

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Vonderlehr Creek, Pennington County
02-9202-00
1993

Table 1. Population and Biomass Estimates for Vonderlehr Creek

Site Number: 1	Date Sampled: 06/16/1993	Conductivity (umhos/cm): 185
Site Midpoint (Latitude, Longitude): 43.86691400, -103.67407526	Site Length (m): 100	pH: 8.6
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.7	Water Temperature (C): 11.0
Stream Classification: BK3, BR0	Number of Pass: 3	Voltage: 400

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	88	90	94	88	5357	102	900	2170	91.43	1448	117.4	19.1
Brook Trout	>=200mm	1	1	1	1	60	5	10	24	4.73	16	204.0	89.0
Brook Trout	All	89	91	95	89	5417	108	910	2194	96.24	1464	118.4	19.9
Brown Trout	<200mm	1	1	2	1	60	1	10	24	0.48	16	99.0	9.0
Brown Trout	All	1	1	2	1	60	1	10	24	0.48	16	99.0	9.0
Longnose Dace	All	4	4	7	4	238	2	40	96	1.38	64	88.8	6.5

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 Vonderlehr Creek, 1983-1993

Site 1

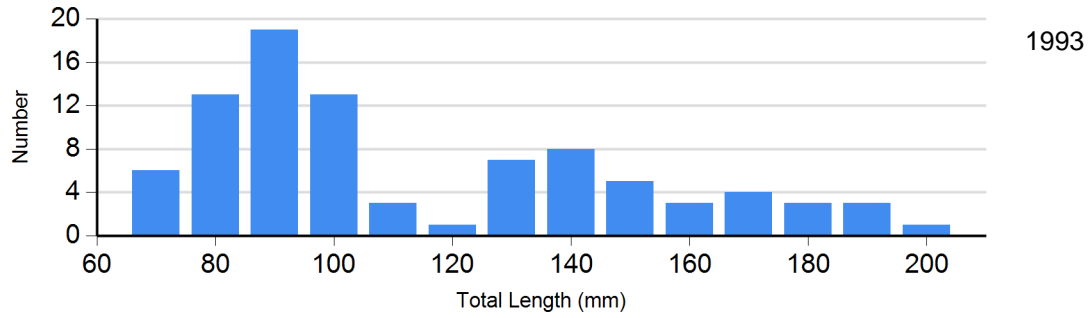
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 16, 1993	90	88-94	
Brook Trout >=200mm	Jun 16, 1993	1	1-1	BK3
Brown Trout <200mm	Jun 16, 1993	1	1-2	
Longnose Dace	Jun 16, 1993	4	4-7	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 1

Species: Brook Trout



Site: 1

Species: Longnose Dace

