SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Ice Box Gulch, Lawrence County 09-0048-00 2004

Table 1. Population and Biomass Estimates for Ice Box Gulch

Site Midpoint (Latitude, Longitude): 44.29717382, -103.85881505

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK2

Site Number: 9

Date Sampled: 10/01/2004

Conductivity (umhos/cm):

300

6.0

Site Length (m): 100 Mean Width (m): 1.4

Number of Pass: 3

pH: 8.7 Water Temperature (C):

Voltage: 300

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	42	48	59	42	3385	39	480	1371	34.54	772	93.8	11.4
Brook Trout	>=200mm	3	3	4	3	212	20	30	86	17.82	48	208.0	94.3
Brook Trout	All	45	52	64	45	3667	62	520	1485	55.51	837	101.4	17.0

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 BrookTrout 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 Ice Box Gulch, 1994-2004

Site 9

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 01, 2004	48	42-59	
Brook Trout >=200mm	Oct 01, 2004	3	3-4	BK2

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 9 Species: Brook Trout

