

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Deadwood Creek, Lawrence County
09-0060-00
2006

Table 1. Population and Biomass Estimates for Deadwood Creek

Site Number: 8
Site Midpoint (Latitude, Longitude): 44.37166357, -103.73844669
Survey Completed by: Chadwick Ecological Services
Stream Classification: BK3

Date Sampled: 08/29/2006
Site Length (m):
Mean Width (m): 0.0
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C):
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)
Brook Trout	<200mm	107	114	123	107	0	0	0	0	0.00	0	92.5	10.9
Brook Trout	>=200mm	1	1	1	1	0	0	0	0	0.00	0	257.0	190.0
Brook Trout	All	108	115	124	108	0	0	0	0	0.00	0	94.0	12.5

Site Number: 9
Site Midpoint (Latitude, Longitude): 44.37126918, -103.73941917
Survey Completed by: Chadwick Ecological Services
Stream Classification: BK3, BR0

Date Sampled: 08/29/2006
Site Length (m):
Mean Width (m): 0.0
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	120	124	130	120	0	0	0	0	0.00	0	95.8	11.6
Brook Trout	>=200mm	1	1	1	1	0	0	0	0	0.00	0	273.0	198.0
Brook Trout	All	121	125	131	121	0	0	0	0	0.00	0	97.3	13.1
Brown Trout	<200mm	59	60	63	59	0	0	0	0	0.00	0	89.5	8.5
Brown Trout	All	59	60	63	59	0	0	0	0	0.00	0	89.5	8.5

Site Number: 49
Site Midpoint (Latitude, Longitude): 44.36269958, -103.78234679
Survey Completed by:
Stream Classification: BK3

Date Sampled: 08/29/2006
Site Length (m): 126
Mean Width (m): 0.0
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	42	43	46	42	0	0	341	0	0.00	549	116.2	21.5
Brook Trout	>=200mm	5	5	5	5	0	0	40	0	0.00	64	213.8	102.8
Brook Trout	All	47	48	51	47	0	0	381	0	0.00	613	126.6	30.1

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 Deadwood Creek, 1996-2006

Site 8

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 25, 2004	60	59-63	
	Aug 30, 2005	159	151-168	
	Aug 29, 2006	114	107-123	
Brook Trout >=200mm	Aug 25, 2004	2	2-2	BK2
	Aug 30, 2005	5	5-5	BK3
	Aug 29, 2006	1	1-1	BK3

Site 9

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 25, 2004	43	43-44	
	Aug 30, 2005	265	250-280	
	Aug 29, 2006	124	120-130	
Brook Trout >=200mm	Aug 25, 2004	1	1-1	BK3
	Aug 30, 2005	2	2-2	BK3
	Aug 29, 2006	1	1-1	BK3
Brown Trout <200mm	Aug 25, 2004	1	1-1	
	Aug 30, 2005	55	55-57	
	Aug 29, 2006	60	59-63	

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Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 25, 1996	156	149-164	
	Sep 11, 1997	200	197-205	
	Sep 11, 1998	334	331-338	
	Oct 17, 2001	216	211-222	

