

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Rapid Creek - North Fork, Pennington County
02-0075-00
1994

Table 1. Population and Biomass Estimates for Rapid Creek - North Fork

Site Number: 119	Date Sampled: 07/13/1994	Conductivity (umhos/cm): 262
Site Midpoint (Latitude, Longitude): 44.19752923, -103.76147540	Site Length (m): 100	pH: 8.5
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.0	Water Temperature (C): 10.0
Stream Classification: BK2, BR3	Number of Pass: 3	Voltage: 300

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	33	34	37	33	1683	56	340	682	49.87	547	148.1	33.2
Brook Trout	>=200mm	2	2	2	2	99	11	20	40	9.90	32	216.0	112.0
Brook Trout	All	35	36	39	35	1782	67	360	722	59.97	579	151.9	37.7
Brown Trout	<200mm	5	5	6	5	248	8	50	100	7.25	80	148.0	32.8
Brown Trout	>=200mm	1	1	1	1	50	8	10	20	6.76	16	243.0	153.0
Brown Trout	All	6	6	7	6	297	16	60	120	14.01	97	163.8	52.8
Longnose Dace	All	58	64	73	58	3168	24	640	1283	20.99	1030	92.1	7.4
Mountain Sucker	All	15	15	16	15	743	35	150	301	31.38	241	163.7	47.3
Unidentified YOY Trout	<200mm	21	21	23	21	1040	2	210	421	1.79	338	59.0	1.9
Unidentified YOY Trout	All	21	21	23	21	1040	2	210	421	1.79	338	59.0	1.9

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 Rapid Creek - North Fork, 1984-1994

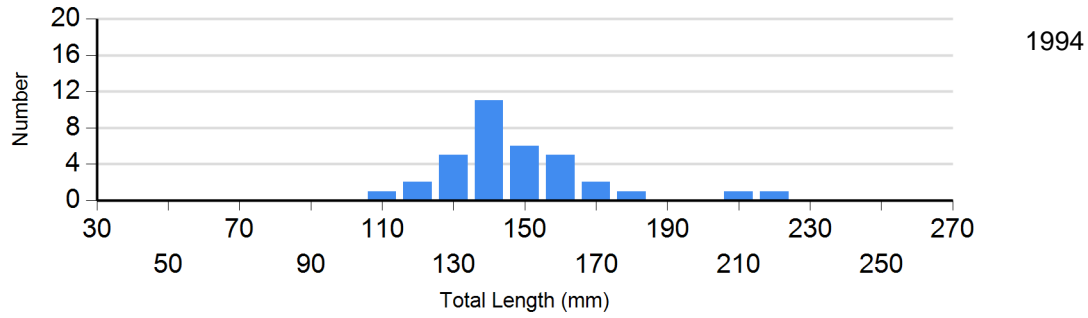
Site 119

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 13, 1994	34	33-37	
Brook Trout >=200mm	Jul 13, 1994	2	2-2	BK2
Brown Trout <200mm	Jul 13, 1994	5	5-6	
Brown Trout >=200mm	Jul 13, 1994	1	1-1	BR3
Longnose Dace	Jul 13, 1994	64	58-73	
Mountain Sucker	Jul 13, 1994	15	15-16	

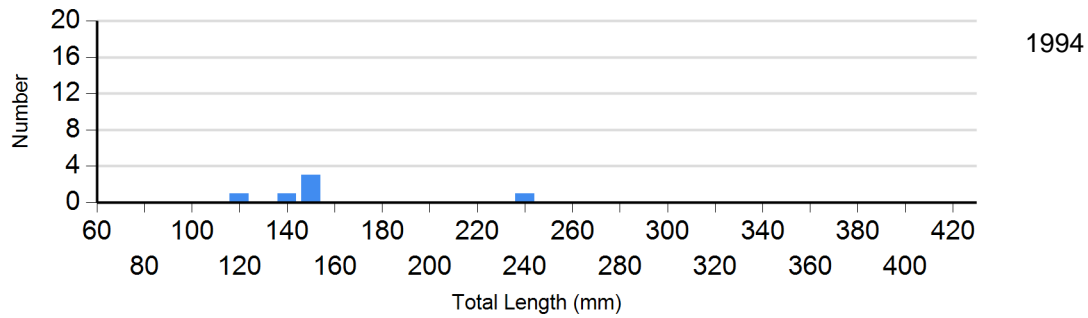
Length Frequency Distribution

Length frequency histogram of species sampled by year.

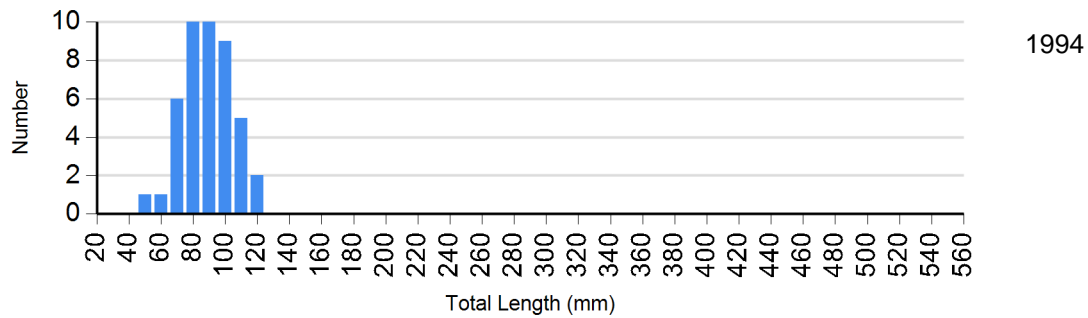
Site: 119
Species: Brook Trout



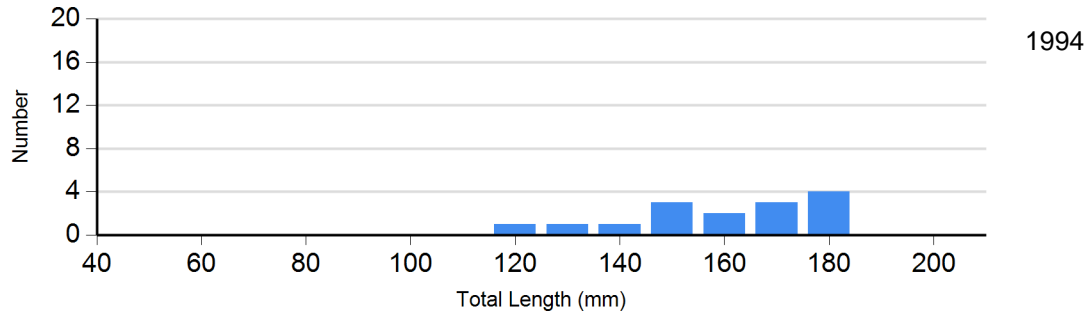
Site: 119
Species: Brown Trout



Site: 119
Species: Longnose Dace



Site: 119
Species: Mountain Sucker



Site: 119
Species: Unidentified YOY Trout

