

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Annie Creek, Lawrence County
09-0074-00
2012

Table 1. Population and Biomass Estimates for Annie Creek

Site Number: 2

Site Midpoint (Latitude, Longitude): 44.32728433, -103.89361583

Survey Completed by: GEI

Stream Classification: BK2, BR2

Date Sampled: 08/24/2012

Site Length (m): 100

Mean Width (m): 2.6

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

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)
Brook Trout	<200mm	140	162	182	142	6275	109	1620	2541	97.20	2607	99.1	17.3
Brook Trout	>=200mm	3	3	4	3	116	10	30	47	9.06	48	214.0	87.3
Brook Trout	All	143	166	187	145	6430	123	1660	2604	109.48	2671	101.5	19.1
Brown Trout	<200mm	29	29	30	29	1123	5	290	455	4.42	467	67.3	4.4
Brown Trout	>=200mm	2	2	3	2	77	8	20	31	7.40	32	222.0	107.0
Brown Trout	All	31	31	32	31	1201	16	310	486	13.89	499	77.3	13.0

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 Annie Creek, 2002-2012

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 27, 2002	55	55-57	
	Aug 26, 2003	31	31-31	
	Sep 01, 2004	41	41-42	
	Aug 31, 2006	91	90-94	
	Aug 29, 2007	118	110-128	
	Aug 27, 2008	114	113-117	
	Aug 26, 2009	125	115-136	

Brook Trout <200mm	Aug 24, 2010	130	129-133	
	Aug 24, 2011	113	109-119	
	Aug 24, 2012	162	142-182	
Brook Trout >=200mm	Aug 27, 2002	1	1-1	BK3
	Aug 26, 2003	3	3-3	BK2
	Sep 01, 2004	2	2-2	BK2
	Aug 31, 2006	1	1-1	BK3
	Aug 29, 2007	2	2-2	BK3
	Aug 27, 2008	1	1-1	BK3
	Aug 26, 2009	2	2-2	BK3
	Aug 24, 2011	3	3-3	BK2
	Aug 24, 2012	3	3-4	BK2
Brown Trout <200mm	Aug 27, 2002	33	33-34	
	Aug 26, 2003	13	13-13	
	Sep 01, 2004	8	8-10	
	Aug 31, 2006	5	5-5	

