SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Rapid Creek - Rhodes Fork, Pennington County 02-9212-00 1994

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

Site Midpoint (Latitude, Longitude): 44.14214752, -103.84916391

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK0, BR1

Site Number: 7

Date Sampled: 07/11/1994

Site Length (m): 100

Mean Width (m): 2.5

Number of Pass: 3

Conductivity (umhos/cm):

pH: 8.3

292

Water Temperature (C): 9.0

Voltage: 250

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	1	1	5	1	39	0	10	16	0.35	16	108.0	10.0
Brook Trout	All	1	1	5	1	39	0	10	16	0.35	16	108.0	10.0
Brown Trout	<200mm	127	133	140	127	5236	142	1330	2121	127.23	2140	137.2	27.2
Brown Trout	>=200mm	16	16	17	16	630	58	160	255	51.78	257	216.4	92.1
Brown Trout	All	143	148	155	143	5827	201	1480	2360	179.32	2381	146.1	34.5
Hatchery Brown Trout	>=200mm	1	1	1	1	39	3	10	16	2.85	16	217.0	81.0
Hatchery Brown Trout	All	1	1	1	1	39	3	10	16	2.85	16	217.0	81.0

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 Rapid Creek - Rhodes Fork, 1984-1994

Site 7

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 11, 1994	1	1-5	
Brown Trout <200mm	Jul 11, 1994	133	127-140	
Brown Trout >=200mm	Jul 11, 1994	16	16-17	BR1
Hatchery Brown Trout >=200mm	Jul 11, 1994	1	1-1	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 7
Species: Brown Trout

