

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Boxelder - Middle Fork, Lawrence County
09-0070-00
2017

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

Site Number: 150	Date Sampled: 05/15/2017	Conductivity (umhos/cm): 314
Site Midpoint (Latitude, Longitude): 44.19781397, -103.70026584	Site Length (m): 100	pH:
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.7	Water Temperature (C): 11.9
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	36	37	40	36	2224	73	370	901	65.41	595	104.7	32.9
Brook Trout	>=200mm	2	2	2	2	120	15	20	49	13.79	32	215.0	128.5
Brook Trout	All	38	39	42	38	2344	102	390	949	91.17	628	110.5	43.6

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 Boxelder - Middle Fork, 2007-2017

Site 150

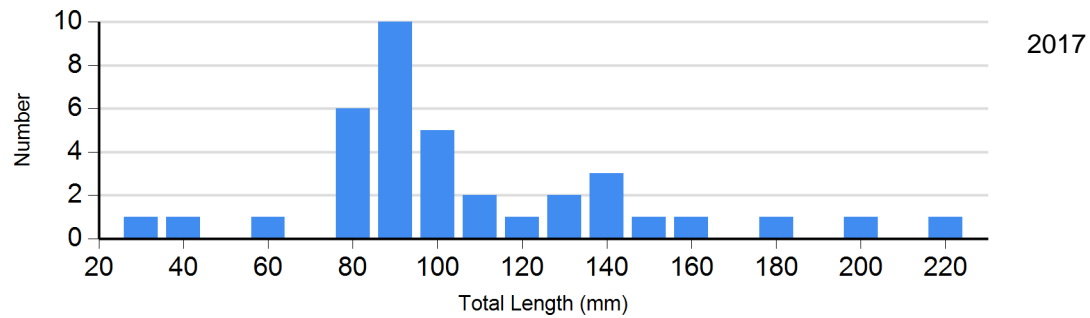
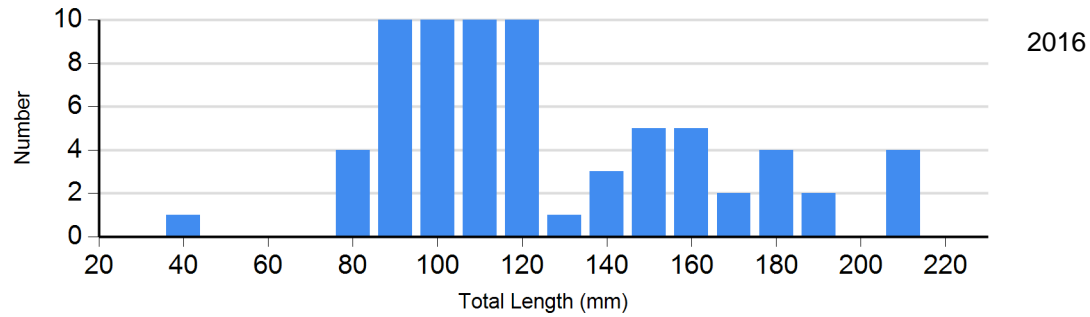
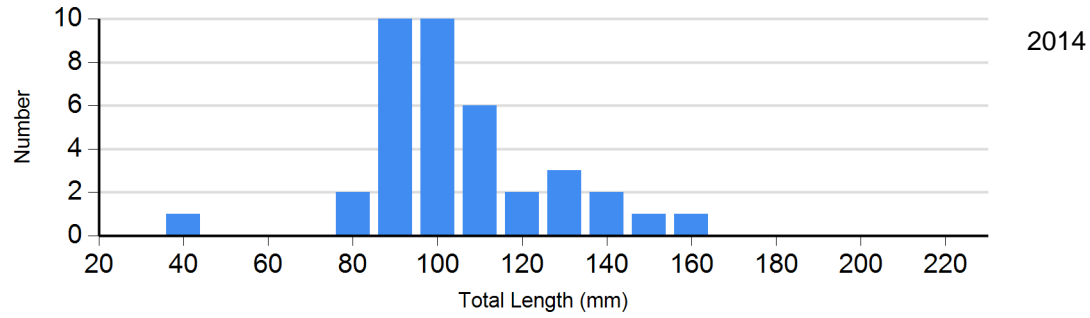
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 11, 2014	52	52-53	
	Jun 06, 2016	99	97-103	
	May 15, 2017	37	36-40	
Brook Trout >=200mm	Jun 06, 2016	4	4-5	BK2
	May 15, 2017	2	2-2	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 150

Species: Brook Trout



Site: 150
Species: Longnose Dace

