## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## Jim Creek, Lawrence County

09-0067-00

2008

Table 1. Population and Biomass Estimates for Jim Creek

Site Number: 44 Site Midpoint (Latitude, Longitude): 44.14568942, -103.50326089 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: BK0					Date Sampled:06/23/2Site Length (m):100Mean Width (m):3.9Number of Pass:1		3.9	<ul> <li>Conductivity (umhos/cm):</li> <li>pH:</li> <li>Water Temperature (C):</li> <li>Voltage:</li> </ul>		308 8.2 16.0 300			
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	26	26	26	26	665	26	260	269	23.04	418	131.8	38.8
Brook Trout	All	26	26	26	26	665	26	260	269	23.04	418	131.8	38.8
Site Number:	105								~~ /~~ /~~~	-			
Site Midpoint Survey Compl Stream Classi	(Latitude, L leted by: So	outh Dakota					Date Sar Site Len Mean Wi Number	gth (m): idth (m):	2.8	(um pH: Wat	nductivity nhos/cm): ter Tempen tage:	rature (C):	280 7.9 16.0 300
Site Midpoint Survey Compl	(Latitude, L leted by: So	outh Dakota				# per Hectacre	Site Len Mean Wi	gth (m): idth (m):	100 2.8	(um pH: Wat	hos/cm): ter Temper	rature (C): Mean Length (mm)	7.9 16.0
Site Midpoint Survey Compl Stream Classi	(Latitude, L leted by: So ification: Bh Size	outh Dakota <3 Total Number	Game, Fisl Est. # in	h and Parks <b>Upper</b>	Lower		Site Len Mean Wi Number Kg per	gth (m): idth (m): of Pass: # per	100 2.8 1 <b># per</b>	(um pH: Wat Volt	ihos/cm): ter Tempei tage: # per	Mean Length	7.9 16.0 300 Mean Weight
Site Midpoint Survey Compl Stream Classi Species	(Latitude, L leted by: So ification: Br Size Class <200mm	Total Number Captured	Game, Fisl Est. # in site	h and Parks Upper 95% Cl	Lower 95% Cl	Hectacre	Site Len Mean Wi Number Kg per Hectacre	gth (m): idth (m): of Pass: # per Km	100 2.8 1 <b># per</b> Acre	(um pH: Wat Volt Ib. per Acre	ihos/cm): ter Tempei tage: # per Mile	Mean Length (mm)	7.9 16.0 300 Mean Weight (grams)

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 Jim Creek, 1998-2008

## Site 44

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	26	26-26	
Site 105				
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 23, 2008	9	9-9	

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.



Species: Brook Trout





