

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**False Bottom Creek, Lawrence County**  
**09-0040-00**  
**1997**

Table 1. Population and Biomass Estimates for False Bottom Creek

**Site Number:** 542  
**Site Midpoint (Latitude, Longitude):** 44.39916853, -103.80488353  
**Survey Completed by:** Chadwick Ecological Services  
**Stream Classification:** BK2

**Date Sampled:** 09/21/1997  
**Site Length (m):** 50  
**Mean Width (m):** 2.5  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):** 10.5  
**Voltage:**

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	294	301	308	294	12040	95	6020	4876	84.58	9686	86.6	7.9
Brook Trout	>=200mm	5	5	5	5	200	22	100	81	20.04	161	218.8	112.2
Brook Trout	All	299	306	313	299	12240	118	6120	4957	105.05	9847	88.8	9.6
Longnose Dace	All	10	10	11	10	400	1	200	162	1.32	322	75.1	3.7

**Site Number:** 544  
**Site Midpoint (Latitude, Longitude):** 44.39822078, -103.80297429  
**Survey Completed by:** Chadwick Ecological Services  
**Stream Classification:** BK3, BR0

**Date Sampled:** 09/21/1997  
**Site Length (m):** 50  
**Mean Width (m):** 0.0  
**Number of Pass:** 4  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):** 11.1  
**Voltage:**

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	298	300	304	298	0	0	6000	0	0.00	9654	88.4	8.1
Brook Trout	>=200mm	12	12	12	12	0	0	240	0	0.00	386	219.2	114.5
Brook Trout	All	311	313	317	311	0	0	6260	0	0.00	10072	93.4	12.2
Brown Trout	<200mm	2	2	2	2	0	0	40	0	0.00	64	162.0	40.0
Brown Trout	All	2	2	2	2	0	0	40	0	0.00	64	162.0	40.0
Longnose Dace	All	9	9	11	9	0	0	180	0	0.00	290	70.1	3.2

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	
<b>Class BR1</b>	Number of wild Brown Trout exceeds 150 per acre
<b>Class BR2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BR3</b>	Number of wild Brown Trout is less than 25 per acre
<b>Class BK1</b>	Number of wild Brook Trout exceeds 150 per acre
<b>Class BK2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BK3</b>	Number of wild Brook Trout is less than 25 per acre
<b>Class RB1</b>	Number of wild Rainbow Trout exceeds 25 per acre
<b>Class RB2</b>	Number of wild Rainbow Trout is less than 25 per acre

Table 2. Species composition and population estimates on False Bottom Creek, 1987-1997

**Site 542**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 21, 1997	301	294-308	
Brook Trout >=200mm	Sep 21, 1997	5	5-5	BK2
Longnose Dace	Sep 21, 1997	10	10-11	

**Site 544**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 21, 1997	300	298-304	
Brook Trout >=200mm	Sep 21, 1997	12	12-12	BK3
Brown Trout <200mm	Sep 21, 1997	2	2-2	

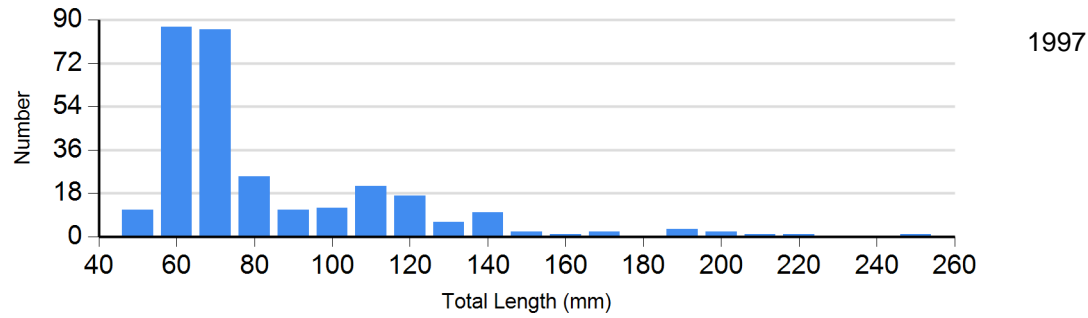


## Length Frequency Distribution

Length frequency histogram of species sampled by year.

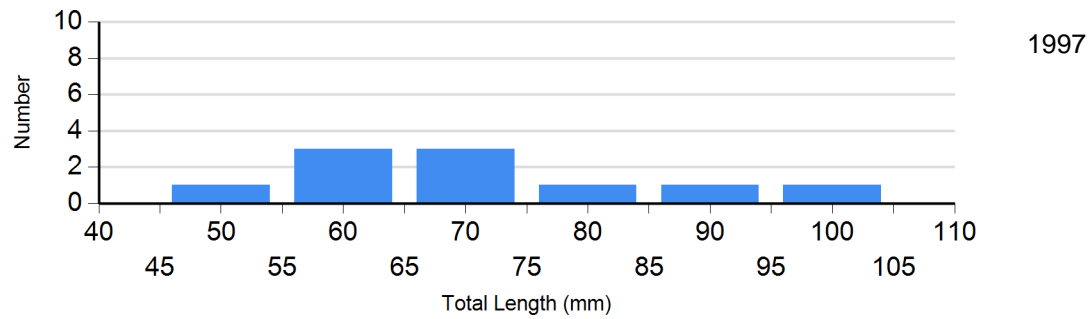
**Site:** 542

**Species:** Brook Trout



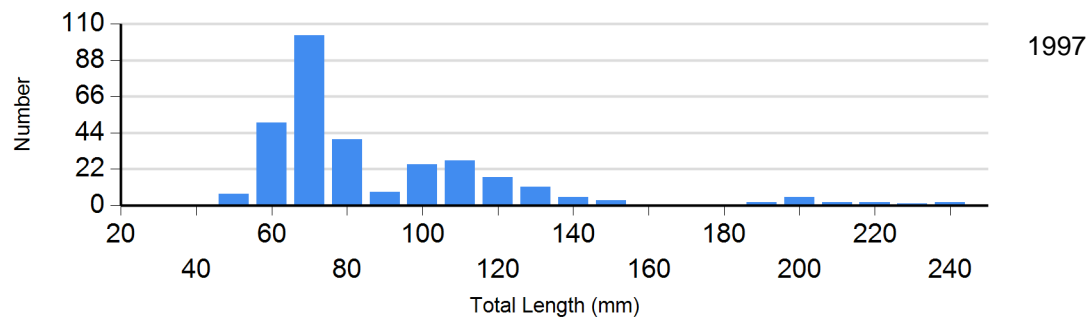
**Site:** 542

**Species:** Longnose Dace



**Site:** 544

**Species:** Brook Trout



Site: 544  
Species: Longnose Dace

