SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Strawberry Creek, Lawrence County 09-0034-00 2001

Table 1. Population and Biomass Estimates for Strawberry Creek

Site Number: 1
Site Midpoint (Latitude, Longitude): 44.32376938, -103.65155893

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK3

Date Sampled: 10/23/2001

Site Length (m): 100

Mean Width (m): 2.1

Number of Pass: 4

Conductivity 5130 (umhos/cm):

pH: 8.6

Water Temperature (C): 5.6

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	59	119	234	59	5667	23	1190	2295	20.50	1915	72.3	4.1
Brook Trout	>=200mm	1	1	1	1	48	5	10	19	4.89	16	241.0	115.0
Brook Trout	All	157	164	172	157	7810	46	1640	3163	41.14	2639	75.1	5.9
Longnose Dace	All	6	8	19	6	381	3	80	154	2.52	129	83.7	7.4
Mountain Sucker	All	2	2	4	2	95	1	20	39	0.81	32	97.0	9.5

Site Number: 6

Site Midpoint (Latitude, Longitude): 44.32378728, -103.65699254

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK2

Date Sampled: 10/23/2001

Site Length (m): 100

Mean Width (m): 1.5

Number of Pass: 4

Conductivity 6690 (umhos/cm):

pH: 8.4

Water Temperature (C): 5.6

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	4	4	4	4	268	3	40	109	2.58	64	98.8	10.8
Brook Trout	>=200mm	1	1	1	1	67	6	10	27	5.45	16	224.0	91.0
Brook Trout	All	5	5	5	5	335	9	50	136	8.02	80	123.8	26.8

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 Strawberry Creek, 1991-2001

Site 1

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 14, 2000	99	97-103	
	Oct 23, 2001	119	59-234	
Brook Trout >=200mm	Sep 14, 2000	1	1-2	ВК3
	Oct 23, 2001	1	1-1	ВК3
Longnose Dace	Sep 14, 2000	42	40-47	
	Oct 23, 2001	8	6-19	
Mountain Sucker	Sep 14, 2000	7	7-8	

Mountain Sucker Oct 23, 2001 2 2-4

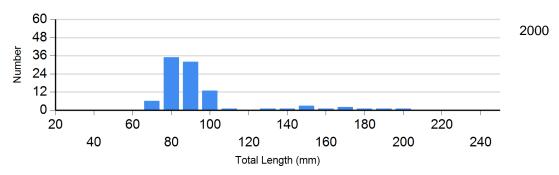
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 20, 2000	8	8-10	
	Oct 23, 2001	4	4-4	
Brook Trout >=200mm	Sep 20, 2000	1	1-1	ВК3
	Oct 23, 2001	1	1-1	BK2

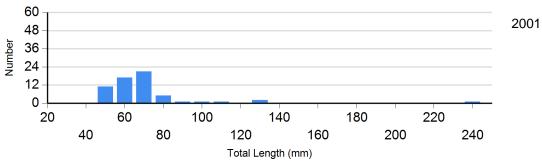
Length Frequency Distribution

Length frequency histogram of species sampled by year.

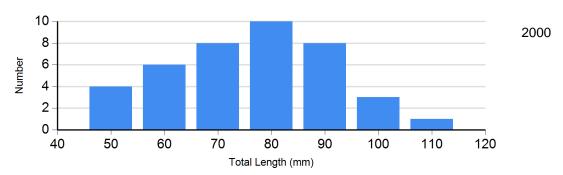
Site: 1

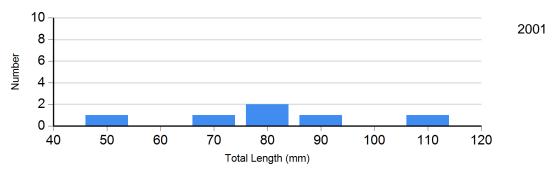
Species: Brook Trout



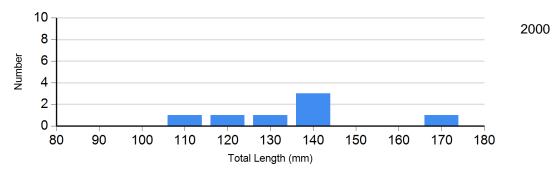


Site: 1 Species: Longnose Dace





Site: 1 Species: Mountain Sucker



Site: 6 Species: Brook Trout

