

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Annie Creek, Lawrence County
09-0074-00
2002

Table 1. Population and Biomass Estimates for Annie Creek

Site Number: 2	Date Sampled: 08/27/2002	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.32728433, -103.89361583	Site Length (m): 103	pH:
Survey Completed by: Chadwick Ecological Services	Mean Width (m): 2.3	Water Temperature (C): 14.0
Stream Classification: BK3, BR2	Number of Pass: 3	Voltage: 125

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	55	55	57	55	2401	43	534	972	38.14	859	112.2	17.8
Brook Trout	>=200mm	1	1	1	1	44	5	10	18	4.87	16	220.0	125.0
Brook Trout	All	56	56	58	56	2444	48	544	990	43.01	875	114.1	19.7
Brown Trout	<200mm	33	33	34	33	1440	61	320	583	54.11	516	158.0	42.1
Brown Trout	>=200mm	4	4	4	4	175	17	39	71	14.89	62	214.3	95.5
Brown Trout	All	37	37	38	37	1615	77	359	654	69.00	578	164.1	47.8

Site Number: 16	Date Sampled: 08/27/2002	Conductivity (umhos/cm):
Site Midpoint (Latitude, Longitude): 44.33009788, -103.87749203	Site Length (m): 104	pH:
Survey Completed by: Chadwick Ecological Services	Mean Width (m): 1.8	Water Temperature (C): 14.9
Stream Classification: None	Number of Pass: 3	Voltage: 150

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)
Mountain Sucker	All	19	19	19	19	1050	13	183	425	11.34	294	92.3	12.1

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 Brook Trout 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 Annie Creek, 1992-2002

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 27, 1992	11	11-11	
	Aug 29, 1995	48	48-50	
	Aug 30, 2001	52	52-54	
	Aug 27, 2002	55	55-57	
Brook Trout >=200mm	Oct 27, 1992	3	3-3	BK3
	Aug 29, 1995	5	5-5	BK2
	Aug 30, 2001	2	2-2	BK2

Brook Trout >=200mm	Aug 27, 2002	1	1-1	BK3
Brown Trout <200mm	Jun 24, 1992	19	19-20	
	Aug 30, 2001	94	93-97	
	Aug 27, 2002	33	33-34	
Brown Trout >=200mm	Aug 30, 2001	1	1-1	BR3
	Aug 27, 2002	4	4-4	BR2
Mountain Sucker	Aug 29, 1995	33	25-51	

Site 16

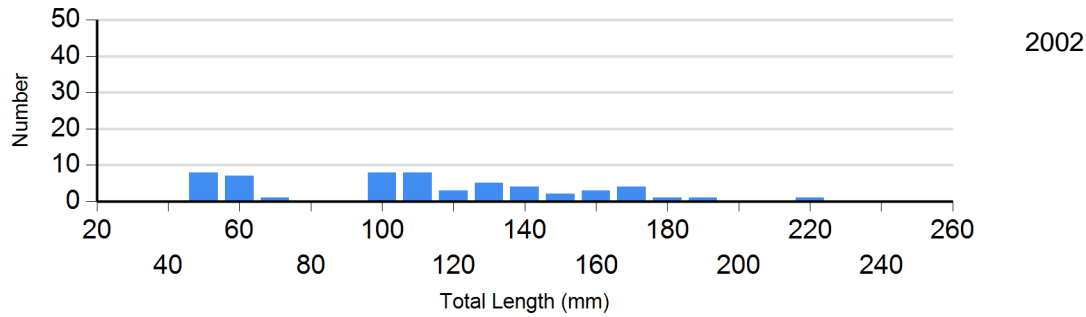
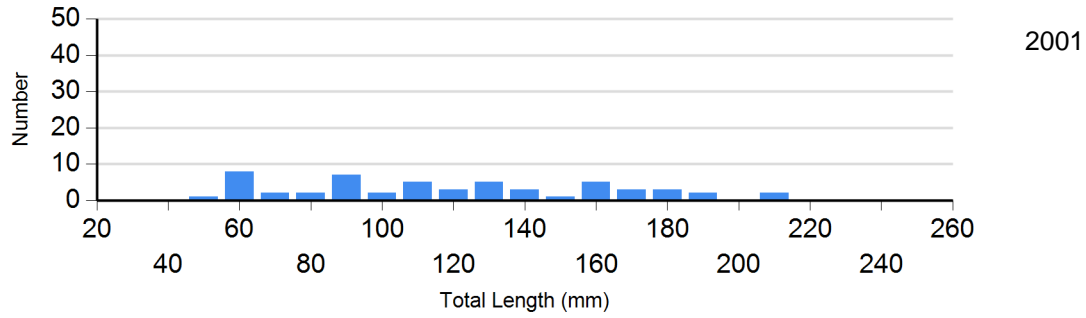
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Mountain Sucker	Jun 24, 1992	2	2-2	
	Oct 28, 1992	2	2-4	
	Oct 28, 1992	2	2-2	
	Aug 28, 1995	3	3-4	
	Aug 27, 2002	19	19-19	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

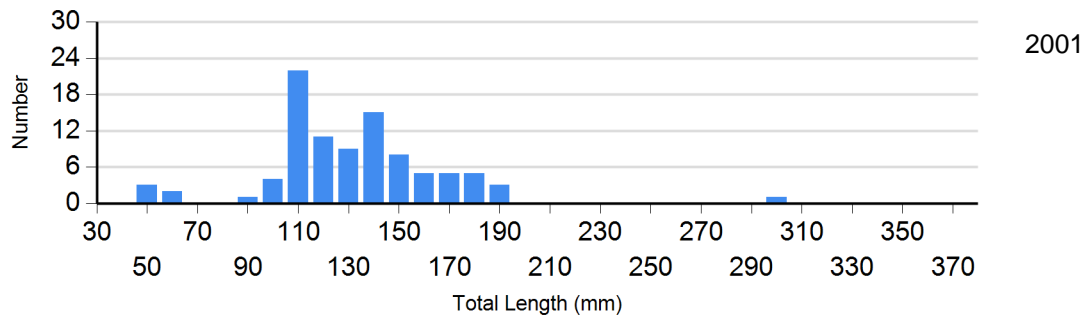
Site: 2

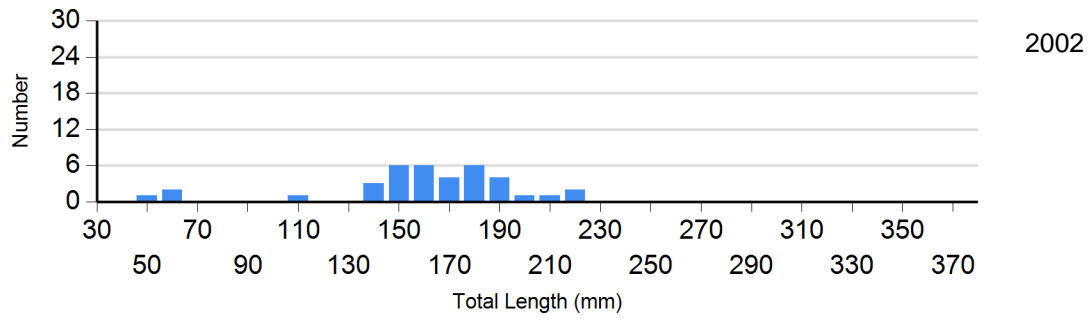
Species: Brook Trout



Site: 2

Species: Brown Trout





Site: 16
Species: Mountain Sucker

