

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Rubicon Gulch, Lawrence County
09-0103-00
2005

Table 1. Population and Biomass Estimates for Rubicon Gulch

Site Number: 22
Site Midpoint (Latitude, Longitude): 44.40850571, -103.86075411
Survey Completed by: KNK Aquatic Ecology
Stream Classification: BK2

Date Sampled: 08/28/2005
Site Length (m): 100
Mean Width (m): 1.5
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C): 12.2
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	28	28	30	28	1913	60	280	775	53.99	451	133.8	31.6
Brook Trout	>=200mm	4	4	4	4	273	29	40	111	25.56	64	206.0	104.8
Brook Trout	All	32	32	34	32	2186	89	320	885	79.55	515	142.8	40.8
Longnose Dace	All	1	1	2	1	68	0	10	28	0.43	16	92.0	7.0

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 Rubicon Gulch, 1995-2005

Site 22

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 20, 1996	48	48-50	
	Sep 03, 1997	99	94-106	
	Sep 17, 1998	103	103-105	
	Sep 16, 2000	88	88-90	
	Oct 04, 2002	91	91-91	
	Sep 22, 2004	26	26-27	
	Aug 28, 2005	28	28-30	

Brook Trout >=200mm	Sep 20, 1996	3	3-3	BK3
	Sep 03, 1997	3	3-3	BK2
	Sep 17, 1998	1	1-1	BK2
	Sep 16, 2000	2	2-4	BK2
	Oct 04, 2002	1	1-1	BK2
	Aug 28, 2005	4	4-4	BK2
Longnose Dace	Aug 28, 2005	1	1-2	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 22

Species: Brook Trout



