

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Deadwood Creek, Lawrence County
09-0060-00
1998

Table 1. Population and Biomass Estimates for Deadwood Creek

Site Number: 15	Date Sampled: 09/12/1998	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.37074701, -103.74538988	Site Length (m): 100	pH:
Survey Completed by: OEA Research Inc.	Mean Width (m): 3.2	Water Temperature (C): 15.0
Stream Classification: BK2	Number of Pass: 3	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	33	33	35	33	1025	30	330	415	26.73	531	128.8	29.2
Brook Trout	>=200mm	5	5	5	5	155	17	50	63	15.03	80	207.6	108.4
Brook Trout	All	38	38	40	38	1180	47	380	478	41.76	611	139.2	39.6

Site Number: 49	Date Sampled: 09/11/1998	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.36269958, -103.78234679	Site Length (m): 100	pH:
Survey Completed by: OEA Research Inc.	Mean Width (m): 2.8	Water Temperature (C): 16.0
Stream Classification: BK2	Number of Pass: 3	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	331	334	338	331	12014	226	3340	4866	201.87	5374	113.6	18.8
Brook Trout	>=200mm	3	3	4	3	108	13	30	44	11.24	48	220.3	116.7
Brook Trout	All	334	337	341	334	12122	239	3370	4910	213.20	5422	114.6	19.7
Longnose Dace	All	2	2	2	2	72	1	20	29	0.64	32	98.0	10.0

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 Deadwood Creek, 1988-1998

Site 15

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 12, 1998	33	33-35	
Brook Trout >=200mm	Sep 12, 1998	5	5-5	BK2

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	

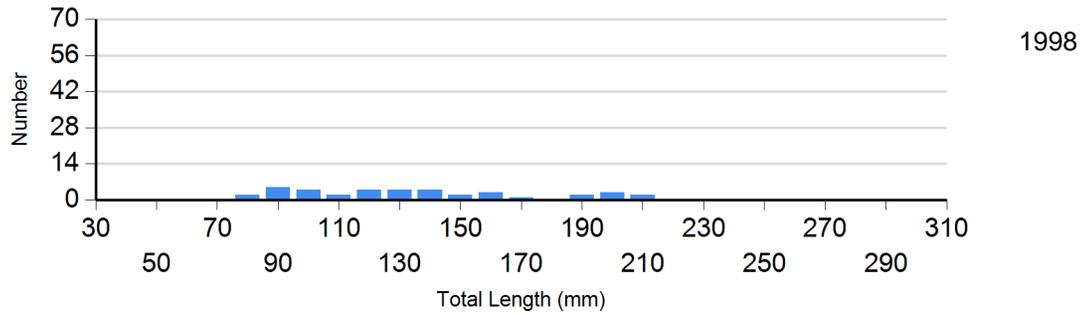
Brook Trout <200mm	Sep 11, 1998	334	331-338	
Brook Trout >=200mm	Aug 20, 1992	1	1-1	BK2
	Oct 13, 1994	8	8-9	BK3
	Sep 25, 1996	28	28-29	BK3
	Sep 11, 1997	16	16-16	BK1
	Sep 11, 1998	3	3-4	BK2
Longnose Dace	Sep 25, 1996	2	2-4	
	Sep 11, 1997	2	2-4	
	Sep 11, 1998	2	2-2	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 15

Species: Brook Trout



Site: 49

Species: Brook Trout

