

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Iron Creek (North), Lawrence County**  
**09-0049-00**  
**2018**

Table 1. Population and Biomass Estimates for Iron Creek (North)

**Site Number:** 3  
**Site Midpoint (Latitude, Longitude):** 44.37387285, -103.92121334  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR1, RB2

**Date Sampled:** 06/13/2018  
**Site Length (m):** 100  
**Mean Width (m):** 3.7  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):**  
**Voltage:** 300

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)
Brown Trout	<200mm	82	82	84	82	2227	101	820	902	90.14	1319	147.2	45.3
Brown Trout	>=200mm	42	42	43	42	1141	140	420	462	124.58	676	225.0	122.3
Brown Trout	All	124	125	128	124	3395	249	1250	1375	222.63	2011	173.5	73.4
Rainbow Trout	<200mm	1	1	1	1	27	1	10	11	0.70	16	143.0	29.0
Rainbow Trout	>=200mm	1	1	1	1	27	5	10	11	4.61	16	263.0	190.0
Rainbow Trout	All	2	2	2	2	54	6	20	22	5.31	32	203.0	109.5

**Site Number:** 76  
**Site Midpoint (Latitude, Longitude):** 44.36972596, -103.98788929  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BK0, BR2, RB1

**Date Sampled:** 06/13/2018  
**Site Length (m):** 100  
**Mean Width (m):** 1.1  
**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	17	17	18	17	1571	38	170	636	34.33	274	122.2	24.5
Brook Trout	All	17	17	18	17	1571	38	170	636	34.33	274	122.2	24.5
Brown Trout	<200mm	2	2	2	2	185	5	20	75	4.21	32	129.0	25.5

Brown Trout	>=200mm	1	1	1	1	92	32	10	37	28.14	16	319.0	341.0
Brown Trout	All	3	3	3	3	277	36	30	112	32.35	48	192.3	130.7
Rainbow Trout	<200mm	4	4	5	4	370	13	40	150	11.88	64	140.8	36.0
Rainbow Trout	>=200mm	2	2	3	2	185	74	20	75	65.70	32	358.5	398.0
Rainbow Trout	All	6	6	7	6	555	87	60	225	77.58	97	213.3	156.7

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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 Iron Creek (North), 2008-2018

**Site 3**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jul 08, 2008	23	23-23	
	Jun 25, 2014	41	40-44	
	Jun 13, 2018	82	82-84	
Brown Trout >=200mm	Jul 08, 2008	38	38-38	BR1
	Jun 25, 2014	31	31-32	BR1
	Jun 13, 2018	42	42-43	BR1
Rainbow Trout <200mm	Jul 08, 2008	1	1-1	

Rainbow Trout <200mm	Jun 13, 2018	1	1-1	
Rainbow Trout >=200mm	Jul 08, 2008	2	2-2	RB1
	Jun 25, 2014	5	5-5	RB1
	Jun 13, 2018	1	1-1	RB2

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**Site 76**

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<b>Species/Size</b>	<b>Date</b>	<b>Pop Est.</b>	<b>(95% C.I.)</b>	<b>Stream Classification</b>
Brook Trout <200mm	Jul 09, 2008	7	7-7	
	May 28, 2015	16	16-16	
	Jun 13, 2018	17	17-18	
Brook Trout >=200mm	Jul 09, 2008	1	1-1	BK2
Brown Trout <200mm	Jul 09, 2008	7	7-7	
	Jun 13, 2018	2	2-2	
Brown Trout >=200mm	Jul 09, 2008	1	1-1	BR2
	Jun 13, 2018	1	1-1	BR2
Rainbow Trout <200mm	Jul 09, 2008	27	27-27	
	May 28, 2015	32	32-32	

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Rainbow Trout <200mm	Jun 13, 2018	4	4-5	
Rainbow Trout >=200mm	May 28, 2015	2	2-2	RB1
	Jun 13, 2018	2	2-3	RB1

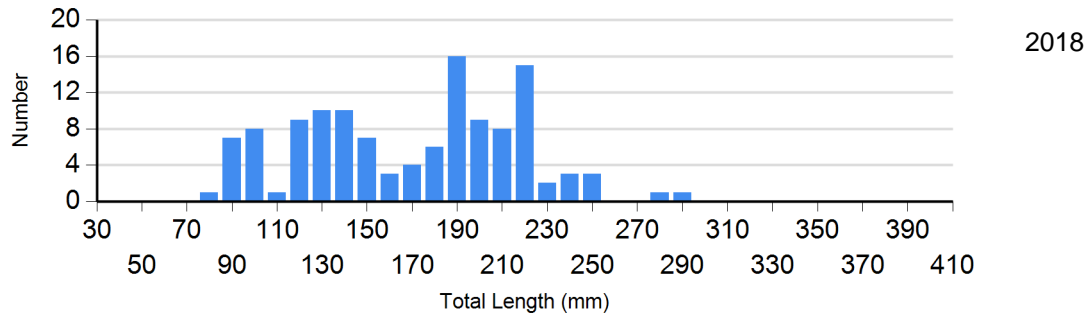
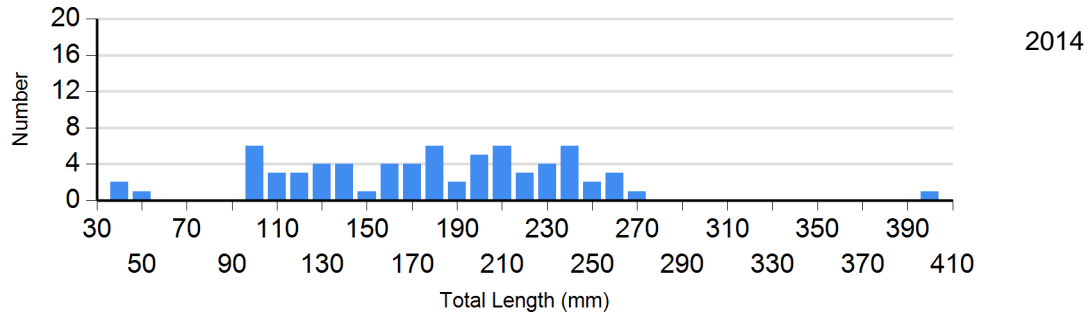
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## Length Frequency Distribution

Length frequency histogram of species sampled by year.

