

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Strawberry Creek, Lawrence County
09-0034-00
2003

Table 1. Population and Biomass Estimates for Strawberry Creek

Site Number: 1	Date Sampled: 09/17/2003	Conductivity (umhos/cm):	400
Site Midpoint (Latitude, Longitude): 44.32376938, -103.65155893	Site Length (m): 100	pH:	8.4
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.8	Water Temperature (C):	8.5
Stream Classification: BK0	Number of Pass: 4	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	118	118	118	118	6589	36	1180	2668	32.01	1899	81.3	5.4
Brook Trout	All	118	118	118	118	6589	36	1180	2668	32.01	1899	81.3	5.4
Longnose Dace	All	18	18	18	18	1005	5	180	407	4.09	290	78.7	4.6

Site Number: 6	Date Sampled: 09/17/2003	Conductivity (umhos/cm):	650
Site Midpoint (Latitude, Longitude): 44.32378728, -103.65699254	Site Length (m): 100	pH:	8.2
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.5	Water Temperature (C):	8.5
Stream Classification: BK0	Number of Pass: 3	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	15	15	15	15	1025	17	150	415	15.13	241	114.8	16.5
Brook Trout	All	15	15	15	15	1025	17	150	415	15.13	241	114.8	16.5

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 Strawberry Creek, 1993-2003

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	
	Sep 10, 2002	112	112-114	
	Sep 17, 2003	118	118-118	
Brook Trout >=200mm	Sep 14, 2000	1	1-2	BK3
	Oct 23, 2001	1	1-1	BK3
Longnose Dace	Sep 14, 2000	42	40-47	

Longnose Dace	Oct 23, 2001	8	6-19
	Sep 10, 2002	8	8-9
	Sep 17, 2003	18	18-18

Site 6

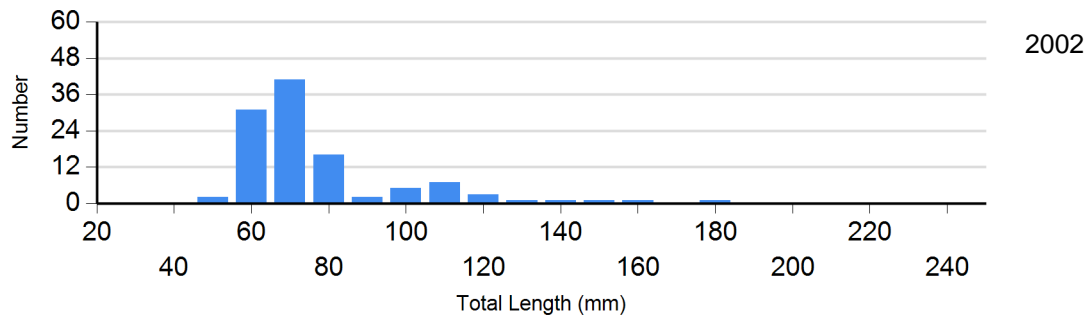
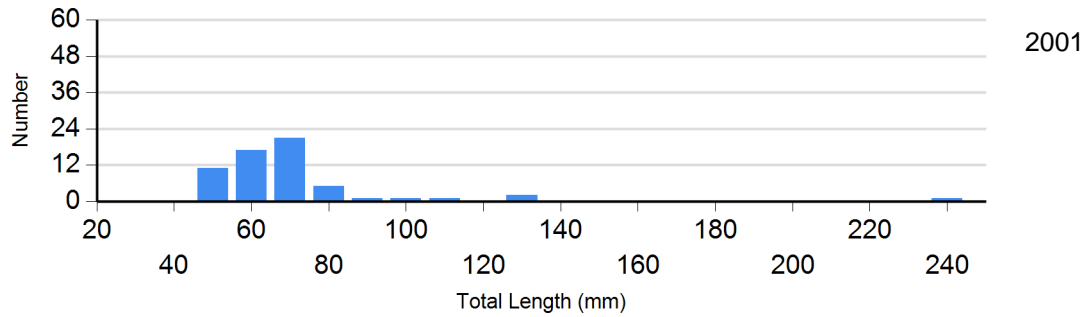
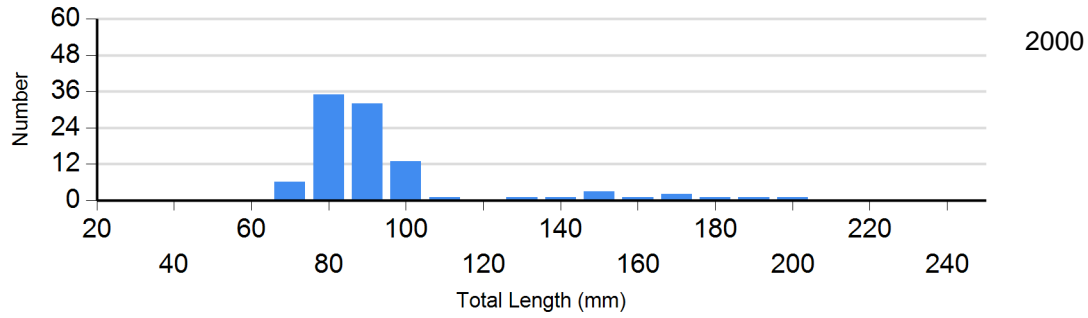
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 20, 2000	8	8-10	
	Oct 23, 2001	4	4-4	
	Sep 10, 2002	7	7-7	
	Sep 17, 2003	15	15-15	
Brook Trout >=200mm	Sep 20, 2000	1	1-1	BK3
	Oct 23, 2001	1	1-1	BK2

