

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Silver Creek (Trib. of Castle), Pennington County
10120110000150
2008

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

Site Number: 22	Date Sampled: 05/30/2008	Conductivity (umhos/cm): 447
Site Midpoint (Latitude, Longitude): 44.03195306, -103.86743219	Site Length (m): 100	pH: 8.5
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.3	Water Temperature (C): 14.3
Stream Classification: BK3	Number of Pass: 1	Voltage: 300

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	32	32	32	32	1408	36	320	570	32.25	515	130.5	25.7
Brook Trout	>=200mm	1	1	1	1	44	4	10	18	3.77	16	202.0	96.0
Brook Trout	All	33	33	33	33	1452	40	330	588	36.03	531	132.7	27.8

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 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 Silver Creek (Trib. of Castle), 1998-2008

Site 22

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 30, 2008	32	32-32	
Brook Trout >=200mm	May 30, 2008	1	1-1	BK3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 22

Species: Brook Trout

