

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Newton Fork Creek, Pennington County**  
**02-9223-00**  
**2015**

Table 1. Population and Biomass Estimates for Newton Fork Creek

<b>Site Number:</b> 88	<b>Date Sampled:</b> 08/13/2015	<b>Conductivity (umhos/cm):</b>	241
<b>Site Midpoint (Latitude, Longitude):</b> 43.96252566, -103.60651768	<b>Site Length (m):</b> 100	<b>pH:</b>	8.2
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 3.0	<b>Water Temperature (C):</b>	18.0
<b>Stream Classification:</b> BK2	<b>Number of Pass:</b> 3	<b>Voltage:</b>	350

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	62	62	63	62	2098	112	620	850	99.66	998	145.2	53.2
Brook Trout	>=200mm	10	10	10	10	338	41	100	137	36.17	161	223.2	119.7
Brook Trout	All	72	72	73	72	2437	158	720	987	141.13	1158	156.1	64.9
Longnose Dace	All	64	65	68	64	2200	31	650	891	27.50	1046	77.7	14.0

<b>Site Number:</b> 134	<b>Date Sampled:</b> 08/13/2015	<b>Conductivity (umhos/cm):</b>	204
<b>Site Midpoint (Latitude, Longitude):</b> 43.96642437, -103.64115347	<b>Site Length (m):</b> 100	<b>pH:</b>	7.8
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 1.4	<b>Water Temperature (C):</b>	22.9
<b>Stream Classification:</b> BK1	<b>Number of Pass:</b> 3	<b>Voltage:</b>	350

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	7	7	7	7	513	37	70	208	32.74	113	181.0	71.4
Brook Trout	>=200mm	6	6	6	6	440	64	60	178	57.23	97	228.7	145.7
Brook Trout	All	13	13	13	13	953	101	130	386	89.97	209	203.0	105.7

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 Newton Fork Creek, 2005-2015

**Site 88**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 13, 2015	62	62-63	
Brook Trout >=200mm	Aug 13, 2015	10	10-10	BK2
Longnose Dace	Aug 13, 2015	65	64-68	

**Site 134**

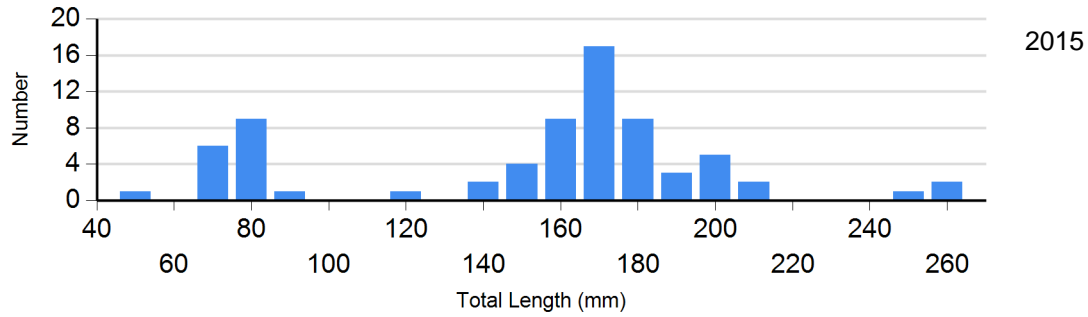
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 13, 2015	7	7-7	
Brook Trout >=200mm	Aug 13, 2015	6	6-6	BK1

## Length Frequency Distribution

Length frequency histogram of species sampled by year.

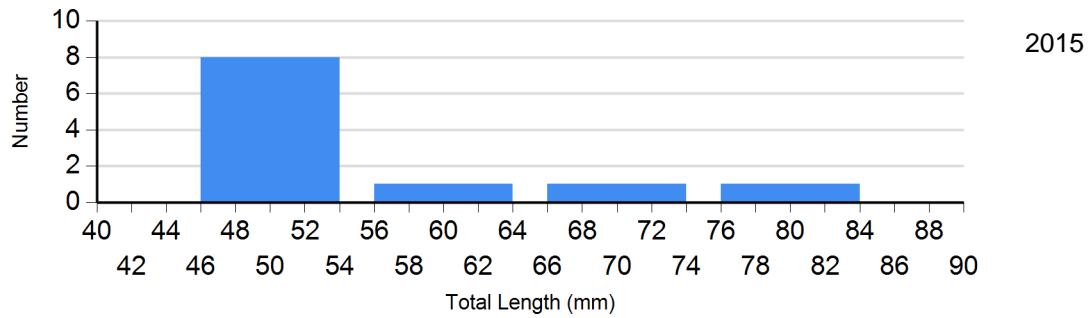
**Site:** 88

**Species:** Brook Trout



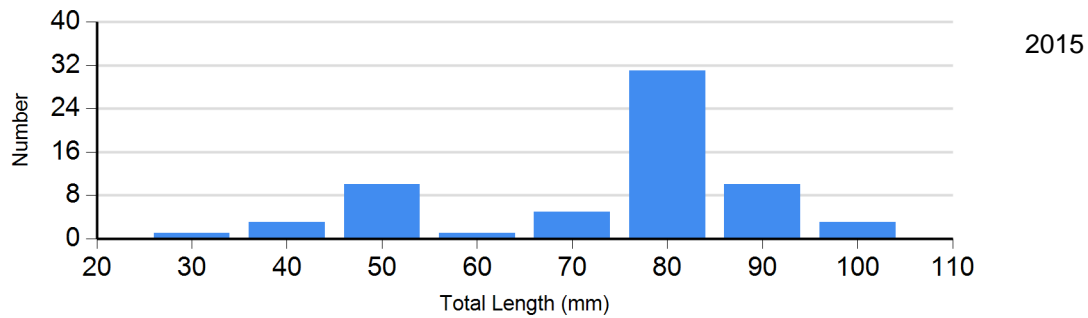
**Site:** 88

**Species:** Fathead Minnow



**Site:** 88

**Species:** Longnose Dace



Site: 134  
Species: Brook Trout

