

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Spearfish Creek, Lawrence County
09-0021-00
1987

Table 1. Population and Biomass Estimates for Spearfish Creek

Site Number: 174

Date Sampled: 07/30/1987

Conductivity (umhos/cm):

Site Midpoint (Latitude, Longitude): 44.50196266, -103.86743501

Site Length (m): 100

pH:

Survey Completed by: South Dakota Game, Fish and Parks

Mean Width (m): 0.0

Water Temperature (C):

Stream Classification: BR3

Number of Pass: 2

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)
Brown Trout	<200mm	15	15	15	15	0	0	150	0	0.00	241	140.0	46.0
Brown Trout	>=200mm	54	54	54	54	0	0	540	0	0.00	869	271.3	246.0
Brown Trout	All	69	69	69	69	0	0	690	0	0.00	1110	242.8	202.5

Site Number: 190

Date Sampled: 07/29/1987

Conductivity (umhos/cm):

Site Midpoint (Latitude, Longitude): 44.48929462, -103.86435821

Site Length (m): 100

pH:

Survey Completed by: South Dakota Game, Fish and Parks

Mean Width (m): 0.0

Water Temperature (C):

Stream Classification: BR3, RB0

Number of Pass: 2

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)
Brown Trout	<200mm	7	7	7	7	0	0	70	0	0.00	113	152.9	45.7
Brown Trout	>=200mm	26	26	26	26	0	0	260	0	0.00	418	253.1	200.7
Brown Trout	All	33	33	33	33	0	0	330	0	0.00	531	231.8	167.8
Rainbow Trout	<200mm	1	1	1	1	0	0	10	0	0.00	16	140.0	43.0
Rainbow Trout	All	1	1	1	1	0	0	10	0	0.00	16	140.0	43.0

Site Number: 205

Site Midpoint (Latitude, Longitude): 44.47880965, -103.85669154

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR3

Date Sampled: 07/30/1987

Site Length (m): 100

Mean Width (m): 0.0

Number of Pass: 2

Conductivity
(umhos/cm):

pH:

Water Temperature (C):

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)
Brown Trout	>=200mm	3	3	3	3	0	0	30	0	0.00	48	360.0	568.0
Brown Trout	All	3	3	3	3	0	0	30	0	0.00	48	360.0	568.0

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	
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 Spearfish Creek, 1977-1987

Site 174

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jul 30, 1987	15	15-15	
Brown Trout >=200mm	Jul 30, 1987	54	54-54	BR3

Site 190

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jul 29, 1987	7	7-7	
Brown Trout >=200mm	Jul 29, 1987	26	26-26	BR3
Rainbow Trout <200mm	Jul 29, 1987	1	1-1	

Site 205

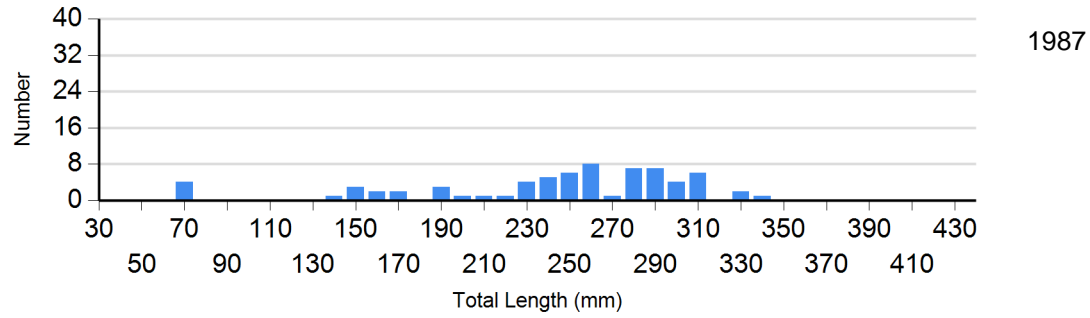
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout >=200mm	Jul 30, 1987	3	3-3	BR3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 174

Species: Brown Trout



Site: 190

Species: Brown Trout