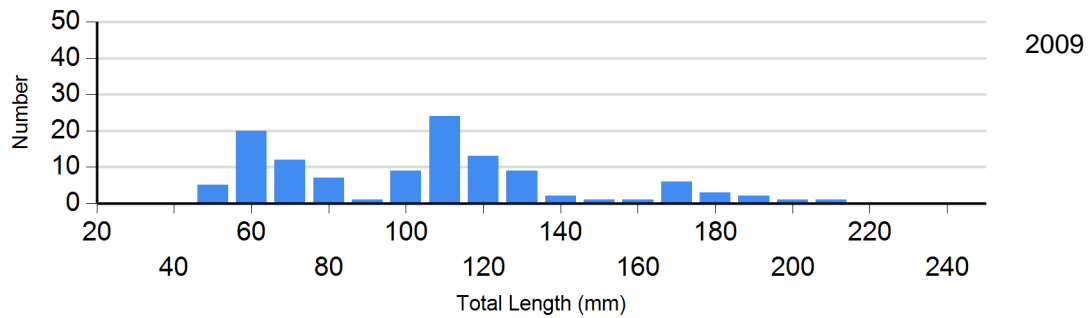
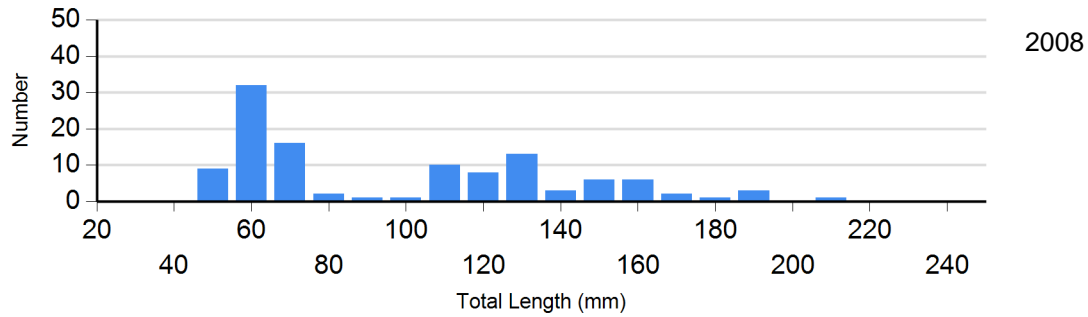
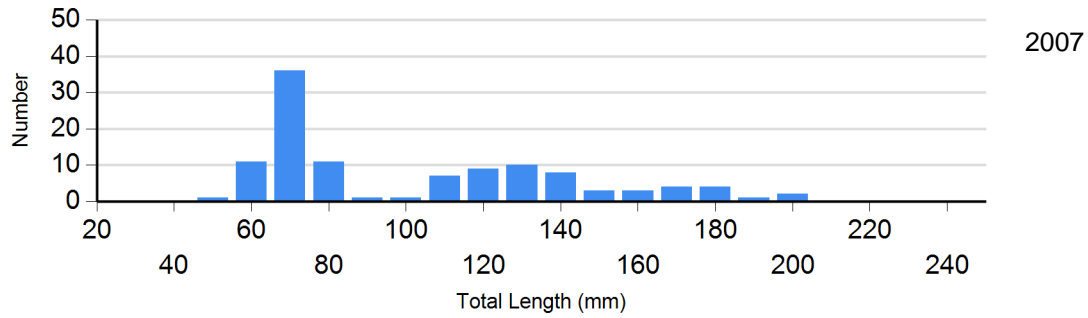
Brown Trout <200mm	Aug 29, 2007	17	16-21	
	Aug 27, 2008	14	15-19	
	Aug 26, 2009	3	3-3	
	Aug 24, 2010	6	6-6	
	Aug 24, 2011	7	7-7	
	Aug 24, 2012	29	29-30	
Brown Trout >=200mm	Aug 27, 2002	4	4-4	BR2
	Aug 26, 2003	8	8-8	BR2
