

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Annie Creek, Lawrence County
09-0074-00
2011

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: 08/24/2011

Site Length (m): 106

Mean Width (m): 3.1

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C):

Voltage:

180

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	109	113	119	109	3688	82	1066	1494	72.91	1715	114.6	22.1
Brook Trout	>=200mm	3	3	3	3	98	9	28	40	8.19	46	207.7	93.7
Brook Trout	All	112	116	122	112	3786	91	1094	1533	81.32	1761	117.1	24.1
Brown Trout	<200mm	7	7	7	7	228	7	66	93	6.30	106	130.0	30.9
Brown Trout	>=200mm	4	4	4	4	131	21	38	53	18.54	61	242.5	159.0
Brown Trout	All	11	11	11	11	359	28	104	145	24.83	167	170.9	77.5

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 Annie Creek, 2001-2011

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 30, 2001	52	52-54	
	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	

Brook Trout <200mm	Aug 26, 2009	125	115-136	
	Aug 24, 2010	130	129-133	
	Aug 24, 2011	113	109-119	
Brook Trout >=200mm	Aug 30, 2001	2	2-2	BK2
	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
Brown Trout <200mm	Aug 30, 2001	94	93-97	
	Aug 27, 2002	33	33-34	
	Aug 26, 2003	13	13-13	
	Sep 01, 2004	8	8-10	

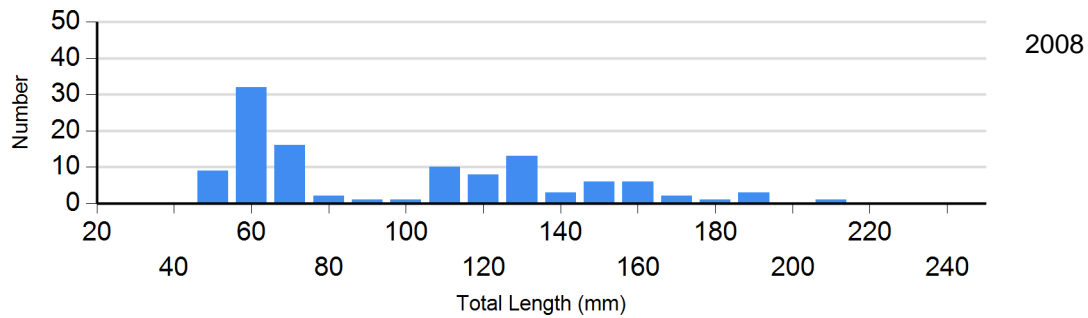
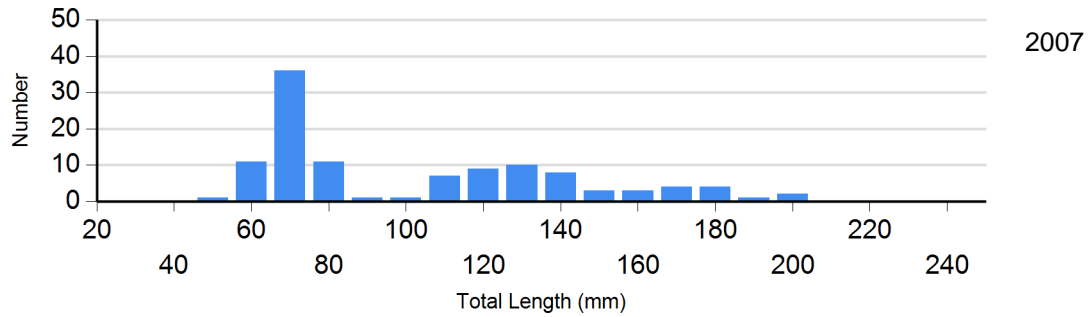
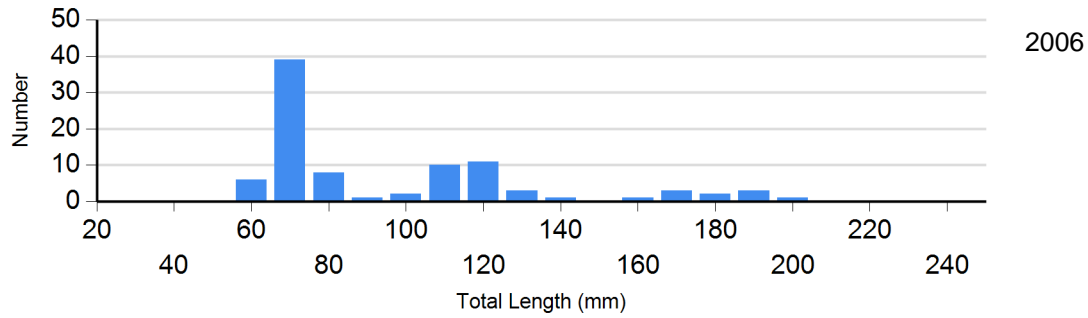
Brown Trout <200mm	Aug 31, 2006	5	5-5	
	Aug 29, 2007	17	16-21	
	Aug 27, 2008	14	15-19	
	Aug 26, 2009	3	3-3	
	Aug 24, 2010	6	6-6	
	Aug 24, 2011	7	7-7	
Brown Trout >=200mm	Aug 30, 2001	1	1-1	BR3
	Aug 27, 2002	4	4-4	BR2
	Aug 26, 2003	8	8-8	BR2
	Sep 01, 2004	2	2-2	BR2
	Aug 31, 2006	1	1-1	BR3
	Aug 29, 2007	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

