SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Rapid Creek - North Fork, Pennington County 02-0075-00 2006

Table 1. Population and Biomass Estimates for Rapid Creek - North Fork

Site Number: 2

Site Midpoint (Latitude, Longitude): 44.13240684, -103.73631714

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR2

Date Sampled: 09/25/2006

Conductivity (umhos/cm):

313

Site Length (m): 100

Mean Width (m): 2.5

pH:

Voltage:

Water Temperature (C): 9.5

Number of Pass: 3

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	41	41	42	41	1611	41	410	652	36.59	660	123.8	25.4
Brown Trout	>=200mm	2	2	2	2	79	7	20	32	6.45	32	206.5	92.0
Brown Trout	All	43	43	44	43	1689	48	430	684	43.04	692	127.6	28.5
Hatchery Rainbow Trout	>=200mm	1	1	1	1	39	3	10	16	3.09	16	220.0	88.0
Hatchery Rainbow Trout	All	1	1	1	1	39	3	10	16	3.09	16	220.0	88.0
Longnose Dace	All	37	36	47	37	1414	5	360	573	4.17	579	60.5	3.3
Mountain Sucker	All	1	1	1	1	39	1	10	16	1.02	16	132.0	29.0
White Sucker	All	10	10	10	10	393	12	100	159	10.66	161	133.7	30.4

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 Rapid Creek - North Fork, 1996-2006

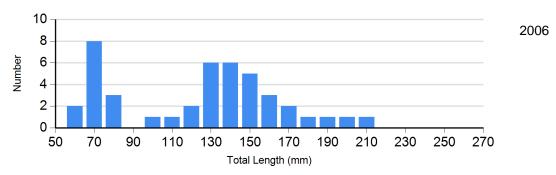
Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 25, 2006	41	41-42	
Brown Trout >=200mm	Sep 25, 2006	2	2-2	BR2
Hatchery Rainbow Trout >=200mm	Sep 25, 2006	1	1-1	
Longnose Dace	Sep 25, 2006	36	37-47	
Mountain Sucker	Sep 25, 2006	1	1-1	
White Sucker	Sep 25, 2006	10	10-10	

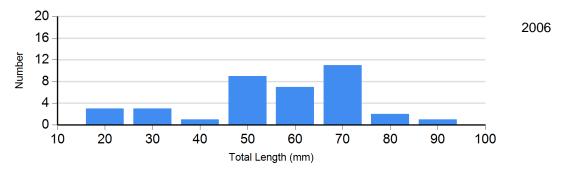
Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2 Species: Brown Trout



Site: 2 Species: Longnose Dace



Site: 2 Species: White Sucker

