

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Boxelder - Middle Fork, Lawrence County
09-0070-00
2016

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

Site Number: 150

Site Midpoint (Latitude, Longitude): 44.19781397, -103.70026584

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK2

Date Sampled: 06/06/2016

Site Length (m): 100

Mean Width (m): 1.8

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

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	97	99	103	97	5642	166	990	2285	148.62	1593	119.7	29.5
Brook Trout	>=200mm	4	4	5	4	228	25	40	92	22.24	64	212.8	109.3
Brook Trout	All	101	104	109	101	5927	200	1040	2401	178.34	1673	123.4	33.7

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, 2006-2016

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	
Brook Trout >=200mm	Jun 06, 2016	4	4-5	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 150

Species: Brook Trout

