

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Boxelder - South Fork, Lawrence County
09-0071-00
1997

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

Site Number: 110	Date Sampled: 05/23/1997	Conductivity (umhos/cm): 153
Site Midpoint (Latitude, Longitude): 44.18982200, -103.59672323	Site Length (m): 100	pH: 7.5
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.0	Water Temperature (C): 15.0
Stream Classification: BK1	Number of Pass: 3	Voltage: 350

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	38	39	42	38	1931	69	390	782	61.38	628	147.6	35.6
Brook Trout	>=200mm	11	11	13	11	545	59	110	221	52.95	177	223.4	108.9
Brook Trout	All	49	51	56	49	2525	131	510	1023	117.36	821	164.6	52.1
Longnose Dace	All	15	41	178	15	2030	17	410	822	14.74	660	87.5	8.1
White Sucker	All	2	2	2	2	99	13	20	40	11.32	32	222.5	128.0

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 Boxelder - South Fork, 1987-1997

Site 110

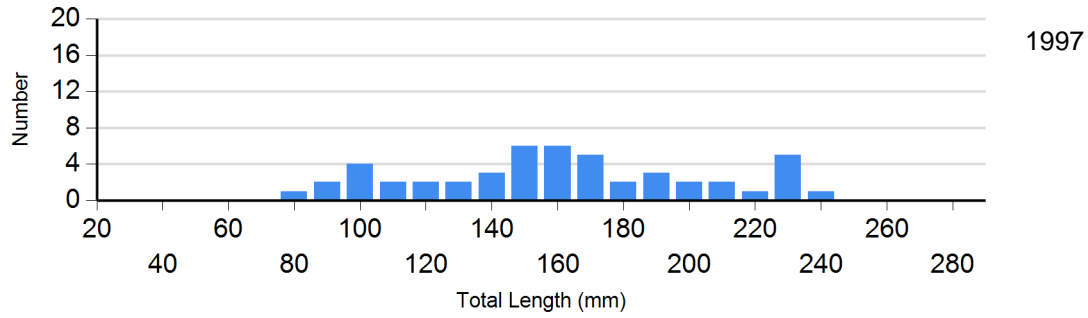
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 23, 1997	39	38-42	
Brook Trout >=200mm	May 23, 1997	11	11-13	BK1
Longnose Dace	May 23, 1997	41	15-178	
White Sucker	May 23, 1997	2	2-2	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 110

Species: Brook Trout



Site: 110

Species: Longnose Dace

