

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Crow Creek (Trib. of Redwater), Lawrence County
09-0037-00
1993

Table 1. Population and Biomass Estimates for Crow Creek (Trib. of Redwater)

Site Number: 34	Date Sampled: 09/09/1993	Conductivity (umhos/cm): 910
Site Midpoint (Latitude, Longitude): 44.56088009, -104.01045755	Site Length (m): 100	pH: 8.4
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 4.4	Water Temperature (C): 13.0
Stream Classification: BR1	Number of Pass: 3	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)
Brown Trout	<200mm	75	118	179	75	2658	53	1180	1076	47.71	1899	116.1	20.1
Brown Trout	>=200mm	25	25	27	25	563	77	250	228	69.14	402	239.3	137.5
Brown Trout	All	101	135	172	101	3041	149	1350	1231	133.21	2172	146.9	49.1
Longnose Dace	All	13	14	19	13	315	1	140	128	1.15	225	78.8	4.1
Longnose Sucker	All	1	1	2	1	23	3	10	9	2.51	16	240.0	125.0
White Sucker	All	1	1	1	1	23	10	10	9	8.59	16	333.0	427.0

Site Number: 104	Date Sampled: 09/09/1993	Conductivity (umhos/cm): 510
Site Midpoint (Latitude, Longitude): 44.53566594, -104.00858373	Site Length (m): 100	pH:
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.6	Water Temperature (C): 12.0
Stream Classification: BR1	Number of Pass: 3	Voltage: 200

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	77	77	79	77	3008	52	770	1218	46.28	1239	118.1	17.2
Brown Trout	>=200mm	19	19	19	19	742	134	190	301	119.63	306	251.9	180.5

Brown Trout	All	96	96	98	96	3750	186	960	1519	165.91	1545	144.6	49.6
Green Sunfish	All	1	1	2	1	39	0	10	16	0.24	16	77.0	7.0
Longnose Dace	All	1	1	1	1	39	0	10	16	0.24	16	95.0	7.0

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 Crow Creek (Trib. of Redwater), 1983-1993

Site 34

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 09, 1993	118	75-179	
Brown Trout >=200mm	Sep 09, 1993	25	25-27	BR1
Longnose Dace	Sep 09, 1993	14	13-19	
Longnose Sucker	Sep 09, 1993	1	1-2	
White Sucker	Sep 09, 1993	1	1-1	

Site 104

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 09, 1993	77	77-79	

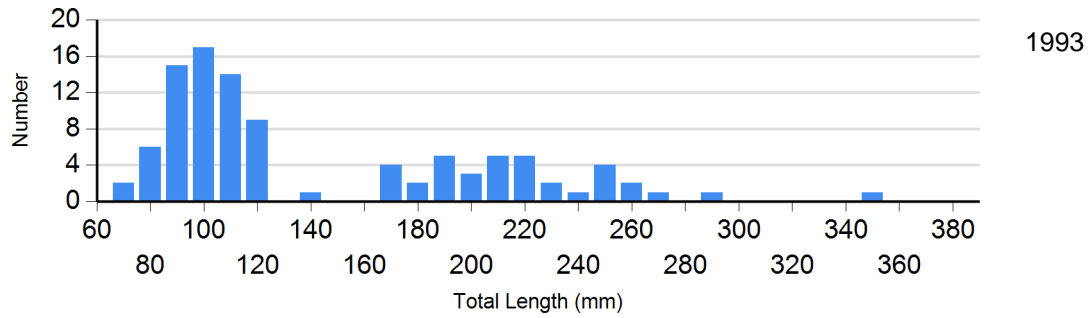
Brown Trout >=200mm	Sep 09, 1993	19	19-19	BR1
Green Sunfish	Sep 09, 1993	1	1-2	
Longnose Dace	Sep 09, 1993	1	1-1	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

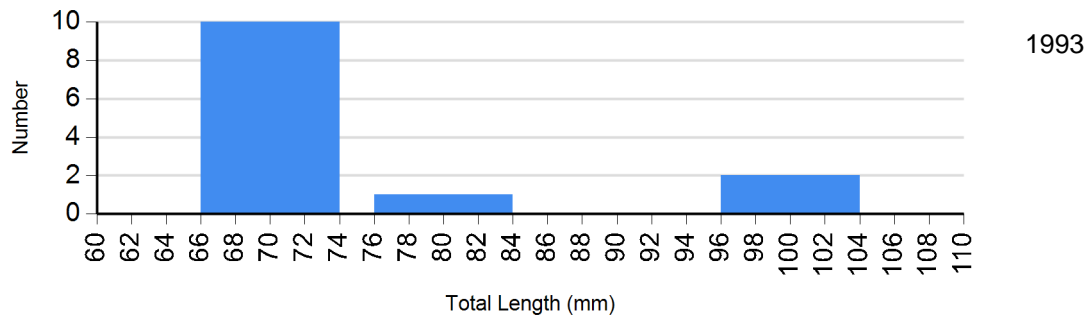
Site: 34

Species: Brown Trout



Site: 34

Species: Longnose Dace



Site: 104

Species: Brown Trout

