

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Boxelder - North Fork, Lawrence County
09-0069-00
2018

Table 1. Population and Biomass Estimates for Boxelder - North Fork

Site Number: 112

Site Midpoint (Latitude, Longitude): 44.22303907, -103.69113208

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK3

Date Sampled: 05/21/2018

Site Length (m): 100

Mean Width (m): 1.9

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 12.0

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)
Brook Trout	<200mm	25	26	30	25	1388	36	260	562	32.14	418	111.0	25.9
Brook Trout	>=200mm	1	1	1	1	53	5	10	22	4.10	16	213.0	86.0
Brook Trout	All	26	27	30	26	1442	43	270	584	38.53	434	114.9	29.9
Longnose Dace	All	34	33	40	34	1762	26	330	714	23.60	531	73.6	15.0

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 Boxelder - North Fork, 2008-2018

Site 112

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 11, 2014	31	30-34	
	Jun 06, 2016	43	43-43	
	May 15, 2017	72	71-75	
	May 21, 2018	26	25-30	
Brook Trout >=200mm	Jun 11, 2014	1	1-1	BK3
	Jun 06, 2016	3	3-3	BK2
	May 15, 2017	1	1-2	BK2

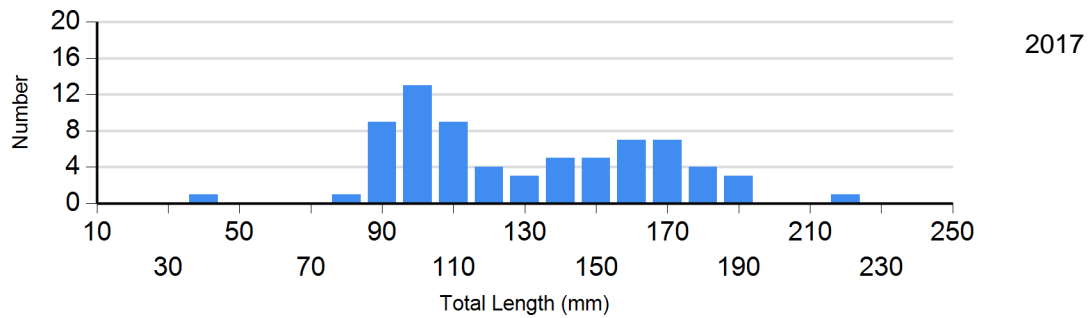
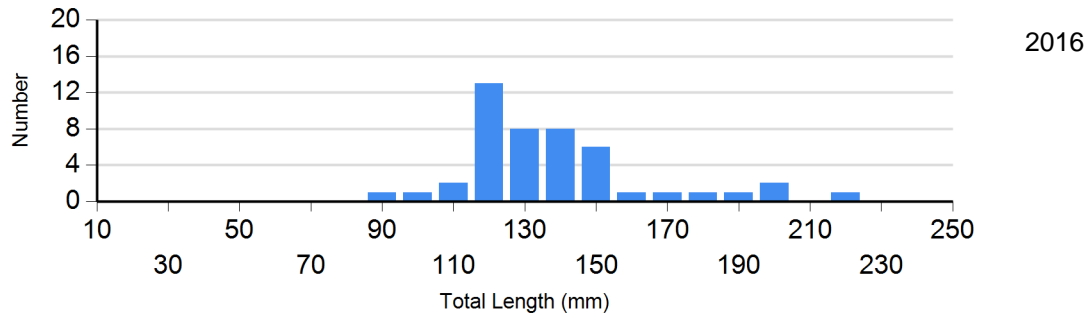
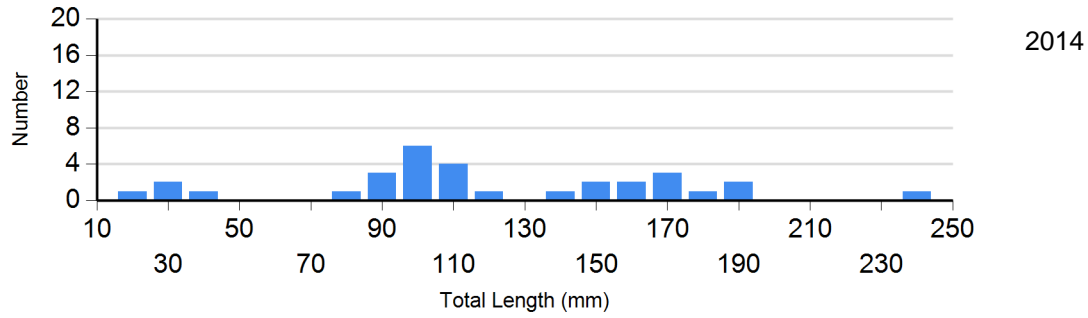
Brook Trout >=200mm	May 21, 2018	1	1-1	BK3
Longnose Dace	Jun 11, 2014	16	13-26	
	Jun 06, 2016	35	33-40	
	May 21, 2018	33	34-40	

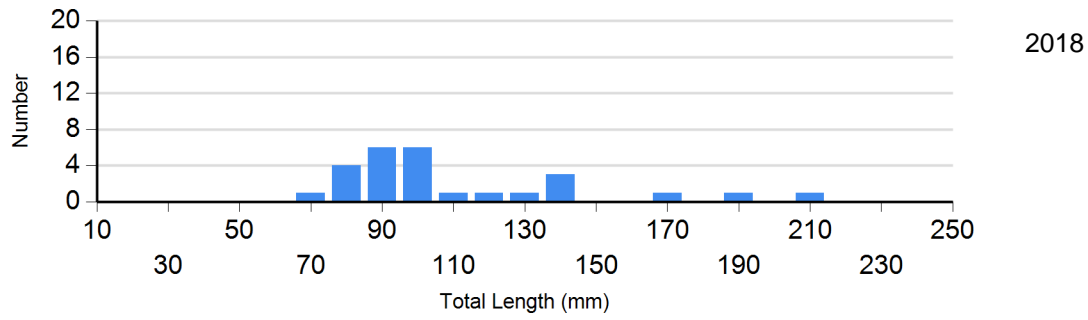
Length Frequency Distribution

Length frequency histogram of species sampled by year.

