

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Jim Creek, Lawrence County
09-0067-00
2017

Table 1. Population and Biomass Estimates for Jim Creek

Site Number: 105

Site Midpoint (Latitude, Longitude): 44.14548613, -103.55011650

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK2

Date Sampled: 06/12/2017

Site Length (m): 100

Mean Width (m): 1.6

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 11.5

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	45	46	49	45	2875	97	460	1164	86.99	740	135.6	33.9
Brook Trout	>=200mm	2	2	3	2	125	12	20	51	10.27	32	209.5	92.0
Brook Trout	All	47	48	52	47	3000	109	480	1215	97.54	772	138.7	36.4
Longnose Dace	All	45	49	56	45	3063	38	490	1240	34.18	788	60.2	12.5
Mountain Sucker	All	1	1	1	1	63	1	10	25	1.23	16	130.0	22.0
White Sucker	All	4	4	4	4	250	16	40	101	13.84	64	173.8	62.0

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 Jim Creek, 2007-2017

Site 105

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	9	9-9	
	Jun 10, 2014	3	3-4	
	Jul 07, 2016	147	146-150	
	Jun 12, 2017	46	45-49	
Brook Trout >=200mm	Jun 23, 2008	1	1-1	BK3
	Jun 10, 2014	1	1-1	BK3
	Jul 07, 2016	12	12-13	BK1

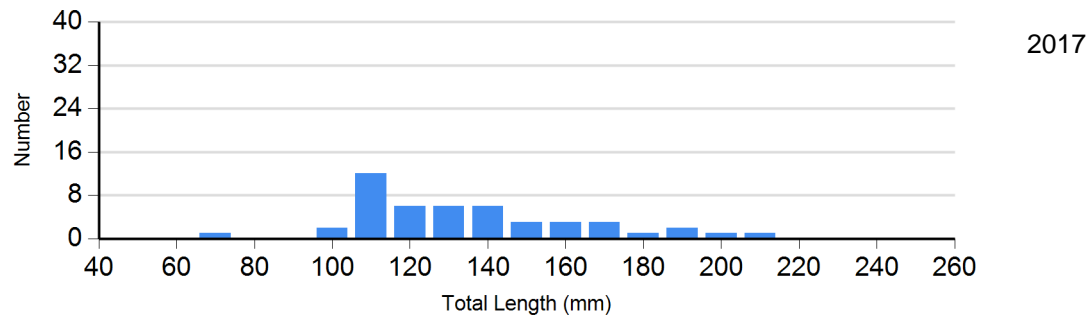
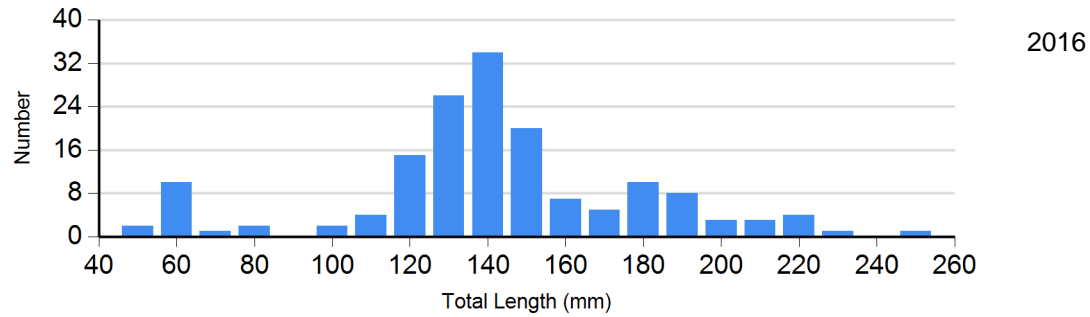
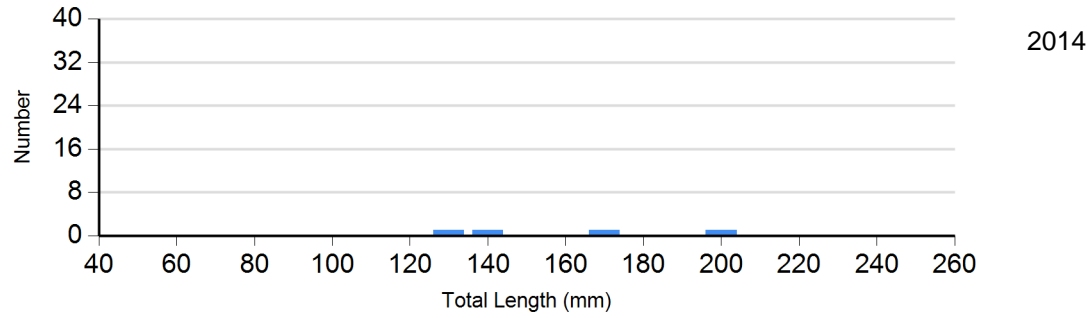
Brook Trout >=200mm	Jun 12, 2017	2	2-3	BK2
Longnose Dace	Jul 07, 2016	42	42-43	
	Jun 12, 2017	49	45-56	
Mountain Sucker	Jul 07, 2016	3	3-4	
	Jun 12, 2017	1	1-1	
White Sucker	Jul 07, 2016	3	3-5	
	Jun 12, 2017	4	4-4	