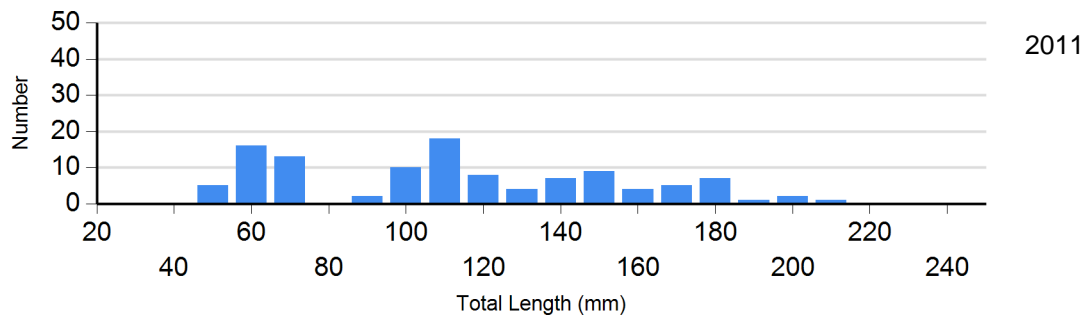
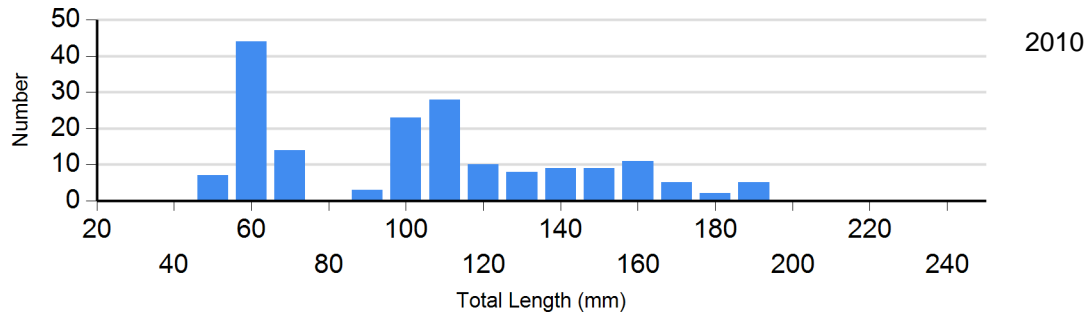
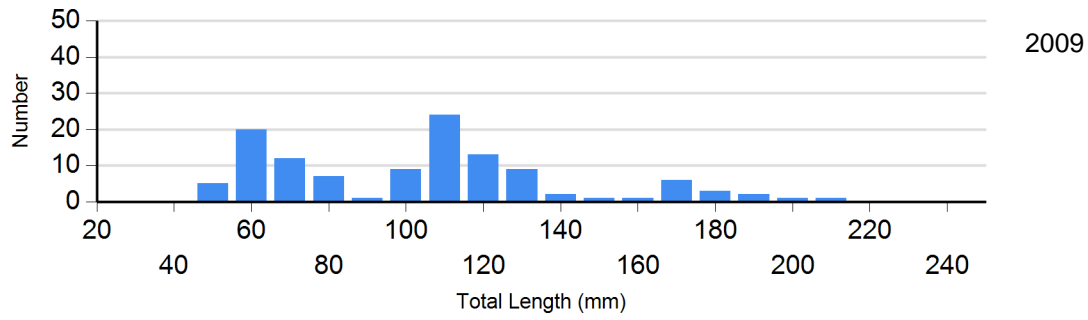
Length Frequency Distribution

