

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Jim Creek, Lawrence County
09-0067-00
2018

Table 1. Population and Biomass Estimates for Jim Creek

Site Number: 44	Date Sampled: 05/14/2018	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.14568942, -103.50326089	Site Length (m): 100	pH:
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.1	Water Temperature (C): 16.0
Stream Classification: BK0	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)
Brook Trout	<200mm	75	78	83	75	3698	79	780	1498	70.14	1255	118.9	21.2
Brook Trout	All	75	78	83	75	3698	79	780	1498	70.14	1255	118.9	21.2

Site Number: 105	Date Sampled: 05/14/2018	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.14548613, -103.55011650	Site Length (m): 100	pH:
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.8	Water Temperature (C): 12.0
Stream Classification: BK2	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)
Brook Trout	<200mm	49	49	50	49	2750	62	490	1114	55.19	788	123.3	22.5
Brook Trout	>=200mm	2	2	2	2	112	11	20	45	10.17	32	213.0	101.5
Brook Trout	All	51	51	52	51	2862	74	510	1159	66.22	821	126.8	25.9
Longnose Dace	All	138	137	156	138	7689	77	1370	3114	68.65	2204	58.5	10.0

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, 2008-2018

Site 44

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	26	26-26	
	Jun 10, 2014	124	84-175	
	Jul 07, 2016	269	259-279	
	May 14, 2018	78	75-83	
Brook Trout >=200mm	Jul 07, 2016	1	1-1	BK3
Longnose Dace	Jun 10, 2014	1	1-5	
	Jul 07, 2016	5	5-7	

Site 105

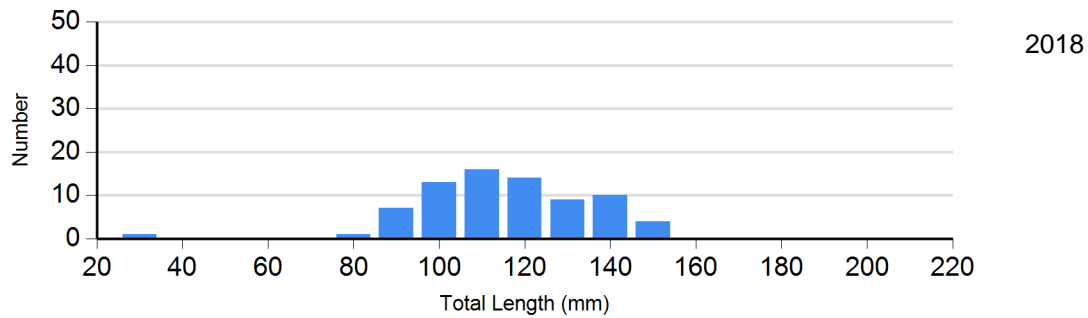
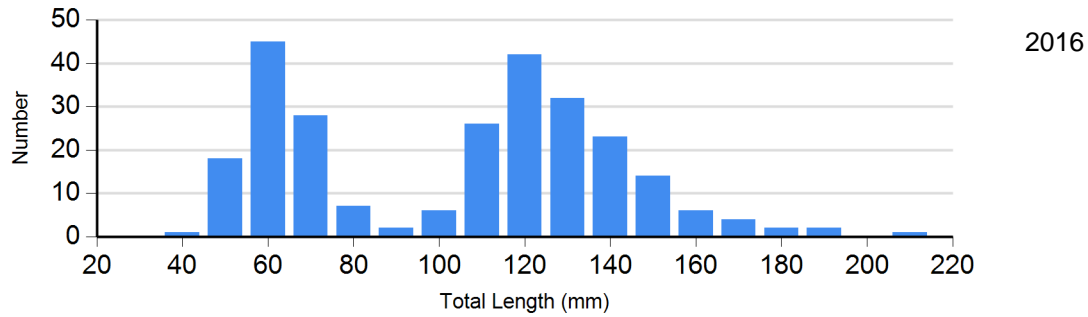
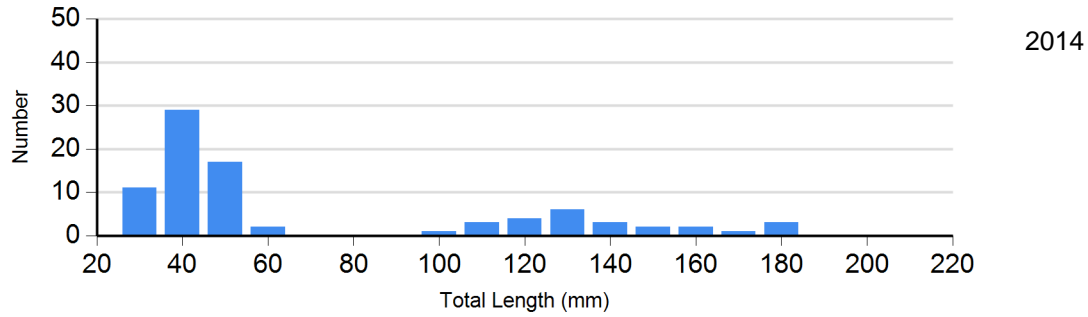
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	9	9-9	
	Jun 10, 2014	3	3-4	
	Jul 07, 2016	147	146-150	
	Jun 12, 2017	46	45-49	
	May 14, 2018	49	49-50	
Brook Trout >=200mm	Jun 23, 2008	1	1-1	BK3
	Jun 10, 2014	1	1-1	BK3
	Jul 07, 2016	12	12-13	BK1
	Jun 12, 2017	2	2-3	BK2
	May 14, 2018	2	2-2	BK2
Longnose Dace	Jul 07, 2016	42	42-43	
	Jun 12, 2017	49	45-56	
	May 14, 2018	137	138-156	