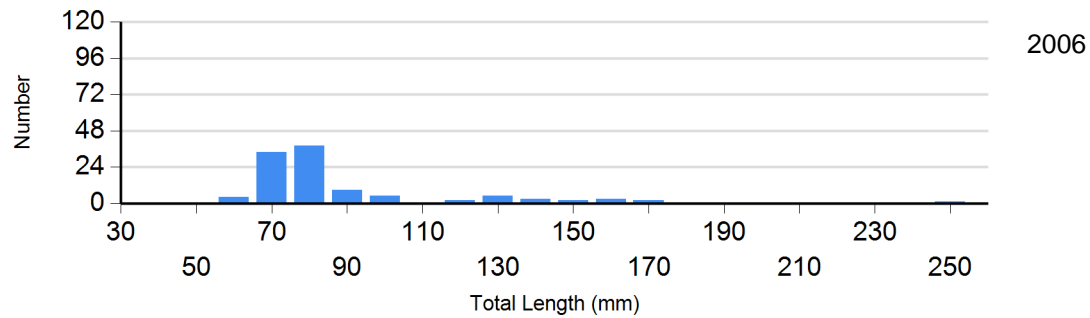
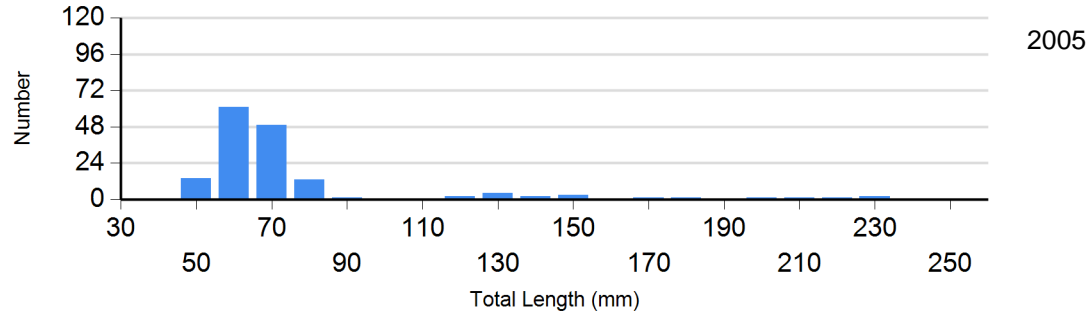
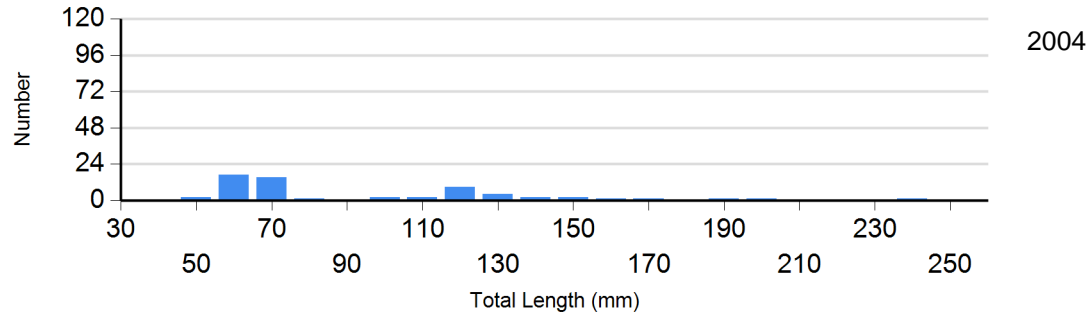
Brook Trout <200mm	Aug 25, 2004	89	86-94	
	Aug 29, 2005	68	66-72	
	Aug 29, 2006	43	42-46	
Brook Trout >=200mm	Sep 25, 1996	28	28-29	BK3
	Sep 11, 1997	16	16-16	BK1
	Sep 11, 1998	3	3-4	BK2
	Aug 25, 2004	4	4-4	BK2
	Aug 29, 2005	3	3-3	BK3
	Aug 29, 2006	5	5-5	BK3

