

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Stewart Gulch Creek, Lawrence County**  
**10120202050013**  
**2001**

Table 1. Population and Biomass Estimates for Stewart Gulch Creek

<b>Site Number:</b> 1	<b>Date Sampled:</b> 08/29/2001	<b>Conductivity (umhos/cm):</b>
<b>Site Midpoint (Latitude, Longitude):</b> 44.32588376, -103.80031007	<b>Site Length (m):</b> 100	<b>pH:</b>
<b>Survey Completed by:</b> Chadwick Ecological Services	<b>Mean Width (m):</b> 2.3	<b>Water Temperature (C):</b>
<b>Stream Classification:</b> BK1	<b>Number of Pass:</b> 3	<b>Voltage:</b>

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	63	65	70	63	2837	63	650	1149	56.54	1046	117.4	22.3
Brook Trout	>=200mm	11	11	11	11	480	50	110	194	44.51	177	214.0	103.8
Brook Trout	All	75	77	81	75	3361	114	770	1361	102.12	1239	131.8	34.0

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, 1991-2001

**Site 1**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 22, 1994	61	60-65	
	Sep 03, 1997	19	19-21	
	Aug 26, 1998	40	38-46	
	Aug 29, 2001	65	63-70	
Brook Trout >=200mm	Aug 22, 1994	4	4-7	BK3
	Sep 03, 1997	2	2-2	BK2
	Aug 26, 1998	17	17-18	BK1



## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site: 1**

**Species:** Brook Trout

