SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Boxelder - South Fork, Lawrence County 09-0071-00 2018

Table 1. Population and Biomass Estimates for Boxelder - South Fork

Site Number: 110

Site Midpoint (Latitude, Longitude): 44.18982200, -103.59672323

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK0, BR0

Date Sampled: 05/21/2018

Site Length (m):

Mean Width (m): 2.2

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 20.0

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	19	19	20	19	0	0	0	0	0.00	0	122.5	24.1
Brook Trout	All	19	19	20	19	0	0	0	0	0.00	0	122.5	24.1
Brown Trout	<200mm	1	1	2	1	0	0	0	0	0.00	0	112.0	14.0
Brown Trout	All	1	1	2	1	0	0	0	0	0.00	0	112.0	14.0
Longnose Dace	All	150	164	178	150	0	0	0	0	0.00	0	76.2	9.0

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	ss BR1 Number of wild Brown Trout exceeds 150 per acre				
Class BR2 Number of wild Brook Trout ranges from 25 to 150 per					
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 Boxelder - South Fork, 2008-2018

Site 110

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 10, 2015	117	117-118	
	Jul 26, 2017	14	14-14	
	May 21, 2018	19	19-20	
Brook Trout >=200mm	Sep 10, 2015	14	14-14	BK1
Brown Trout <200mm	Jul 26, 2017	1	1-1	
	May 21, 2018	1	1-2	
Longnose Dace	Sep 10, 2015	40	39-43	

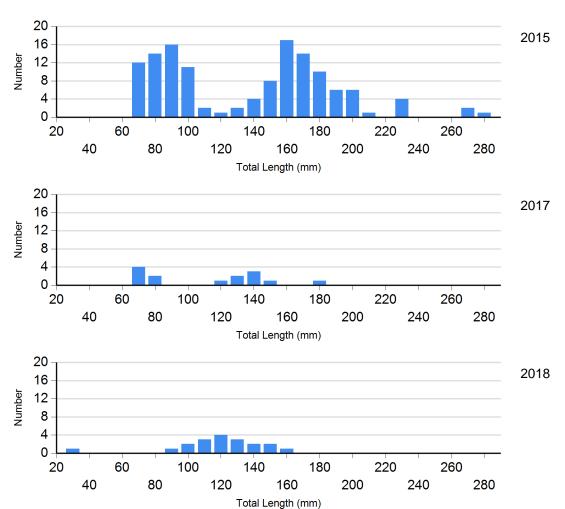
Longnose Dace	Jul 26, 2017	105	105-106	
	May 21, 2018	164	150-178	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 110

Species: Brook Trout



Site: 110

Species: Longnose Dace

