## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## False Bottom Creek, Lawrence County 09-0040-00 2017

Table 1. Population and Biomass Estimates for False Bottom Creek

Site Number: 544

Site Midpoint (Latitude, Longitude): 44.39822078, -103.80297429

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK0, BR2

**Date Sampled:** 08/07/2017

Site Length (m): 100

Mean Width (m): 2.2

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 14.0

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	17	17	18	17	760	16	170	308	14.13	274	104.8	20.8
Brook Trout	All	17	17	18	17	760	16	170	308	14.13	274	104.8	20.8
Brown Trout	<200mm	121	125	131	121	5589	131	1250	2264	117.40	2011	98.7	23.5
Brown Trout	>=200mm	2	2	4	2	89	9	20	36	8.02	32	221.5	100.5
Brown Trout	All	123	127	133	123	5679	147	1270	2300	130.92	2043	100.7	25.8

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 False Bottom Creek, 2007-2017

## **Site 544**

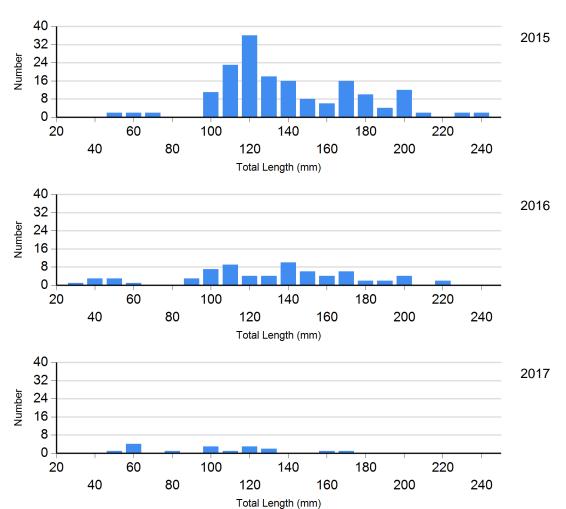
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 21, 2015	81	77-87	
	Jul 21, 2015	81	77-87	
	Jun 30, 2016	67	65-71	
	Aug 07, 2017	17	17-18	
Brook Trout >=200mm	Jul 21, 2015	9	9-10	BK2
	Jul 21, 2015	9	9-10	BK2
	Jun 30, 2016	6	6-7	BK2

Brown Trout <200mm	Jul 21, 2015	117	107-128	
	Jul 21, 2015	117	107-128	
	Jun 30, 2016	126	121-133	
	Aug 07, 2017	125	121-131	
Brown Trout >=200mm	Jul 21, 2015	14	14-16	BR1
	Jul 21, 2015	14	14-16	BR1
	Jun 30, 2016	7	7-7	BR2
	Aug 07, 2017	2	2-4	BR2

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.

Site: 544 Species: Brook Trout



**Site:** 544

Species: Brown Trout

