

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Jim Creek, Lawrence County
09-0067-00
2014

Table 1. Population and Biomass Estimates for Jim Creek

Site Number: 44
Site Midpoint (Latitude, Longitude): 44.14568942, -103.50326089
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK0

Date Sampled: 06/10/2014
Site Length (m): 100
Mean Width (m): 3.4
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C):
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	84	124	175	84	3686	118	1240	1493	105.46	1995	74.8	32.0
Brook Trout	All	84	124	175	84	3686	118	1240	1493	105.46	1995	74.8	32.0
Longnose Dace	All	1	1	5	1	30	1	10	12	0.53	16	111.0	20.0

Site Number: 105
Site Midpoint (Latitude, Longitude): 44.14548613, -103.55011650
Survey Completed by:
Stream Classification: BK3, BR0

Date Sampled: 06/10/2014
Site Length (m): 100
Mean Width (m): 1.7
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C):
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	3	3	4	3	172	6	30	70	5.58	48	149.7	36.3
Brook Trout	>=200mm	1	1	1	1	57	6	10	23	5.12	16	204.0	100.0
Brook Trout	All	4	4	4	4	229	12	40	93	10.69	64	163.3	52.3
Brown Trout	<200mm	1	1	1	1	57	2	10	23	1.64	16	138.0	32.0
Brown Trout	All	1	1	1	1	57	2	10	23	1.64	16	138.0	32.0

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 Jim Creek, 2004-2014

Site 44

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	26	26-26	
	Jun 10, 2014	124	84-175	
Longnose Dace	Jun 10, 2014	1	1-5	

Site 105

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	9	9-9	
	Jun 10, 2014	3	3-4	
Brook Trout >=200mm	Jun 23, 2008	1	1-1	BK3

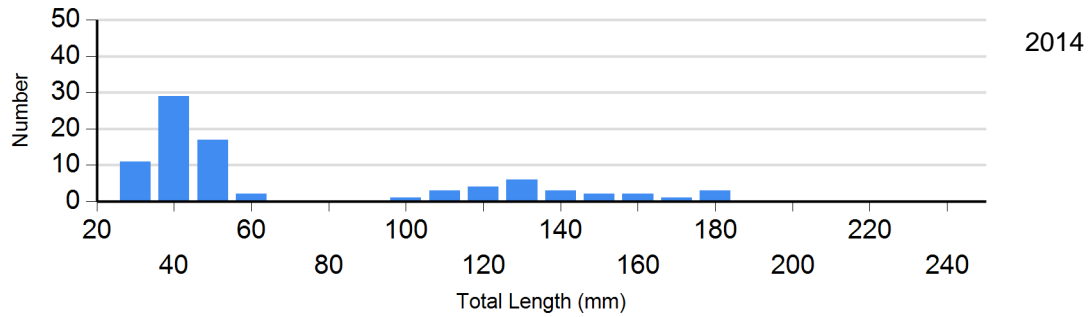
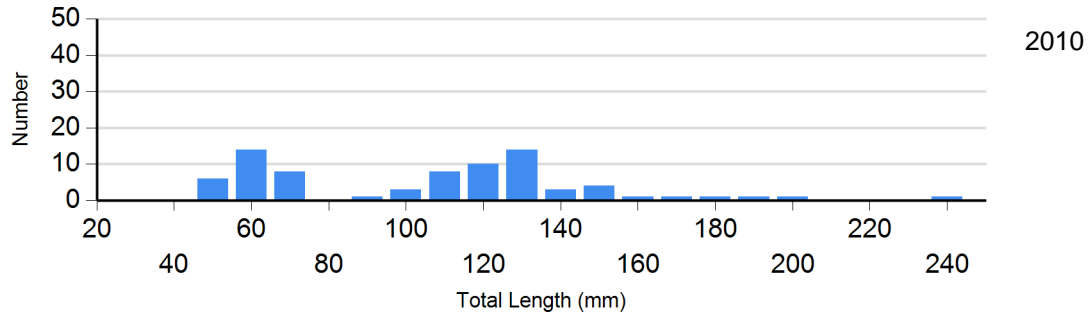
Brook Trout >=200mm	Jun 10, 2014	1	1-1	BK3
Brown Trout <200mm	Jun 10, 2014	1	1-1	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 44

Species: Brook Trout



Site: 105

Species: Brook Trout

