

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
False Bottom Creek, Lawrence County
09-0040-00
2018

Table 1. Population and Biomass Estimates for False Bottom Creek

Site Number: 542
Site Midpoint (Latitude, Longitude): 44.39916853, -103.80488353
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK3, BR2, RB0

Date Sampled: 06/11/2018
Site Length (m): 100
Mean Width (m): 3.0
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage: 400

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	7	7	7	7	234	8	70	95	6.93	113	136.1	33.1
Brook Trout	>=200mm	1	1	1	1	33	4	10	14	3.31	16	212.0	111.0
Brook Trout	All	8	8	8	8	267	11	80	108	10.24	129	145.6	42.9
Brown Trout	<200mm	82	84	88	82	2809	62	840	1137	55.29	1352	122.2	22.0
Brown Trout	>=200mm	3	3	3	3	100	12	30	41	10.51	48	220.7	117.3
Brown Trout	All	85	87	91	85	2909	74	870	1178	66.00	1400	125.7	25.4
Rainbow Trout	<200mm	1	1	2	1	33	3	10	14	2.33	16	193.0	78.0
Rainbow Trout	All	1	1	2	1	33	3	10	14	2.33	16	193.0	78.0

Site Number: 577
Site Midpoint (Latitude, Longitude): 44.38067497, -103.81715809
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK0, BR0

Date Sampled: 06/11/2018
Site Length (m): 100
Mean Width (m): 2.0
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage: 400

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	33	33	34	33	1650	35	330	668	31.67	531	114.2	21.5

Brook Trout	All	33	33	34	33	1650	35	330	668	31.67	531	114.2	21.5
Brown Trout	<200mm	7	7	7	7	350	7	70	142	6.56	113	122.0	21.0
Brown Trout	All	7	7	7	7	350	7	70	142	6.56	113	122.0	21.0

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 False Bottom Creek, 2008-2018

Site 542

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 11, 2018	7	7-7	
Brook Trout >=200mm	Jun 11, 2018	1	1-1	BK3
Brown Trout <200mm	Jun 11, 2018	84	82-88	
Brown Trout >=200mm	Jun 11, 2018	3	3-3	BR2
Rainbow Trout <200mm	Jun 11, 2018	1	1-2	

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Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 28, 2008	42	42-44	

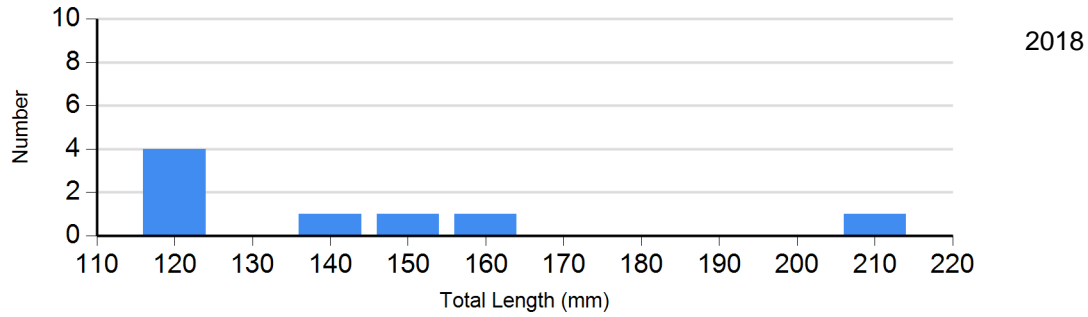
Brook Trout <200mm	Jun 17, 2014	76	75-79	
	Jun 30, 2016	54	54-55	
	Jun 11, 2018	33	33-34	
Brook Trout >=200mm	Jun 30, 2016	1	1-1	BK3
Brown Trout <200mm	Jun 17, 2014	3	3-3	
	Jun 30, 2016	50	49-53	
	Jun 11, 2018	7	7-7	
Brown Trout >=200mm	Jun 17, 2014	1	1-1	BR3
	Jun 30, 2016	1	1-1	BR3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

