

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Labrador Creek, Lawrence County
10120203001955
1998

Table 1. Population and Biomass Estimates for Labrador Creek

Site Number: 2 Site Midpoint (Latitude, Longitude): 44.37483097, -103.86545813 Survey Completed by: OEA Research Inc. Stream Classification: BK1	Date Sampled: 09/14/1998 Site Length (m): 100 Mean Width (m): 1.4 Number of Pass: 3	Conductivity (umhos/cm): pH: Water Temperature (C): 11.0 Voltage:
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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	135	139	145	135	10072	262	1390	4079	233.56	2237	118.2	26.0
Brook Trout	>=200mm	6	6	6	6	435	48	60	176	43.03	97	215.3	110.8
Brook Trout	All	141	145	151	141	10507	311	1450	4255	277.52	2333	122.4	29.6

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 Labrador Creek, 1988-1998

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 12, 1993	88	78-101	
	Sep 16, 1994	119	112-127	
	Sep 19, 1996	45	45-47	
	Sep 06, 1997	97	88-108	
	Sep 14, 1998	139	135-145	
Brook Trout >=200mm	Sep 12, 1993	1	1-1	BK3
	Sep 16, 1994	2	2-3	BK3

Brook Trout >=200mm	Sep 19, 1996	7	7-8	BK3
	Sep 06, 1997	15	15-16	BK1
	Sep 14, 1998	6	6-6	BK1

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2

Species: Brook Trout



