## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Lime Creek, Pennington County 02-0099-00 1995

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: BK2, BR2

**Date Sampled:** 06/12/1995

Conductivity (umhos/cm):

pH:

680

Site Length (m): 100

8.4

Mean Width (m): 2.3 Number of Pass: 5

Water Temperature (C):

Voltage:

200

12.0

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	3	3	4	3	130	24	30	53	21.04	48	256.7	180.7
Brook Trout	All	3	3	4	3	130	24	30	53	21.04	48	256.7	180.7
Brown Trout	<200mm	1	1	2	1	43	2	10	18	1.36	16	144.0	35.0
Brown Trout	>=200mm	6	6	6	6	261	122	60	106	108.74	97	335.2	466.8
Brown Trout	All	7	7	8	7	304	123	70	123	110.10	113	307.9	405.1
Creek Chub	All	1	1	5	1	43	1	10	18	0.47	16	118.0	12.0
Longnose Dace	All	17	19	25	17	826	6	190	335	5.27	306	77.3	7.1
White Sucker	All	3	3	4	3	130	24	30	53	21.39	48	213.7	183.7

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, 1985-1995

Site 12

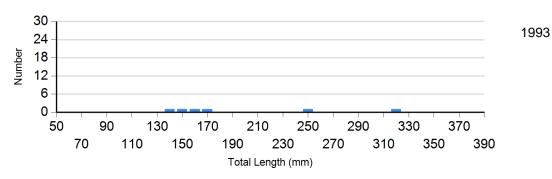
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout >=200mm	Jun 12, 1995	3	3-4	BK2
Brown Trout <200mm	May 17, 1993	4	4-6	
	Jun 12, 1995	1	1-2	
Brown Trout >=200mm	May 17, 1993	2	2-2	BR2
	Jun 12, 1995	6	6-6	BR2
Creek Chub	Jun 12, 1995	1	1-5	
Longnose Dace	May 17, 1993	245	154-336	

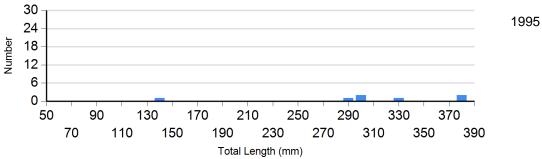
Longnose Dace	Jun 12, 1995	19	17-25	
White Sucker	May 17, 1993	4	4-6	
	Jun 12, 1995	3	3-4	

## **Length Frequency Distribution**

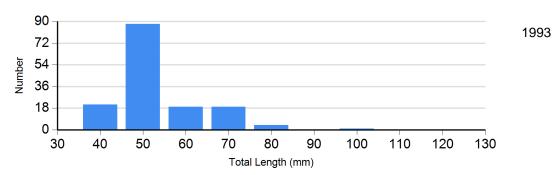
Length frequency histogram of species sampled by year.

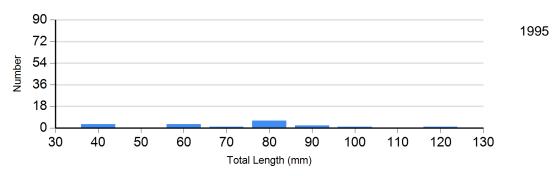
Site: 12 Species: Brown Trout





Site: 12 Species: Longnose Dace





Site: 12 Species: White Sucker

