

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Stewart Gulch Creek, Lawrence County**  
**10120202050013**  
**2012**

Table 1. Population and Biomass Estimates for Stewart Gulch Creek

**Site Number:** 1  
**Site Midpoint (Latitude, Longitude):** 44.32588376, -103.80031007  
**Survey Completed by:** GEI  
**Stream Classification:** BK1, BR2

**Date Sampled:** 08/22/2012  
**Site Length (m):** 100  
**Mean Width (m):** 2.0  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):**  
**Voltage:** 200

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	129	131	135	129	6550	92	1310	2653	82.01	2108	99.8	14.0
Brook Trout	>=200mm	8	8	9	8	400	43	80	162	38.62	129	220.0	108.1
Brook Trout	All	137	140	145	137	7000	137	1400	2835	121.99	2253	106.8	19.5
Brown Trout	>=200mm	2	2	3	2	100	21	20	41	18.75	32	260.5	210.0
Brown Trout	All	2	2	3	2	100	21	20	41	18.75	32	260.5	210.0

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	
<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, 2002-2012

**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	
Brook Trout >=200mm	Sep 02, 2004	6	6-6	BK2
	Aug 28, 2005	2	2-3	BK3

Brook Trout >=200mm	Aug 25, 2010	6	6-7	BK1
	Aug 25, 2011	7	7-7	BK2
	Aug 22, 2012	8	8-9	BK1
Brown Trout >=200mm	Aug 22, 2012	2	2-3	BR2

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## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site: 1**

**Species: Brook Trout**

