

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Iron Creek (North), Lawrence County
09-0049-00
1995

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

Site Number: 3	Date Sampled: 06/07/1995	Conductivity (umhos/cm): 229
Site Midpoint (Latitude, Longitude): 44.37387285, -103.92121334	Site Length (m): 100	pH: 8.5
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.8	Water Temperature (C): 11.0
Stream Classification: BR1, RB1	Number of Pass: 3	Voltage: 450

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	25	31	23	661	22	250	268	19.36	402	138.7	32.8
Brown Trout	>=200mm	15	16	20	15	423	72	160	171	63.92	257	247.5	169.1
Brown Trout	All	38	43	52	38	1138	99	430	461	87.97	692	181.7	86.6
Rainbow Trout	<200mm	2	2	6	2	53	4	20	21	3.66	32	144.0	77.5
Rainbow Trout	>=200mm	3	3	4	3	79	8	30	32	7.18	48	211.0	101.3
Rainbow Trout	All	5	5	7	5	132	12	50	54	10.84	80	184.2	91.8

Site Number: 48	Date Sampled: 06/07/1995	Conductivity (umhos/cm): 178
Site Midpoint (Latitude, Longitude): 44.37798051, -103.96025421	Site Length (m): 100	pH: 8.9
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.4	Water Temperature (C): 12.0
Stream Classification: BR2	Number of Pass: 3	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)
Brown Trout	>=200mm	2	2	2	2	83	22	20	33	19.81	32	282.0	268.5
Brown Trout	All	2	2	2	2	83	22	20	33	19.81	32	282.0	268.5

Longnose Dace All 65 91 128 65 3760 26 910 1523 22.99 1464 60.8 6.8

Site Number: 76
Site Midpoint (Latitude, Longitude): 44.36972596, -103.98788929
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: None

Date Sampled: 06/07/1995
Site Length (m): 100
Mean Width (m): 1.1
Number of Pass: 3
Conductivity (umhos/cm): 131
pH: 7.9
Water Temperature (C): 8.0
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)
Hatchery Rainbow Trout	<200mm	47	56	71	47	4912	87	560	1989	77.92	901	114.8	17.8
Hatchery Rainbow Trout	>=200mm	1	1	1	1	88	8	10	36	7.28	16	202.0	93.0
Hatchery Rainbow Trout	All	48	57	71	48	5000	97	570	2025	86.31	917	116.6	19.3

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), 1985-1995

Site 3

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jun 07, 1995	25	23-31	
Brown Trout >=200mm	Jun 07, 1995	16	15-20	BR1
Rainbow Trout <200mm	Jun 07, 1995	2	2-6	
Rainbow Trout >=200mm	Jun 07, 1995	3	3-4	RB1

Site 48

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout >=200mm	Jun 07, 1995	2	2-2	BR2
Longnose Dace	Jun 07, 1995	91	65-128	

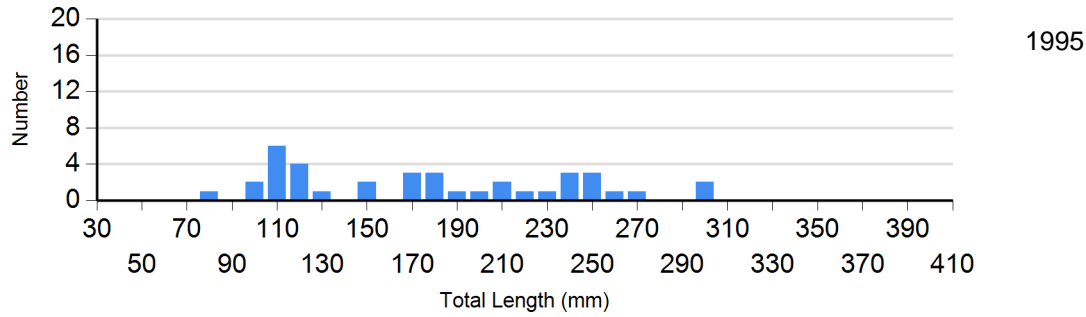
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Hatchery Rainbow Trout <200mm	Jun 07, 1995	56	47-71	
Hatchery Rainbow Trout ≥200mm	Jun 07, 1995	1	1-1	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

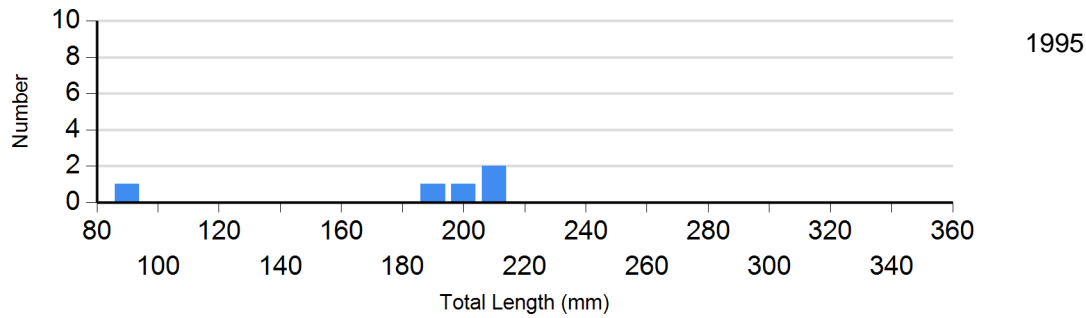
Site: 3

Species: Brown Trout



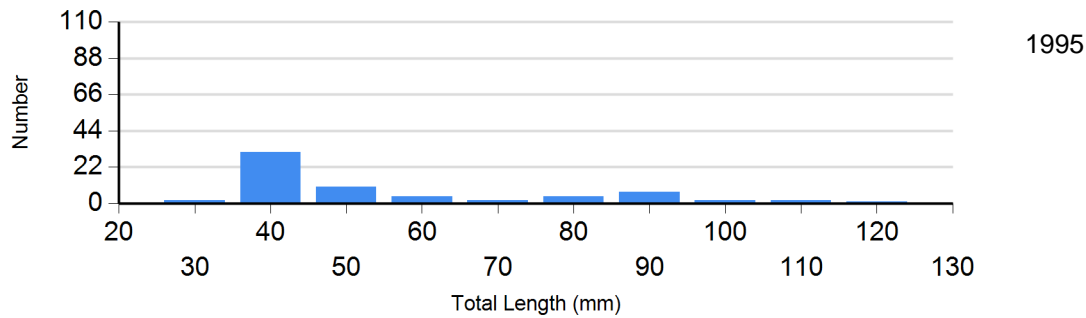
Site: 3

Species: Rainbow Trout



Site: 48

Species: Longnose Dace



Site: 76

Species: Hatchery Rainbow Trout