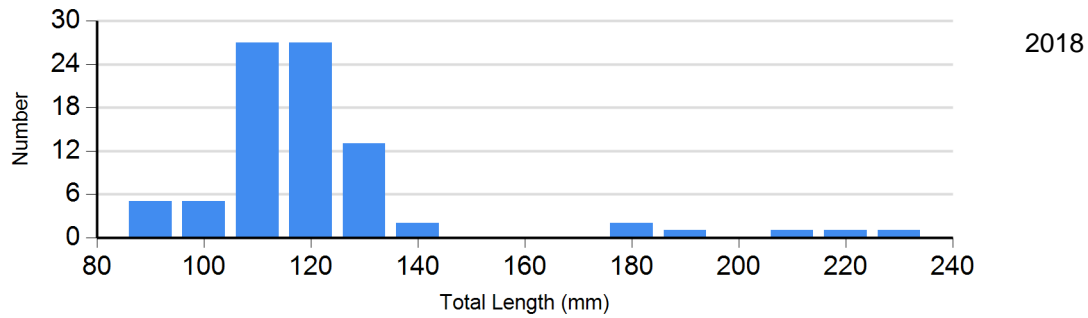
Site: 542

Species: Brook Trout



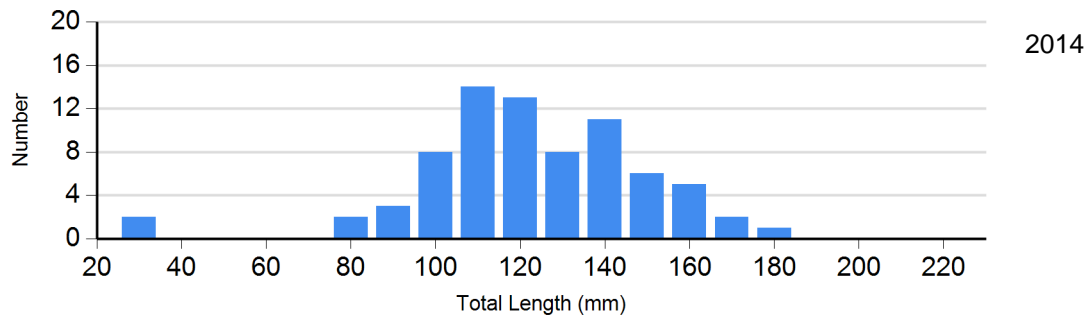
Site: 542

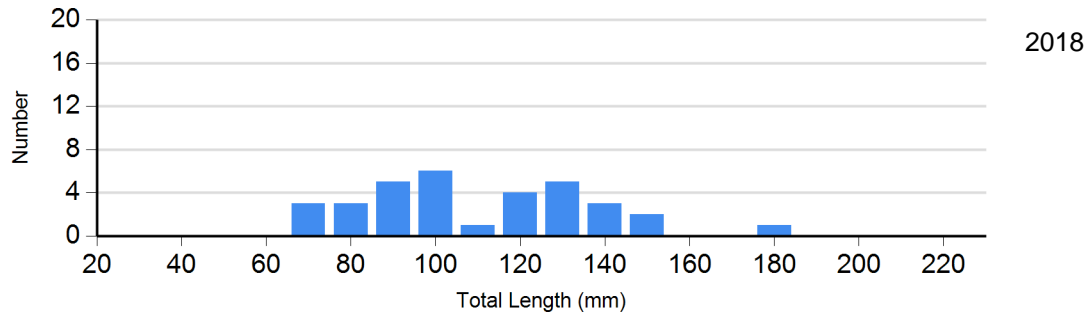
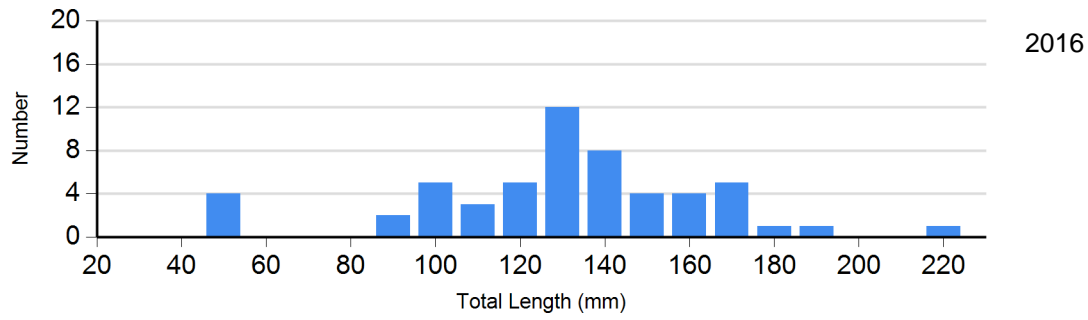
Species: Brown Trout



