

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Potato Creek, Lawrence County
09-0038-00
2015

Table 1. Population and Biomass Estimates for Potato Creek

Site Number: 44	Date Sampled: 09/16/2015	Conductivity (umhos/cm):	166
Site Midpoint (Latitude, Longitude): 44.37789871, -104.02352457	Site Length (m): 100	pH:	8.3
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.2	Water Temperature (C):	11.8
Stream Classification: BK1	Number of Pass: 3	Voltage:	350

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	127	136	146	127	11333	345	1360	4590	307.89	2188	111.0	30.4
Brook Trout	>=200mm	11	11	13	11	917	125	110	371	111.31	177	233.5	136.0
Brook Trout	All	435	453	465	441	37750	1617	4530	15289	1444.20	7289	120.8	42.8

Site Number: 53	Date Sampled: 05/27/2015	Conductivity (umhos/cm):	81
Site Midpoint (Latitude, Longitude): 44.38078011, -104.01462888	Site Length (m): 100	pH:	7.8
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.3	Water Temperature (C):	11.0
Stream Classification: BK3	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	86	90	96	86	2727	68	900	1105	60.67	1448	117.3	24.9
Brook Trout	>=200mm	2	2	2	2	61	6	20	25	5.74	32	207.5	106.0
Brook Trout	All	88	92	98	88	2788	75	920	1129	66.72	1480	119.4	26.8

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 Potato Creek, 2005-2015

Site 44

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 16, 2015	136	127-146	
Brook Trout >=200mm	Sep 16, 2015	11	11-13	BK1

Site 53

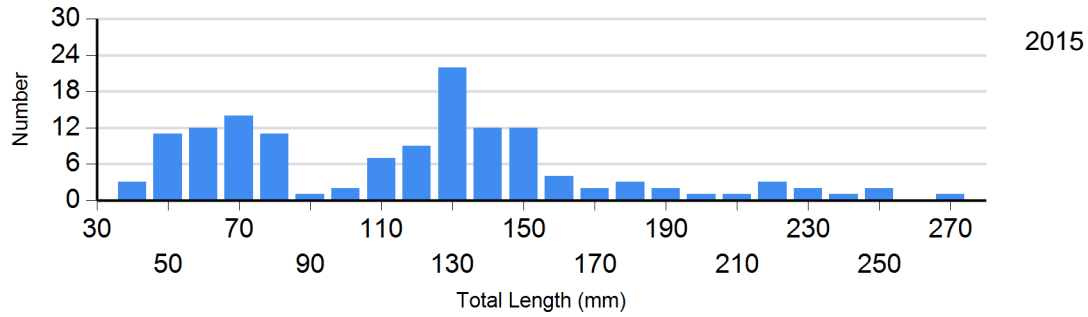
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 01, 2008	31	31-31	
	May 27, 2015	90	86-96	
Brook Trout >=200mm	Jul 01, 2008	5	5-5	BK2
	May 27, 2015	2	2-2	BK3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

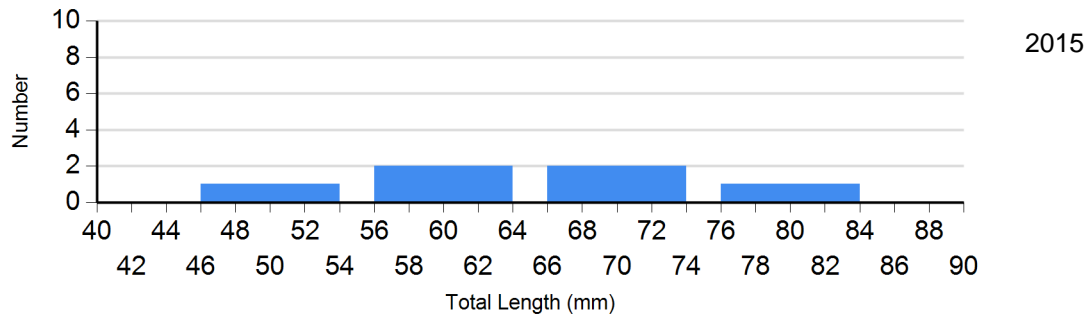
Site: 44

Species: Brook Trout



Site: 44

Species: Longnose Dace



Site: 53

Species: Brook Trout

