

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Stewart Gulch Creek, Lawrence County
10120202050013
1997

Table 1. Population and Biomass Estimates for Stewart Gulch Creek

Site Number: 1
Site Midpoint (Latitude, Longitude): 44.32588376, -103.80031007
Survey Completed by: Chadwick Ecological Services
Stream Classification: BK2

Date Sampled: 09/03/1997
Site Length (m): 100
Mean Width (m): 3.0
Number of Pass: 2
Conductivity (umhos/cm):
pH:
Water Temperature (C):
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	19	19	21	19	633	25	190	257	22.13	306	152.1	39.1
Brook Trout	>=200mm	2	2	2	2	67	12	20	27	10.86	32	257.5	182.5
Brook Trout	All	21	21	22	21	700	37	210	284	33.00	338	162.1	52.8

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, 1987-1997

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	
Brook Trout >=200mm	Aug 22, 1994	4	4-7	BK3
	Sep 03, 1997	2	2-2	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 1

Species: Brook Trout