Length Frequency Distribution

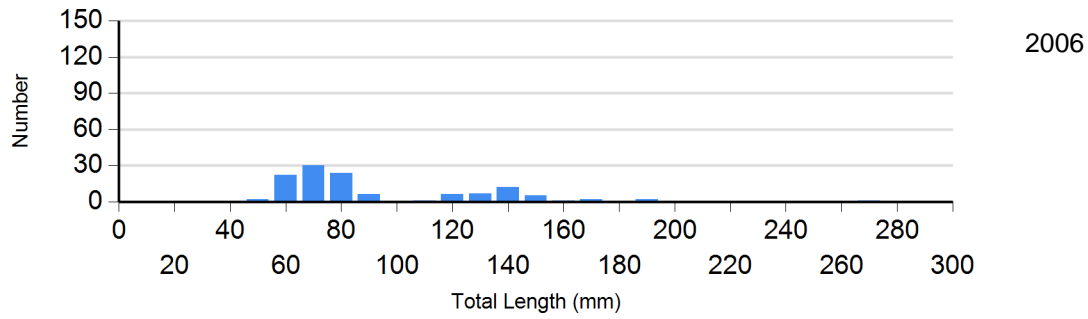
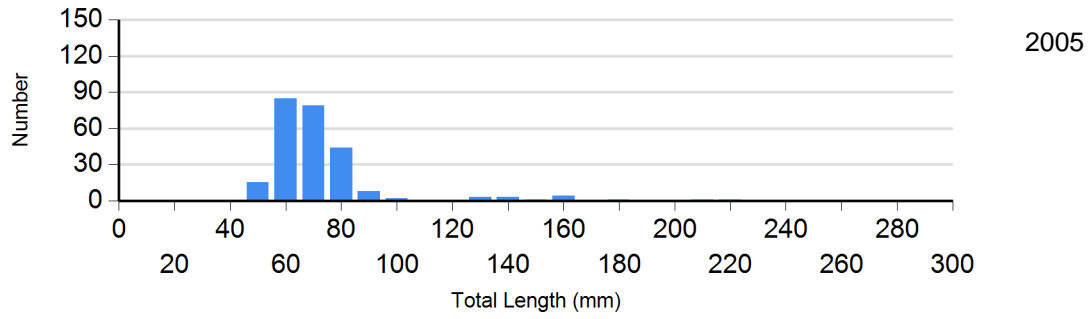
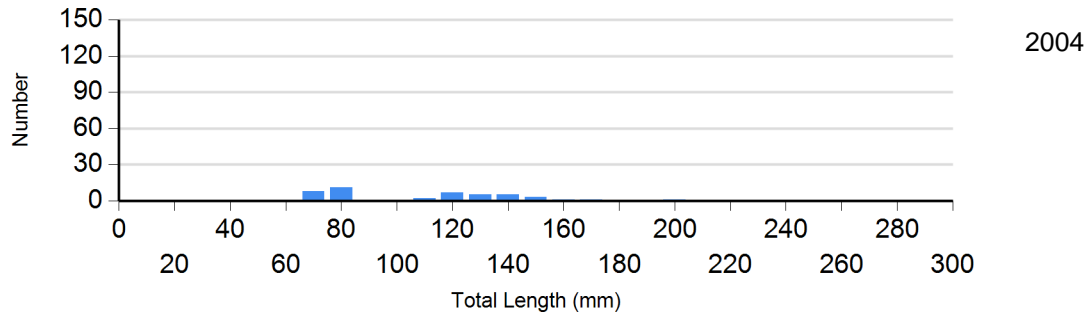
Length frequency histogram of species sampled by year.

Site: 8

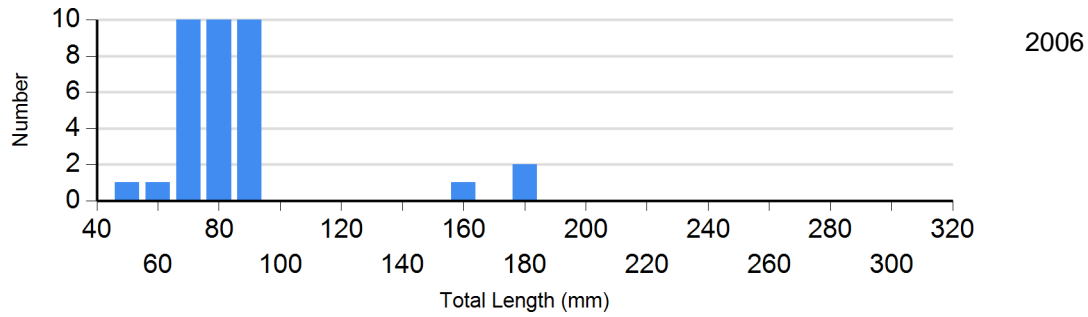
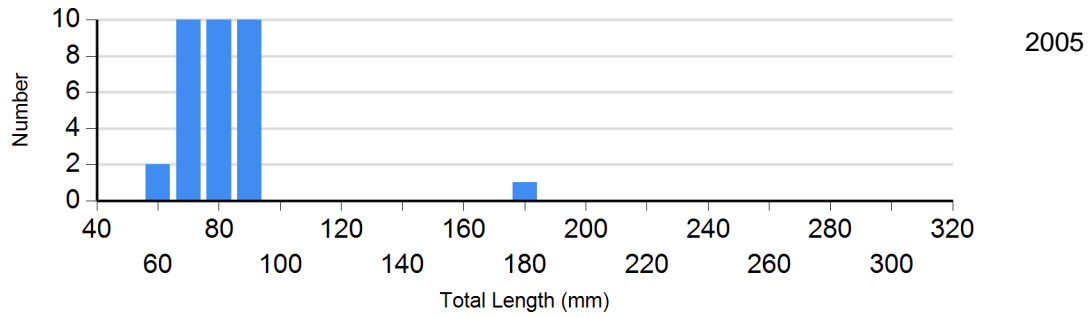
Species: Brook Trout



Site: 9
Species: Brook Trout



Site: 9
Species: Brown Trout



Site: 49
Species: Brook Trout

