## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## Silver Creek (Trib. of Castle), Pennington County 10120110000150 1994

Table 1. Population and Biomass Estimates for Silver Creek (Trib. of Castle)

Site Midpoint (Latitude, Longitude): 44.03195306, -103.86743219

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK0

Site Number: 22

Date Sampled: 06/22/1994 Conductivity

Site Length (m): 100

Mean Width (m): 1.2

Number of Pass: 3

(umhos/cm): pH: 8.7

310

Water Temperature (C): 8.0

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	27	27	29	27	2177	26	270	882	22.90	434	97.6	11.8
Brook Trout	All	27	27	29	27	2177	26	270	882	22.90	434	97.6	11.8

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 Silver Creek (Trib. of Castle), 1984-1994

## Site 22

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification	
Brook Trout <200mm	Jun 22, 1994	27	27-29		

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.

Site: 22 Species: Brook Trout