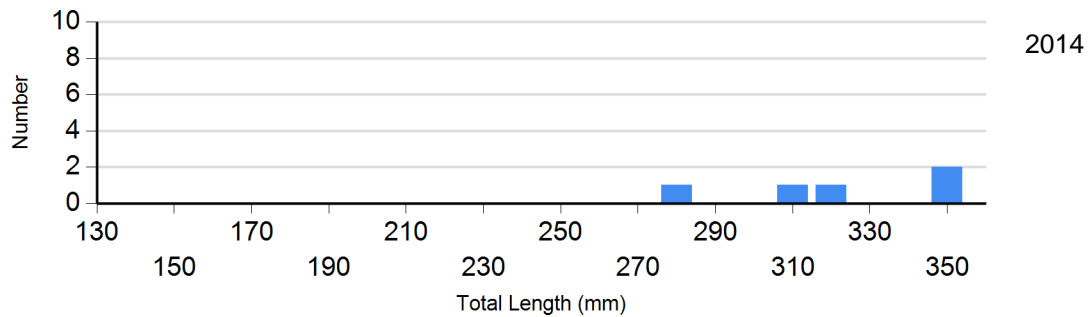
**Site:** 3

**Species:** Brown Trout

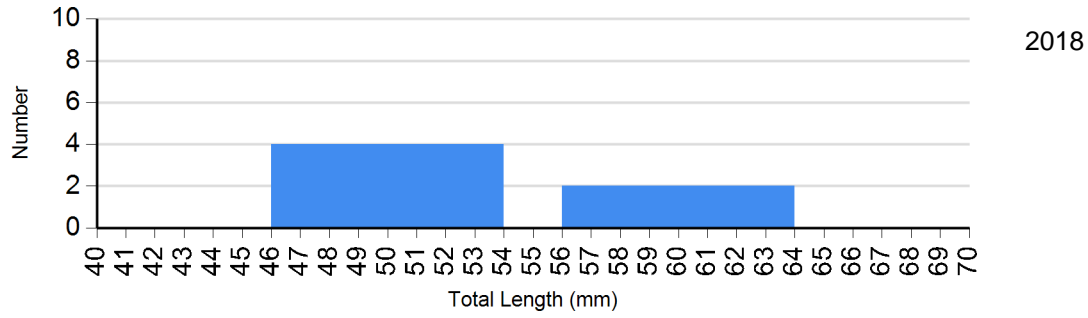


**Site:** 3

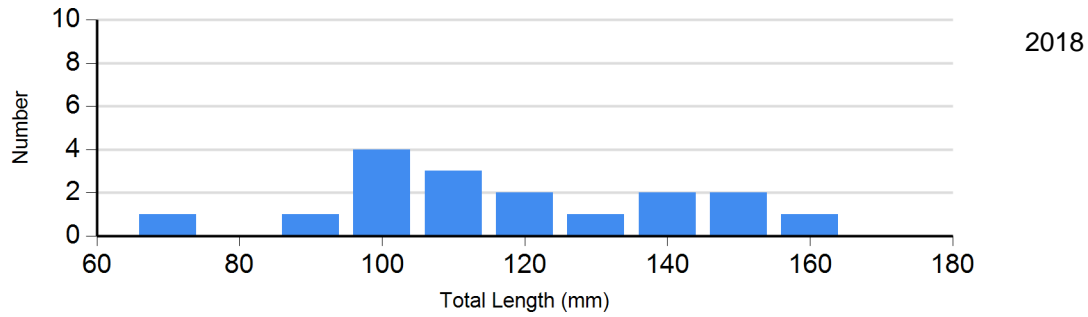
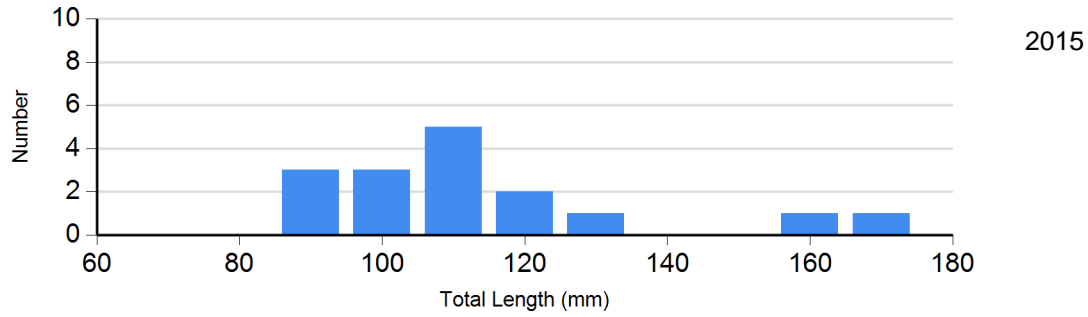
**Species:** Rainbow Trout



**Site: 76**  
**Species: Bluegill**



**Site: 76**  
**Species: Brook Trout**



Site: 76  
Species: Rainbow Trout

