

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Cascade Creek, Fall River County**  
**27-0026-01**  
**1998**

Table 1. Population and Biomass Estimates for Cascade Creek

<b>Site Number:</b> 48	<b>Date Sampled:</b> 08/26/1998	<b>Conductivity (umhos/cm):</b> 2316
<b>Site Midpoint (Latitude, Longitude):</b> 43.33510799, -103.56025297	<b>Site Length (m):</b> 100	<b>pH:</b> 7.7
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 4.5	<b>Water Temperature (C):</b> 20.8
<b>Stream Classification:</b> None	<b>Number of Pass:</b> 3	<b>Voltage:</b>

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)
Hatchery Rainbow Trout	>=200mm	1	1	1	1	22	6	10	9	5.10	16	283.0	256.0
Hatchery Rainbow Trout	All	1	1	1	1	22	6	10	9	5.10	16	283.0	256.0
Longnose Dace	All	241	262	278	246	5848	15	2620	2369	13.61	4216	67.2	2.6
White Sucker	All	9	9	10	9	201	14	90	81	12.10	145	183.6	67.4

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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 Cascade Creek, 1988-1998

**Site 48**

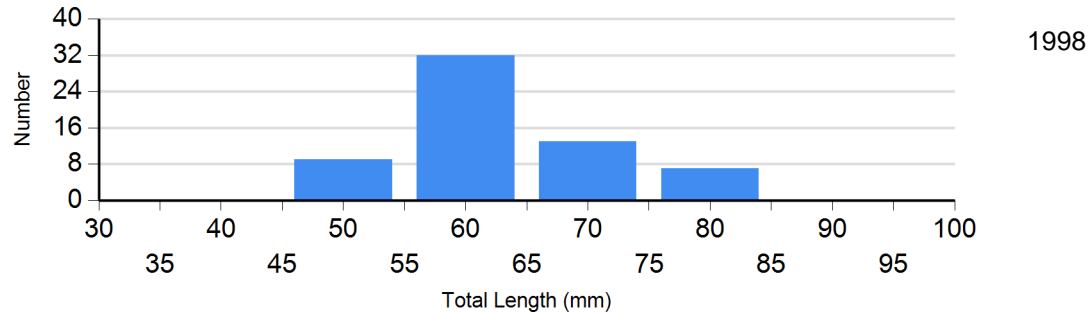
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Hatchery Rainbow Trout >=200mm	Aug 26, 1998	1	1-1	
Longnose Dace	May 11, 1993	2	2-2	
	Aug 26, 1998	262	246-278	
White Sucker	Aug 26, 1998	9	9-10	

## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site:** 48

**Species:** Longnose Dace



**Site:** 48

**Species:** White Sucker

