SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Flynn Creek, Custer County 21-0034-00 2018

Table 1. Population and Biomass Estimates for Flynn Creek

Site Number: 87

Site Midpoint (Latitude, Longitude): 43.66865687, -103.46352358

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: None

Date Sampled: 07/03/2018

Site Length (m): 100

Mean Width (m): 1.5

Number of Pass: 3

Conductivity (umhos/cm):

рН:

Voltage:

Water Temperature (C): 16.0

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| Spec | ies | 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) |
|---------------|-----|---------------|-----------------------------|-------------------|-----------------|-----------------|-------------------|--------------------|-------------|---------------|-----------------|---------------|------------------------|---------------------------|
| Mount Suck | | All | 11 | 11 | 12 | 11 | 752 | 10 | 110 | 304 | 8.72 | 177 | 93.2 | 13.0 |

Site Number: 126

Site Midpoint (Latitude, Longitude): 43.68508330, -103.47288268

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: None

Date Sampled: 07/03/2018

Site Length (m): 100

Mean Width (m): 2.0

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 14.0

Voltage:

| 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) |
|--------------------|---------------|-----------------------------|-------------------|-----------------|-----------------|-------------------|--------------------|-------------|---------------|-----------------|---------------|------------------------|---------------------------|
| Creek Chub | All | 6 | 6 | 7 | 6 | 300 | 7 | 60 | 122 | 6.16 | 97 | 70.2 | 23.0 |
| Mountain Sucker | All | 8 | 7 | 10 | 8 | 350 | 7 | 70 | 142 | 6.25 | 113 | 105.9 | 20.0 |

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 BrookTrout 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 Flynn Creek, 2008-2018

Site 87

| Species/Size | Date | Pop Est. | (95% C.I.) | Stream Classification |
|-----------------|--------------|----------|------------|-----------------------|
| Creek Chub | Aug 06, 2015 | 15 | 15-15 | |
| | Jun 28, 2016 | 4 | 4-4 | |
| | Jun 02, 2017 | 17 | 14-27 | |
| Longnose Dace | Jun 28, 2016 | 74 | 74-76 | |
| Mountain Sucker | Aug 06, 2015 | 16 | 16-17 | |
| | Jun 28, 2016 | 5 | 5-7 | |
| | Jun 02, 2017 | 13 | 13-13 | |
| | | | | |

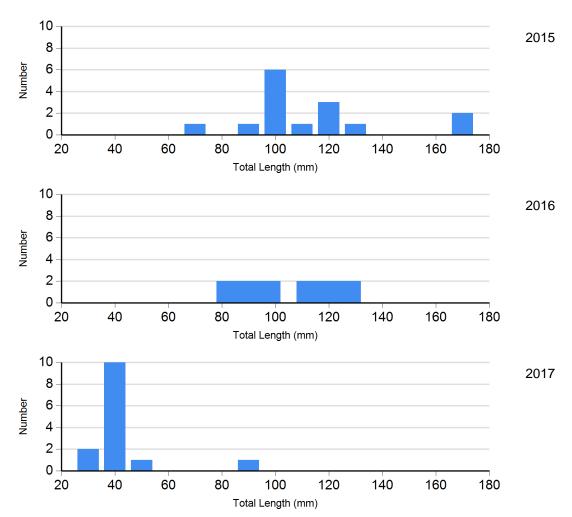
Site 126

| Species/Size | Date | Pop Est. | (95% C.I.) | Stream Classification |
|-----------------|----------------------------|----------|------------|-----------------------|
| Creek Chub | Jun 28, 2016 | 7 | 7-7 | |
| | Jul 03, 2018 | 6 | 6-7 | |
| Longnose Dace | May 26, 2009 | 3 | 3-3 | |
| | Jun 28, 2016 | 80 | 74-89 | |
| Mountain Sucker | Aug 06, 2015 | 8 | 6-19 | |
| | Jun 28, 2016 | 14 | 14-15 | |
| | Jul 03, 2018 | 7 | 8-10 | |
| | 3 3 3 3 3 3 3 3 3 3 | , | 3 10 | |

