

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Crow Creek (Trib. of Redwater), Lawrence County
09-0037-00
2017

Table 1. Population and Biomass Estimates for Crow Creek (Trib. of Redwater)

Site Number: 31
Site Midpoint (Latitude, Longitude): 44.56201742, -104.00884914
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BR1, RB1

Date Sampled: 05/25/2017
Site Length (m): 100
Mean Width (m): 5.7
Number of Pass: 3

Conductivity (umhos/cm):
pH:
Water Temperature (C): 12.2
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	45	49	57	45	865	45	490	350	39.78	788	148.2	51.5
Brown Trout	>=200mm	131	135	141	131	2384	626	1350	965	558.52	2172	277.8	262.4
Brown Trout	All	176	184	192	176	3249	698	1840	1316	623.66	2961	244.7	215.0
Green Sunfish	All	4	3	5	4	53	2	30	21	2.03	48	119.3	43.0
Largemouth Bass	All	1	1	1	1	18	1	10	7	1.20	16	183.0	76.0
Longnose Sucker	All	11	11	11	11	194	127	110	79	113.78	177	411.3	656.1
Rainbow Trout	<200mm	1	1	1	1	18	5	10	7	4.43	16	192.0	281.0
Rainbow Trout	>=200mm	18	18	18	18	318	234	180	129	208.92	290	402.8	736.2
