

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Bear Gulch, Custer County
10120109000999
1993

Table 1. Population and Biomass Estimates for Bear Gulch

Site Number: 66	Date Sampled: 09/14/1993	Conductivity (umhos/cm): 170
Site Midpoint (Latitude, Longitude): 43.79201243, -103.35262400	Site Length (m): 100	pH: 8.6
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.5	Water Temperature (C): 6.0
Stream Classification: BK2, BR1	Number of Pass: 3	Voltage: 400

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	9	9	9	9	354	14	90	144	12.58	145	149.7	39.8
Brook Trout	>=200mm	3	3	3	3	118	15	30	48	13.08	48	221.3	124.0
Brook Trout	All	12	12	12	12	472	29	120	191	25.66	193	167.6	60.8
Brown Trout	<200mm	137	137	137	137	5394	75	1370	2184	67.07	2204	107.9	13.9
Brown Trout	>=200mm	42	42	42	42	1654	283	420	670	252.29	676	248.9	170.9
Brown Trout	All	179	179	179	179	7047	358	1790	2854	319.36	2880	140.9	50.8
Longnose Dace	All	4	4	4	4	157	1	40	64	0.49	64	77.0	3.5
White Sucker	All	9	9	9	9	354	116	90	144	103.31	145	261.1	326.6

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 Bear Gulch, 1983-1993

Site 66

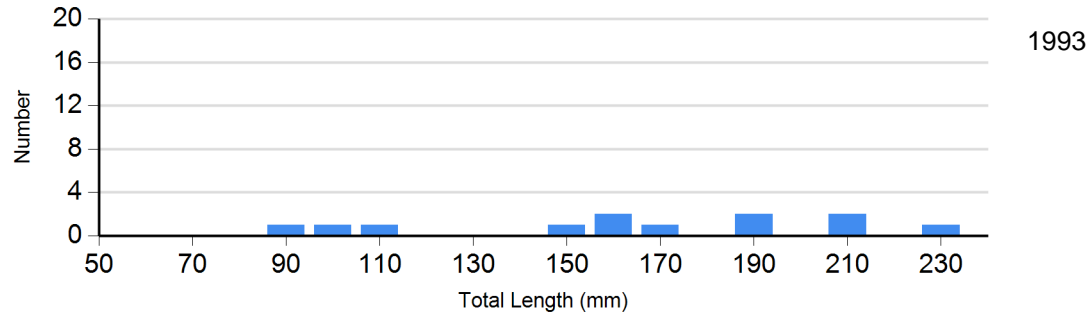
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 14, 1993	9	9-9	
Brook Trout >=200mm	Sep 14, 1993	3	3-3	BK2
Brown Trout <200mm	Sep 14, 1993	137	137-137	
Brown Trout >=200mm	Sep 14, 1993	42	42-42	BR1
Longnose Dace	Sep 14, 1993	4	4-4	
White Sucker	Sep 14, 1993	9	9-9	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

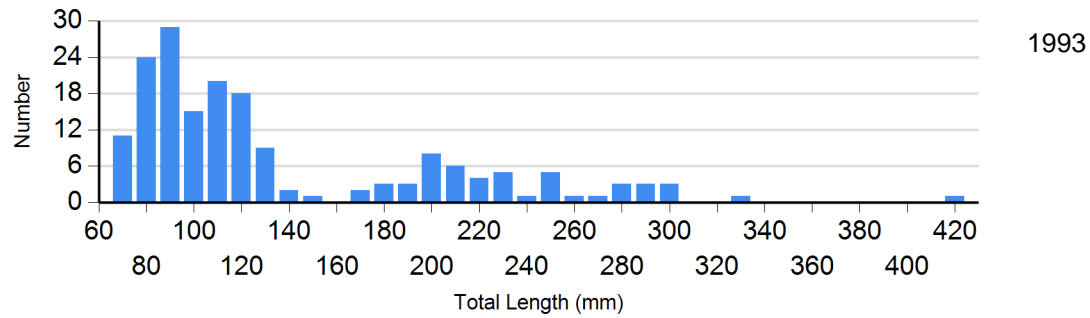
Site: 66

Species: Brook Trout



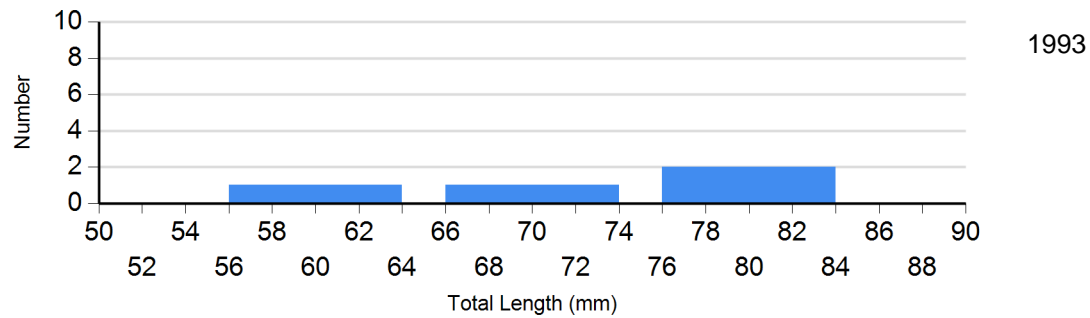
Site: 66

Species: Brown Trout

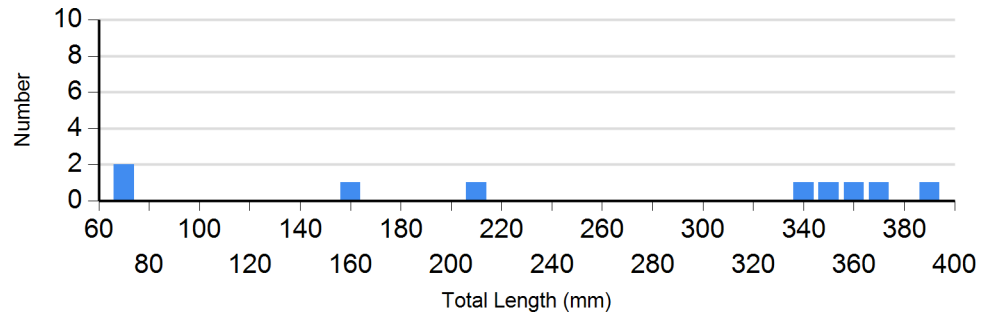


Site: 66

Species: Longnose Dace



Site: 66
Species: White Sucker



1993