Length Frequency Distribution

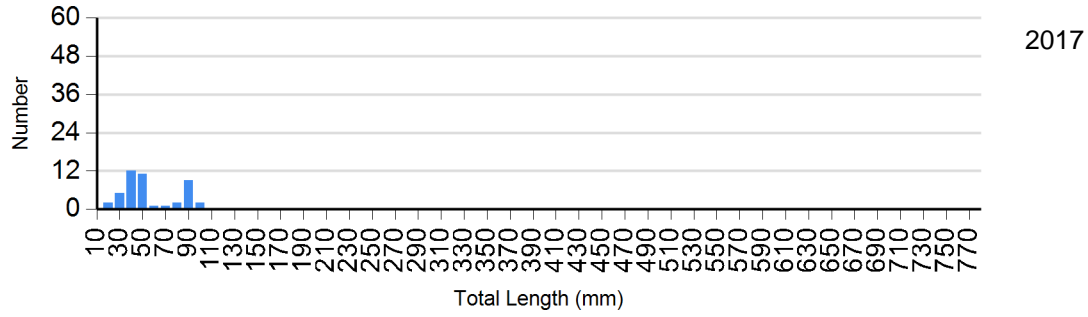
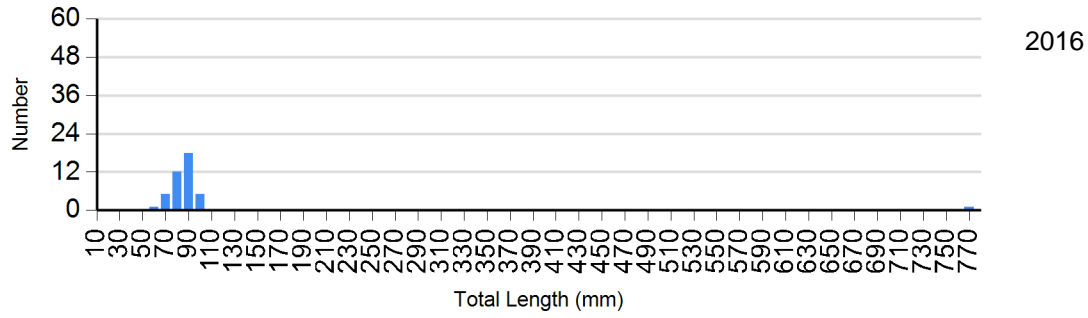
Length frequency histogram of species sampled by year.

Site: 105

Species: Brook Trout



Site: 105
Species: Longnose Dace



Site: 105
Species: White Sucker

