

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Beaver Creek (Custer Co.), Custer County
21-0014-00
1997

Table 1. Population and Biomass Estimates for Beaver Creek (Custer Co.)

Site Number: 484

Site Midpoint (Latitude, Longitude): 43.58152049, -103.47295429

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK3

Date Sampled: 06/10/1997

Site Length (m): 100

Mean Width (m): 3.4

Number of Pass: 3

Conductivity (umhos/cm): 392

pH: 9.3

Water Temperature (C): 15.0

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)
Brook Trout	<200mm	4	4	5	4	116	8	40	47	6.89	64	147.3	66.3
Brook Trout	>=200mm	1	1	2	1	29	3	10	12	2.31	16	206.0	89.0
Brook Trout	All	5	5	7	5	145	10	50	59	9.34	80	159.0	72.0
Fathead Minnow	All	21	20	30	21	581	2	200	235	1.61	322	63.2	3.1
Longnose Dace	All	157	272	393	157	7907	43	2720	3202	37.97	4376	80.0	5.4
White Sucker	All	3	3	4	3	87	11	30	35	9.55	48	178.7	122.7

Site Number: 507

Site Midpoint (Latitude, Longitude): 43.58553636, -103.49132514

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: None

Date Sampled: 06/17/1997

Site Length (m): 100

Mean Width (m): 2.7

Number of Pass: 3

Conductivity (umhos/cm): 440

pH: 8.1

Water Temperature (C): 16.0

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)
Fathead Minnow	All	33	50	86	33	1880	3	500	761	3.08	805	55.1	1.8
Longnose Dace	All	205	524	941	205	19699	103	5240	7978	91.79	8431	79.1	5.2

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 Beaver Creek (Custer Co.), 1987-1997

Site 484

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 10, 1997	4	4-5	
Brook Trout >=200mm	Jun 10, 1997	1	1-2	BK3
Fathead Minnow	Jun 10, 1997	20	21-30	
Longnose Dace	Jun 10, 1997	272	157-393	
White Sucker	Jun 10, 1997	3	3-4	

Site 507

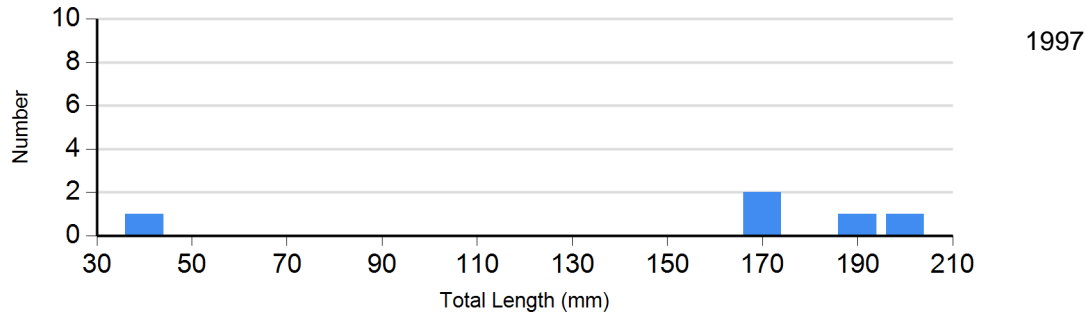
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Fathead Minnow	Jun 17, 1997	50	33-86	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

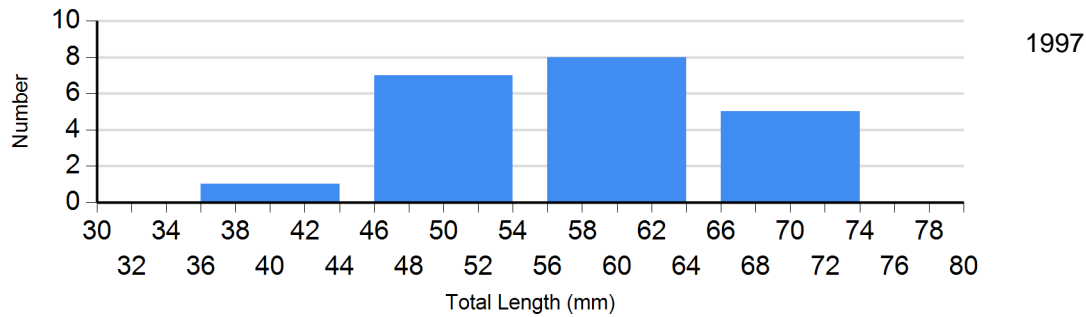
Site: 484

Species: Brook Trout



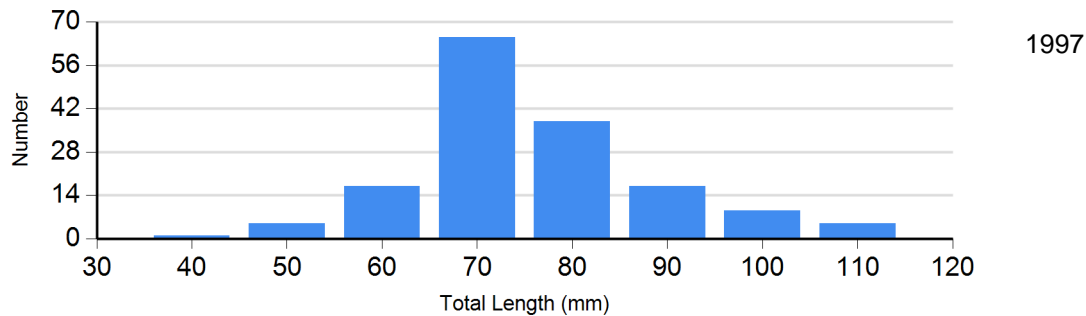
Site: 484

Species: Fathead Minnow

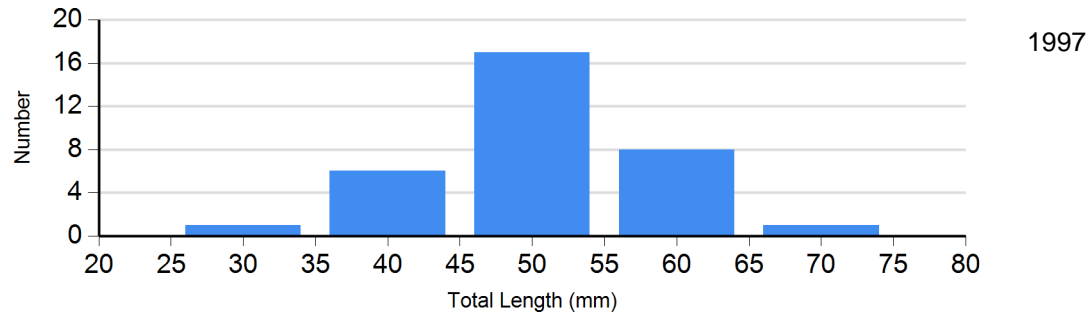


Site: 484

Species: Longnose Dace



Site: 507
Species: Fathead Minnow



Site: 507
Species: Longnose Dace

