

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Newton Fork Creek, Pennington County
02-9223-00
2009

Table 1. Population and Biomass Estimates for Newton Fork Creek

Site Number: 82	Date Sampled: 05/20/2009	Conductivity (umhos/cm): 170
Site Midpoint (Latitude, Longitude): 43.95989736, -103.60163789	Site Length (m): 100	pH: 8.4
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.0	Water Temperature (C): 13.5
Stream Classification: BK2, RB2	Number of Pass: 1	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	9	9	9	9	302	11	90	122	10.07	145	149.1	37.3
Brook Trout	>=200mm	2	2	2	2	67	7	20	27	6.14	32	208.0	102.5
Brook Trout	All	11	11	11	11	369	18	110	149	16.21	177	159.8	49.2
Rainbow Trout	>=200mm	1	1	1	1	34	7	10	14	6.68	16	286.0	223.0
Rainbow Trout	All	1	1	1	1	34	7	10	14	6.68	16	286.0	223.0

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 Newton Fork Creek, 1999-2009

Site 82

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 20, 2009	9	9-9	
Brook Trout >=200mm	May 20, 2009	2	2-2	BK2
Rainbow Trout >=200mm	May 20, 2009	1	1-1	RB2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 82

Species: Brook Trout

