## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Beaver Creek (Penn. Co.), Pennington County 10120107000855 2017

Table 1. Population and Biomass Estimates for Beaver Creek (Penn. Co.)

Site Number: 69

**Site Midpoint (Latitude, Longitude):** 44.06725657, -104.02501870

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK2

**Date Sampled:** 08/09/2017

Site Length (m): 100

Mean Width (m): 3.1

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	38	38	39	38	1237	42	380	501	37.11	611	142.8	33.6
Brook Trout	>=200mm	3	3	3	3	98	9	30	40	8.05	48	204.7	92.3
Brook Trout	All	41	41	41	41	1334	51	410	540	45.16	660	147.4	37.9

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 Beaver Creek (Penn. Co.), 2007-2017

## Site 69

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 26, 2014	61	56-69	
	Jul 07, 2014	44	43-47	
	Jun 22, 2016	36	36-37	
	Aug 09, 2017	38	38-39	
Brook Trout >=200mm	Jun 26, 2014	11	11-12	BK1
	Jul 07, 2014	8	8-10	BK2
	Aug 09, 2017	3	3-3	BK2

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.

**Site:** 69

Species: Brook Trout

