SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Deadwood Creek, Lawrence County 09-0060-00 1994

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: BK3

Date Sampled: 10/13/1994

Site Length (m): 100

Mean Width (m): 0.0

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

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	30	31	34	30	0	0	310	0	0.00	499	112.1	22.9
Brook Trout	>=200mm	9	10	15	9	0	0	100	0	0.00	161	209.4	96.0
Brook Trout	All	39	41	46	39	0	0	410	0	0.00	660	134.6	39.8

Site Number: 49

Site Midpoint (Latitude, Longitude): 44.36269958, -103.78234679

Survey Completed by: OEA Research Inc.

Stream Classification: BK3

Date Sampled: 10/13/1994

Site Length (m): 100

Mean Width (m): 0.0

Number of Pass: 4

Conductivity (umhos/cm):

pH:

Water Temperature (C):

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	75	90	108	75	0	0	900	0	0.00	1448	100.4	16.2
Brook Trout	>=200mm	8	8	9	8	0	0	80	0	0.00	129	221.4	112.3
Brook Trout	All	83	96	111	83	0	0	960	0	0.00	1545	112.0	25.4

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 BrookTrout 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, 1984-1994

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	
Brook Trout >=200mm	Aug 20, 1992	10	10-10	BK1
	Oct 13, 1994	10	9-15	ВК3
e 49				
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 20, 1992	316	311-322	

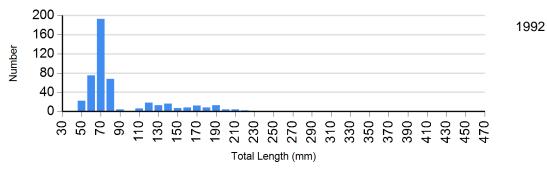
Brook Trout <200mm	Oct 13, 1994	90	75-108	
Brook Trout >=200mm	Aug 20, 1992	1	1-1	BK2
	Oct 13, 1994	8	8-9	ВК3

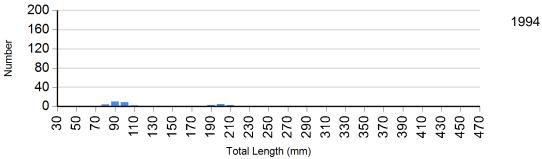
Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 46

Species: Brook Trout





Site: 49 Species: Brook Trout

