

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Stewart Gulch Creek, Lawrence County**  
**10120202050013**  
**2014**

Table 1. Population and Biomass Estimates for Stewart Gulch Creek

**Site Number:** 1  
**Site Midpoint (Latitude, Longitude):** 44.32588376, -103.80031007  
**Survey Completed by:** Unknown Consultant Firm for mining  
**Stream Classification:** BK1

**Date Sampled:** 08/20/2014  
**Site Length (m):** 100  
**Mean Width (m):** 1.9  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):**  
**Voltage:** 295

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	290	310	325	295	16316	122	3100	6608	108.91	4988	81.6	7.5
Brook Trout	>=200mm	8	8	8	8	421	48	80	171	43.05	129	216.5	114.5
Brook Trout	All	298	317	331	303	16684	173	3170	6757	154.17	5101	85.2	10.3

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 Stewart Gulch Creek, 2004-2014

**Site 1**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 02, 2004	56	56-58	
	Aug 28, 2005	129	125-135	
	Aug 25, 2010	98	98-100	
	Aug 25, 2011	110	110-110	
	Aug 22, 2012	131	129-135	
	Aug 20, 2014	310	295-325	
Brook Trout >=200mm	Sep 02, 2004	6	6-6	BK2

Brook Trout >=200mm	Aug 28, 2005	2	2-3	BK3
	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

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## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site: 1**

**Species: Brook Trout**



