

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Annie Creek, Lawrence County**  
**09-0074-00**  
**2017**

Table 1. Population and Biomass Estimates for Annie Creek

<b>Site Number:</b> 2	<b>Date Sampled:</b> 08/23/2017	<b>Conductivity (umhos/cm):</b>
<b>Site Midpoint (Latitude, Longitude):</b> 44.32728433, -103.89361583	<b>Site Length (m):</b> 105	<b>pH:</b>
<b>Survey Completed by:</b> GEI	<b>Mean Width (m):</b> 2.7	<b>Water Temperature (C):</b>
<b>Stream Classification:</b> BK3, BR2	<b>Number of Pass:</b> 3	<b>Voltage:</b>

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	96	97	100	96	3581	51	924	1450	45.76	1486	102.9	14.3
Brook Trout	>=200mm	1	1	1	1	37	4	10	15	3.43	15	235.0	104.0
Brook Trout	All	97	98	101	97	3617	55	933	1465	49.21	1502	104.3	15.2
Brown Trout	<200mm	27	28	32	27	1034	22	267	419	19.89	429	128.0	21.6
Brown Trout	>=200mm	9	9	11	9	332	41	86	135	36.58	138	230.7	123.3
Brown Trout	All	36	38	43	36	1403	66	362	568	58.86	582	153.7	47.0

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	
<b>Class BR1</b>	Number of wild Brown Trout exceeds 150 per acre
<b>Class BR2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BR3</b>	Number of wild Brown Trout is less than 25 per acre
<b>Class BK1</b>	Number of wild Brook Trout exceeds 150 per acre
<b>Class BK2</b>	Number of wild Brook Trout ranges from 25 to 150 per acre
<b>Class BK3</b>	Number of wild Brook Trout is less than 25 per acre
<b>Class RB1</b>	Number of wild Rainbow Trout exceeds 25 per acre
<b>Class RB2</b>	Number of wild Rainbow Trout is less than 25 per acre

Table 2. Species composition and population estimates on Annie Creek, 2007-2017

**Site 2**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 29, 2007	118	110-128	
	Aug 27, 2008	114	113-117	
	Aug 26, 2009	125	115-136	
	Aug 24, 2010	130	129-133	
	Aug 24, 2011	113	109-119	
	Aug 24, 2012	162	142-182	
	May 28, 2014	25	25-26	

Brook Trout <200mm	Aug 22, 2014	136	129-144	
	Aug 26, 2015	96	95-99	
	Aug 26, 2015	95	95-97	
	Jun 03, 2016	41	41-43	
	Aug 23, 2017	97	96-100	
Brook Trout >=200mm	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
	May 28, 2014	1	1-1	BK3
	Aug 22, 2014	5	5-5	BK2
	Aug 26, 2015	9	9-9	BK3
	Aug 26, 2015	9	9-9	BK3
	Jun 03, 2016	1	1-1	BK3
	Aug 23, 2017	1	1-1	BK3

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	
	May 28, 2014	15	15-17	
	Aug 22, 2014	35	35-36	
	Aug 26, 2015	20	20-20	
	Aug 26, 2015	20	20-20	
	Jun 03, 2016	1	1-1	
	Aug 23, 2017	28	27-32	
Brown Trout >=200mm	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

Brown Trout >=200mm	Aug 24, 2011	4	4-4	BR2
	Aug 24, 2012	2	2-3	BR2
	Aug 22, 2014	1	1-1	BR3
	Aug 26, 2015	19	19-19	BR3
	Aug 26, 2015	19	19-19	BR3
	Jun 03, 2016	1	1-1	BR3
	Aug 23, 2017	9	9-11	BR2

