SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Potato Creek, Lawrence County

09-0038-00

2008

Table 1. Population and Biomass Estimates for Potato Creek

Site Number: 53 Site Midpoint (Latitude, Longitude): 44.38078011, -104.01462888 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: BK2, BR0						Date Sampled: Site Length (m): Mean Width (m): Number of Pass:		1.9	(um pH: Wat	Conductivity (umhos/cm): pH: Water Temperature (C): Voltage:		131 8.2 16.2 325	
Species	Size Class	Total Number Captured	Est. # in site	Upper 95% Cl	Lower 95% Cl	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	31	31	31	31	1608	37	310	651	33.36	499	120.0	23.2
Brook Trout	>=200mm	5	5	5	5	259	32	50	105	28.40	80	220.8	122.6
Brook Trout	All	36	36	36	36	1868	69	360	757	61.76	579	134.0	37.0
Brown Trout	<200mm	23	23	23	23	1193	20	230	483	17.58	370	99.8	16.5
Brown Trout	All	26	26	26	26	1349	22	260	546	19.87	418	99.8	16.5

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 Potato Creek, 1998-2008

Site 53

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 01, 2008	31	31-31	
Brook Trout >=200mm	Jul 01, 2008	5	5-5	BK2
Brown Trout <200mm	Jul 01, 2008	23	23-23	

Length Frequency Distribution

Length frequency histogram of species sampled by year.







