

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Stewart Gulch Creek, Lawrence County
10120202050013
1998

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: BK1

Date Sampled: 08/26/1998
Site Length (m): 92
Mean Width (m): 2.1
Number of Pass: 2
Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage: 150

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	38	40	46	38	1905	75	435	771	67.01	700	94.6	39.4
Brook Trout	>=200mm	17	17	18	17	810	116	185	328	103.28	297	227.4	142.9
Brook Trout	All	55	57	62	55	2714	284	620	1099	253.39	997	135.6	104.6

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, 1988-1998

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	
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

