

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Lange Spring, Pennington County
10120111006763
All Years

Table 1. Population and Biomass Estimates for Lange Spring

Site Number: 1	Date Sampled: 07/29/1999	Conductivity (umhos/cm): 329
Site Midpoint (Latitude, Longitude): 44.13304113, -103.32729900	Site Length (m): 100	pH: 8.1
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.3	Water Temperature (C): 11.6
Stream Classification: BK2	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	57	67	82	57	2043	29	670	827	25.53	1078	104.4	14.0
Brook Trout	>=200mm	8	8	10	8	244	27	80	99	23.96	129	221.6	110.0
Brook Trout	All	65	75	89	65	2287	59	750	926	52.71	1207	118.9	25.8
Longnose Dace	All	1	1	1	1	30	0	10	12	0.05	16	82.0	2.0

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 Lange Spring, 1989-1999

Site 1

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 29, 1999	67	57-82	
Brook Trout >=200mm	Jul 29, 1999	8	8-10	BK2
Longnose Dace	Jul 29, 1999	1	1-1	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 1

Species: Brook Trout