Length Frequency Distribution

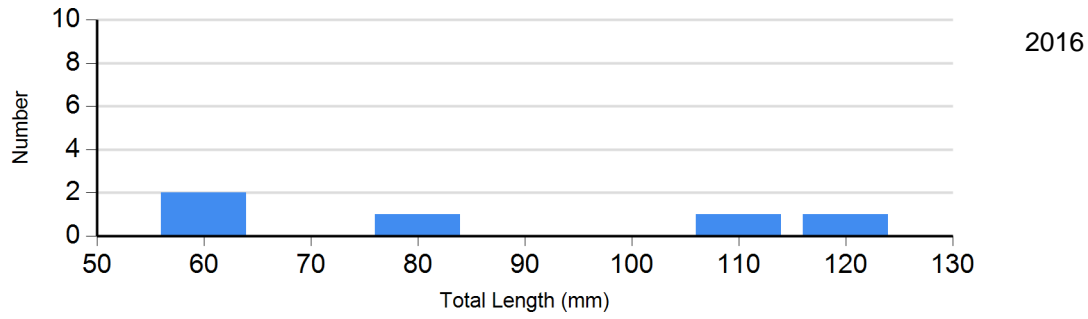
Length frequency histogram of species sampled by year.

Site: 44

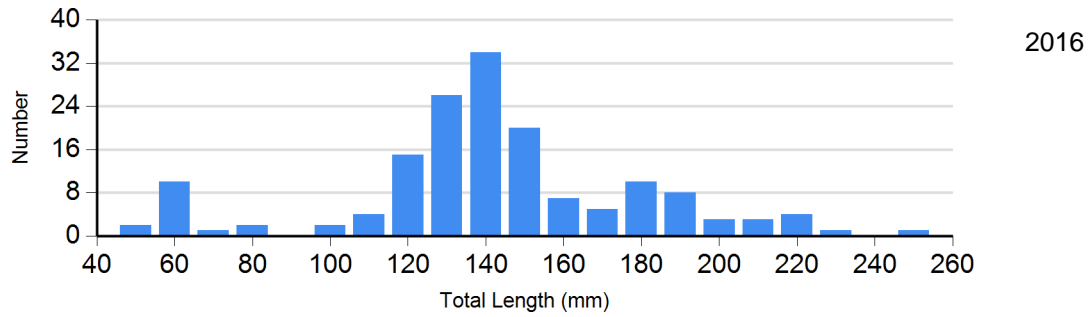
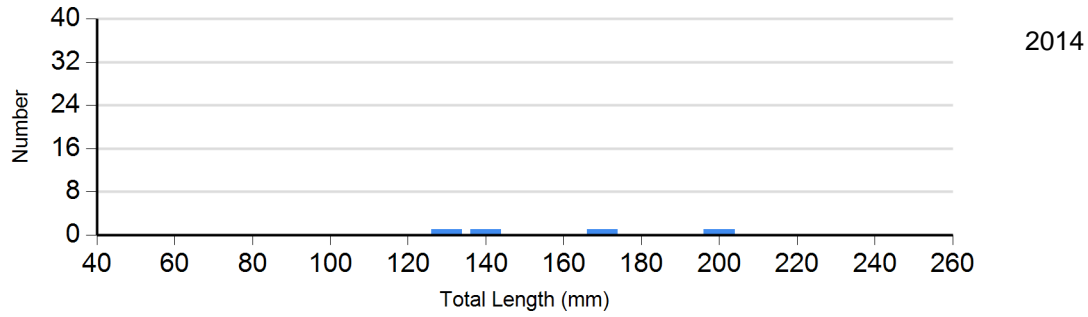
