

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Whitetail Creek, Lawrence County
09-0059-00
2001

Table 1. Population and Biomass Estimates for Whitetail Creek

Site Number: 50

Date Sampled: 08/29/2001

Conductivity (umhos/cm):

Site Midpoint (Latitude, Longitude): 44.32465294, -103.79815239

Site Length (m): 119

pH:

Survey Completed by: Chadwick Ecological Services

Mean Width (m): 1.4

Water Temperature (C):

Stream Classification: BK0

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	72	72	73	72	5333	39	605	2160	34.92	974	86.2	7.3
Brook Trout	All	73	73	74	73	5407	39	613	2190	35.19	987	86.2	7.3

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, 1991-2001

Site 50

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 04, 1997	19	19-21	
	Aug 26, 1998	17	16-22	
	Aug 29, 2001	72	72-73	
Brook Trout >=200mm	Sep 04, 1997	1	1-1	BK3
	Aug 26, 1998	5	5-5	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 50

Species: Brook Trout

