

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Rapid Creek - Rhodes Fork, Pennington County**  
**02-9212-00**  
**2008**

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

<b>Site Number:</b> 7	<b>Date Sampled:</b> 06/16/2008	<b>Conductivity (umhos/cm):</b> 412
<b>Site Midpoint (Latitude, Longitude):</b> 44.14214752, -103.84916391	<b>Site Length (m):</b> 100	<b>pH:</b> 8.6
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 2.3	<b>Water Temperature (C):</b> 11.0
<b>Stream Classification:</b> BK0, BR2	<b>Number of Pass:</b> 1	<b>Voltage:</b> 315

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	1	1	43	1	10	18	0.66	16	125.0	17.0
Brook Trout	All	1	1	1	1	43	1	10	18	0.66	16	125.0	17.0
Brown Trout	<200mm	57	57	57	57	2469	61	570	1000	54.68	917	122.8	24.8
Brown Trout	>=200mm	7	7	7	7	303	30	70	123	27.03	113	219.6	99.9
Brown Trout	All	64	64	64	64	2772	92	640	1123	81.70	1030	133.3	33.0

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	
<b>Class BR1</b>	Number of wild Brown Trout exceeds 150 per acre
<b>Class BR2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BR3</b>	Number of wild Brown Trout is less than 25 per acre
<b>Class BK1</b>	Number of wild Brook Trout exceeds 150 per acre
<b>Class BK2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BK3</b>	Number of wild Brook Trout is less than 25 per acre
<b>Class RB1</b>	Number of wild Rainbow Trout exceeds 25 per acre
<b>Class RB2</b>	Number of wild Rainbow Trout is less than 25 per acre

Table 2. Species composition and population estimates on Rapid Creek - Rhodes Fork, 1998-2008

**Site 7**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 16, 2008	1	1-1	
Brown Trout <200mm	May 07, 2003	130	127-135	
	Sep 23, 2003	35	29-48	
	Jun 16, 2008	57	57-57	
Brown Trout >=200mm	May 07, 2003	18	18-18	BR1
	Sep 23, 2003	7	7-7	BR2
	Jun 16, 2008	7	7-7	BR2

## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site:** 7

**Species:** Brown Trout

