

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Whitetail Creek, Lawrence County
09-0059-00
1996

Table 1. Population and Biomass Estimates for Whitetail Creek

Site Number: 2

Site Midpoint (Latitude, Longitude): 44.34320234, -103.75974705

Survey Completed by: OEA Research Inc.

Stream Classification: BK3, BR0, RB2

Date Sampled: 09/27/1996

Site Length (m): 100

Mean Width (m): 0.0

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 5.0

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	298	308	317	299	0	0	3080	0	0.00	4956	73.2	4.2
Brook Trout	>=200mm	10	10	10	10	0	0	100	0	0.00	161	217.9	116.9
Brook Trout	All	309	319	328	310	0	0	3190	0	0.00	5133	77.9	7.9
Brown Trout	<200mm	24	25	29	24	0	0	250	0	0.00	402	90.0	6.9
Brown Trout	All	24	25	29	24	0	0	250	0	0.00	402	90.0	6.9
Rainbow Trout	>=200mm	1	1	1	1	0	0	10	0	0.00	16	415.0	645.0
Rainbow Trout	All	1	1	1	1	0	0	10	0	0.00	16	415.0	645.0

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 Whitetail Creek, 1986-1996

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 15, 1993	75	73-80	
	Jun 07, 1995	19	19-19	
	Sep 27, 1996	308	299-317	
Brook Trout >=200mm	Jul 15, 1993	5	5-5	BK2
	Jun 07, 1995	1	1-1	BK3
	Sep 27, 1996	10	10-10	BK3
Brown Trout <200mm	Jul 15, 1993	10	10-12	

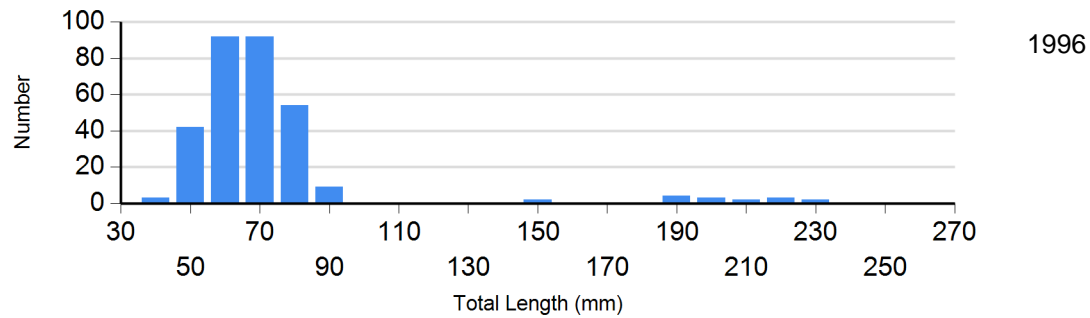
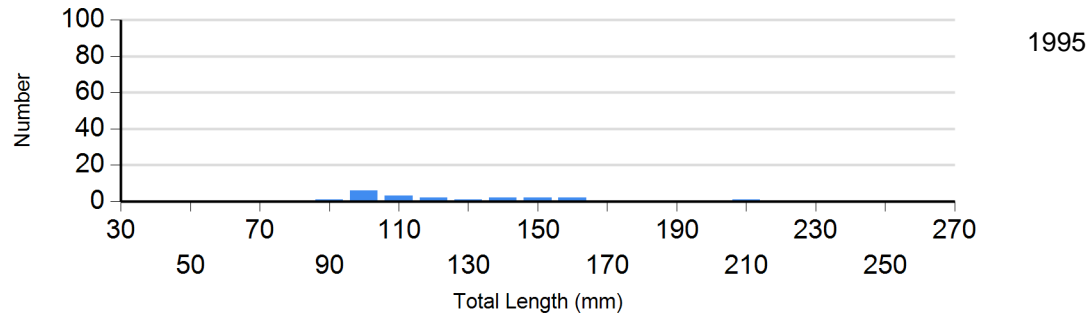
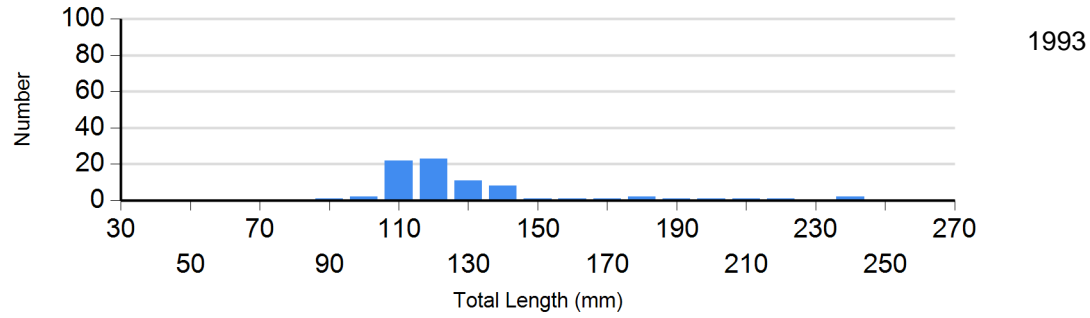
Brown Trout <200mm	Jun 07, 1995	1	1-1	
	Sep 27, 1996	25	24-29	
Brown Trout >=200mm	Jun 07, 1995	1	1-1	BR3
Rainbow Trout >=200mm	Sep 27, 1996	1	1-1	RB2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2

Species: Brook Trout



Site: 2
Species: Brown Trout