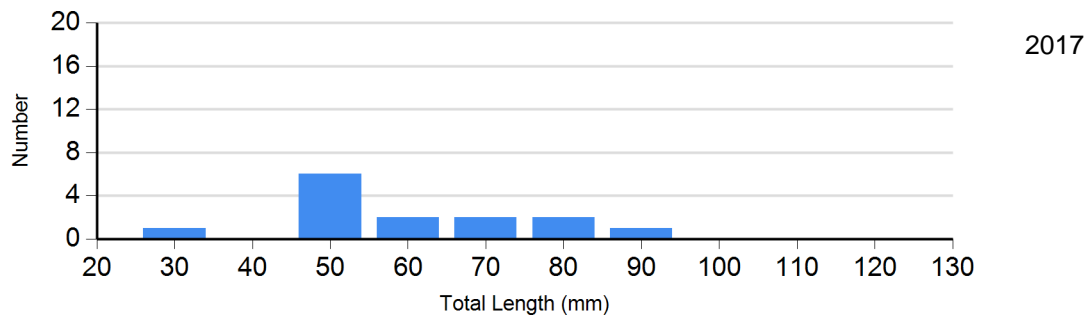
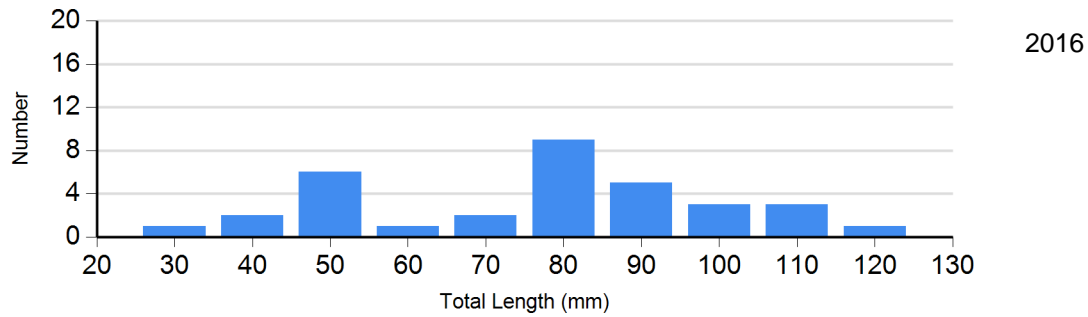
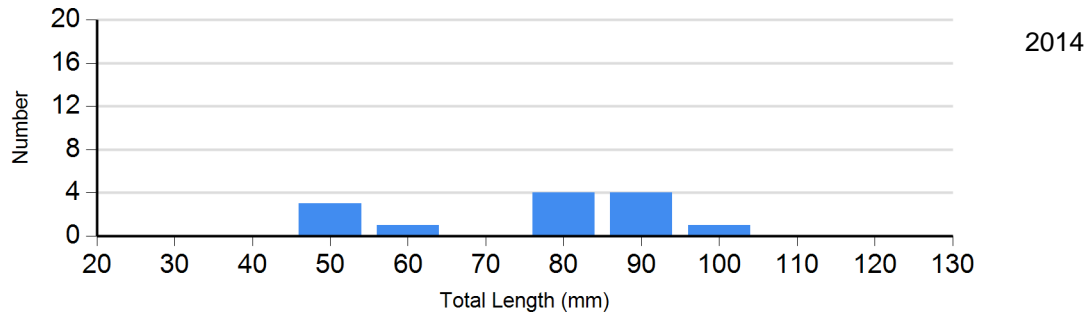
Site: 112

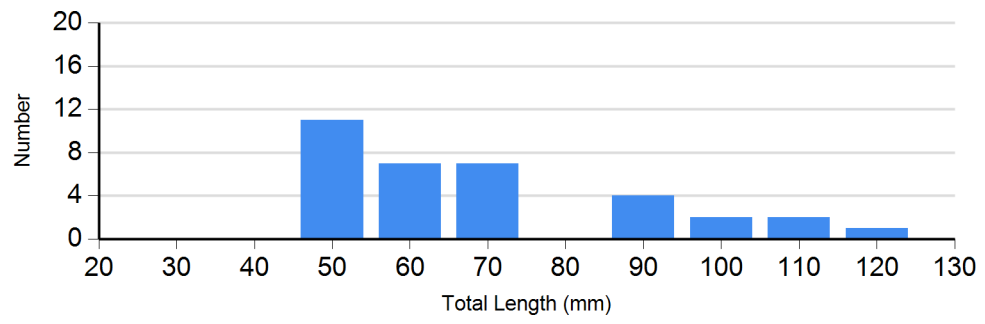
Species: Brook Trout





Site: 112
Species: Longnose Dace





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