

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**West Strawberry Creek, Lawrence County**  
**09-0058-00**  
**1998**

Table 1. Population and Biomass Estimates for West Strawberry Creek

<b>Site Number:</b> 9	<b>Date Sampled:</b> 10/01/1998	<b>Conductivity (umhos/cm):</b> 367
<b>Site Midpoint (Latitude, Longitude):</b> 44.34822300, -103.73358595	<b>Site Length (m):</b> 100	<b>pH:</b> 7.2
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 1.9	<b>Water Temperature (C):</b> 8.2
<b>Stream Classification:</b> BK1, BR3	<b>Number of Pass:</b> 3	<b>Voltage:</b> 300

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	393	409	420	398	21755	241	4090	8811	215.21	6581	98.5	11.1
Brook Trout	>=200mm	9	9	10	9	479	47	90	194	42.27	145	222.8	98.9
Brook Trout	All	402	418	429	407	22234	290	4180	9005	259.17	6726	101.3	13.1
Brown Trout	<200mm	4	4	4	4	213	9	40	86	8.07	64	159.3	42.5
Brown Trout	>=200mm	1	1	1	1	53	8	10	22	7.50	16	246.0	158.0
Brown Trout	All	5	5	5	5	266	17	50	108	15.58	80	176.6	65.6

<b>Site Number:</b> 25	<b>Date Sampled:</b> 10/15/1998	<b>Conductivity (umhos/cm):</b> 287
<b>Site Midpoint (Latitude, Longitude):</b> 44.33681659, -103.72326310	<b>Site Length (m):</b> 101	<b>pH:</b> 7.7
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 1.7	<b>Water Temperature (C):</b> 6.0
<b>Stream Classification:</b> BK0	<b>Number of Pass:</b> 3	<b>Voltage:</b> 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)
Brook Trout	<200mm	317	330	340	320	19643	168	3267	7955	150.43	5257	94.0	8.6
Brook Trout	All	362	382	396	368	22738	195	3782	9209	174.14	6086	94.0	8.6

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 West Strawberry Creek, 1988-1998

**Site 9**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 28, 1993	108	101-117	
	Oct 01, 1998	409	398-420	
Brook Trout >=200mm	Jun 28, 1993	3	3-4	BK2
	Oct 01, 1998	9	9-10	BK1
Brown Trout <200mm	Oct 01, 1998	4	4-4	
Brown Trout >=200mm	Oct 01, 1998	1	1-1	BR3

**Site 25**

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<b>Species/Size</b>	<b>Date</b>	<b>Pop Est.</b>	<b>(95% C.I.)</b>	<b>Stream Classification</b>
Brook Trout <200mm	Oct 15, 1998	330	320-340	

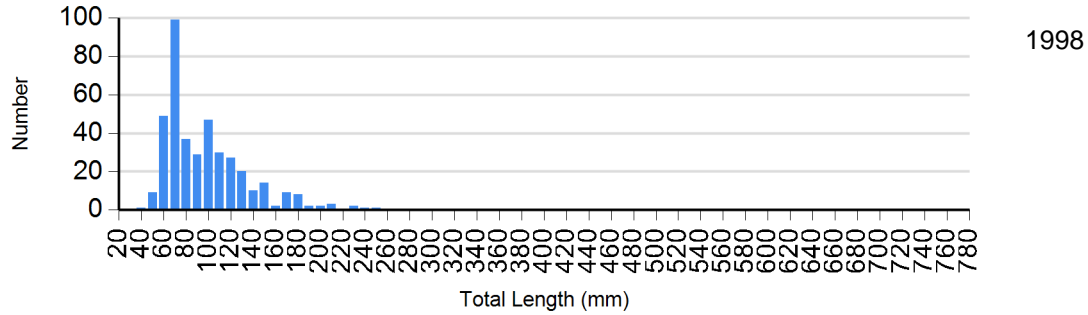
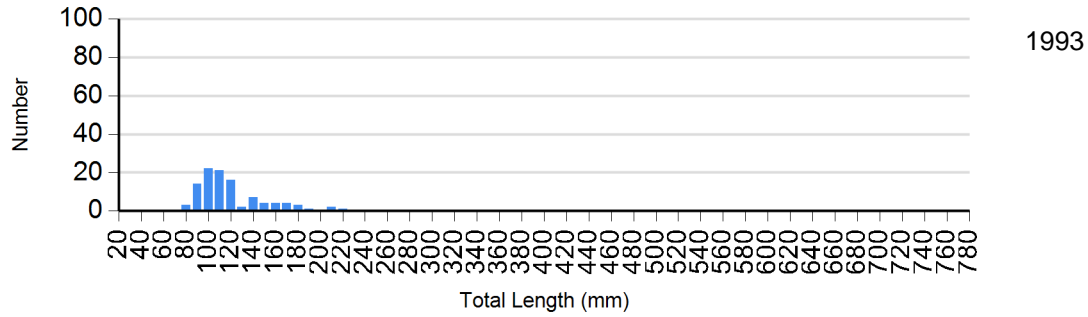
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## Length Frequency Distribution

Length frequency histogram of species sampled by year.

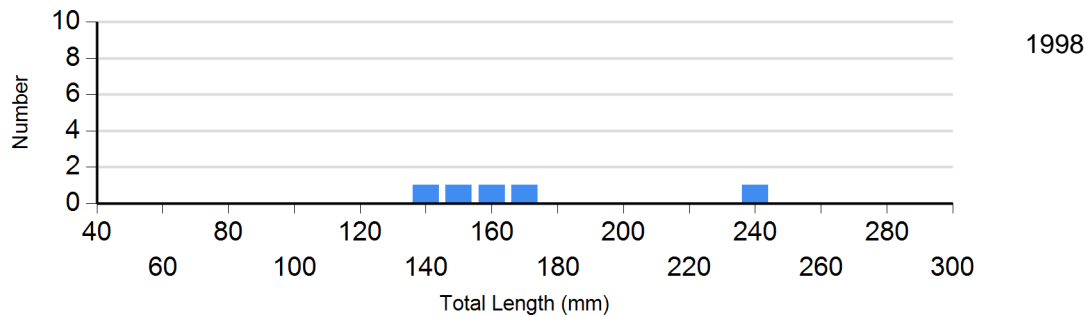
**Site:** 9

**Species:** Brook Trout



**Site:** 9

**Species:** Brown Trout



Site: 25  
Species: Brook Trout

