

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Hay Creek (Trib. of Boxelder), Lawrence County
09-0064-00
2015

Table 1. Population and Biomass Estimates for Hay Creek (Trib. of Boxelder)

Site Number: 2	Date Sampled: 05/13/2015	Conductivity (umhos/cm):	150
Site Midpoint (Latitude, Longitude): 44.23033342, -103.57592412	Site Length (m): 100	pH:	8.1
Survey Completed by:	Mean Width (m): 2.1	Water Temperature (C):	7.7
Stream Classification: BK2	Number of Pass: 3	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	27	33	25	1297	50	270	525	44.51	434	144.2	38.4
Brook Trout	>=200mm	3	3	3	3	144	14	30	58	12.82	48	215.7	99.7
Brook Trout	All	28	30	35	28	1441	66	300	584	58.54	483	151.8	45.5
Longnose Dace	All	4	4	7	4	192	2	40	78	2.06	64	84.0	12.0

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 Hay Creek (Trib. of Boxelder), 2005-2015

Site 2

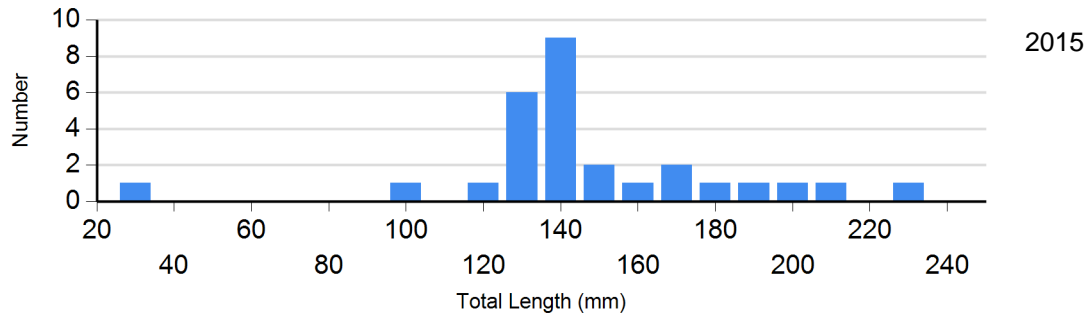
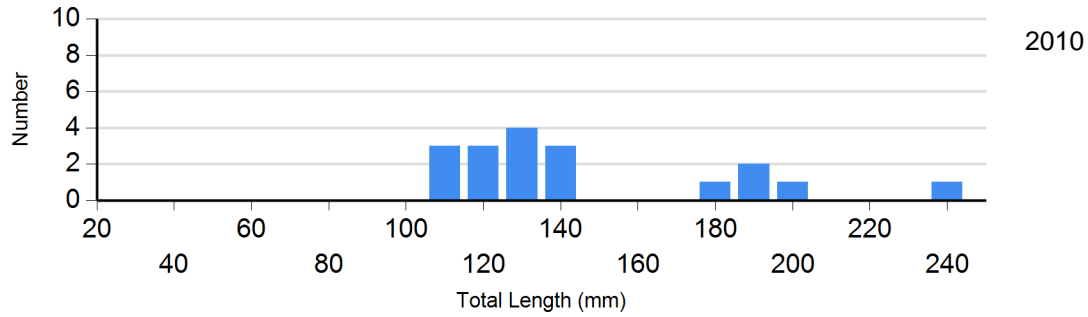
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	May 13, 2015	27	25-33	
Brook Trout >=200mm	May 13, 2015	3	3-3	BK2
Longnose Dace	May 13, 2015	4	4-7	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2

Species: Brook Trout



Site: 2

Species: Longnose Dace

