

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Annie Creek, Lawrence County
09-0074-00
2001

Table 1. Population and Biomass Estimates for Annie Creek

Site Number: 2
Site Midpoint (Latitude, Longitude): 44.32728433, -103.89361583
Survey Completed by: Chadwick Ecological Services
Stream Classification: BK2, BR3

Date Sampled: 08/30/2001
Site Length (m): 101
Mean Width (m): 2.7
Number of Pass: 3

Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage:

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	52	52	54	52	1907	40	515	772	35.70	828	120.0	21.0
Brook Trout	>=200mm	2	2	2	2	73	7	20	30	6.42	32	216.5	98.0
Brook Trout	All	54	54	56	54	1981	47	535	802	42.12	860	123.6	23.8
Brown Trout	<200mm	93	94	97	93	3448	88	931	1396	78.68	1497	133.7	25.6
Brown Trout	>=200mm	1	1	1	1	37	8	10	15	7.34	16	308.0	224.0
Brown Trout	All	94	95	98	94	3484	96	941	1411	86.09	1513	135.5	27.7

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 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, 1991-2001

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	
Brook Trout >=200mm	Oct 27, 1992	3	3-3	BK3
	Aug 29, 1995	5	5-5	BK2
	Aug 30, 2001	2	2-2	BK2
Brown Trout <200mm	Jun 24, 1992	19	19-20	

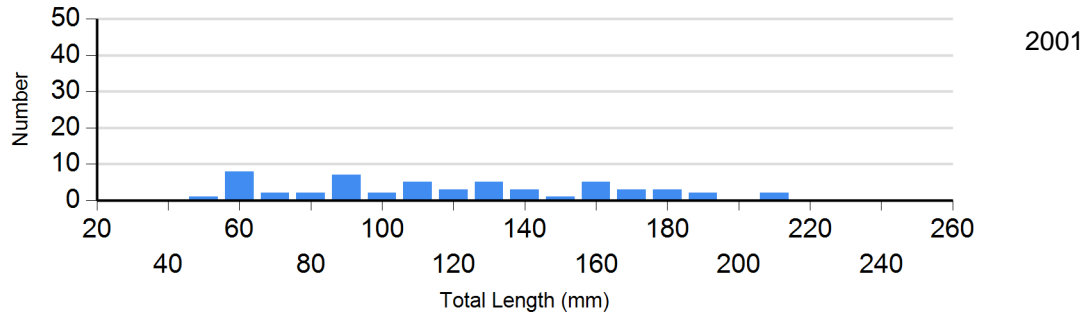
Brown Trout <200mm	Aug 30, 2001	94	93-97	
Brown Trout >=200mm	Aug 30, 2001	1	1-1	BR3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2

Species: Brook Trout



Site: 2

Species: Brown Trout