	Sep 01, 2004	2	2-2	BR2
	Aug 31, 2006	1	1-1	BR3
	Aug 29, 2007	3	3-4	BR3
	Aug 27, 2008	1	1-1	BR3
	Aug 26, 2009	3	3-3	BR3
	Aug 24, 2010	2	2-2	BR2
	Aug 24, 2011	4	4-4	BR2
	Aug 24, 2012	2	2-3	BR2

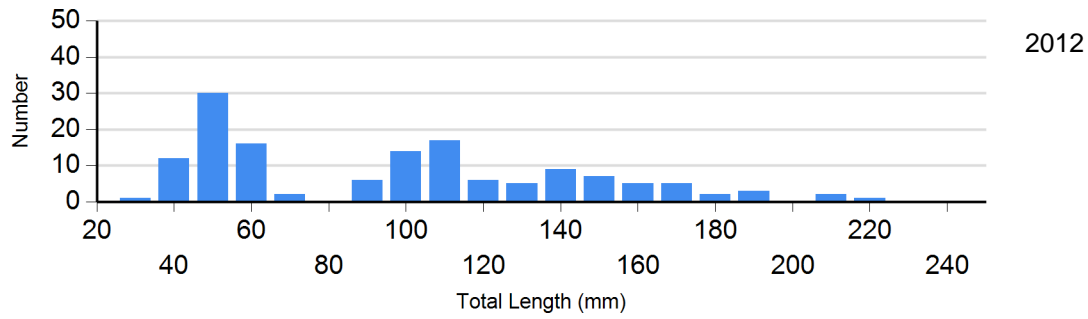
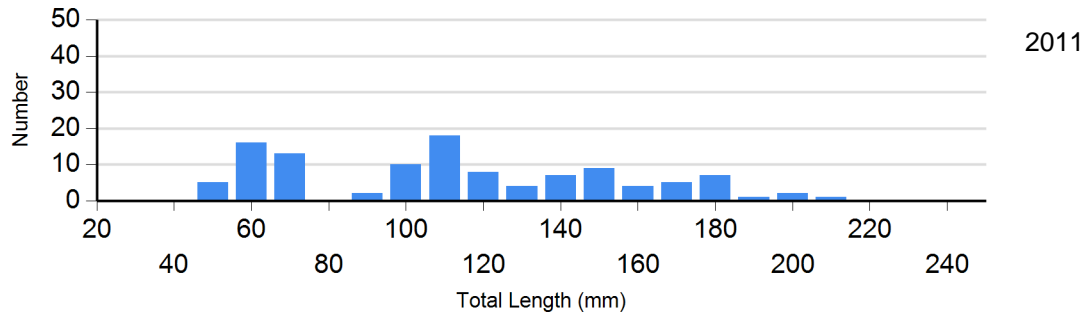
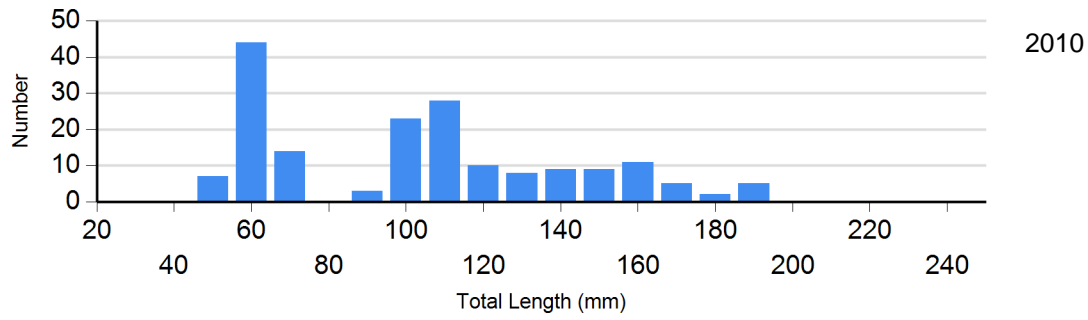
Length Frequency Distribution

