

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
French Creek, Custer County
21-0017-00
2016

Table 1. Population and Biomass Estimates for French Creek

Site Number: 875	Date Sampled: 06/28/2016	Conductivity (umhos/cm): 205
Site Midpoint (Latitude, Longitude): 43.71839672, -103.36797411	Site Length (m): 100	pH: 9.0
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 8.4	Water Temperature (C): 22.2
Stream Classification: BK0, BR1	Number of Pass: 3	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)
Brook Trout	<200mm	1	1	1	1	12	0	10	5	0.30	16	139.0	28.0
Brook Trout	All	1	1	1	1	12	0	10	5	0.30	16	139.0	28.0
Brown Trout	<200mm	102	102	103	102	1210	70	1020	490	62.61	1641	108.5	57.9
Brown Trout	>=200mm	39	39	39	39	463	87	390	187	78.02	628	258.2	188.8
Brown Trout	All	141	141	142	141	1673	199	1410	678	177.33	2269	149.9	118.7
Creek Chub	All	44	44	44	44	522	7	440	211	6.44	708	89.3	13.8
White Sucker	All	11	11	11	11	131	10	110	53	8.72	177	164.7	74.8

Site Number: 1129	Date Sampled: 06/28/2016	Conductivity (umhos/cm): 202
Site Midpoint (Latitude, Longitude): 43.71790044, -103.48904117	Site Length (m): 100	pH: 7.1
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 6.5	Water Temperature (C): 71.0
Stream Classification: BR2, RB2	Number of Pass: 3	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)
Brown Trout	<200mm	13	13	13	13	199	11	130	81	10.00	209	149.6	56.3
Brown Trout	>=200mm	11	11	11	11	168	36	110	68	31.94	177	268.9	212.5

Brown Trout	All	24	24	24	24	367	51	240	149	45.29	386	204.3	138.1
Creek Chub	All	36	38	43	36	581	22	380	235	20.02	611	104.9	38.6
Mountain Sucker	All	3	3	4	3	46	1	30	19	1.27	48	145.3	31.0
Rainbow Trout >=200mm		1	1	1	1	15	6	10	6	5.03	16	322.0	368.0
Rainbow Trout	All	1	1	1	1	15	6	10	6	5.03	16	322.0	368.0
White Sucker	All	108	111	116	108	1698	178	1110	688	158.95	1786	191.8	104.8

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 French Creek, 2006-2016

Site 875

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 28, 2016	1	1-1	
Brown Trout <200mm	May 28, 2009	12	12-12	
	Jul 02, 2013	49	49-51	
	Sep 11, 2015	19	19-19	
	Jun 28, 2016	102	102-103	
Brown Trout >=200mm	May 28, 2009	2	2-2	BR3
	Jul 02, 2013	11	11-12	BR2

Brown Trout >=200mm	Sep 11, 2015	16	16-16	BR2
	Jun 28, 2016	39	39-39	BR1
Creek Chub	Sep 11, 2015	12	12-12	
	Jun 28, 2016	44	44-44	
Longnose Dace	Sep 11, 2015	21	21-21	
Rainbow Trout <200mm	Jul 02, 2013	1	1-1	
Rainbow Trout >=200mm	May 28, 2009	1	1-1	RB2
	Sep 11, 2015	2	2-2	RB2
White Sucker	May 28, 2009	2	2-2	
	Jul 02, 2013	11	11-11	
	Sep 11, 2015	2	2-2	
	Jun 28, 2016	11	11-11	

Site 1129

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 20, 2015	3	3-4	
Brown Trout <200mm	Jul 09, 2013	2	2-4	

