SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY Highland, Custer County 10120109020009 2015

Table 1. Population and Biomass Estimates for Highland

Site Number: 175	Date Sampled: 08/05/2015	Conductivity	248
Site Midpoint (Latitude, Longitude): 43.62889300, -103.43874935	Site Length (m): 100	(umhos/cm):	
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 2.8	pH:	8.8
Stream Classification: BK1		Water Temperature (C):	21.2
	Number of Pass: 3	Voltage:	

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% Cl	Lower 95% Cl	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	1	1	1	1	35	3	10	14	2.67	16	185.0	85.0
Brook Trout	>=200mm	12	12	13	12	422	66	120	171	58.52	193	227.6	155.4
Brook Trout	All	13	13	14	13	457	69	130	185	61.19	209	224.3	150.0

Site Number: 178
Site Midpoint (Latitude, Longitude): 43.63053293, -103.44064411
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK1

Date Sampled:	06/29/2015	Conductivity	177
Site Length (m):	100	(umhos/cm): pH:	7.6
Mean Width (m):	2.8	Water Temperature (C):	
Number of Pass:	3	Voltage:	20.0

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% Cl	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	14	14	15	14	503	40	140	204	36.09	225	177.1	80.3
Brook Trout	>=200mm	11	11	11	11	395	49	110	160	44.17	177	214.5	125.1
Brook Trout	All	25	25	26	25	899	91	250	364	80.91	402	193.6	100.8

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 BrookTrout 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 Highland, 2005-2015

Site 175

Date	Pop Est.	(95% C.I.)	Stream Classification
Aug 05, 2015	1	1-1	
Aug 05, 2015	12	12-13	BK1
Date	Pop Est.	(95% C.I.)	Stream Classification
Jun 29, 2015	14	14-15	
Jun 29, 2015	11	11-11	BK1
	Aug 05, 2015 Aug 05, 2015 Date Jun 29, 2015	Aug 05, 2015 1 Aug 05, 2015 12 Date Pop Est. Jun 29, 2015 14	Aug 05, 2015 1 1-1 Aug 05, 2015 12 12-13 Date Pop Est. (95% C.I.) Jun 29, 2015 14 14-15

Length Frequency Distribution

Length frequency histogram of species sampled by year.







