

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Slate Creek, Pennington County
02-0074-00
2014

Table 1. Population and Biomass Estimates for Slate Creek

Site Number: 28	Date Sampled: 05/28/2014	Conductivity (umhos/cm): 180
Site Midpoint (Latitude, Longitude): 44.06991665, -103.61942788	Site Length (m): 100	pH: 8.5
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.3	Water Temperature (C): 16.5
Stream Classification: BK3	Number of Pass: 3	Voltage: 275

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)
Brook Trout	<200mm	1	1	1	1	30	3	10	12	2.36	16	184.0	87.0
Brook Trout	>=200mm	1	1	1	1	30	7	10	12	6.46	16	261.0	238.0
Brook Trout	All	2	2	2	2	61	10	20	25	8.82	32	222.5	162.5
Creek Chub	All	80	93	109	80	2826	57	930	1145	50.46	1496	85.7	20.0
Mountain Sucker	All	1	1	1	1	30	1	10	12	0.87	16	143.0	32.0
White Sucker	All	16	16	18	16	486	11	160	197	9.41	257	122.1	21.7

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, 2004-2014

Site 28

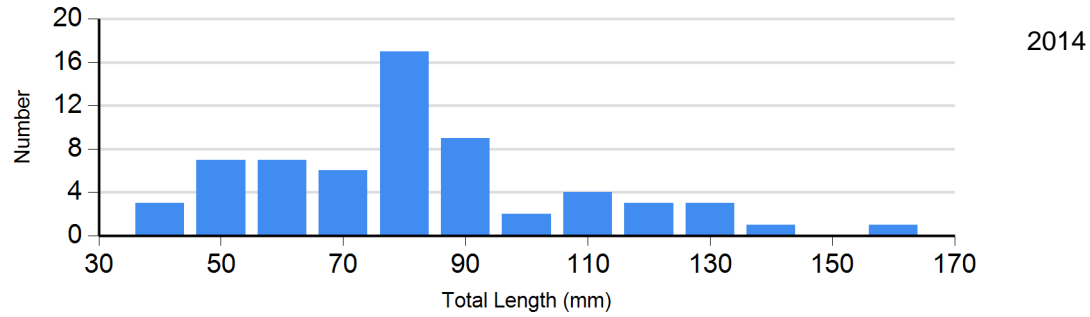
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 28, 2014	1	1-1	
Brook Trout >=200mm	May 28, 2014	1	1-1	BK3
Creek Chub	May 28, 2014	93	80-109	
Mountain Sucker	May 28, 2014	1	1-1	
White Sucker	May 28, 2014	16	16-18	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

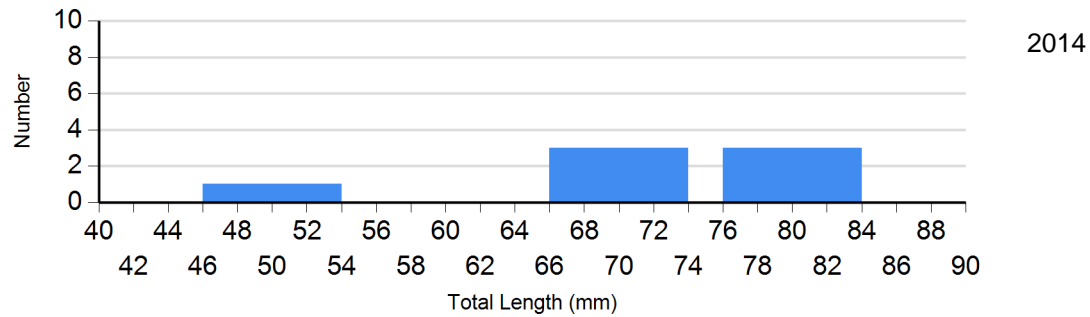
Site: 28

Species: Creek Chub



Site: 28

Species: Longnose Dace



Site: 28

Species: White Sucker

