

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Stewart Gulch Creek, Lawrence County**  
**10120202050013**  
**2010**

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:** 08/25/2010  
**Site Length (m):** 100  
**Mean Width (m):** 1.6  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):**  
**Voltage:** 250

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	98	98	100	98	6195	113	980	2509	100.81	1577	105.8	18.2
Brook Trout	>=200mm	6	6	7	6	379	51	60	154	45.66	97	227.7	134.8
Brook Trout	All	104	104	106	104	6575	164	1040	2663	146.48	1673	112.9	25.0

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, 2000-2010

**Site 1**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 29, 2001	65	63-70	
	Sep 02, 2004	56	56-58	
	Aug 28, 2005	129	125-135	
	Aug 25, 2010	98	98-100	
Brook Trout >=200mm	Aug 29, 2001	11	11-11	BK1
	Sep 02, 2004	6	6-6	BK2
	Aug 28, 2005	2	2-3	BK3



## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site: 1**

**Species: Brook Trout**

