## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## Lake Creek (unnamed trib), Lawrence County 10120203001450 2006

Table 1. Population and Biomass Estimates for Lake Creek (unnamed trib)

Site Number: 7

**Site Midpoint (Latitude, Longitude):** 44.56577978, -103.99318823

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR2

**Date Sampled:** 08/29/2006

Site Length (m): 110

Mean Width (m): 4.1

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

Voltage:

1040

20.0

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)
Brown Trout	<200mm	34	34	35	34	827	18	309	335	16.45	497	116.0	22.3
Brown Trout	>=200mm	10	10	10	10	243	55	91	99	49.00	146	267.5	225.5
Brown Trout	All	44	44	45	44	1071	73	400	434	65.45	644	150.4	68.5
Finescale Dace	All	74	85	99	74	2069	5	773	838	4.26	1243	58.9	2.3
Hatchery Rainbow Trout	>=200mm	1	1	1	1	24	5	9	10	4.35	15	290.0	200.0
Hatchery Rainbow Trout	All	1	1	1	1	24	5	9	10	4.35	15	290.0	200.0
Longnose Dace	All	64	80	102	64	1947	6	727	788	5.39	1170	66.2	3.1
White Sucker	All	95	100	107	95	2434	104	909	986	93.16	1463	143.5	42.9

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 Lake Creek (unnamed trib), 1996-2006

Site 7

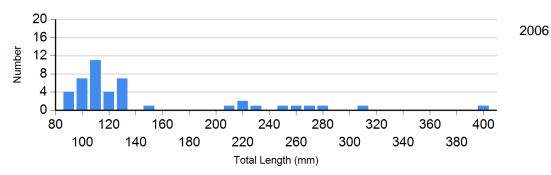
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Aug 29, 2006	34	34-35	
Brown Trout >=200mm	Aug 29, 2006	10	10-10	BR2
Finescale Dace	Aug 29, 2006	85	74-99	
Hatchery Rainbow Trout >=200mm	Aug 29, 2006	1	1-1	
Longnose Dace	Aug 29, 2006	80	64-102	
White Sucker	Aug 29, 2006	100	95-107	

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.

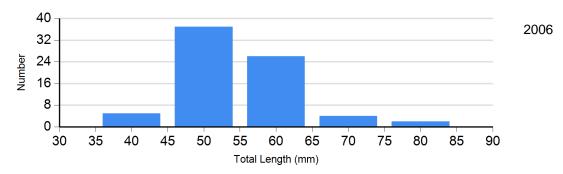
Site: 7

Species: Brown Trout



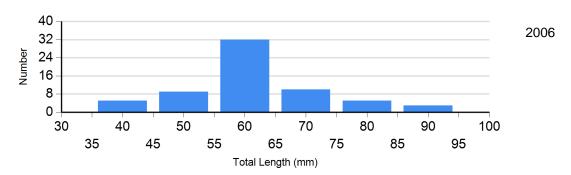
Site: 7

Species: Finescale Dace



Site: 7

Species: Longnose Dace



Site: 7 Species: White Sucker

