

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Elk Creek, Meade County
09-0015-00
2009

Table 1. Population and Biomass Estimates for Elk Creek

Site Number: 474	Date Sampled: 07/13/2009	Conductivity (umhos/cm): 330
Site Midpoint (Latitude, Longitude): 44.24203322, -102.63549179	Site Length (m): 100	pH: 9.0
Survey Completed by:	Mean Width (m): 4.7	Water Temperature (C): 23.5
Stream Classification: BK0	Number of Pass: 1	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	1	1	1	1	21	1	10	9	0.87	16	159.0	46.0
Brook Trout	All	1	1	1	1	21	1	10	9	0.87	16	159.0	46.0

Site Number: 2309	Date Sampled: 07/13/2009	Conductivity (umhos/cm): 319
Site Midpoint (Latitude, Longitude): 44.29773491, -103.58253202	Site Length (m): 100	pH: 8.8
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 0.0	Water Temperature (C): 19.8
Stream Classification: None	Number of Pass: 1	Voltage: 250

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)
Mountain Sucker	All	218	218	218	218	0	0	2180	0	0.00	3508	112.9	17.4

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 Elk Creek, 1999-2009

Site 474

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 13, 2009	1	1-1	

Site 2309

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Mountain Sucker	Jul 13, 2009	218	218-218	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2309

Species: Mountain Sucker