Rainbow Trout	All	19	19	19	19	335	239	190	136	213.35	306	391.7	712.3
White Sucker	All	10	10	10	10	177	107	100	72	95.28	161	366.2	604.4

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 Crow Creek (Trib. of Redwater), 2007-2017

Site 31

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jul 28, 2008	5	5-5	
	Jul 09, 2015	16	16-16	
	May 26, 2016	31	31-31	
	May 25, 2017	49	45-57	
Brown Trout >=200mm	Jul 28, 2008	18	18-18	BR2
	Jul 09, 2015	29	29-29	BR1
	May 26, 2016	22	22-23	BR2

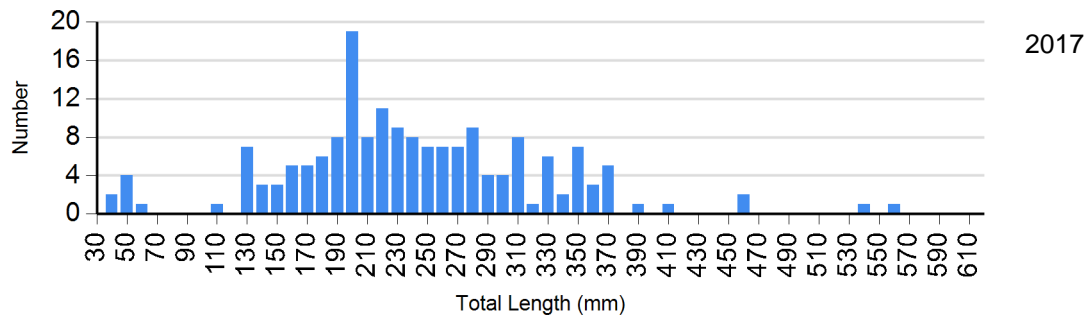
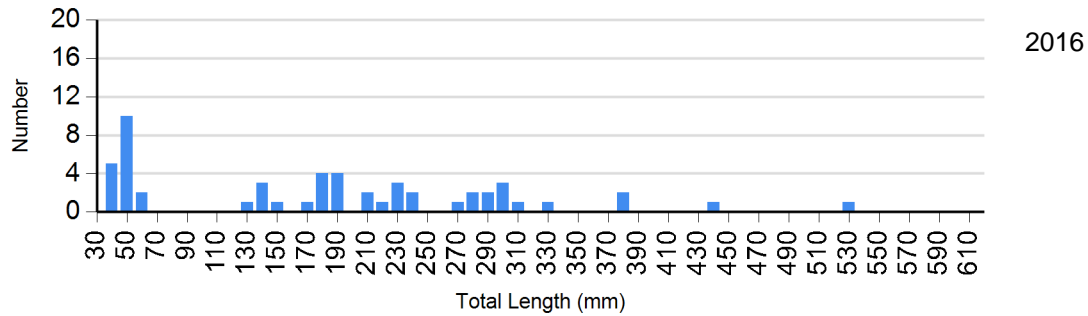
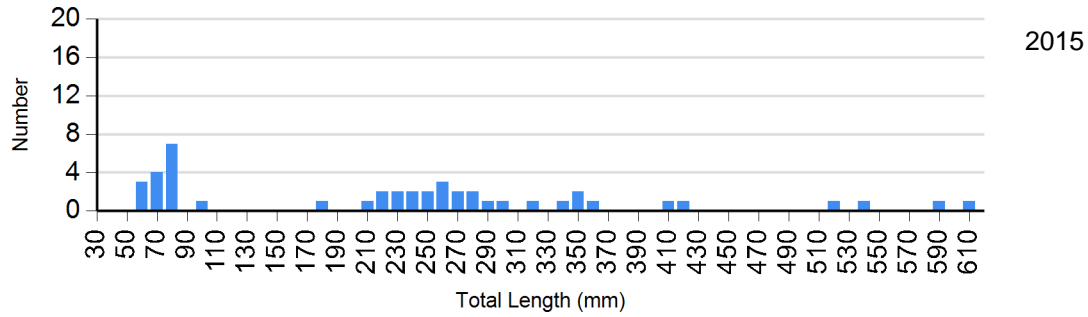
Brown Trout >=200mm	May 25, 2017	135	131-141	BR1
Green Sunfish	May 25, 2017	3	4-5	
Largemouth Bass	May 25, 2017	1	1-1	
Longnose Sucker	Jul 09, 2015	4	4-4	
	May 26, 2016	10	10-11	
	May 25, 2017	11	11-11	
Rainbow Trout <200mm	Jul 28, 2008	1	1-1	
	May 25, 2017	1	1-1	
Rainbow Trout >=200mm	Jul 28, 2008	4	4-4	RB1
	May 25, 2017	18	18-18	RB1
White Sucker	Jul 09, 2015	9	9-9	
	May 26, 2016	4	4-4	
	May 25, 2017	10	10-10	