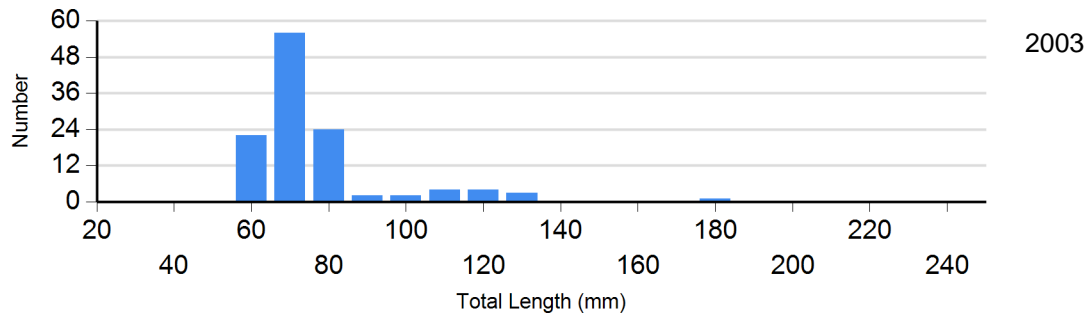
Length Frequency Distribution

Length frequency histogram of species sampled by year.

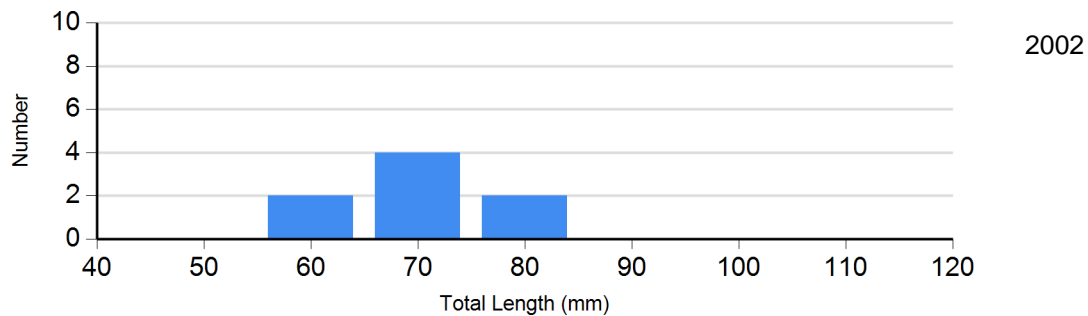
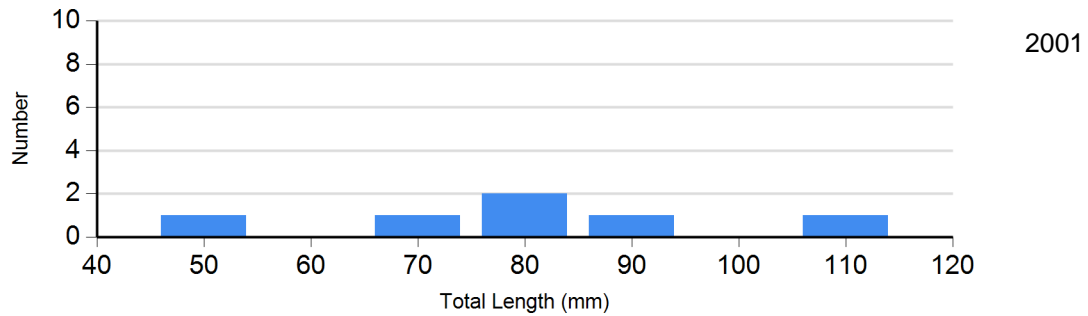
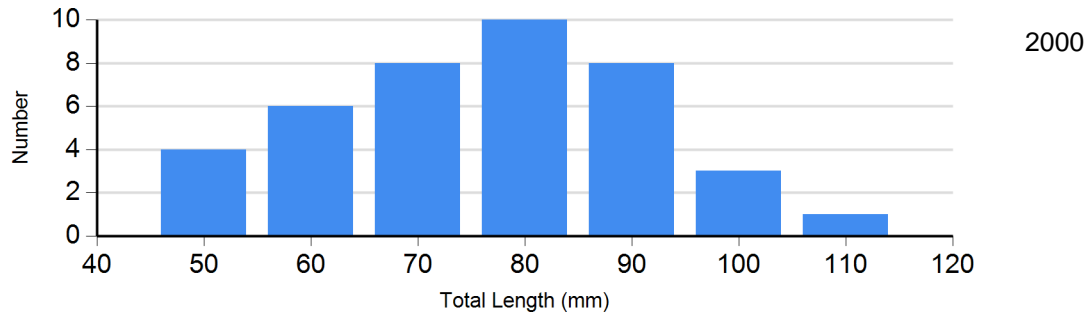
Site: 1

