

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Labrador Creek, Lawrence County
10120203001955
2005

Table 1. Population and Biomass Estimates for Labrador Creek

Site Number: 2 Site Midpoint (Latitude, Longitude): 44.37483097, -103.86545813 Survey Completed by: KNK Aquatic Ecology Stream Classification: BK2	Date Sampled: 08/26/2005 Site Length (m): 100 Mean Width (m): 1.3 Number of Pass: 3	Conductivity (umhos/cm): pH: Water Temperature (C): 9.4 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	101	106	113	101	8329	186	1060	3373	165.96	1706	126.8	22.3
Brook Trout	>=200mm	1	1	1	1	79	8	10	32	7.51	16	206.0	107.0
Brook Trout	All	102	107	114	102	8407	195	1070	3405	173.75	1722	127.5	23.1

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, 1995-2005

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 19, 1996	45	45-47	
	Sep 06, 1997	97	88-108	
	Sep 14, 1998	139	135-145	
	Sep 17, 2000	208	202-215	
	Oct 02, 2002	123	114-133	
	Aug 26, 2005	106	101-113	
Brook Trout >=200mm	Sep 19, 1996	7	7-8	BK3

Brook Trout >=200mm	Sep 06, 1997	15	15-16	BK1
	Sep 14, 1998	6	6-6	BK1
	Sep 17, 2000	7	7-8	BK1
	Oct 02, 2002	2	2-2	BK2
	Aug 26, 2005	1	1-1	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2

Species: Brook Trout

