

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Slate Creek, Pennington County
02-0074-00
2015

Table 1. Population and Biomass Estimates for Slate Creek

Site Number: 193

Site Midpoint (Latitude, Longitude): 44.01787210, -103.65255431

Survey Completed by:

Stream Classification: BK1, RB2

Date Sampled: 08/04/2015

Site Length (m): 100

Mean Width (m): 2.4

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

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)
Brook Trout	<200mm	198	201	206	198	8219	332	2010	3329	296.65	3234	104.5	40.4
Brook Trout	>=200mm	21	21	21	21	859	131	210	348	116.87	338	237.6	152.4
Brook Trout	All	219	222	226	219	9078	618	2220	3677	551.94	3572	117.3	68.1
Longnose Dace	All	23	23	25	23	941	40	230	381	35.69	370	83.0	42.5
Rainbow Trout	>=200mm	1	1	1	1	41	10	10	17	8.65	16	273.0	237.0
Rainbow Trout	All	1	1	1	1	41	10	10	17	8.65	16	273.0	237.0
White Sucker	All	9	10	15	9	409	41	100	166	36.74	161	175.6	100.6

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, 2005-2015

Site 193

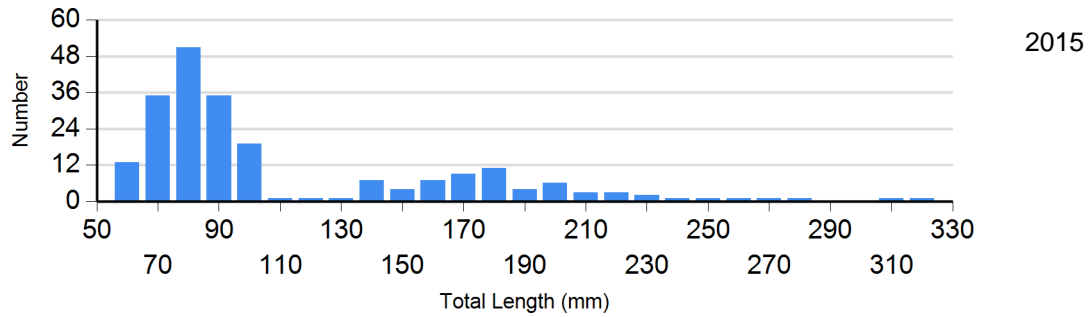
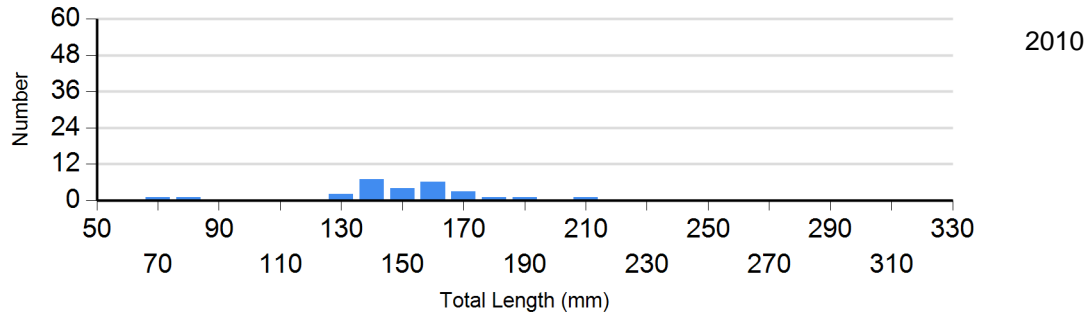
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 02, 2008	5	5-5	
	Aug 04, 2015	201	198-206	
Brook Trout >=200mm	Aug 04, 2015	21	21-21	BK1
Longnose Dace	Aug 04, 2015	23	23-25	
Rainbow Trout >=200mm	Aug 04, 2015	1	1-1	RB2
White Sucker	Jul 02, 2008	1	1-1	
	Aug 04, 2015	10	9-15	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

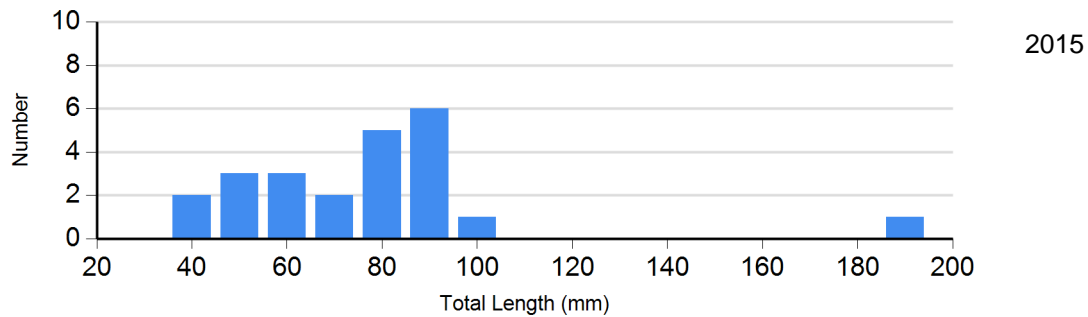
Site: 193

Species: Brook Trout



Site: 193

Species: Longnose Dace



Site: 193
Species: White Sucker

