

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Tillson Creek, Lawrence County
09-0081-00
2015

Table 1. Population and Biomass Estimates for Tillson Creek

Site Number: 57

Site Midpoint (Latitude, Longitude): 44.17390335, -103.79870822

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK2, BR2

Date Sampled: 09/18/2015

Site Length (m): 100

Mean Width (m): 2.0

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

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	55	55	56	55	2738	82	550	1109	73.42	885	112.1	30.0
Brook Trout	>=200mm	4	4	4	4	199	28	40	81	24.93	64	231.8	140.3
Brook Trout	All	59	59	60	59	2937	131	590	1189	117.29	949	120.3	44.7
Brown Trout	<200mm	19	19	19	19	946	42	190	383	37.82	306	163.1	44.8
Brown Trout	>=200mm	3	3	4	3	149	22	30	60	19.69	48	232.7	147.7
Brown Trout	All	22	22	23	22	1095	64	220	443	57.51	354	172.6	58.8
Longnose Dace	All	18	17	22	18	846	10	170	343	9.19	274	96.7	12.2
Mountain Sucker	All	3	3	5	3	149	3	30	60	2.80	48	121.7	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 Tillson Creek, 2005-2015

Site 57

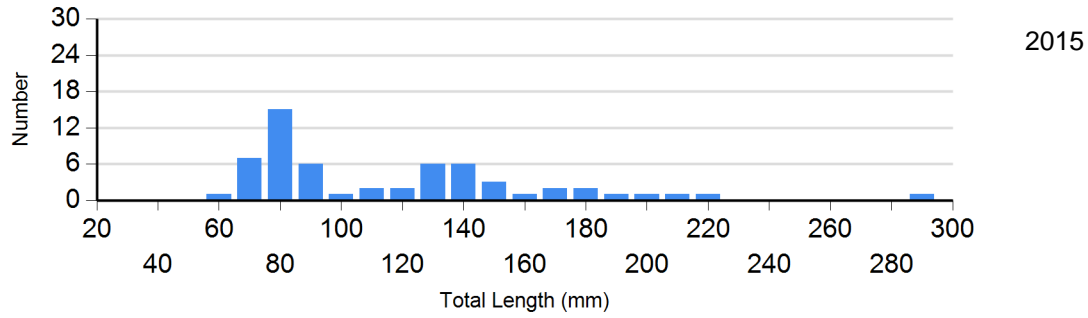
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 18, 2015	55	55-56	
Brook Trout >=200mm	Sep 18, 2015	4	4-4	BK2
Brown Trout <200mm	Sep 18, 2015	19	19-19	
Brown Trout >=200mm	Sep 18, 2015	3	3-4	BR2
Longnose Dace	Sep 18, 2015	17	18-22	
Mountain Sucker	Sep 18, 2015	3	3-5	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

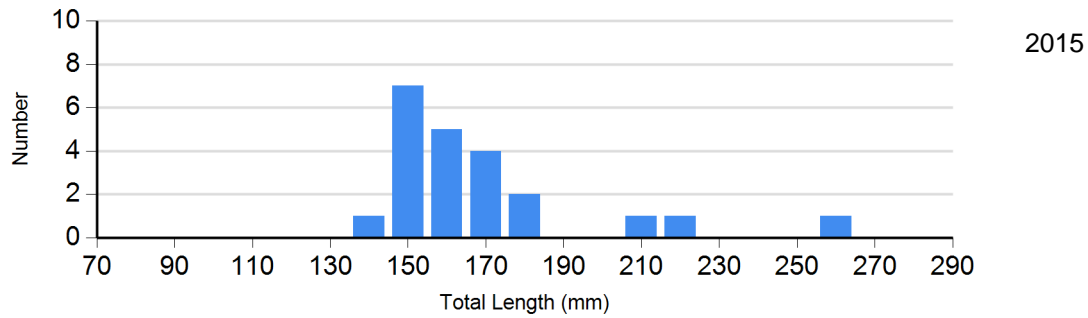
Site: 57

Species: Brook Trout



Site: 57

Species: Brown Trout



Site: 57

Species: Longnose Dace