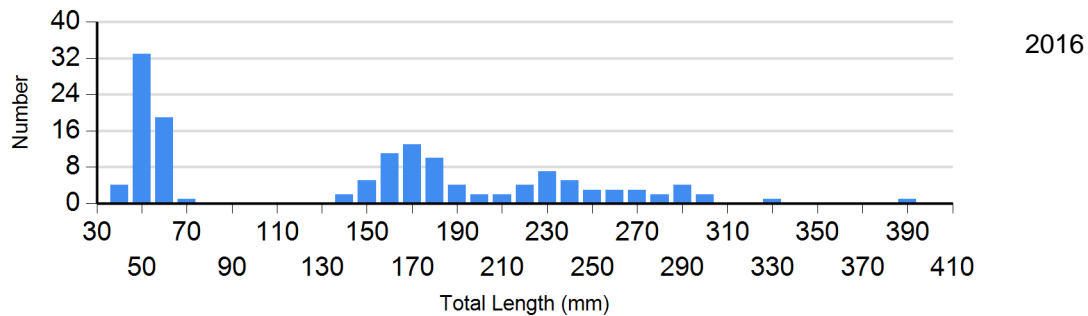
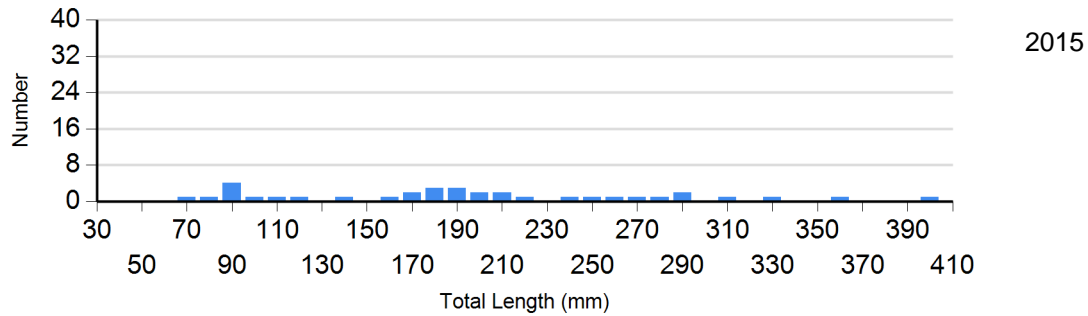
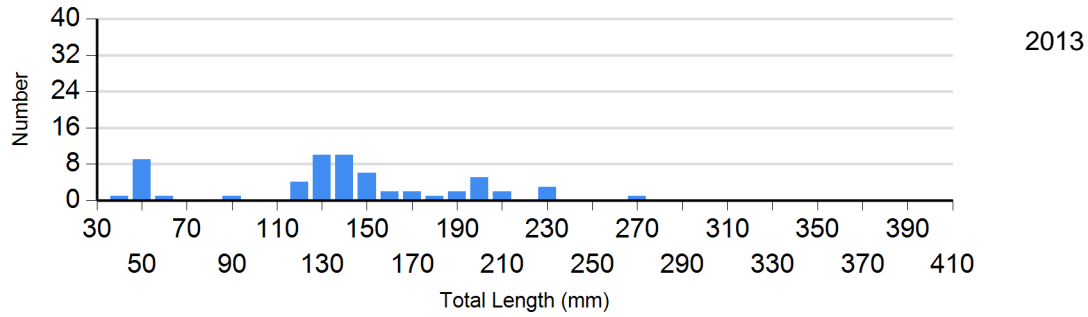
Brown Trout <200mm	Oct 20, 2015	49	49-51	
	Jun 28, 2016	13	13-13	
Brown Trout >=200mm	Jul 09, 2013	5	5-6	BR2
	Oct 20, 2015	10	10-10	BR2
	Jun 28, 2016	11	11-11	BR2
Creek Chub	Jul 09, 2013	92	89-97	
	Oct 20, 2015	94	82-109	
	Jun 28, 2016	38	36-43	
Longnose Dace	Oct 20, 2015	111	112-128	
Mountain Sucker	Jul 09, 2013	5	5-6	
	Oct 20, 2015	3	3-4	
	Jun 28, 2016	3	3-4	
Rainbow Trout >=200mm	Oct 20, 2015	3	3-3	RB2
	Jun 28, 2016	1	1-1	RB2
White Sucker	Oct 20, 2015	117	109-126	
	Jun 28, 2016	111	108-116	

