

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Ditch Creek, Pennington County
02-0059-00
2014

Table 1. Population and Biomass Estimates for Ditch Creek

Site Number: 14	Date Sampled: 06/30/2014	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 43.97247052, -103.84458740	Site Length (m): 100	pH:
Survey Completed by:	Mean Width (m): 4.3	Water Temperature (C):
Stream Classification: BK0	Number of Pass: 3	Voltage:

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	255	257	261	255	5964	120	2570	2415	106.74	4135	101.1	20.0
Brook Trout	All	344	385	409	361	8935	179	3850	3619	159.90	6195	101.1	20.0

Site Number: 32	Date Sampled: 06/30/2014	Conductivity (umhos/cm): 420
Site Midpoint (Latitude, Longitude): 43.95982757, -103.84226980	Site Length (m): 100	pH: 8.3
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.7	Water Temperature (C): 9.0
Stream Classification: BK2	Number of Pass: 3	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	120	130	141	120	3522	144	1300	1426	128.27	2092	123.5	40.8
Brook Trout	>=200mm	6	6	6	6	163	16	60	66	14.59	97	204.5	100.5
Brook Trout	All	126	135	145	126	3658	161	1350	1481	143.84	2172	127.3	44.0

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 Ditch Creek, 2004-2014

Site 14

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 21, 2006	106	106-106	
	Jun 13, 2008	108	108-108	
	Jun 30, 2014	257	255-261	
Brook Trout >=200mm	Sep 21, 2006	1	1-1	BK2
	Jun 13, 2008	1	1-1	BK3

Site 32

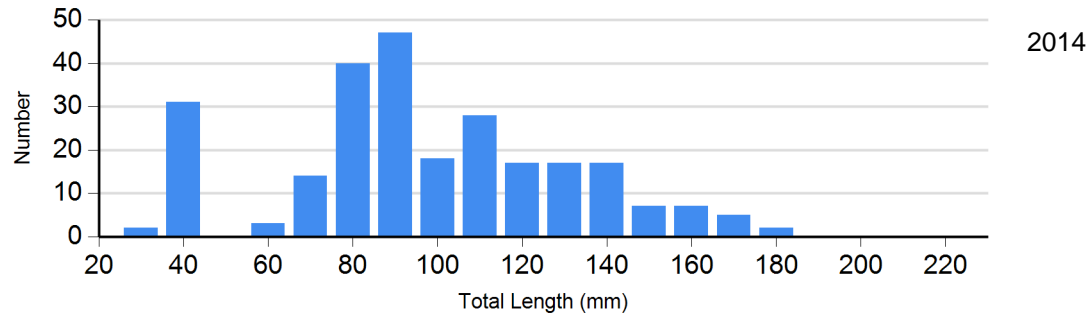
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 30, 2014	130	120-141	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 14

Species: Brook Trout



Site: 32

Species: Brook Trout

