	962	2.67	3.83	73.08	8	19
	Overall	211	17,996 (4,133)	7,724	2.33 (0.14)	3.01 (0.22)	68.72	4	44

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

Lake	Month					Total
	May	June	July	August	September	
Horsethief (Pennington)	3,345 (1,535)	2,609 (891)	7,862 (3,634)	1,610 (590)	2,569 (614)	17,996 (4,133)

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

Species	Month					Total
	May	June	July	August	September	
Brown Trout	0	7 (6)	18 (19)	14 (11)	11 (12)	49 (26)
Rainbow Trout	447 (433)	770 (337)	1,333 (730)	405 (247)	401 (108)	3,357 (952)
Total	447 (433)	777 (343)	1,351 (749)	419 (258)	413 (120)	3,407 (978)

Table 5a. Estimated monthly and overall angler catch rate per hour fished (C/h) for all anglers by species at Horsethief (80% confidence interval). Abbreviations for species are as follows: Brown Trout (BNT), Rainbow Trout (RBT) and other species (Other).

Year	Month	BNT	RBT
		C/h	C/h
2018	May	0.02 (0.02)	0.30 (0.28)
	June	0.01 (<0.01)	0.64 (0.52)
	July	0.01	0.58 (0.38)
	August	0.02 (0.02)	0.54 (0.45)
	September	0.07 (0.02)	0.53 (0.19)
	Overall	0.02	0.53 (0.19)

Table 5b. Estimated monthly and overall angler harvest rate per hour fished (H/h) for all anglers by species at Horsethief (80% confidence interval). Abbreviations for species are as follows: Brown Trout (BNT), Rainbow Trout (RBT) and other species (Other).

Year	Month	BNT	RBT
		H/h	H/h
2018	May	0.00	0.13 (0.14)
	June	<0.01 (<0.01)	0.30 (0.27)
	July	<0.01	0.17 (0.12)
	August	0.01 (<0.01)	0.25 (0.29)
	September	<0.01 (<0.01)	0.16 (0.05)
	Overall	<0.01	0.19 (0.07)

Table 6a. Estimated monthly and overall angler catch rate per hour fished (C/h) only for anglers primarily targeting a species at Horsethief. (80% confidence interval). Abbreviations for species are as follows: Brown Trout (BNT), Rainbow Trout (RBT) and Other Species (Other).

Year	Month	BNT	RBT
		C/h	C/h
2018	May	0.00	0.21 (0.29)
	June	0.00	0.93 (1.51)
	July	0.01 (0.08)	0.56 (0.65)
	August	0.00	0.80 (0.69)
	September	0.19	0.50 (0.56)
	Overall	0.04 (0.02)	0.60 (0.37)

Table 6b. Estimated monthly and overall angler harvest rate per hour fished (H/h) only for anglers primarily targeting a species at Horsethief. (80% confidence interval). Abbreviations for species are as follows: Brown Trout (BNT), Rainbow Trout (RBT) and Other Species (Other).

Year	Month	BNT	RBT
		H/h	H/h
2018	May	0.00	0.00
	June	0.00	0.40 (1.07)
	July	0.00	0.26 (0.29)
	August	0.00	0.58 (0.71)
	September	0.19	0.12 (0.15)
	Overall	0.03	0.27 (0.26)

Table 7a. Estimated monthly and overall angler catch (C) for all anglers by species at Horsethief (80% confidence interval). Abbreviations for species are as follows: Brown Trout (BNT), Rainbow Trout (RBT) and other species (Other).

Year	Month	BNT	RBT
		C	C
2018	May	69 (61)	988 (715)
	June	20 (16)	1,667 (745)
	July	42 (31)	4,569 (2,217)
	August	34 (25)	866 (392)
	September	190 (39)	1,359 (353)
	Overall	355 (84)	9,450 (2,502)

Table 7b. Estimated monthly and overall angler harvest (H) for all anglers by species at Horsethief (80% confidence interval). Abbreviations for species are as follows: Brown Trout (BNT), Rainbow Trout (RBT) and other species (Other).

Year	Month	BNT	RBT
		H	H
2018	May	0	447 (433)
	June	7 (6)	770 (337)
	July	18 (19)	1,333 (730)
	August	14 (11)	405 (247)
	September	11 (12)	401 (108)
	Overall	49 (26)	3,357 (952)

Table 8. Estimated number and rate (number per hour) of Brown Trout (BNT), Rainbow Trout (RBT) caught and harvested by anglers during the summer and winter fisheries on Horsethief, (80% confidence interval).

Brown Trout

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2018	355 (84)	49 (26)	0.02	<0.01

Rainbow Trout

Season	Year	Catch	Harvest	Catch Rate	Harvest Rate
Summer	2014	0	0	0.00	0.00
Summer	2015	1,075 (321)	746 (286)	0.20 (0.13)	0.14 (0.11)
Summer	2018	9,450 (2,502)	3,357 (952)	0.53 (0.19)	0.19 (0.07)

Table 9. The number of fish harvested with each species by length group (mm) for the winter and summer fisheries at Horsethief. Abbreviations for species are as follows: Brown Trout (BNT), Rainbow Trout (RBT).

