

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Rapid Creek - Rhodes Fork, Pennington County
02-9212-00
2018

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

Site Number: 7	Date Sampled: 06/06/2018	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.14214752, -103.84916391	Site Length (m): 100	pH:
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 6.4	Water Temperature (C): 17.0
Stream Classification: BR2	Number of Pass: 3	Voltage:

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)
Brown Trout	<200mm	10	10	11	10	156	4	100	63	3.31	161	116.2	23.9
Brown Trout	>=200mm	11	11	12	11	171	21	110	69	18.57	177	233.4	121.5
Brown Trout	All	21	21	22	21	327	27	210	132	24.38	338	177.6	83.6

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 - Rhodes Fork, 2008-2018

Site 7

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jun 16, 2008	57	57-57	
	Jun 12, 2014	140	136-146	
	Jun 06, 2018	10	10-11	
Brown Trout >=200mm	Jun 16, 2008	7	7-7	BR2
	Jun 12, 2014	13	13-14	BR1
	Jun 06, 2018	11	11-12	BR2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 7

Species: Brown Trout

