

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Rapid Creek - North Fork, Pennington County
02-0075-00
2008

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

Site Number: 185	Date Sampled: 06/23/2008	Conductivity (umhos/cm): 472
Site Midpoint (Latitude, Longitude): 44.22998341, -103.79465365	Site Length (m): 100	pH: 8.5
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.6	Water Temperature (C): 14.0
Stream Classification: BK3	Number of Pass: 1	Voltage: 325

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	15	15	15	15	922	38	150	373	33.91	241	148.9	41.2
Brook Trout	>=200mm	1	1	1	1	61	6	10	25	5.71	16	211.0	104.0
Brook Trout	All	16	16	16	16	983	44	160	398	39.62	257	152.8	45.1
Longnose Dace	All	1	1	1	1	61	1	10	25	0.88	16	113.0	16.0

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 Rapid Creek - North Fork, 1998-2008

Site 185

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	15	15-15	
Brook Trout >=200mm	Jun 23, 2008	1	1-1	BK3
Longnose Dace	Jun 23, 2008	1	1-1	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 185

Species: Brook Trout