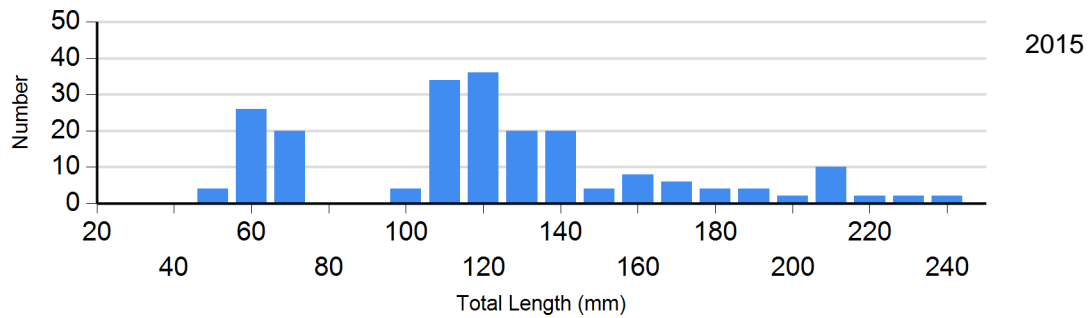
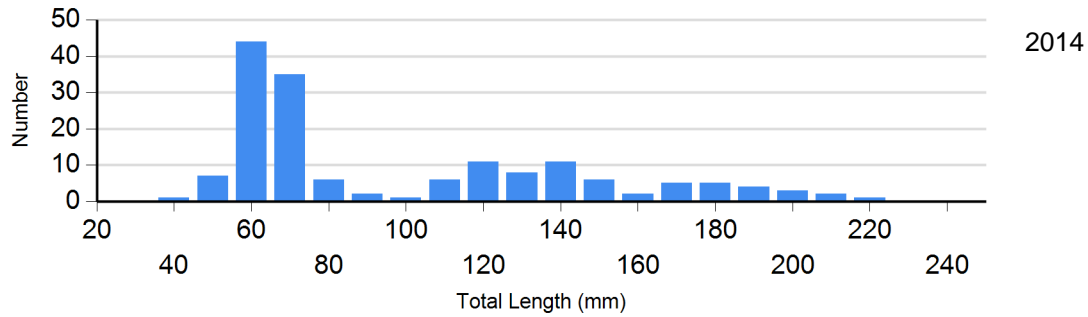
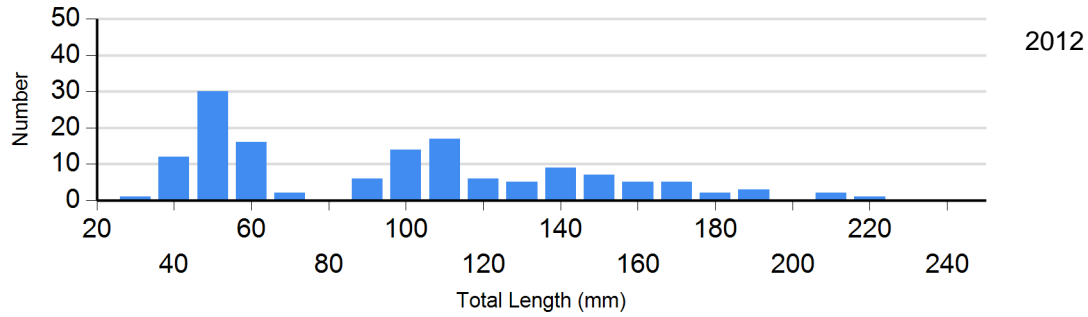
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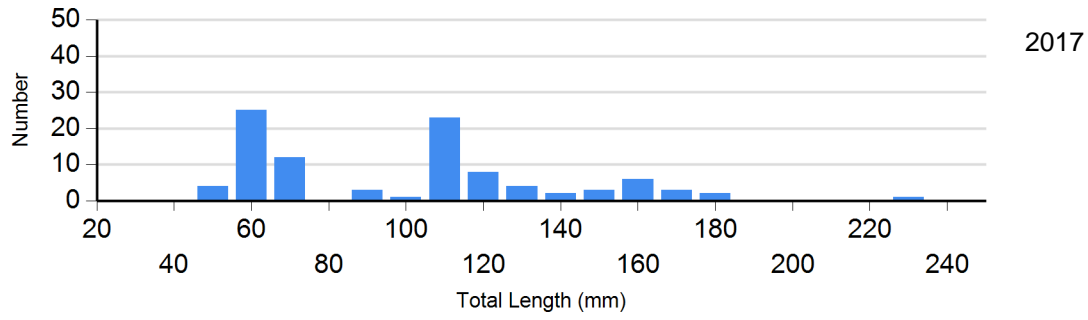
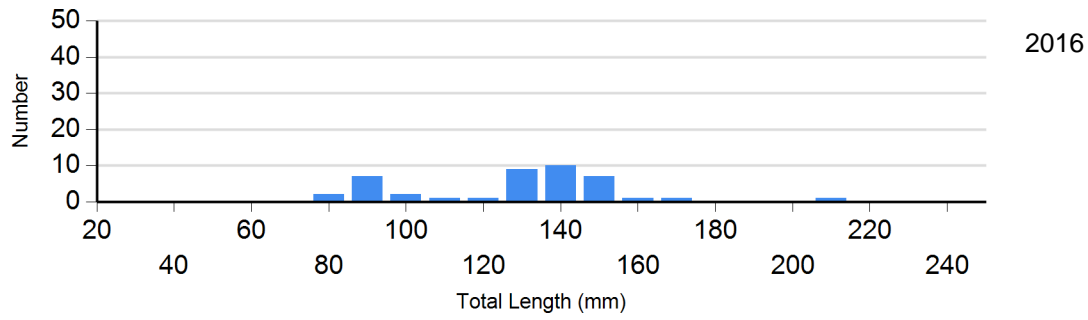
## Length Frequency Distribution

Length frequency histogram of species sampled by year.

**Site:** 2

**Species:** Brook Trout





**Site: 2**  
**Species: Brown Trout**

