

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Iron Creek (South), Pennington County
02-0082-00
2009

Table 1. Population and Biomass Estimates for Iron Creek (South)

Site Number: 102	Date Sampled: 05/18/2009	Conductivity (umhos/cm): 78
Site Midpoint (Latitude, Longitude): 43.84271427, -103.40235933	Site Length (m): 100	pH: 7.8
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.6	Water Temperature (C): 15.2
Stream Classification: BK3	Number of Pass: 1	Voltage: 350

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	13	13	13	13	360	12	130	146	10.61	209	136.7	33.0
Brook Trout	>=200mm	2	2	2	2	55	8	20	22	6.83	32	229.5	138.0
Brook Trout	All	15	15	15	15	416	20	150	168	17.81	241	149.1	48.0

Site Number: 152	Date Sampled: 05/19/2009	Conductivity (umhos/cm): 74
Site Midpoint (Latitude, Longitude): 43.83688225, -103.43574684	Site Length (m): 100	pH: 7.9
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.5	Water Temperature (C): 16.7
Stream Classification: BK0	Number of Pass: 1	Voltage: 350

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	61	61	61	61	1725	50	610	699	44.31	981	130.7	28.8
Brook Trout	All	61	61	61	61	1725	50	610	699	44.31	981	130.7	28.8

Site Number: 195	Date Sampled: 05/19/2009	Conductivity (umhos/cm): 74
Site Midpoint (Latitude, Longitude): 43.82834180, -103.46252843	Site Length (m): 100	pH: 7.6
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.9	Water Temperature (C): 9.9
Stream Classification: BK0		

Number of Pass: 1

Voltage:

350

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	54	54	54	54	1862	39	540	754	34.83	869	110.2	21.0
Brook Trout	All	56	56	56	56	1931	40	560	782	36.12	901	110.2	21.0

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 Iron Creek (South), 1999-2009

Site 102

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 07, 2006	53	52-56	
	May 18, 2009	13	13-13	
Brook Trout >=200mm	Aug 07, 2006	3	3-3	BK2
	May 18, 2009	2	2-2	BK3
Longnose Dace	Aug 07, 2006	35	33-40	

Site 152

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 19, 2009	61	61-61	

Site 195

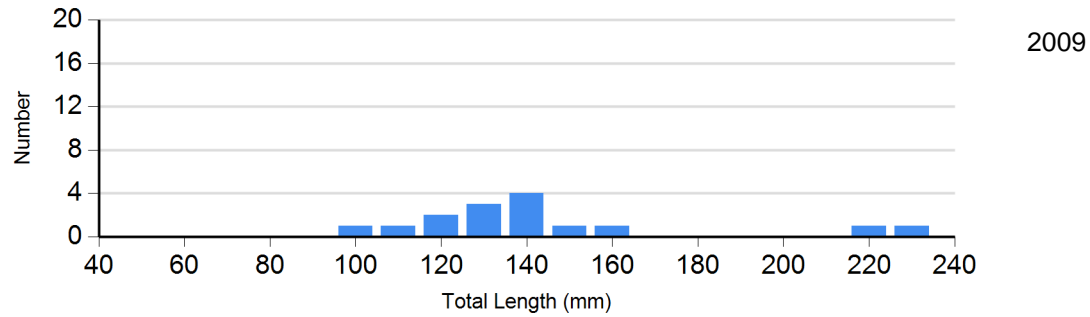
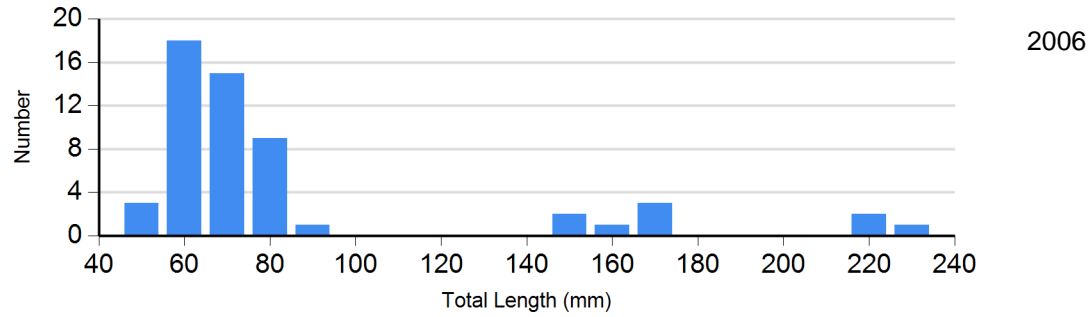
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 19, 2009	54	54-54	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

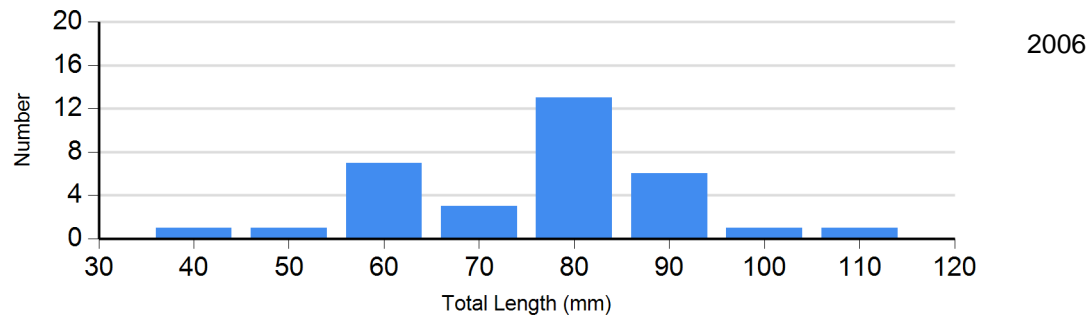
Site: 102

Species: Brook Trout

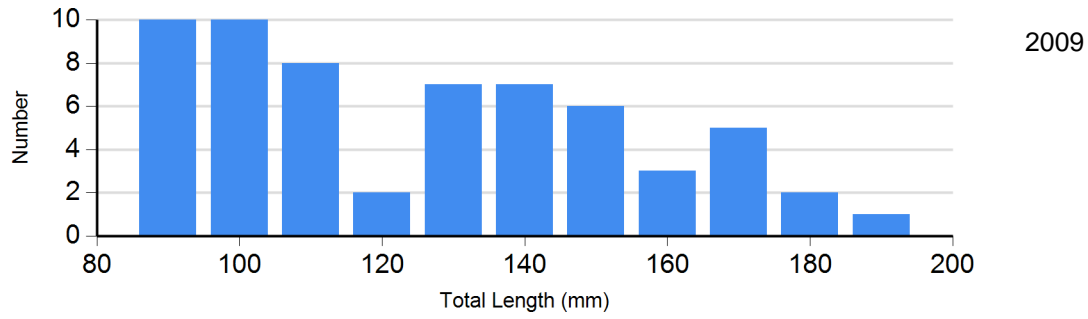


Site: 102

Species: Longnose Dace



Site: 152
Species: Brook Trout



Site: 195
Species: Brook Trout

