

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Ditch Creek, Pennington County**  
**02-0059-00**  
**1998**

Table 1. Population and Biomass Estimates for Ditch Creek

<b>Site Number:</b> 14	<b>Date Sampled:</b> 07/14/1998	<b>Conductivity (umhos/cm):</b> 350
<b>Site Midpoint (Latitude, Longitude):</b> 43.97247052, -103.84458740	<b>Site Length (m):</b> 100	<b>pH:</b> 8.2
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 2.3	<b>Water Temperature (C):</b> 12.8
<b>Stream Classification:</b> BK2, RB0	<b>Number of Pass:</b> 3	<b>Voltage:</b> 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	168	189	207	171	8363	158	1890	3387	141.47	3041	115.2	18.9
Brook Trout	>=200mm	4	4	6	4	177	17	40	72	15.17	64	217.0	96.0
Brook Trout	All	353	421	460	382	18628	387	4210	7544	345.10	6774	117.6	20.7
Hatchery Rainbow Trout	>=200mm	7	7	8	7	310	82	70	125	73.37	113	302.9	265.3
Hatchery Rainbow Trout	All	9	9	10	9	398	106	90	161	94.33	145	302.9	265.3
Rainbow Trout	<200mm	4	4	6	4	177	4	40	72	3.48	64	129.8	22.0
Rainbow Trout	All	4	4	6	4	177	4	40	72	3.48	64	129.8	22.0
Splake Trout	>=200mm	1	1	2	1	44	8	10	18	7.19	16	286.0	182.0
Splake Trout	All	1	1	2	1	44	8	10	18	7.19	16	286.0	182.0

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	
<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 Ditch Creek, 1988-1998

**Site 14**

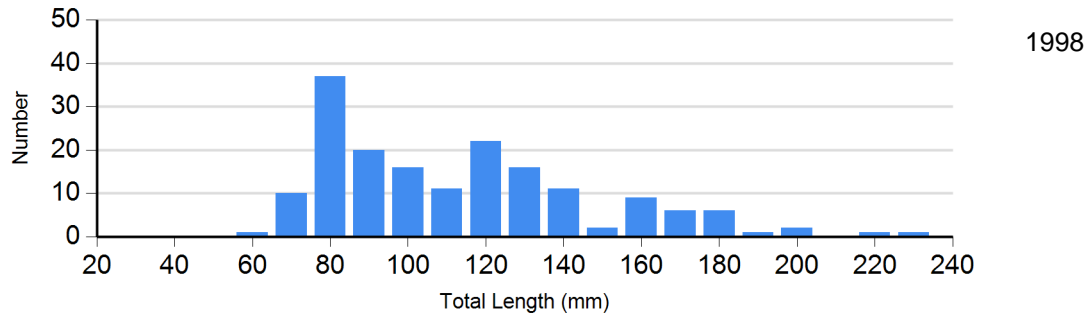
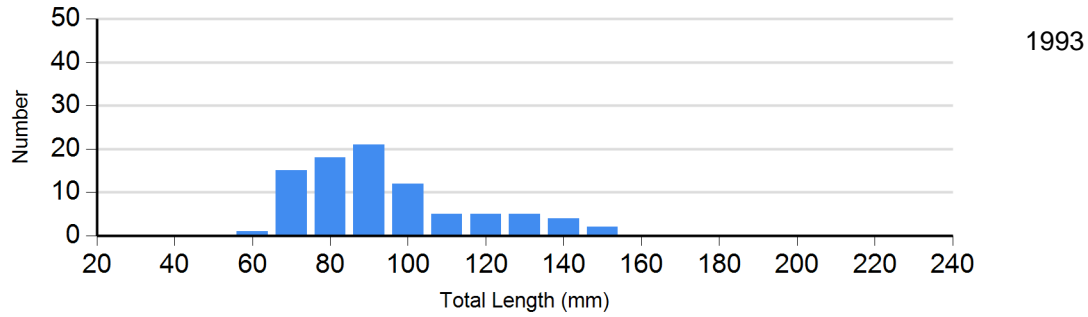
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 10, 1993	93	88-100	
	Jul 14, 1998	189	171-207	
Brook Trout >=200mm	Jul 14, 1998	4	4-6	BK2
Hatchery Rainbow Trout >=200mm	Jul 14, 1998	7	7-8	
Rainbow Trout <200mm	Jun 10, 1993	17	15-24	
	Jul 14, 1998	4	4-6	
Splake Trout >=200mm	Jul 14, 1998	1	1-2	

## Length Frequency Distribution

Length frequency histogram of species sampled by year.

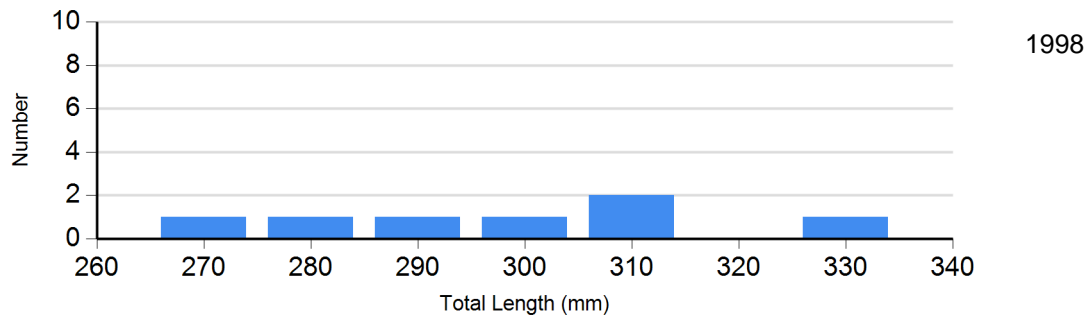
**Site:** 14

**Species:** Brook Trout



**Site:** 14

**Species:** Hatchery Rainbow Trout



**Site: 14**  
**Species: Rainbow Trout**

