

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Little Spearfish Creek, Lawrence County
09-0017-00
1994

Table 1. Population and Biomass Estimates for Little Spearfish Creek

Site Number: 92	Date Sampled: 08/01/1994	Conductivity (umhos/cm): 305
Site Midpoint (Latitude, Longitude): 44.32643606, -103.99361284	Site Length (m): 100	pH: 8.3
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.8	Water Temperature (C): 11.0
Stream Classification: BK3, BR1	Number of Pass: 3	Voltage: 250

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	22	29	46	22	1021	18	290	414	16.29	467	109.9	17.9
Brook Trout	>=200mm	1	1	1	1	35	5	10	14	4.46	16	240.0	142.0
Brook Trout	All	23	29	43	23	1021	24	290	414	21.21	467	115.5	23.3
Brown Trout	<200mm	26	26	27	26	915	37	260	371	33.11	418	159.3	40.5
Brown Trout	>=200mm	26	26	27	26	915	163	260	371	145.47	418	248.0	178.0
Brown Trout	All	52	52	54	52	1831	200	520	742	178.57	837	203.6	109.2

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 Little Spearfish Creek, 1984-1994

Site 92

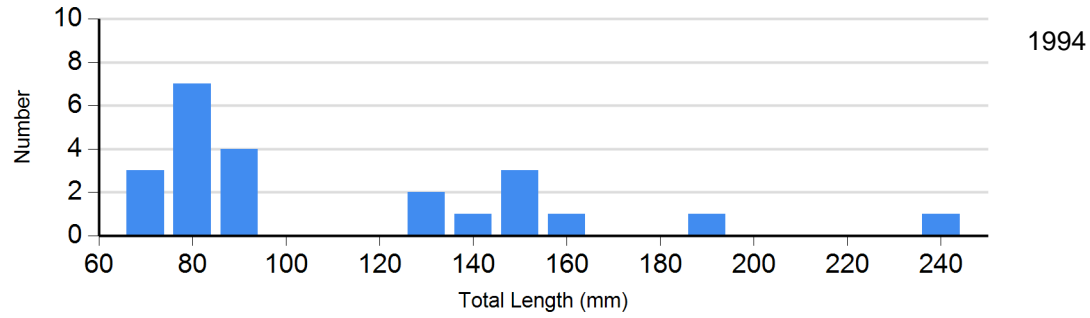
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 01, 1994	29	22-46	
Brook Trout >=200mm	Aug 01, 1994	1	1-1	BK3
Brown Trout <200mm	Aug 01, 1994	26	26-27	
Brown Trout >=200mm	Aug 01, 1994	26	26-27	BR1

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 92

Species: Brook Trout



Site: 92

Species: Brown Trout