Length Frequency Distribution

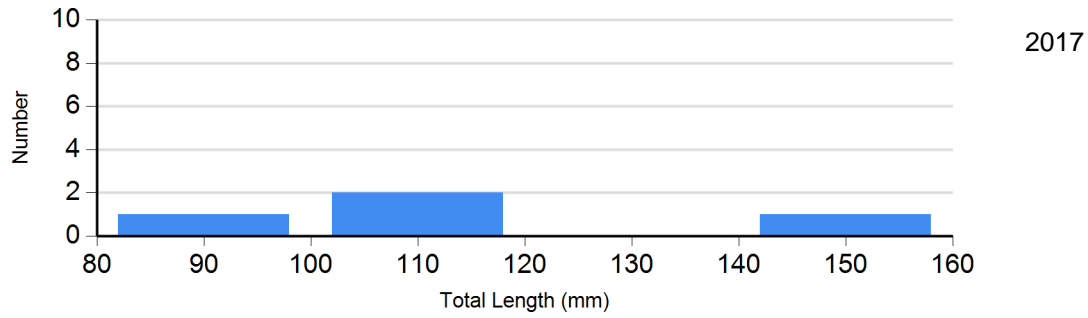
Length frequency histogram of species sampled by year.

Site: 31

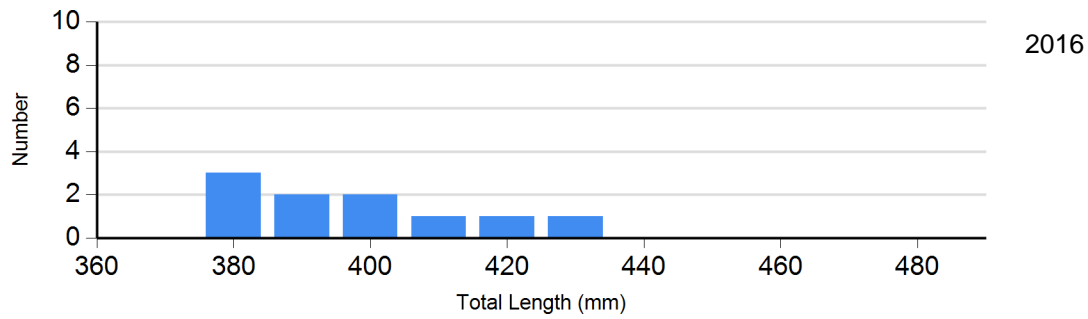
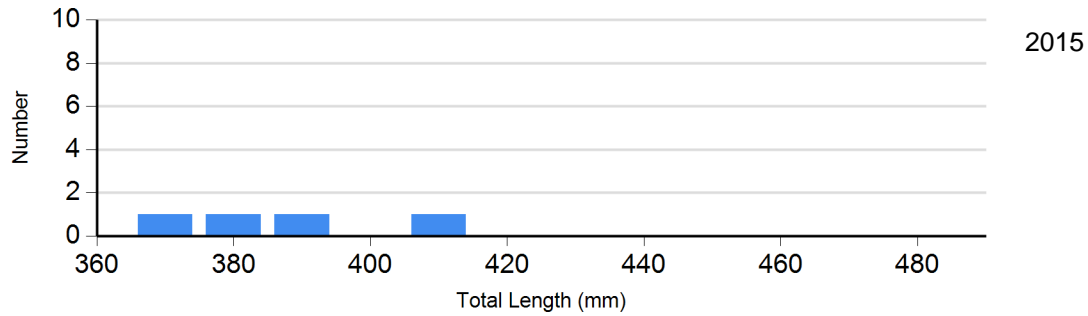
Species: Brown Trout

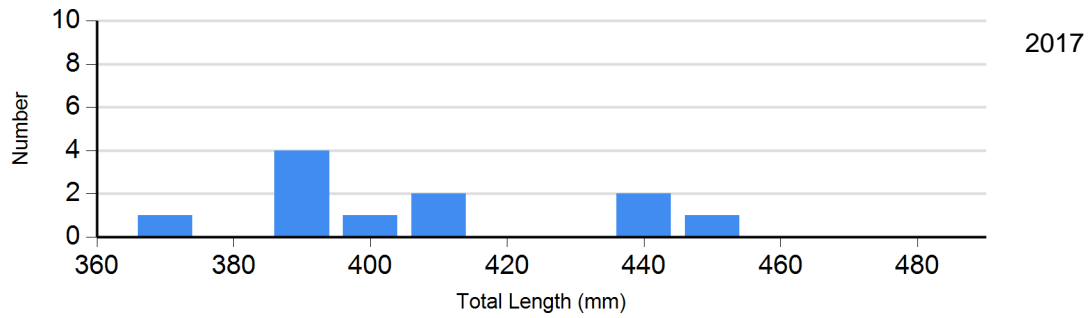


Site: 31
Species: Green Sunfish

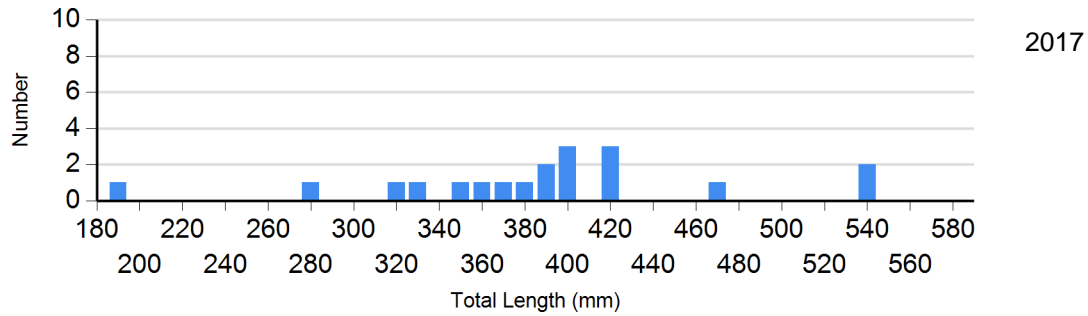


Site: 31
Species: Longnose Sucker





Site: 31
Species: Rainbow Trout



Site: 31
Species: White Sucker

