

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Ditch Creek, Pennington County
02-0059-00
2008

Table 1. Population and Biomass Estimates for Ditch Creek

Site Number: 14	Date Sampled: 06/13/2008	Conductivity (umhos/cm): 440
Site Midpoint (Latitude, Longitude): 43.97247052, -103.84458740	Site Length (m): 100	pH: 7.7
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.0	Water Temperature (C): 9.9
Stream Classification: BK3	Number of Pass: 1	Voltage: 310

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	108	108	108	108	5304	121	1080	2148	107.66	1738	94.4	22.7
Brook Trout	>=200mm	1	1	1	1	49	4	10	20	3.86	16	200.0	88.0
Brook Trout	All	109	109	109	109	5353	132	1090	2168	117.57	1754	95.4	24.6

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 Ditch Creek, 1998-2008

Site 14

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 14, 1998	189	171-207	
	Sep 21, 2006	106	106-106	
	Jun 13, 2008	108	108-108	
Brook Trout >=200mm	Jul 14, 1998	4	4-6	BK2
	Sep 21, 2006	1	1-1	BK2
	Jun 13, 2008	1	1-1	BK3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 14

Species: Brook Trout

