

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Battle Creek (Trib of Cheyenne River), Pennington County
21-0023-00
2014

Table 1. Population and Biomass Estimates for Battle Creek (Trib of Cheyenne River)

Site Number: 242

Date Sampled: 06/13/2014

Conductivity (umhos/cm):

Site Midpoint (Latitude, Longitude): 43.87666382, -103.34452995

Site Length (m): 100

pH:

Survey Completed by: South Dakota Game, Fish and Parks

Mean Width (m): 6.6

Water Temperature (C):

Stream Classification: BK0

Number of Pass: 3

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	3	3	4	3	46	4	30	19	3.72	48	98.0	91.0
Brook Trout	All	3	3	4	3	46	4	30	19	3.72	48	98.0	91.0
Creek Chub	All	161	257	350	164	3921	92	2570	1588	81.79	4135	89.0	23.4
Longnose Dace	All	16	15	20	16	229	1	150	93	1.19	241	73.2	5.8
Rock Bass	All	9	8	12	9	122	1	80	49	1.31	129	59.9	12.0
White Sucker	All	41	43	48	41	656	8	430	266	6.70	692	91.6	11.4

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 Battle Creek (Trib of Cheyenne River), 2004-2014

Site 242

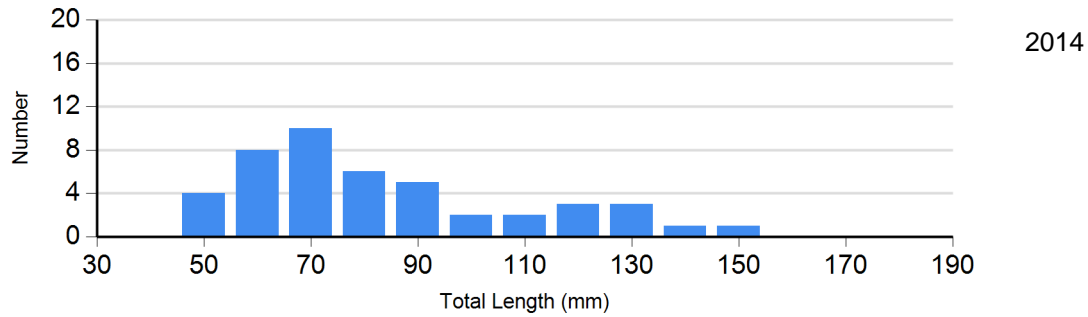
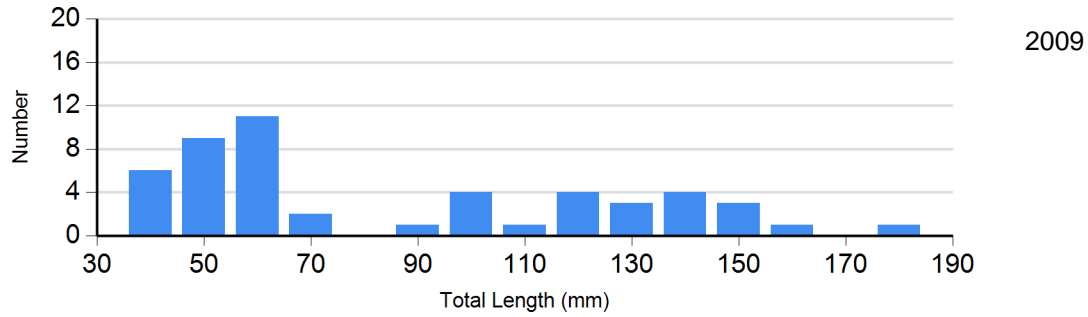
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 13, 2014	3	3-4	
Creek Chub	Jun 13, 2014	257	164-350	
Longnose Dace	Jun 13, 2014	15	16-20	
Rock Bass	Jun 13, 2014	8	9-12	
White Sucker	Jun 13, 2014	43	41-48	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

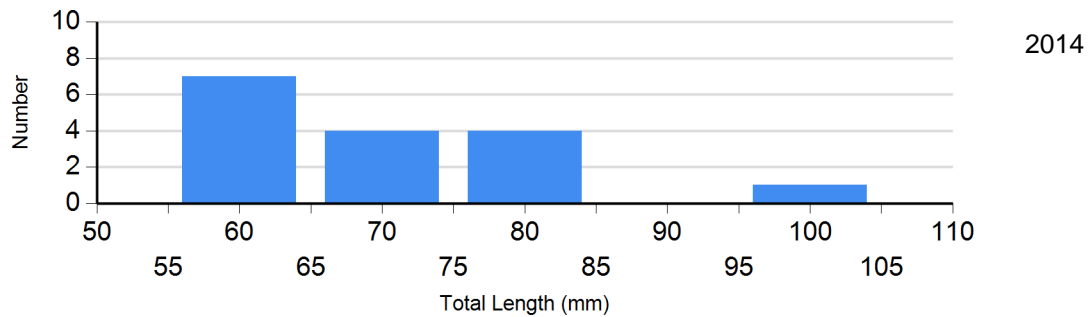
Site: 242

Species: Creek Chub

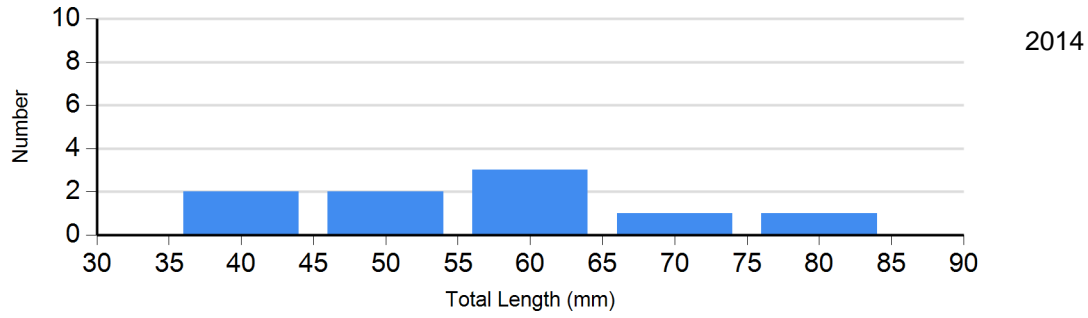


Site: 242

Species: Longnose Dace



Site: 242
Species: Rock Bass



Site: 242
Species: White Sucker

