

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Rubicon Gulch, Lawrence County
09-0103-00
2011

Table 1. Population and Biomass Estimates for Rubicon Gulch

Site Number: 22

Site Midpoint (Latitude, Longitude): 44.40850571, -103.86075411

Survey Completed by:

Stream Classification: BK2

Date Sampled: 09/01/2011

Site Length (m): 100

Mean Width (m): 1.7

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

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)
Brook Trout	<200mm	143	144	147	143	8348	190	1440	3381	169.61	2317	123.0	22.8
Brook Trout	>=200mm	2	2	3	2	116	14	20	47	12.27	32	228.0	118.5
Brook Trout	All	145	146	149	145	8464	204	1460	3428	181.94	2349	124.5	24.1

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 Rubicon Gulch, 2001-2011

Site 22

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 04, 2002	91	91-91	
	Sep 22, 2004	26	26-27	
	Aug 28, 2005	28	28-30	
	Sep 12, 2008	143	139-149	
	Sep 01, 2011	144	143-147	
Brook Trout >=200mm	Oct 04, 2002	1	1-1	BK2
	Aug 28, 2005	4	4-4	BK2

Brook Trout >=200mm

Sep 12, 2008

1

1-1

BK3

Sep 01, 2011

2

2-3

BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 22

Species: Brook Trout

