

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Sunday Gulch, Pennington County
02-9204-00
2004

Table 1. Population and Biomass Estimates for Sunday Gulch

Site Number: 40	Date Sampled: 06/28/2004	Conductivity (umhos/cm): 75
Site Midpoint (Latitude, Longitude): 43.87169717, -103.57990418	Site Length (m): 100	pH: 8.2
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.4	Water Temperature (C): 19.0
Stream Classification: BK0	Number of Pass: 3	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	215	218	223	215	15471	177	2180	6266	158.35	3508	99.6	11.5
Brook Trout	All	215	218	223	215	15471	177	2180	6266	158.35	3508	99.6	11.5
Longnose Dace	All	5	5	7	5	355	2	50	144	1.77	80	82.0	5.6

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 Sunday Gulch, 1994-2004

Site 40

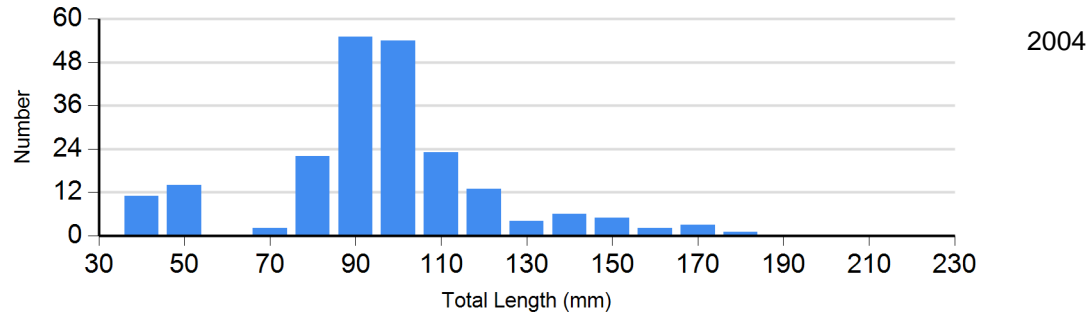
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 06, 1997	184	180-189	
	Jun 28, 2004	218	215-223	
Brook Trout >=200mm	Oct 06, 1997	1	1-1	BK3
Longnose Dace	Oct 06, 1997	3	3-4	
	Jun 28, 2004	5	5-7	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 40

Species: Brook Trout



Site: 40

Species: Longnose Dace

