

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Stewart Gulch Creek, Lawrence County
10120202050013
2017

Table 1. Population and Biomass Estimates for Stewart Gulch Creek

Site Number: 1	Date Sampled: 08/25/2017	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.32588376, -103.80031007	Site Length (m): 100	pH:
Survey Completed by: GEI	Mean Width (m): 2.9	Water Temperature (C):
Stream Classification: BK3, BR3	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	155	158	163	155	5431	72	1580	2200	64.01	2542	101.7	13.2
Brook Trout	>=200mm	2	1	2	2	34	2	10	14	2.16	16	201.0	70.5
Brook Trout	All	157	161	167	157	5534	77	1610	2241	68.83	2590	102.9	13.9
Brown Trout	>=200mm	1	1	1	1	34	3	10	14	2.95	16	211.0	96.0
Brown Trout	All	1	1	1	1	34	3	10	14	2.95	16	211.0	96.0

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 Stewart Gulch Creek, 2007-2017

Site 1

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 25, 2010	98	98-100	
	Aug 25, 2011	110	110-110	
	Aug 22, 2012	131	129-135	
	Aug 20, 2014	310	295-325	
	Aug 28, 2015	170	168-174	
	Aug 28, 2015	170	168-174	
	Aug 25, 2017	158	155-163	

Brook Trout >=200mm	Aug 25, 2010	6	6-7	BK1
	Aug 25, 2011	7	7-7	BK2
	Aug 22, 2012	8	8-9	BK1
	Aug 20, 2014	8	8-8	BK1
	Aug 28, 2015	16	16-16	BK3
	Aug 28, 2015	16	16-16	BK3
	Aug 25, 2017	1	2-2	BK3
Brown Trout >=200mm	Aug 22, 2012	2	2-3	BR2
	Aug 25, 2017	1	1-1	BR3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 1

Species: Brook Trout



