

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Deadwood Creek, Lawrence County
09-0060-00
1997

Table 1. Population and Biomass Estimates for Deadwood Creek

Site Number: 46
Site Midpoint (Latitude, Longitude): 44.36428734, -103.77938126
Survey Completed by: OEA Research Inc.
Stream Classification: BK1

Date Sampled: 09/11/1997
Site Length (m): 100
Mean Width (m): 1.7
Number of Pass: 4
Conductivity (umhos/cm):
pH:
Water Temperature (C): 14.0
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	104	104	105	104	5977	97	1040	2421	86.72	1673	103.1	16.3
Brook Trout	>=200mm	16	16	16	16	920	109	160	372	96.98	257	220.7	118.1
Brook Trout	All	120	120	121	120	6897	206	1200	2793	183.71	1931	118.8	29.8

Site Number: 49
Site Midpoint (Latitude, Longitude): 44.36269958, -103.78234679
Survey Completed by: OEA Research Inc.
Stream Classification: BK1

Date Sampled: 09/11/1997
Site Length (m): 50
Mean Width (m): 1.9
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C): 16.0
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	197	200	205	197	10526	190	4000	4263	169.51	6436	106.6	18.0
Brook Trout	>=200mm	16	16	16	16	842	94	320	341	83.65	515	220.9	111.3
Brook Trout	All	213	216	220	213	11368	285	4320	4604	254.15	6951	115.2	25.0
Longnose Dace	All	2	2	4	2	105	2	40	43	1.64	64	121.0	17.5

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 Deadwood Creek, 1987-1997

Site 46

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 20, 1992	191	188-196	
	Aug 20, 1992	285	277-293	
	Oct 13, 1994	31	30-34	
	Sep 25, 1996	70	70-72	
	Sep 11, 1997	104	104-105	
Brook Trout >=200mm	Aug 20, 1992	10	10-10	BK1
	Oct 13, 1994	10	9-15	BK3

Brook Trout >=200mm	Sep 25, 1996	25	25-26	BK3
	Sep 11, 1997	16	16-16	BK1
Longnose Dace	Aug 20, 1992	1	1-1	

Site 49

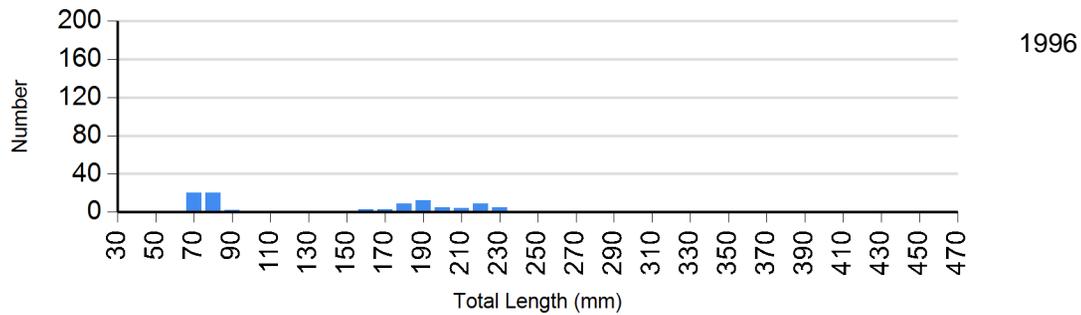
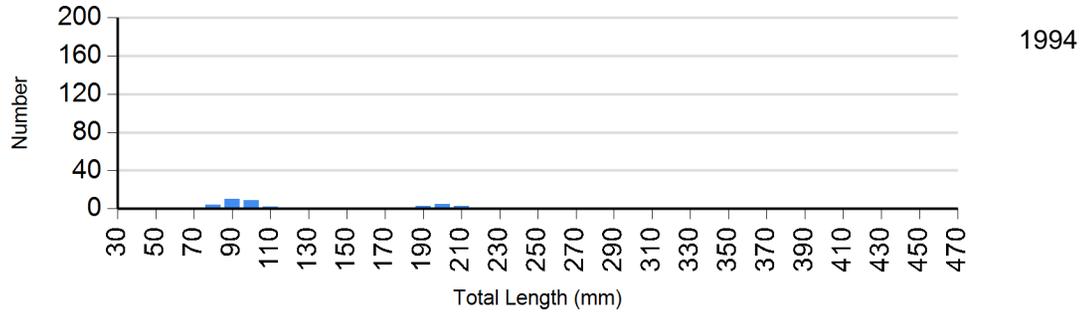
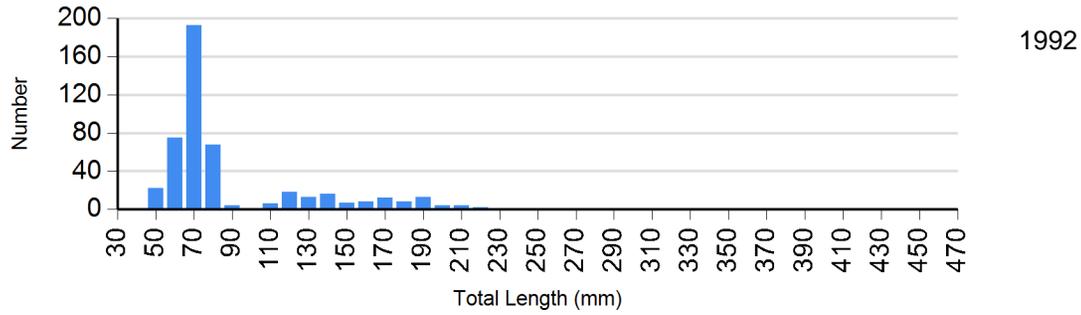
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 20, 1992	316	311-322	
	Oct 13, 1994	90	75-108	
	Sep 25, 1996	156	149-164	
	Sep 11, 1997	200	197-205	
Brook Trout >=200mm	Aug 20, 1992	1	1-1	BK2
	Oct 13, 1994	8	8-9	BK3
	Sep 25, 1996	28	28-29	BK3
	Sep 11, 1997	16	16-16	BK1
Longnose Dace	Sep 25, 1996	2	2-4	
	Sep 11, 1997	2	2-4	

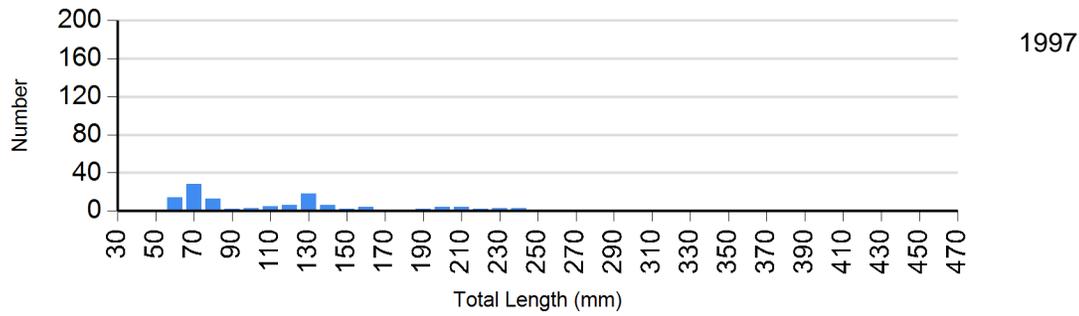
Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 46

Species: Brook Trout





Site: 49
Species: Brook Trout

