

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Lafferty Gulch, Pennington County
10170202080018
All Years

Table 1. Population and Biomass Estimates for Lafferty Gulch

Site Number: 2	Date Sampled: 07/06/2015	Conductivity (umhos/cm): 241
Site Midpoint (Latitude, Longitude): 43.89330961, -103.44066399	Site Length (m): 100	pH: 7.8
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.4	Water Temperature (C): 14.5
Stream Classification: BK2	Number of Pass: 3	Voltage: 275

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	124	129	136	124	9214	189	1290	3732	168.85	2076	98.1	20.5
Brook Trout	>=200mm	5	5	5	5	357	59	50	145	52.23	80	239.2	163.8
Brook Trout	All	171	173	177	171	12357	351	1730	5005	313.30	2784	103.6	28.4
Creek Chub	All	1	1	2	1	71	3	10	29	2.81	16	162.0	44.0

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 Lafferty Gulch, 2005-2015

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 06, 2015	129	124-136	
Brook Trout >=200mm	Jul 06, 2015	5	5-5	BK2
Creek Chub	Jul 06, 2015	1	1-2	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2

Species: Brook Trout