Length frequency histogram of species sampled by year.

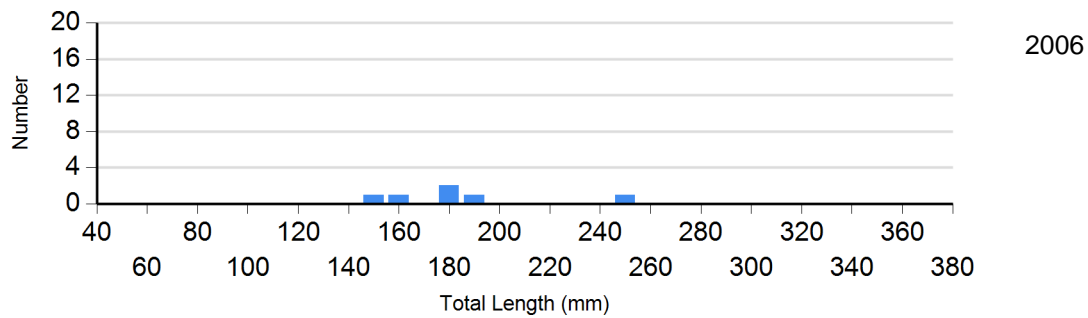
Site: 2

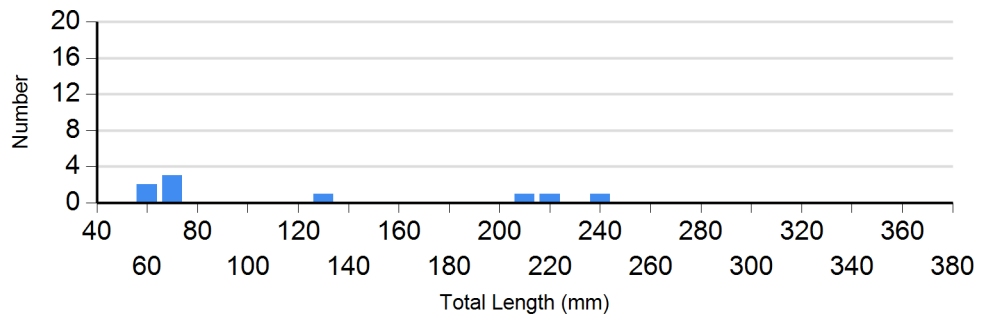
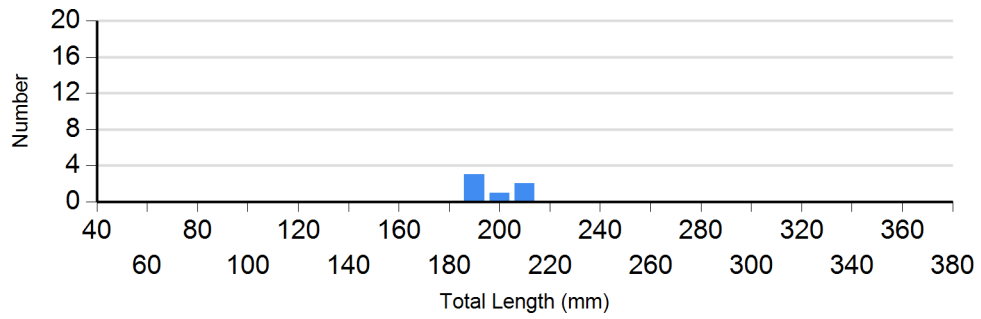
