

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Cleopatra Creek, Lawrence County
09-0055-00
2001

Table 1. Population and Biomass Estimates for Cleopatra Creek

Site Number: 55	Date Sampled: 09/21/2001	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.37280607, -103.85650460	Site Length (m): 100	pH:
Survey Completed by: KNK Aquatic Ecology	Mean Width (m): 2.5	Water Temperature (C):
Stream Classification: BK0	Number of Pass: 3	Voltage: 500

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	397	404	411	397	16032	311	4040	6493	278.03	6500	117.0	19.4
Brook Trout	All	397	404	411	397	16032	311	4040	6493	278.03	6500	117.0	19.4

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 Cleopatra Creek, 1991-2001

Site 55

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 29, 1992	97	96-100	
	Jul 11, 1992	86	81-93	
	Sep 21, 2001	404	397-411	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 55

Species: Brook Trout

