

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
East Spearfish Creek (Hanna), Lawrence County
09-0016-00
1994

Table 1. Population and Biomass Estimates for East Spearfish Creek (Hanna)

Site Number: 77	Date Sampled: 08/02/1994	Conductivity (umhos/cm): 248
Site Midpoint (Latitude, Longitude): 44.24880580, -103.84493296	Site Length (m): 103	pH: 8.4
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.7	Water Temperature (C): 8.0
Stream Classification: BK3	Number of Pass: 3	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)
Brook Trout	<200mm	23	24	28	23	1429	43	233	579	37.96	375	128.1	29.8
Brook Trout	>=200mm	1	1	1	1	60	5	10	24	4.57	16	202.0	86.0
Brook Trout	All	24	25	29	24	1488	48	243	603	42.94	391	131.2	32.3

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 East Spearfish Creek (Hanna), 1984-1994

Site 77

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 02, 1994	24	23-28	
Brook Trout >=200mm	Aug 02, 1994	1	1-1	BK3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 77

Species: Brook Trout

