## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Crow Creek (Trib. of Redwater), Lawrence County 09-0037-00 1997

Table 1. Population and Biomass Estimates for Crow Creek (Trib. of Redwater)

Site Number: 35

Site Midpoint (Latitude, Longitude): 44.56066453, -104.01129520

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR1, RB2

**Date Sampled:** 09/25/1997

Site Length (m): 100

Mean Width (m): 4.0

Number of Pass: 3

Conductivity (umhos/cm):

pH: 7.5

1212

Water Temperature (C): 14.0

Voltage:

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	35	39	34	871	21	350	353	18.52	563	129.0	23.8
Brown Trout	>=200mm	35	36	40	35	896	179	360	363	159.73	579	265.9	199.8
Brown Trout	All	69	73	79	69	1816	205	730	735	183.33	1175	198.5	113.1
Green Sunfish	All	1	1	2	1	25	1	10	10	0.47	16	111.0	21.0
Longnose Dace	All	41	46	55	41	1144	6	460	463	5.26	740	83.9	5.2
Longnose Sucker	All	6	6	6	6	149	8	60	60	7.00	97	133.0	52.5
Rainbow Trout	<200mm	4	4	4	4	100	3	40	40	2.60	64	140.8	29.3
Rainbow Trout	>=200mm	2	2	2	2	50	12	20	20	10.31	32	281.5	232.0
Rainbow Trout	All	6	6	6	6	149	14	60	60	12.90	97	187.7	96.8
White Sucker	All	23	31	50	23	771	191	310	312	170.48	499	197.8	247.6

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 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 Crow Creek (Trib. of Redwater), 1987-1997

Site 35

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 25, 1997	35	34-39	
Brown Trout >=200mm	Sep 25, 1997	36	35-40	BR1
Green Sunfish	Sep 25, 1997	1	1-2	
Longnose Dace	Sep 25, 1997	46	41-55	
Longnose Sucker	Sep 25, 1997	6	6-6	
Rainbow Trout <200mm	Sep 25, 1997	4	4-4	
Rainbow Trout >=200mm	Sep 25, 1997	2	2-2	RB2

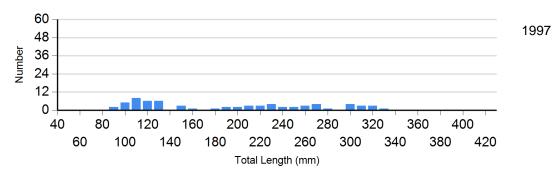
23-50

## **Length Frequency Distribution**

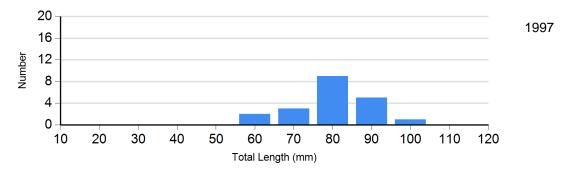
Length frequency histogram of species sampled by year.

**Site:** 35

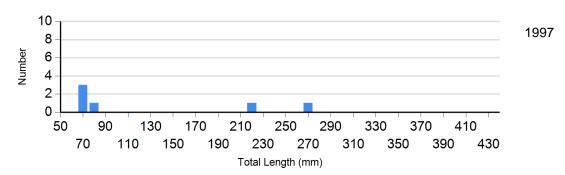
Species: Brown Trout



Site: 35 Species: Longnose Dace

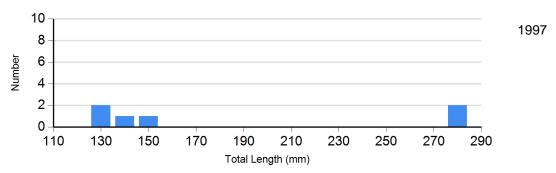


Site: 35 Species: Longnose Sucker



**Site:** 35

Species: Rainbow Trout



**Site:** 35

Species: White Sucker