Summer 2018		
Length Group (mm)	BNT (N=6)	RBT (N=341)
140		1
150		
160		1
170		4
180		4
190		6
200		4
210		9
220		4
230		5
240		9
250	1	13
260	2	35
270	1	48
280	2	45
290		45
300		47
310		32
320		13
330		9
340		3
350		3
360		1

Figure 1a. Length frequency of angler-harvested Rainbow Trout measured by the creel clerk during creel surveys on Horsethief.

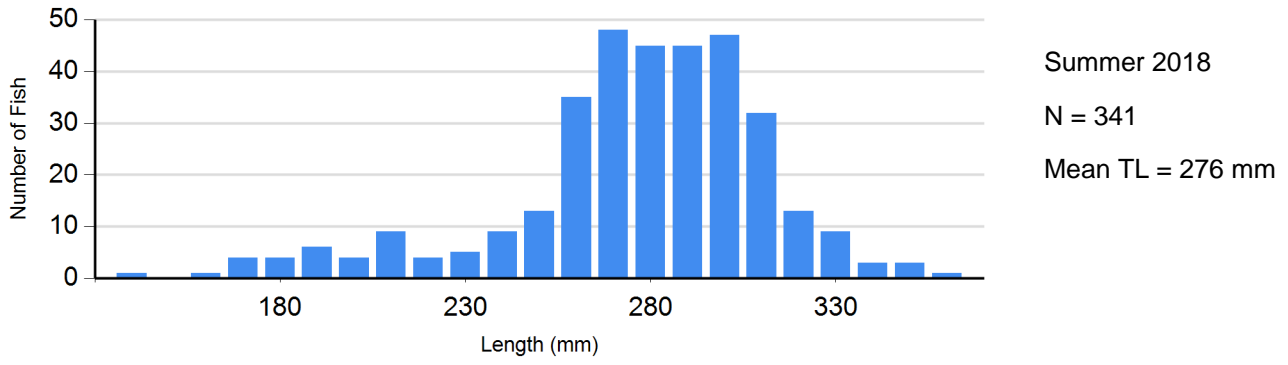


Figure 2. South Dakota county of residence for winter and summer resident anglers fishing Horsethief, South Dakota between May 2018 and September 2018.

Summer 2018

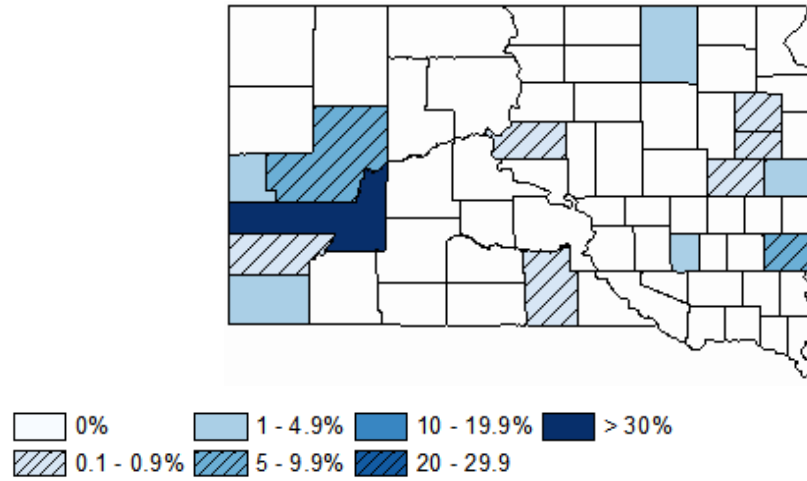


Table 10. Number of parties interviewed that harvested (or caught) a specified number of fish totaled over selected strata for a species.

Summer 2018 Angler Harvest	Counts	
	BNT (n=211)	RBT (n=211)
0.00	204	137
0.10	0	1
0.14	1	0
0.17	1	0
0.25	0	2
0.33	1	3
0.50	3	8
0.60	0	3
0.67	0	3
0.75	0	2
1.00	1	8
1.25	0	1
1.33	0	4
1.50	0	2
1.67	0	3
1.71	0	1
1.75	0	1
2.00	0	9
2.50	0	2
3.00	0	2
3.33	0	4
3.75	0	1
4.00	0	4
4.50	0	3
5.00	0	6
7.00	0	1

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

Question: What is the method of angling?

Response	Summer 2018 (n = 210)
Bait	80%
Fly	1%
Spin	19%

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

Response	Summer 2018 (n = 210)
Very Satisfied	54%
Moderately Satisfied	29%
Slightly Satisfied	8%
Neutral/No Opinion	3%
Slightly Dissatisfied	5%
Moderately Dissatisfied	1%

Question: How many trout did you release today that swallowed the hook?

Response	Summer 2018 (n = 210)
>5	2%
0	90%
1	6%
2	2%
3	0%

Question: For the released fish in the previous question, how many fish did you release by cutting your line?

Response	Summer 2018 (n = 210)
>5	1%
0	95%
1	3%
3	0%

Question: Are you camping at the lake?

Response	Summer 2018 (n = 210)
No	96%
Yes	4%