

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Lime Creek, Pennington County
02-0099-00
2019

Table 1. Population and Biomass Estimates for Lime Creek

Site Number: 2	Date Sampled: 06/28/2019	Conductivity (umhos/cm): 1275
Site Midpoint (Latitude, Longitude): 44.07407521, -103.26553743	Site Length (m): 100	pH: 8.3
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.5	Water Temperature (C): 58.1
Stream Classification: BR1	Number of Pass: 3	Voltage: 250

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)
Brown Trout	<200mm	53	55	60	53	2200	103	550	891	91.99	885	151.2	46.8
Brown Trout	>=200mm	12	12	13	12	480	94	120	194	84.29	193	260.5	196.7
Brown Trout	All	65	67	71	65	2680	200	670	1085	178.25	1078	171.3	74.5

Site Number: 13	Date Sampled: 06/28/2019	Conductivity (umhos/cm): 1291
Site Midpoint (Latitude, Longitude): 44.07957722, -103.27298018	Site Length (m): 100	pH: 8.1
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.4	Water Temperature (C): 0.0
Stream Classification: BR1	Number of Pass: 3	Voltage: 205

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)
Brown Trout	<200mm	30	30	32	30	1245	71	300	504	63.75	483	170.1	57.3
Brown Trout	>=200mm	32	32	33	32	1328	236	320	538	210.44	515	248.8	177.4
Brown Trout	All	62	62	64	62	2574	307	620	1042	274.19	998	210.7	119.3
White Sucker	All	4	4	4	4	166	78	40	67	69.60	64	327.3	469.5

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 Lime Creek, 2009-2019

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jun 28, 2019	55	53-60	
Brown Trout >=200mm	Jun 28, 2019	12	12-13	BR1

Site 13

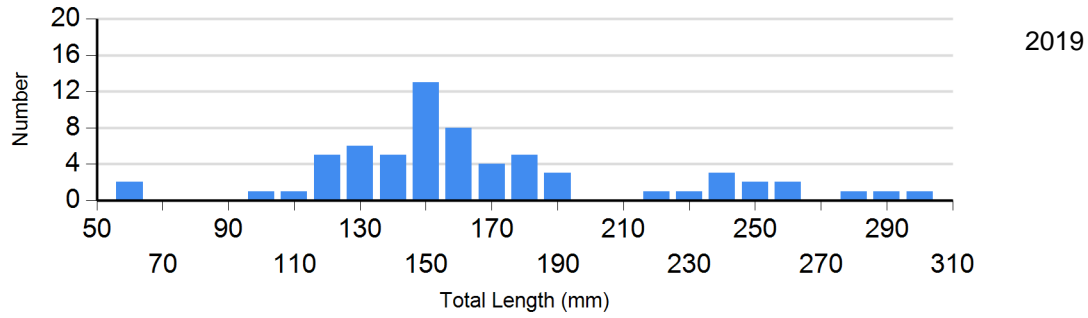
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jun 28, 2019	30	30-32	
Brown Trout >=200mm	Jun 28, 2019	32	32-33	BR1
White Sucker	Jun 28, 2019	4	4-4	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

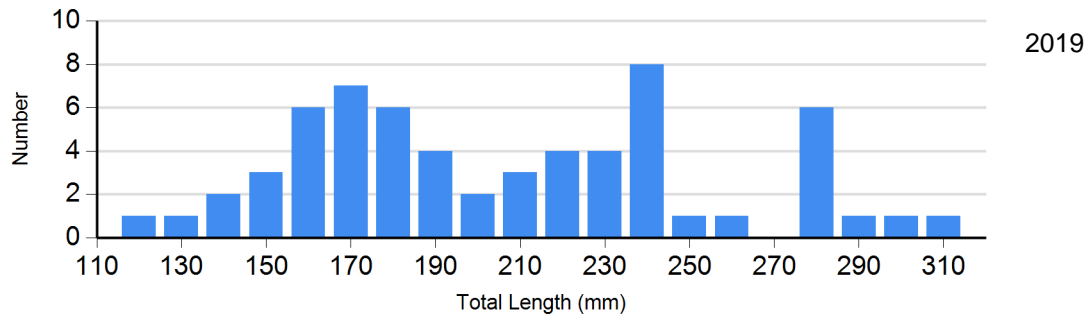
Site: 2

Species: Brown Trout



Site: 13

Species: Brown Trout



Site: 13

Species: White Sucker

