

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Meadow Creek, Lawrence County
09-0072-00
2014

Table 1. Population and Biomass Estimates for Meadow Creek

Site Number: 2
Site Midpoint (Latitude, Longitude): 44.29356512, -103.56014296
Survey Completed by:
Stream Classification: BK3

Date Sampled: 06/06/2014
Site Length (m): 100
Mean Width (m): 2.9
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage: 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	5	5	5	5	172	9	50	70	8.38	80	169.8	54.6
Brook Trout	>=200mm	1	1	1	1	34	4	10	14	3.38	16	224.0	110.0
Brook Trout	All	6	6	6	6	206	13	60	84	11.76	97	178.8	63.8
Mountain Sucker	All	1	1	2	1	34	1	10	14	0.64	16	131.0	21.0

Site Number: 12
Site Midpoint (Latitude, Longitude): 44.28582280, -103.56238706
Survey Completed by:
Stream Classification: BK3

Date Sampled: 06/06/2014
Site Length (m): 100
Mean Width (m): 2.2
Number of Pass: 2
Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage: 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	5	5	5	5	230	11	50	93	9.41	80	146.4	45.8
Brook Trout	>=200mm	1	1	1	1	46	5	10	19	4.52	16	217.0	110.0
Brook Trout	All	6	6	6	6	276	16	60	112	13.93	97	158.2	56.5

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 Meadow Creek, 2004-2014

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 06, 2014	5	5-5	
Brook Trout >=200mm	Jun 06, 2014	1	1-1	BK3
Mountain Sucker	Jun 06, 2014	1	1-2	

Site 12

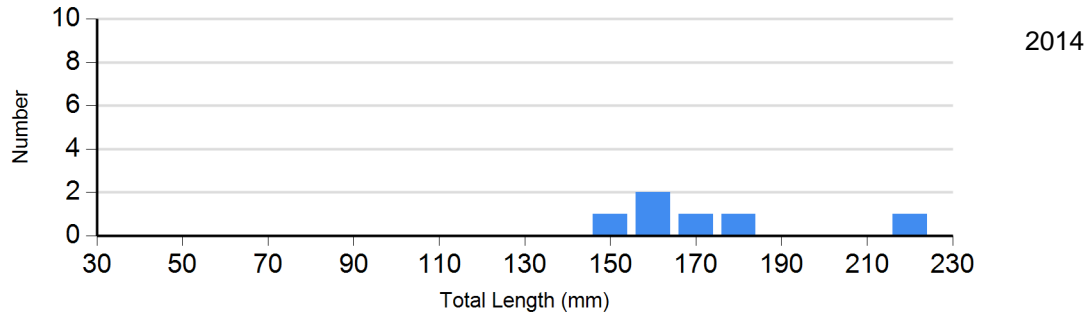
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 06, 2014	5	5-5	
Brook Trout >=200mm	Jun 06, 2014	1	1-1	BK3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

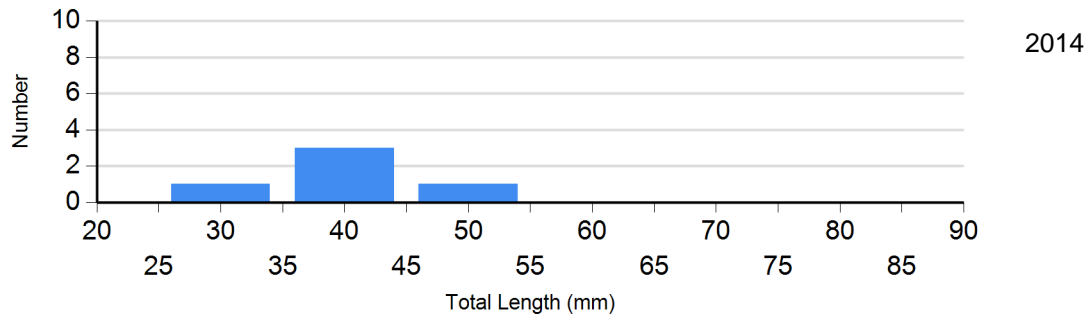
Site: 2

Species: Brook Trout



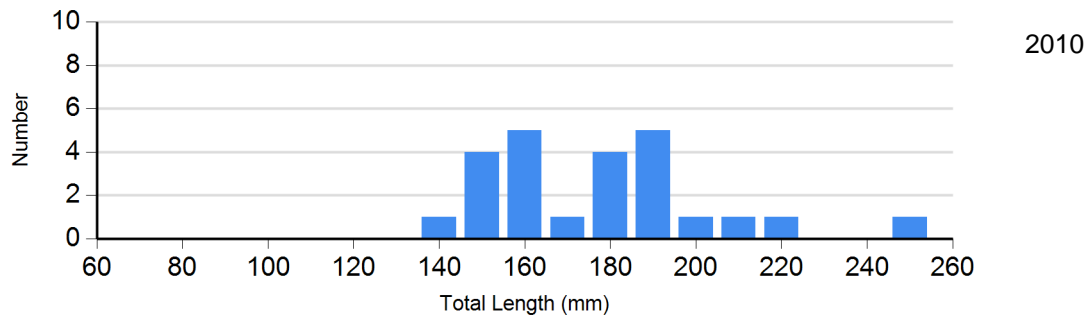
Site: 2

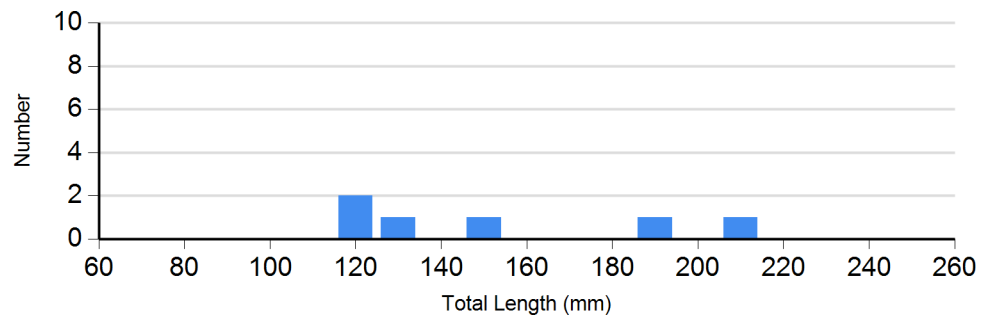
Species: Longnose Dace



Site: 12

Species: Brook Trout





2014