## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## Pine Creek, Pennington County 02-0083-00

1994

Table 1. Population and Biomass Estimates for Pine Creek

Site Number: 12 Site Midpoint (Latitude, Longitude): 43.90260422, -103.46548672 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: BK2						Date Sampled: 0 Site Length (m): 1 Mean Width (m): 2 Number of Pass: 3		2.6	(um pH: Wat	Conductivity (umhos/cm): pH: Water Temperature (C): Voltage:		71 8.5 10.0 600	
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	45	45	46	45	1744	46	450	706	40.98	724	136.6	26.3
Brook Trout	>=200mm	2	2	2	2	78	8	20	31	6.82	32	214.5	98.5
Brook Trout	All	47	47	48	47	1822	54	470	738	47.79	756	139.9	29.4
Fathead Minnow	All	12	12	14	12	465	1	120	188	0.69	193	53.8	1.7

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 Pine Creek, 1984-1994

## Site 12

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 09, 1994	45	45-46	
Brook Trout >=200mm	Jun 09, 1994	2	2-2	BK2
Fathead Minnow	Jun 09, 1994	12	12-14	

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.











