## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## Lime Creek, Pennington County 02-0099-00

1993

 Table 1. Population and Biomass Estimates for Lime Creek

Site Number: 12 Site Midpoint (Latitude, Longitude): 44.07911882, -103.27234080 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: BR2						Date Sampled: Site Length (m): Mean Width (m): Number of Pass:		2.8	(um pH: Wat	Conductivity (umhos/cm): pH: Water Temperature (C): Voltage:		850 14.0 250	
Species	Size Class	Total Number Captured	Est. # in site	Upper 95% Cl	Lower 95% Cl	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brown Trout	<200mm	4	4	6	4	143	6	40	58	5.42	64	160.0	42.5
Brown Trout	>=200mm	2	2	2	2	71	17	20	29	14.86	32	286.5	233.0
Brown Trout	All	6	6	7	6	214	23	60	87	20.28	97	202.2	106.0
Largemouth Bass	All	1	1	3	1	36	0	10	14	0.19	16	77.0	6.0
Longnose Dace	All	152	245	336	154	8750	17	2450	3544	14.85	3942	57.9	1.9
White Sucker	All	4	4	6	4	143	6	40	58	5.36	64	137.0	42.0

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 BrookTrout 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 Lime Creek, 1983-1993

## Site 12

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	May 17, 1993	4	4-6	
Brown Trout >=200mm	May 17, 1993	2	2-2	BR2
Largemouth Bass	May 17, 1993	1	1-3	
Longnose Dace	May 17, 1993	245	154-336	
White Sucker	May 17, 1993	4	4-6	

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.