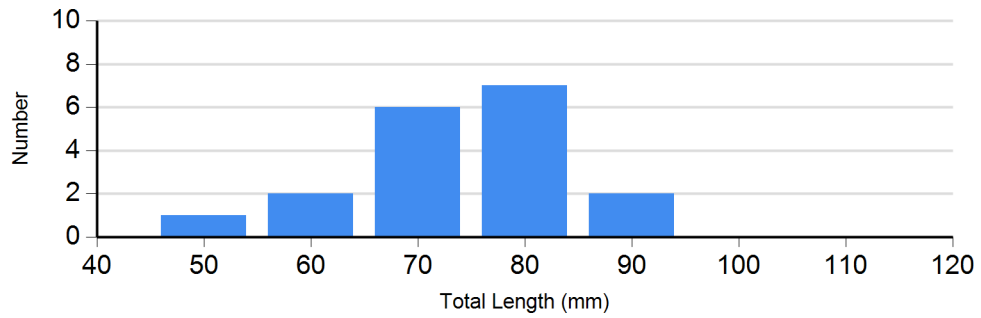
Species: Brook Trout



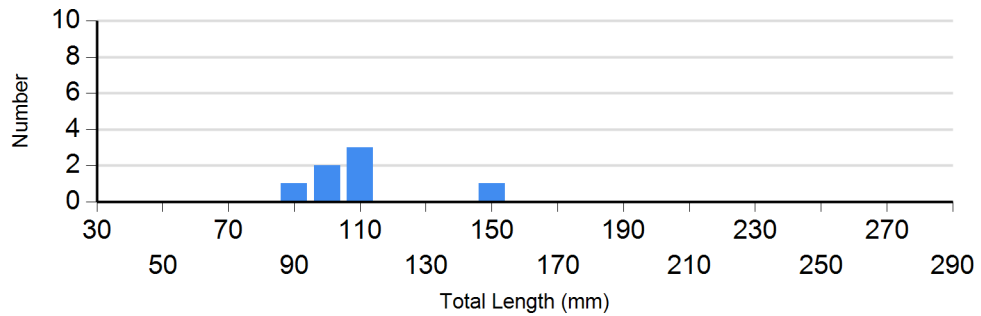
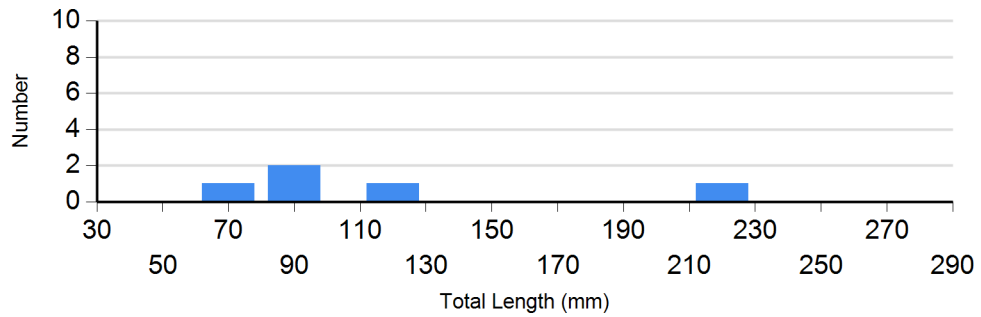
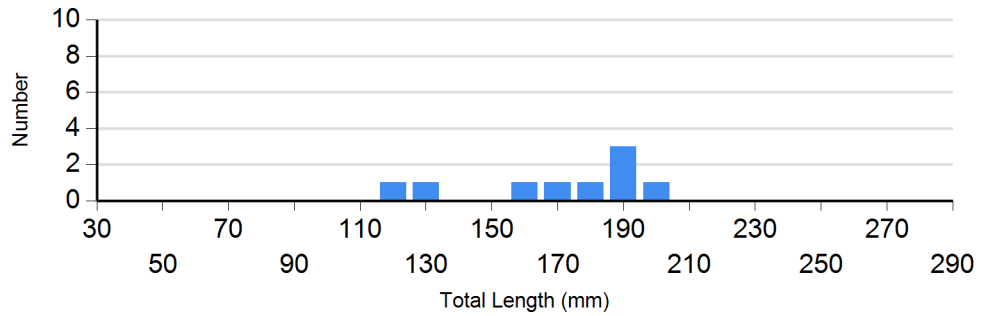


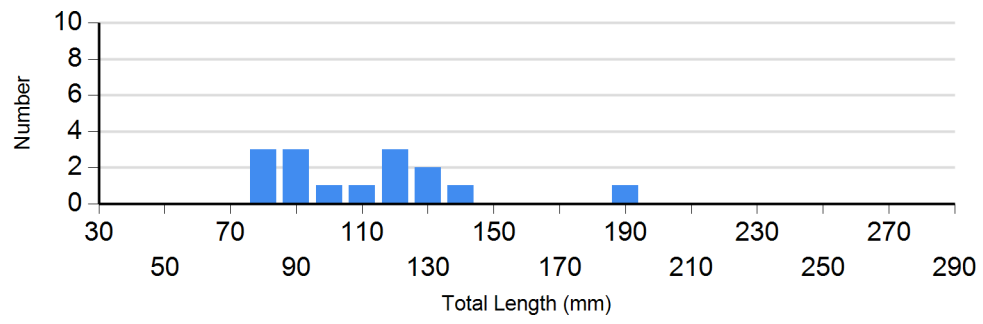
Site: 1
Species: Longnose Dace





Site: 6
Species: Brook Trout





2003