

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Newton Fork Creek, Pennington County
02-9223-00
1994

Table 1. Population and Biomass Estimates for Newton Fork Creek

Site Number: 82	Date Sampled: 06/30/1994	Conductivity (umhos/cm): 121
Site Midpoint (Latitude, Longitude): 43.95989736, -103.60163789	Site Length (m): 100	pH: 8.3
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.3	Water Temperature (C): 12.0
Stream Classification: BK2	Number of Pass: 3	Voltage: 400

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	177	186	195	177	7949	106	1860	3219	94.21	2993	79.3	13.3
Brook Trout	>=200mm	5	5	5	5	214	33	50	87	29.30	80	245.2	153.6
Brook Trout	All	182	191	200	182	8162	150	1910	3306	134.35	3073	83.9	18.4
Hatchery Rainbow Trout	>=200mm	12	12	12	12	513	66	120	208	59.18	193	236.9	129.3
Hatchery Rainbow Trout	All	12	12	12	12	513	66	120	208	59.18	193	236.9	129.3
Longnose Dace	All	17	20	29	17	855	5	200	346	4.68	322	84.3	6.1

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, 1984-1994

Site 82

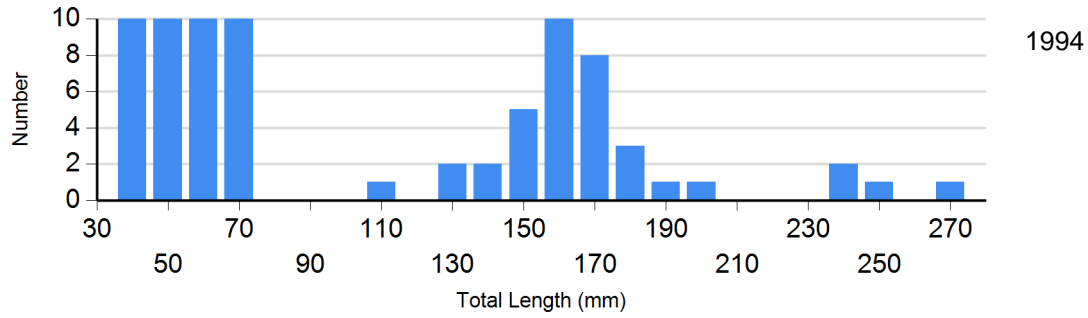
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 30, 1994	186	177-195	
Brook Trout >=200mm	Jun 30, 1994	5	5-5	BK2
Hatchery Rainbow Trout >=200mm	Jun 30, 1994	12	12-12	
Longnose Dace	Jun 30, 1994	20	17-29	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

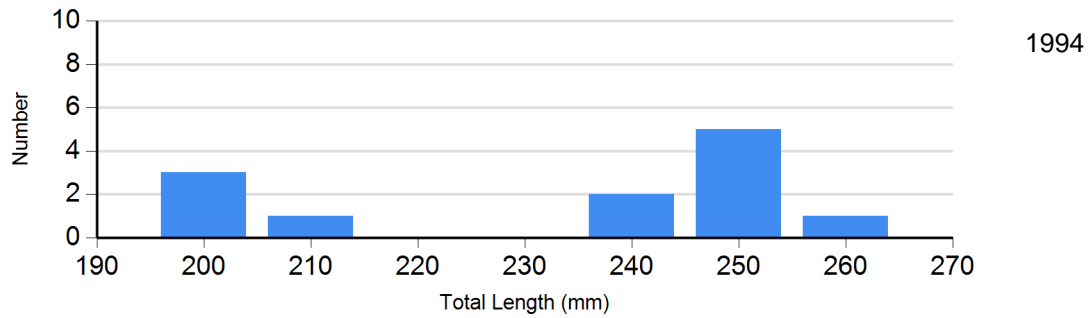
Site: 82

Species: Brook Trout



Site: 82

Species: Hatchery Rainbow Trout



Site: 82

Species: Longnose Dace