Species: Brook Trout

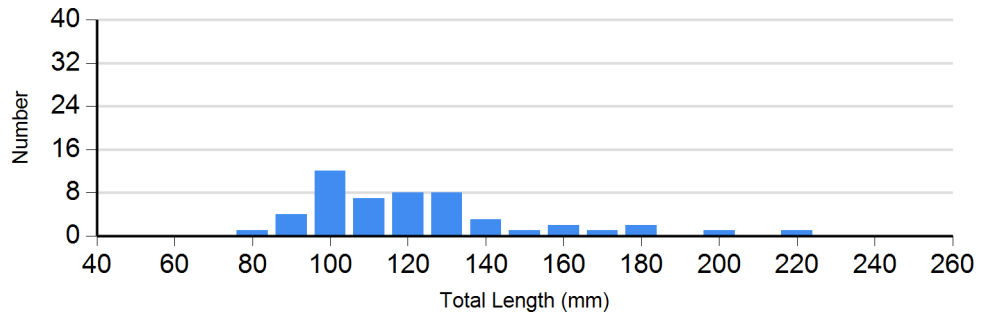
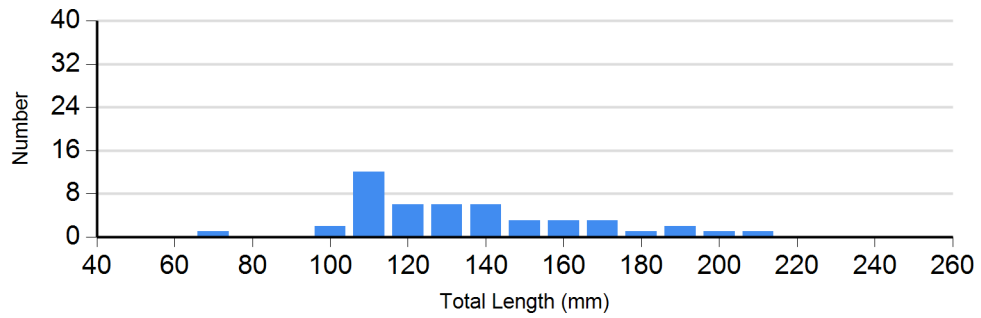


Site: 44
Species: Longnose Dace



Site: 105
Species: Brook Trout





Site: 105
Species: Longnose Dace

