

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Iron Creek (North), Lawrence County
09-0049-00
2008

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

Site Number: 3	Date Sampled: 07/08/2008	Conductivity (umhos/cm): 388
Site Midpoint (Latitude, Longitude): 44.37387285, -103.92121334	Site Length (m): 100	pH: 8.6
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.8	Water Temperature (C): 12.3
Stream Classification: BR1, RB1	Number of Pass: 1	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)
Brown Trout	<200mm	23	23	23	23	821	35	230	333	30.94	370	143.4	42.2
Brown Trout	>=200mm	38	38	38	38	1357	195	380	550	174.14	611	236.7	143.7
Brown Trout	All	61	61	61	61	2179	232	610	882	207.13	981	201.5	106.5
Rainbow Trout	<200mm	1	1	1	1	36	3	10	14	2.42	16	197.0	76.0
Rainbow Trout	>=200mm	2	2	2	2	71	14	20	29	12.50	32	268.0	196.0
Rainbow Trout	All	3	3	3	3	107	17	30	43	14.92	48	244.3	156.0

Site Number: 76	Date Sampled: 07/09/2008	Conductivity (umhos/cm): 235
Site Midpoint (Latitude, Longitude): 44.36972596, -103.98788929	Site Length (m): 100	pH: 8.2
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.0	Water Temperature (C): 14.2
Stream Classification: BK2, BR2, RB0	Number of Pass: 1	Voltage: 340

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	7	7	7	7	706	16	70	286	14.19	113	78.6	22.5
Brook Trout	>=200mm	1	1	1	1	101	10	10	41	9.10	16	210.0	101.0
Brook Trout	All	8	8	8	8	807	39	80	327	35.08	129	95.0	48.7

Brown Trout	<200mm	7	7	7	7	706	16	70	286	14.30	113	120.9	22.7
Brown Trout	>=200mm	1	1	1	1	101	9	10	41	8.20	16	201.0	91.0
Brown Trout	All	8	8	8	8	807	26	80	327	23.38	129	130.9	32.4
Rainbow Trout	<200mm	27	27	27	27	2725	99	270	1104	88.30	434	139.6	36.3
Rainbow Trout	All	40	40	40	40	4037	147	400	1635	130.82	644	139.6	36.3

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 (North), 1998-2008

Site 3

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jul 21, 2004	14	14-16	
	Jul 08, 2008	23	23-23	
Brown Trout >=200mm	Jul 21, 2004	52	52-52	BR1
	Jul 08, 2008	38	38-38	BR1
Rainbow Trout <200mm	Jul 08, 2008	1	1-1	
Rainbow Trout >=200mm	Jul 21, 2004	1	1-1	RB2
	Jul 08, 2008	2	2-2	RB1