Length Frequency Distribution

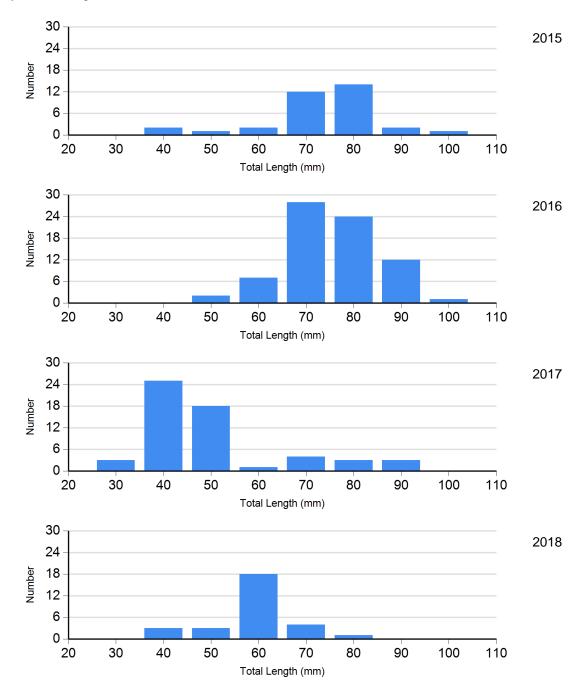
Length frequency histogram of species sampled by year.

Site: 87 Species: Creek Chub



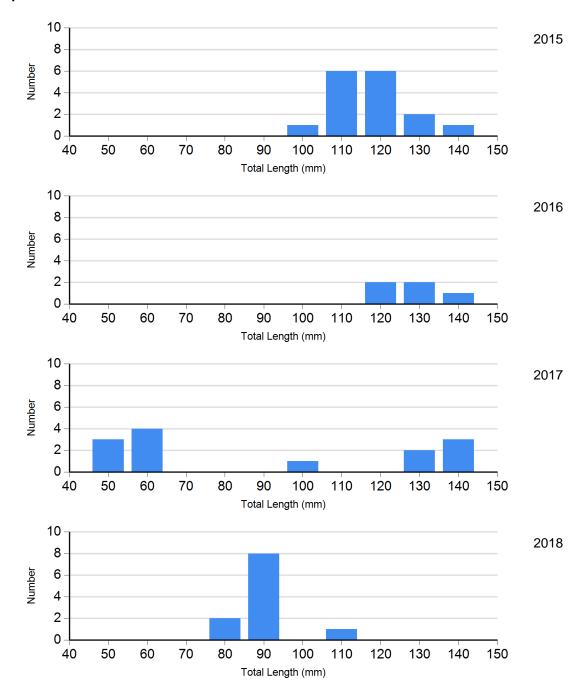
Site: 87

Species: Longnose Dace



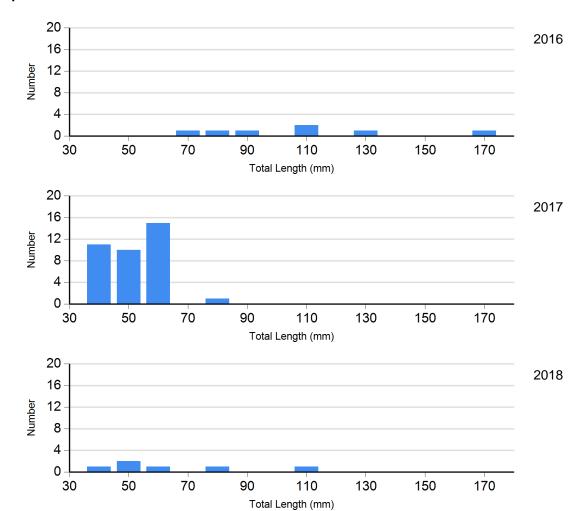
Site: 87

Species: Mountain Sucker



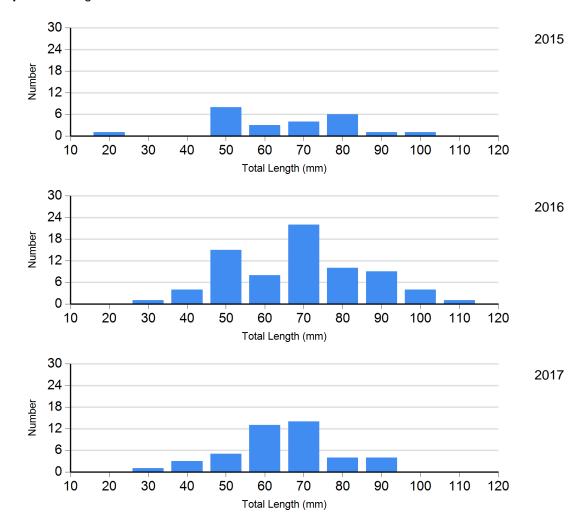
Site: 126

Species: Creek Chub



Site: 126

Species: Longnose Dace



Site: 126

Species: Mountain Sucker

