

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Higgins Gulch, Lawrence County
09-0045-00
2015

Table 1. Population and Biomass Estimates for Higgins Gulch

Site Number: 182	Date Sampled: 05/29/2015	Conductivity (umhos/cm): 312
Site Midpoint (Latitude, Longitude): 44.46415850, -103.94874003	Site Length (m): 100	pH: 8.3
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 4.0	Water Temperature (C): 6.0
Stream Classification: BK3	Number of Pass: 3	Voltage: 500

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	57	63	72	57	1568	29	630	635	25.87	1014	101.0	18.5
Brook Trout	>=200mm	2	2	3	2	50	7	20	20	6.13	32	227.5	138.0
Brook Trout	All	59	65	74	59	1618	38	650	655	33.88	1046	105.3	23.5

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 Higgins Gulch, 2005-2015

Site 182

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 10, 2008	14	14-14	
	May 29, 2015	63	57-72	
Brook Trout >=200mm	Jul 10, 2008	1	1-1	BK3
	May 29, 2015	2	2-3	BK3

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 182

Species: Brook Trout