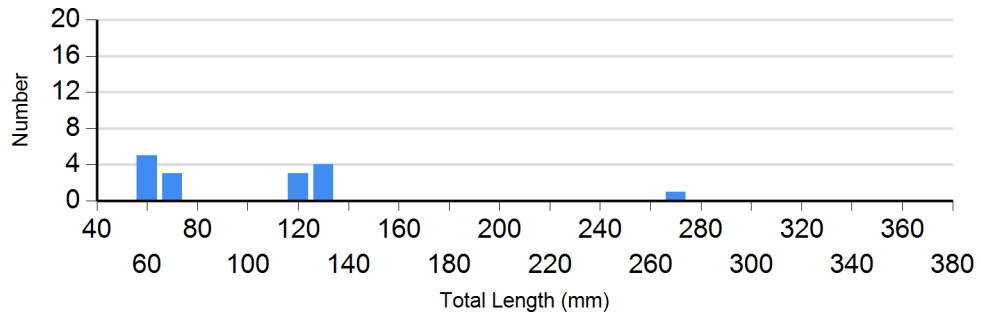
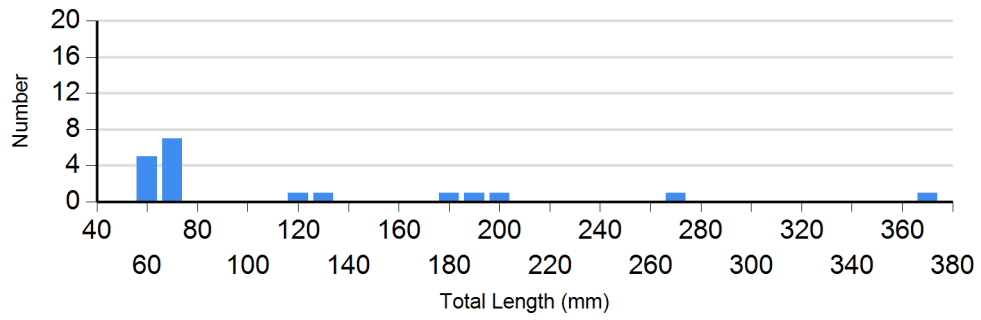
Species: Brook Trout

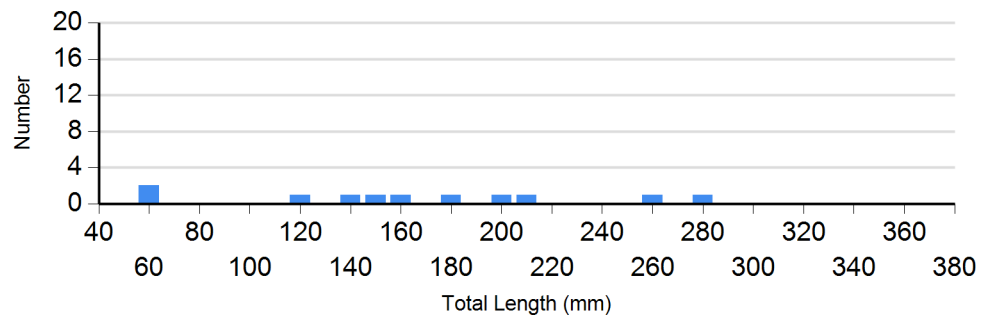




Site: 2
Species: Brown Trout







2011