

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Slate Creek, Pennington County
02-0074-00
2016

Table 1. Population and Biomass Estimates for Slate Creek

Site Number: 135	Date Sampled: 06/15/2016	Conductivity (umhos/cm): 197
Site Midpoint (Latitude, Longitude): 44.03212241, -103.63386714	Site Length (m): 100	pH: 7.4
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.7	Water Temperature (C): 16.8
Stream Classification: BR0	Number of Pass: 3	Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brown Trout	<200mm	5	5	6	5	188	8	50	76	6.70	80	71.6	40.0
Brown Trout	All	5	5	6	5	188	8	50	76	6.70	80	71.6	40.0
Creek Chub	All	120	123	128	120	4618	107	1230	1870	95.46	1979	114.0	23.2
Longnose Dace	All	222	240	254	226	9010	703	2400	3649	627.51	3862	71.9	78.0
White Sucker	All	7	7	9	7	263	14	70	106	12.13	113	167.4	51.7

Stream sites are classified based on the estimates of adult trout over eight inches that exist within the site. Estimates are derived from 3-pass backpack electrofishing surveys at 100-meter sites within streams. While all fish in the site are collected and measured, only trout species are used for classifications. Sites are numbered in accordance for the distance (m) from the stream confluence of a higher order stream/river.

Based on number of trout in excess of eight inches	
Class BR1	Number of wild Brown Trout exceeds 150 per acre
Class BR2	Number of wild Brook Trout ranges from 25 to 150 per acre
Class BR3	Number of wild Brown Trout is less than 25 per acre
Class BK1	Number of wild Brook Trout exceeds 150 per acre
Class BK2	Number of wild Brook Trout ranges from 25 to 150 per acre
Class BK3	Number of wild Brook Trout is less than 25 per acre
Class RB1	Number of wild Rainbow Trout exceeds 25 per acre
Class RB2	Number of wild Rainbow Trout is less than 25 per acre

Table 2. Species composition and population estimates on Slate Creek, 2006-2016

Site 135

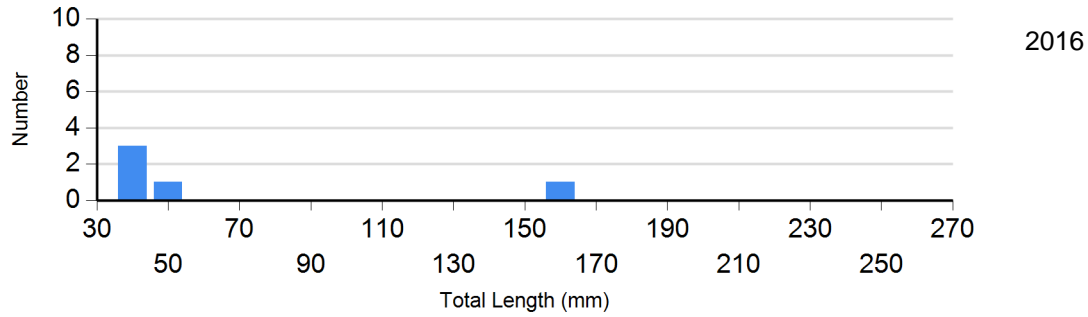
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jun 15, 2016	5	5-6	
Creek Chub	Jun 15, 2016	123	120-128	
Longnose Dace	Jun 15, 2016	240	226-254	
White Sucker	Jun 15, 2016	7	7-9	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

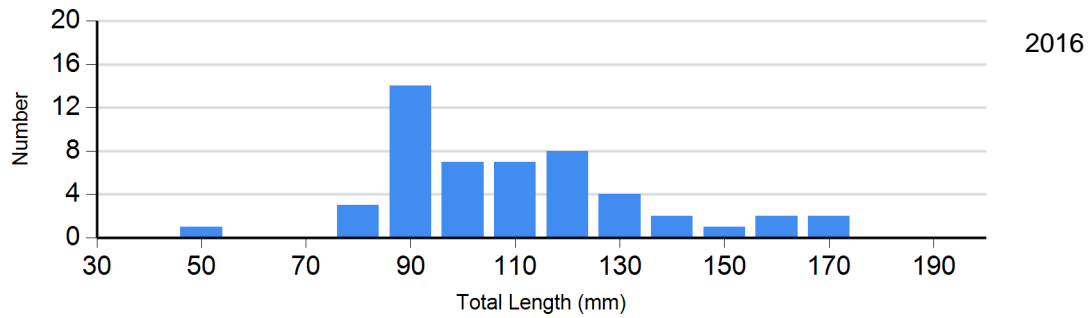
Site: 135

Species: Brown Trout



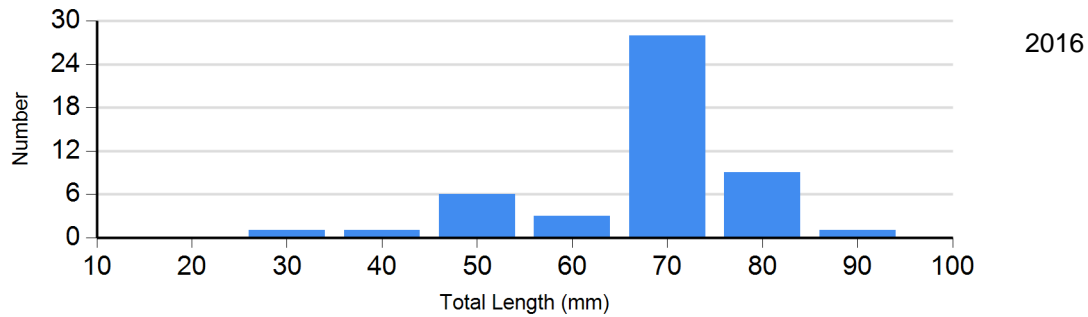
Site: 135

Species: Creek Chub



Site: 135

Species: Longnose Dace



Site: 135
Species: White Sucker

