

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Potato Creek, Lawrence County
09-0038-00
1993

Table 1. Population and Biomass Estimates for Potato Creek

Site Number: 37	Date Sampled: 07/19/1993	Conductivity (umhos/cm): 89
Site Midpoint (Latitude, Longitude): 44.37300061, -104.02607804	Site Length (m): 100	pH: 8.2
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.4	Water Temperature (C): 13.0
Stream Classification: BK0	Number of Pass: 3	Voltage: 600

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	9	9	10	9	652	23	90	264	20.51	145	150.8	35.2
Brook Trout	All	9	9	10	9	652	23	90	264	20.51	145	150.8	35.2
Longnose Dace	All	224	239	252	226	17319	38	2390	7014	33.99	3846	61.7	2.2

Site Number: 53	Date Sampled: 07/19/1993	Conductivity (umhos/cm): 108
Site Midpoint (Latitude, Longitude): 44.38078011, -104.01462888	Site Length (m): 90	pH: 8.4
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.9	Water Temperature (C): 15.0
Stream Classification: BK0	Number of Pass: 3	Voltage: 600

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	17	17	18	17	895	26	189	362	23.45	304	139.8	29.4
Brook Trout	All	17	17	18	17	895	26	189	362	23.45	304	139.8	29.4
Longnose Dace	All	239	251	262	240	13211	34	2789	5350	30.48	4487	64.2	2.6

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 Potato Creek, 1983-1993

Site 37

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 19, 1993	9	9-10	
Longnose Dace	Jul 19, 1993	239	226-252	

Site 53

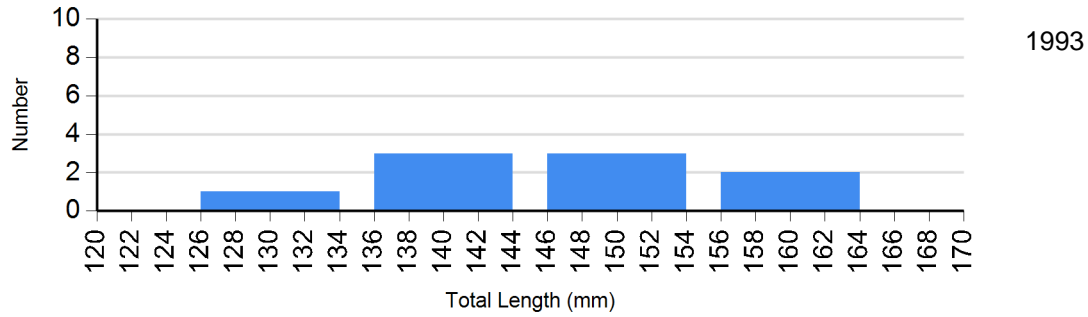
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 19, 1993	17	17-18	
Longnose Dace	Jul 19, 1993	251	240-262	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

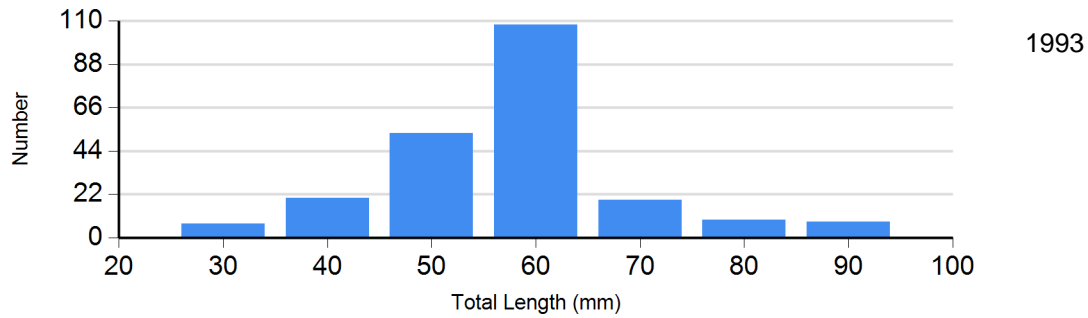
Site: 37

Species: Brook Trout



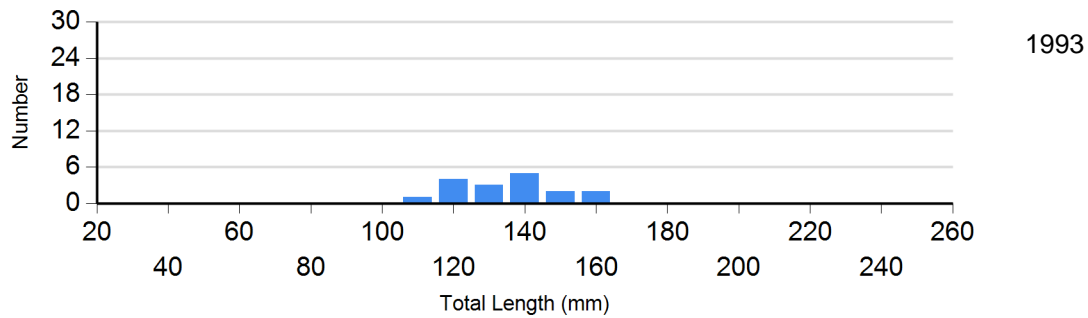
Site: 37

Species: Longnose Dace



Site: 53

Species: Brook Trout



Site: 53
Species: Longnose Dace

