

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Beaver Creek (Penn. Co.), Pennington County**  
**10120107000855**  
**2018**

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

<b>Site Number:</b> 35	<b>Date Sampled:</b> 06/14/2018	<b>Conductivity (umhos/cm):</b> 446
<b>Site Midpoint (Latitude, Longitude):</b> 44.07634200, -104.05080433	<b>Site Length (m):</b> 100	<b>pH:</b>
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 3.1	<b>Water Temperature (C):</b> 12.2
<b>Stream Classification:</b> BK0	<b>Number of Pass:</b> 3	<b>Voltage:</b> 275

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	180	188	196	180	6029	155	1880	2442	138.68	3025	118.3	25.8
Brook Trout	All	181	189	197	181	6061	156	1890	2455	139.42	3041	118.3	25.8

<b>Site Number:</b> 69	<b>Date Sampled:</b> 06/14/2018	<b>Conductivity (umhos/cm):</b> 472
<b>Site Midpoint (Latitude, Longitude):</b> 44.06725657, -104.02501870	<b>Site Length (m):</b> 100	<b>pH:</b>
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 2.1	<b>Water Temperature (C):</b> 8.3
<b>Stream Classification:</b> BK0	<b>Number of Pass:</b> 3	<b>Voltage:</b> 275

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	40	41	44	40	1961	68	410	794	60.43	660	134.7	34.5
Brook Trout	All	40	41	44	40	1961	68	410	794	60.43	660	134.7	34.5

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	
<b>Class BR1</b>	Number of wild Brown Trout exceeds 150 per acre
<b>Class BR2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BR3</b>	Number of wild Brown Trout is less than 25 per acre
<b>Class BK1</b>	Number of wild Brook Trout exceeds 150 per acre
<b>Class BK2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BK3</b>	Number of wild Brook Trout is less than 25 per acre
<b>Class RB1</b>	Number of wild Rainbow Trout exceeds 25 per acre
<b>Class RB2</b>	Number of wild Rainbow Trout is less than 25 per acre

Table 2. Species composition and population estimates on Beaver Creek (Penn. Co.), 2008-2018

**Site 35**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 08, 2014	517	482-552	
	Jun 14, 2018	188	180-196	
Brook Trout >=200mm	Jul 08, 2014	5	5-7	BK2

**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	

Brook Trout <200mm	Aug 09, 2017	38	38-39	
	Jun 14, 2018	41	40-44	
Brook Trout >=200mm	Jun 26, 2014	11	11-12	BK1
	Jul 07, 2014	8	8-10	BK2
	Aug 09, 2017	3	3-3	BK2

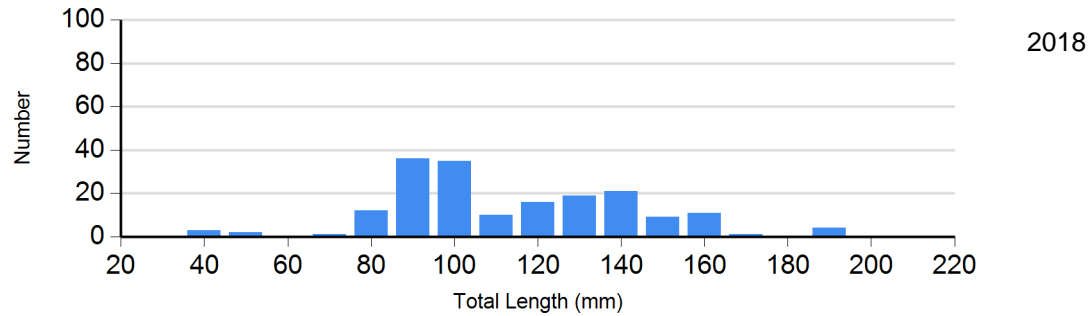
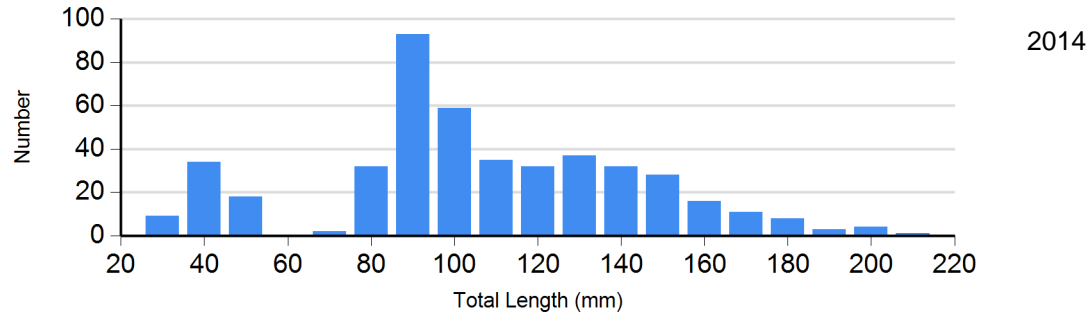
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## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site:** 35

**Species:** Brook Trout



**Site:** 69

**Species:** Brook Trout