Site 76

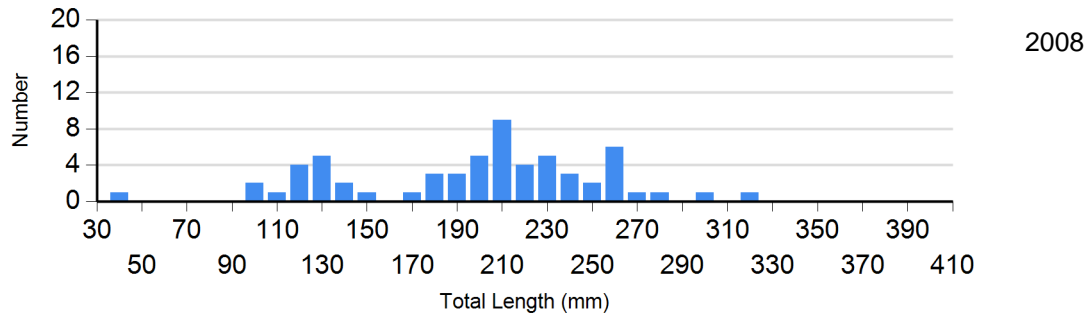
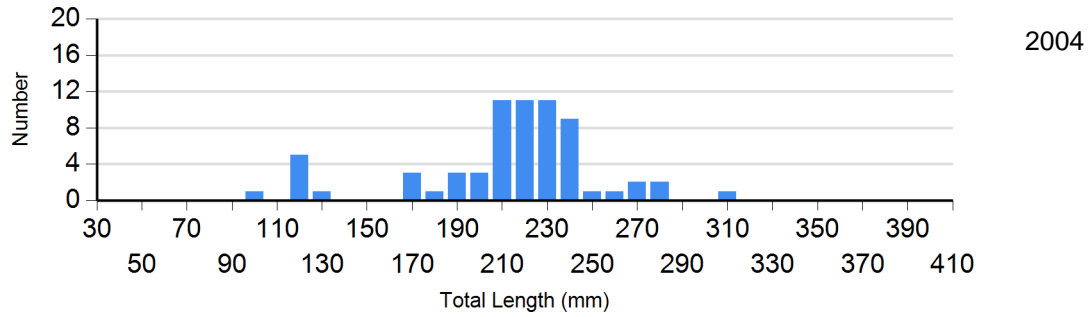
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 24, 1998	5	5-6	
	Jul 09, 2008	7	7-7	
Brook Trout >=200mm	Jun 24, 1998	1	1-1	BK2
	Jul 09, 2008	1	1-1	BK2
Brown Trout <200mm	Jul 09, 2008	7	7-7	
Brown Trout >=200mm	Jul 09, 2008	1	1-1	BR2
Rainbow Trout <200mm	Jul 09, 2008	27	27-27	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

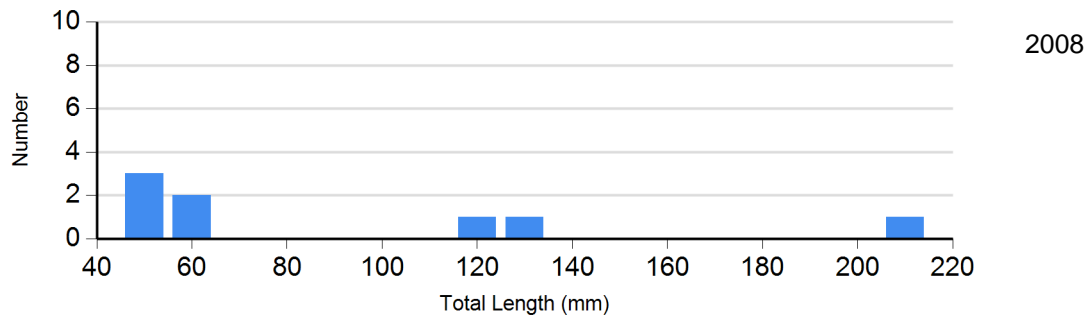
Site: 3

Species: Brown Trout

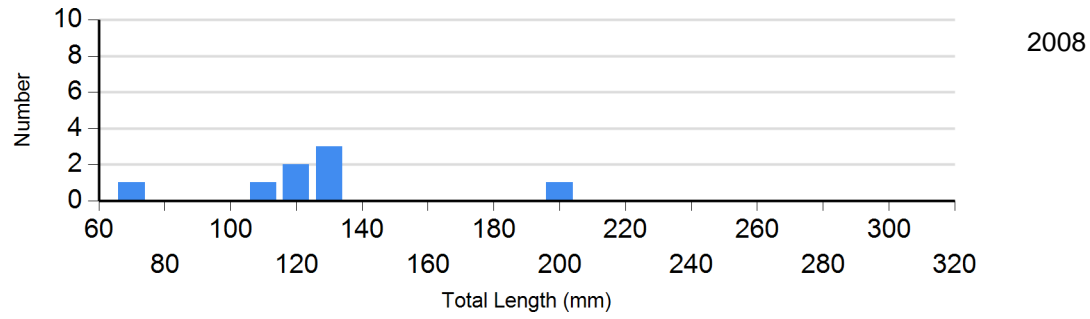


Site: 76

Species: Brook Trout



Site: 76
Species: Brown Trout



Site: 76
Species: Rainbow Trout

