

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Little Spearfish Creek, Lawrence County**  
**09-0017-00**  
**1992**

Table 1. Population and Biomass Estimates for Little Spearfish Creek

<b>Site Number:</b> 3	<b>Date Sampled:</b> 10/28/1992	<b>Conductivity (umhos/cm):</b>
<b>Site Midpoint (Latitude, Longitude):</b> 44.35119883, -103.93106834	<b>Site Length (m):</b> 99	<b>pH:</b>
<b>Survey Completed by:</b> Chadwick Ecological Services	<b>Mean Width (m):</b> 0.0	<b>Water Temperature (C):</b>
<b>Stream Classification:</b> BR3	<b>Number of Pass:</b> 1	<b>Voltage:</b>

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	14	14	14	14	0	0	141	0	0.00	228	144.7	31.9
Brown Trout	>=200mm	7	7	7	7	0	0	71	0	0.00	114	366.0	102.9
Brown Trout	All	21	21	21	21	0	0	212	0	0.00	341	218.5	55.5

<b>Site Number:</b> 52	<b>Date Sampled:</b> 10/28/1992	<b>Conductivity (umhos/cm):</b>
<b>Site Midpoint (Latitude, Longitude):</b> 44.33809498, -103.95962125	<b>Site Length (m):</b> 99	<b>pH:</b>
<b>Survey Completed by:</b> Chadwick Ecological Services	<b>Mean Width (m):</b> 0.0	<b>Water Temperature (C):</b>
<b>Stream Classification:</b> BK3	<b>Number of Pass:</b> 1	<b>Voltage:</b>

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	40	40	40	40	0	0	404	0	0.00	650	124.5	21.7
Brook Trout	>=200mm	1	1	1	1	0	0	10	0	0.00	16	206.0	90.0
Brook Trout	All	41	41	41	41	0	0	414	0	0.00	666	126.4	23.3

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 Little Spearfish Creek, 1982-1992

**Site 3**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 28, 1992	14	14-14	
Brown Trout >=200mm	Oct 28, 1992	7	7-7	BR3

**Site 52**

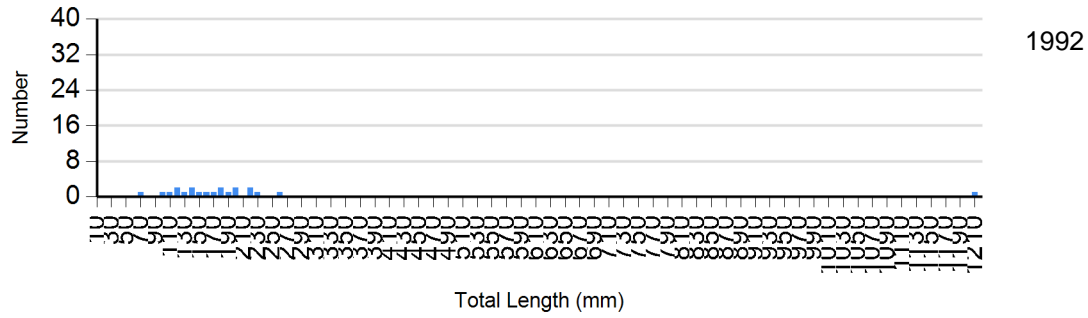
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 28, 1992	40	40-40	
Brook Trout >=200mm	Oct 28, 1992	1	1-1	BK3

## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site:** 3

**Species:** Brown Trout



**Site:** 52

**Species:** Brook Trout

