

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Buskala Creek, Lawrence County
09-0073-00
2014

Table 1. Population and Biomass Estimates for Buskala Creek

Site Number: 8	Date Sampled: 06/10/2014	Conductivity (umhos/cm): 235
Site Midpoint (Latitude, Longitude): 44.19783847, -103.76826504	Site Length (m): 100	pH: 8.3
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.4	Water Temperature (C): 15.1
Stream Classification: BK0, BR0	Number of Pass: 3	Voltage: 260

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	60	68	80	60	4826	103	680	1954	91.95	1094	116.6	21.3
Brook Trout	All	60	68	80	60	4826	103	680	1954	91.95	1094	116.6	21.3
Brown Trout	<200mm	3	5	24	3	355	6	50	144	5.60	80	122.7	17.7
Brown Trout	All	3	5	24	3	355	6	50	144	5.60	80	122.7	17.7
Longnose Dace	All	24	23	33	24	1632	20	230	661	17.73	370	91.7	12.2

Site Number: 46	Date Sampled: 06/16/2014	Conductivity (umhos/cm): 391
Site Midpoint (Latitude, Longitude): 44.20701679, -103.80170587	Site Length (m): 100	pH: 8.3
Survey Completed by:	Mean Width (m): 1.0	Water Temperature (C): 12.5
Stream Classification: BK2	Number of Pass: 3	Voltage: 260

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	49	49	50	49	5052	87	490	2046	77.65	788	100.5	17.2
Brook Trout	>=200mm	1	1	1	1	103	10	10	42	8.93	16	202.0	97.0
Brook Trout	All	50	50	51	50	5155	100	500	2088	88.90	805	102.5	19.3

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 Buskala Creek, 2004-2014

Site 8

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 10, 2014	68	60-80	
Brown Trout <200mm	Jun 10, 2014	5	3-24	
Longnose Dace	Jun 10, 2014	23	24-33	

Site 46

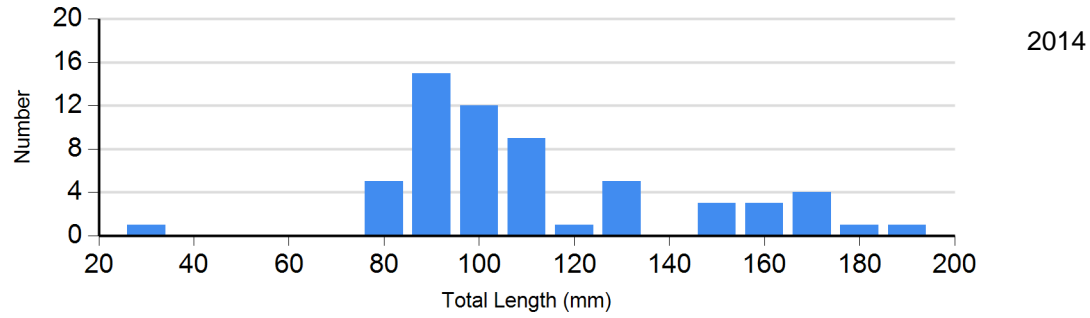
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 30, 2008	39	39-39	
	Jun 16, 2014	49	49-50	
Brook Trout >=200mm	Jun 16, 2014	1	1-1	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

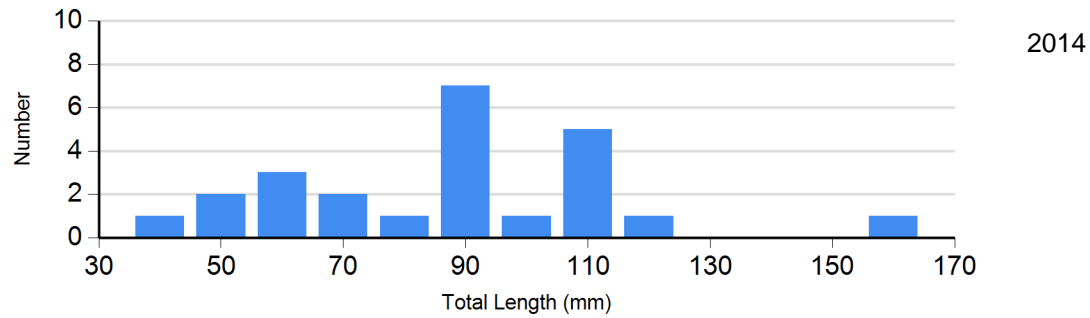
Site: 8

Species: Brook Trout



Site: 8

Species: Longnose Dace



Site: 46

Species: Brook Trout