Length frequency histogram of species sampled by year.

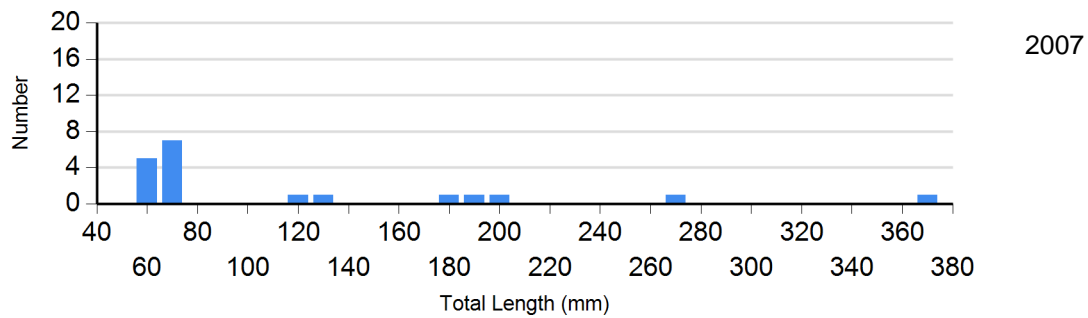
Site: 2

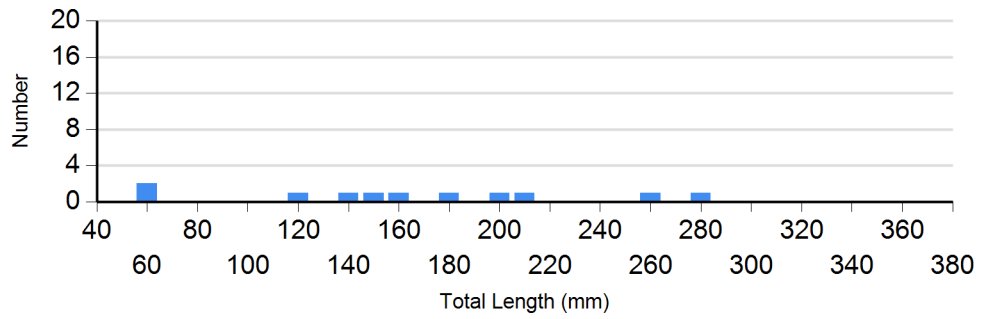
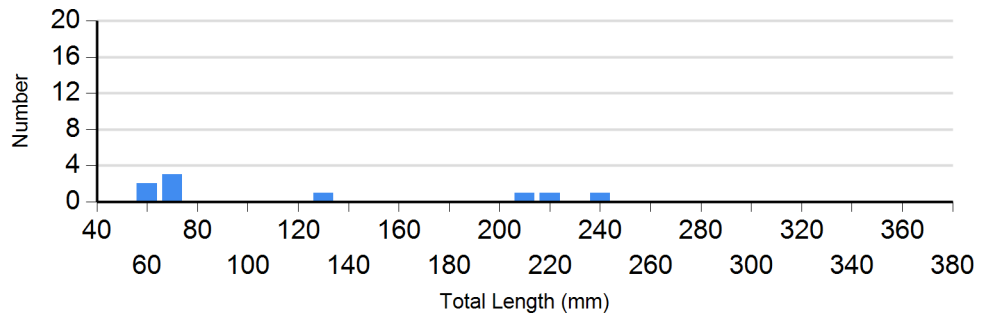
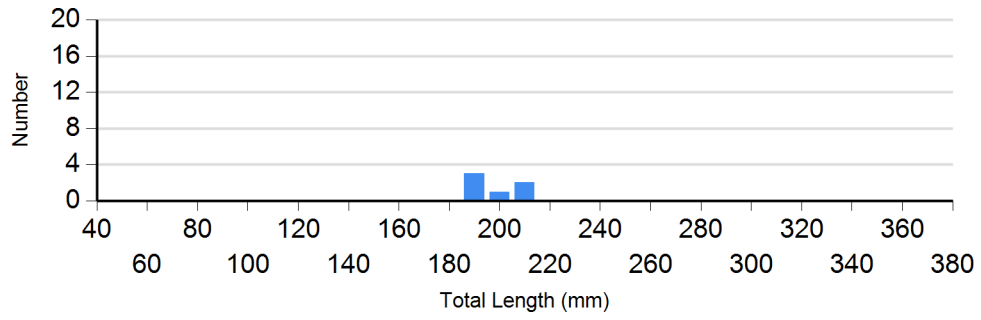
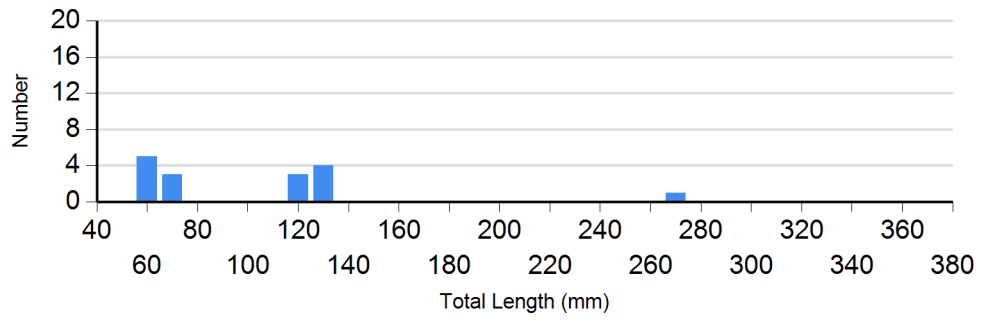
Species: Brook Trout

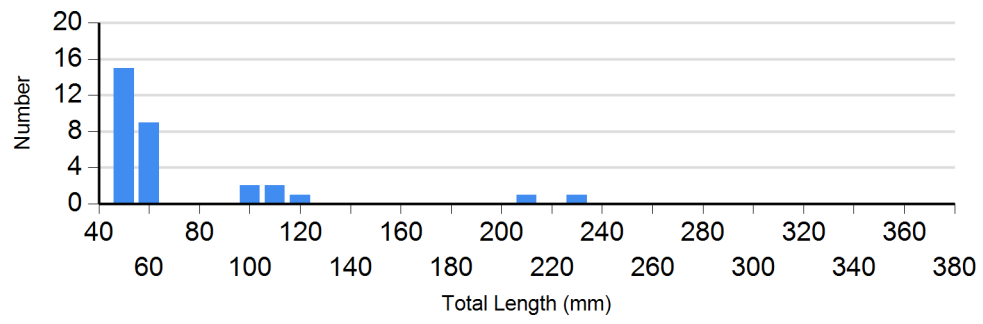




Site: 2
Species: Brown Trout







2012