

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Boxelder - North Fork, Lawrence County
09-0069-00
1997

Table 1. Population and Biomass Estimates for Boxelder - North Fork

Site Number: 75	Date Sampled: 07/08/1997	Conductivity (umhos/cm): 290
Site Midpoint (Latitude, Longitude): 44.22862820, -103.66355032	Site Length (m): 100	pH: 7.5
Survey Completed by:	Mean Width (m): 1.4	Water Temperature (C): 16.0
Stream Classification: BK2	Number of Pass: 3	Voltage: 200

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	66	68	72	66	4789	114	680	1939	102.08	1094	116.1	23.9
Brook Trout	>=200mm	2	2	2	2	141	15	20	57	13.71	32	232.5	109.0
Brook Trout	All	68	70	74	68	4930	132	700	1996	118.01	1126	119.5	26.8
Longnose Dace	All	2	2	4	2	141	2	20	57	1.89	32	82.0	15.0
Mountain Sucker	All	2	2	4	2	141	6	20	57	5.22	32	154.0	41.5

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 Boxelder - North Fork, 1987-1997

Site 75

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 08, 1997	68	66-72	
Brook Trout >=200mm	Jul 08, 1997	2	2-2	BK2
Longnose Dace	Jul 08, 1997	2	2-4	
Mountain Sucker	Jul 08, 1997	2	2-4	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 75

Species: Brook Trout

