

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Boomer Gulch, Lawrence County
09-0102-00
2002

Table 1. Population and Biomass Estimates for Boomer Gulch

Site Number: 1
Site Midpoint (Latitude, Longitude): 44.32319378, -103.65676722
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK2

Date Sampled: 09/10/2002
Site Length (m): 35
Mean Width (m): 0.6
Number of Pass: 4
Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage: 300

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	38	40	38	6239	76	1086	2527	68.16	1747	108.9	12.2
Brook Trout	>=200mm	1	1	5	1	164	12	29	66	10.99	46	207.0	75.0
Brook Trout	All	39	40	43	39	6567	91	1143	2660	81.19	1839	111.5	13.8

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 Boomer Gulch, 1992-2002

Site 1

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 20, 2000	10	10-11	
	Sep 20, 2000	38	38-40	
	Sep 10, 2002	38	38-40	
Brook Trout >=200mm	Sep 10, 2002	1	1-5	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 1

Species: Brook Trout