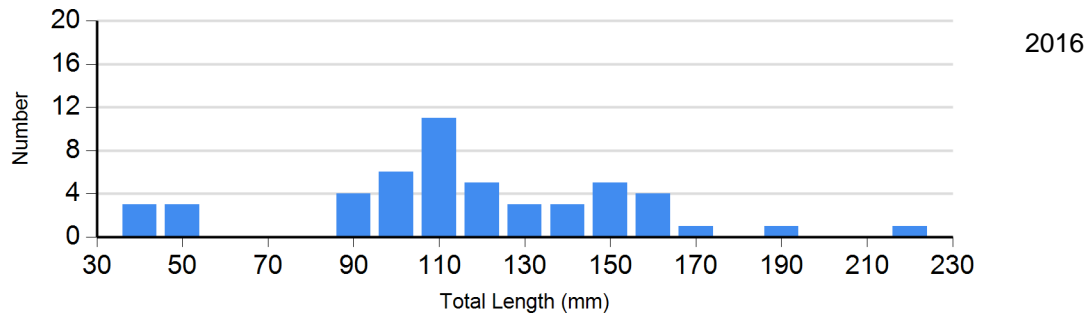
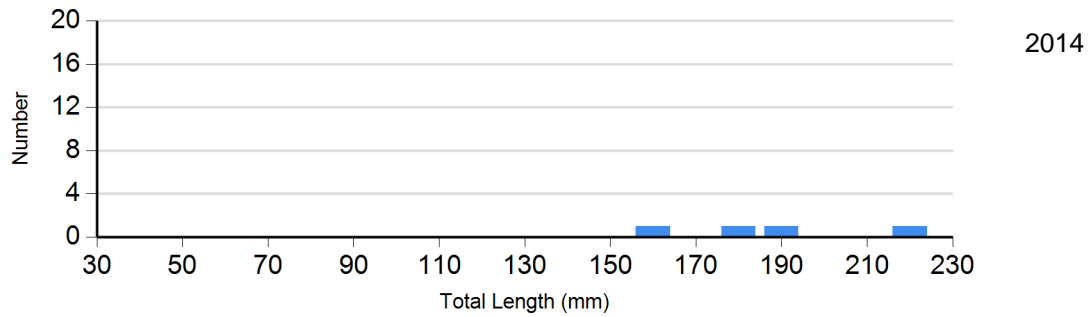
Site: 577

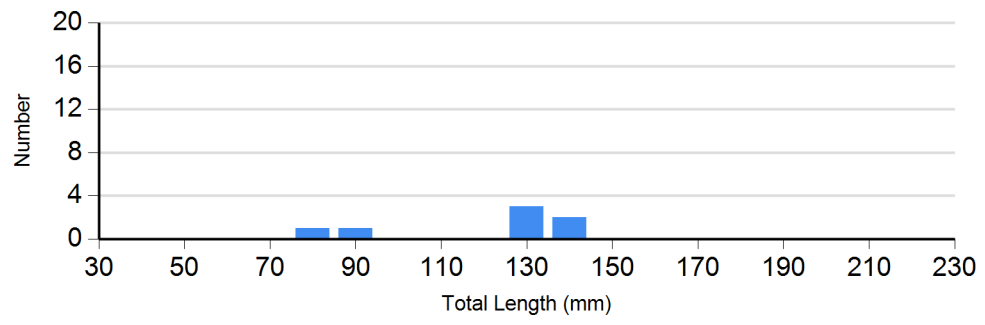
Species: Brook Trout





Site: 577
Species: Brown Trout





2018