## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## **Bogus Jim Creek, Pennington County** 02-0085-00 2018

Table 1. Population and Biomass Estimates for Bogus Jim Creek

Site Number: 15

**Site Midpoint (Latitude, Longitude):** 44.12373383, -103.42432404

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK0

**Date Sampled:** 05/14/2018

Conductivity (umhos/cm):

Site Length (m): 100

pH:

Mean Width (m): 2.6

Water Temperature (C): 14.0

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	135	138	143	135	5253	84	1380	2127	75.39	2220	115.4	16.1
Brook Trout	All	135	138	143	135	5253	84	1380	2127	75.39	2220	115.4	16.1
Longnose Dace	All	3	5	24	3	190	3	50	77	2.80	80	104.7	16.5
White Sucker	All	6	6	6	6	228	35	60	92	31.30	97	237.0	153.5

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 BrookTrout 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 Bogus Jim Creek, 2008-2018

Site 15

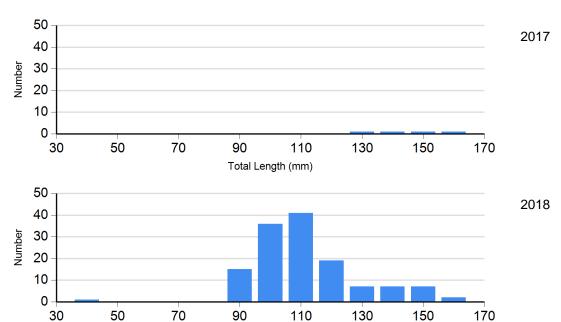
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 15, 2017	4	4-4	
	May 14, 2018	138	135-143	
Longnose Dace	May 14, 2018	5	3-24	
White Sucker	May 14, 2018	6	6-6	

## **Length Frequency Distribution**

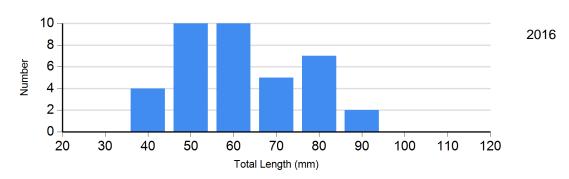
Length frequency histogram of species sampled by year.

**Site:** 15

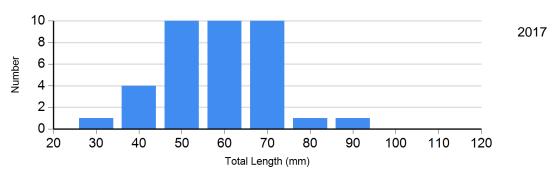
Species: Brook Trout



Site: 15 Species: Longnose Dace



Total Length (mm)



Site: 15 Species: White Sucker

