

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Cascade Creek, Fall River County
27-0026-01
1993

Table 1. Population and Biomass Estimates for Cascade Creek

Site Number: 48	Date Sampled: 05/11/1993	Conductivity (umhos/cm): 2300
Site Midpoint (Latitude, Longitude): 43.33510799, -103.56025297	Site Length (m): 100	pH: 7.2
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.2	Water Temperature (C): 20.0
Stream Classification: None	Number of Pass: 4	Voltage: 50

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 Brown Trout	<200mm	1	1	1	1	31	2	10	13	1.35	16	172.0	48.0
Hatchery Brown Trout	>=200mm	12	14	21	12	440	61	140	178	54.12	225	247.3	137.7
Hatchery Brown Trout	All	13	15	22	13	472	62	150	191	55.08	241	241.5	130.8
Longnose Dace	All	2	2	2	2	63	0	20	25	0.06	32	43.5	1.0

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 Brook Trout 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 Cascade Creek, 1983-1993

Site 48

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Hatchery Brown Trout <200mm	May 11, 1993	1	1-1	
Hatchery Brown Trout >=200mm	May 11, 1993	14	12-21	
Longnose Dace	May 11, 1993	2	2-2	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 48

Species: Hatchery Brown Trout