Length Frequency Distribution

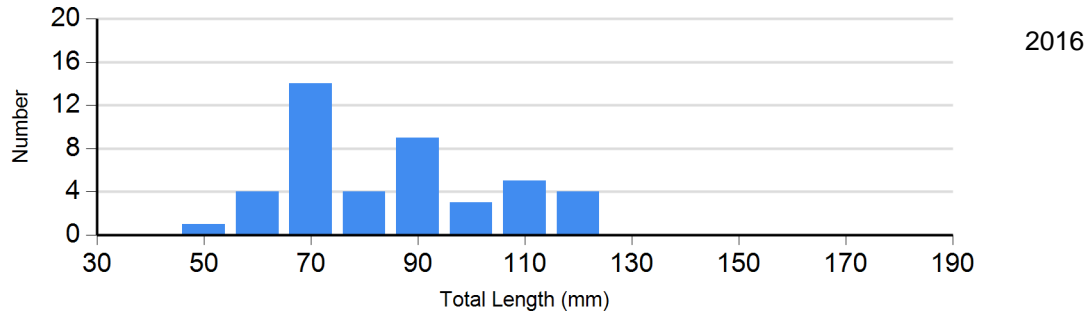
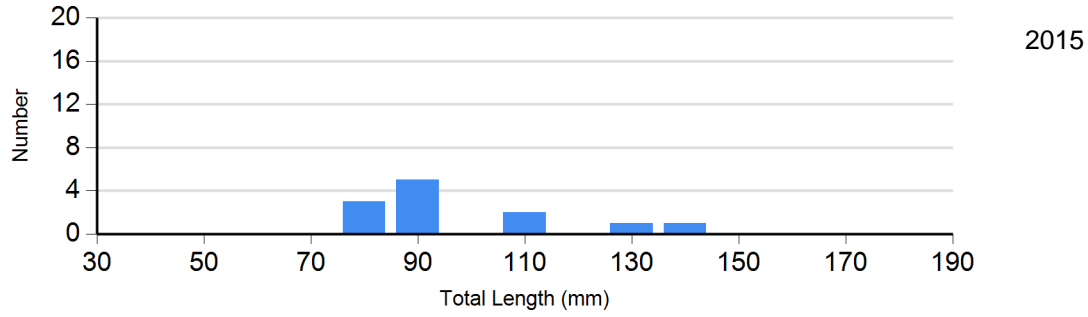
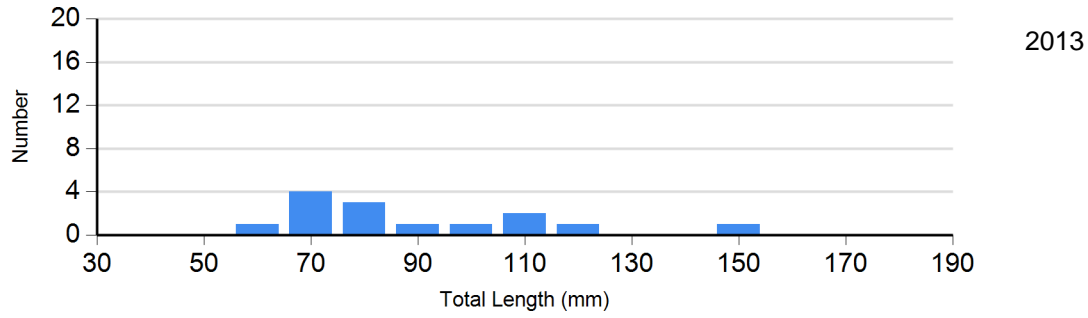
Length frequency histogram of species sampled by year.

Site: 875

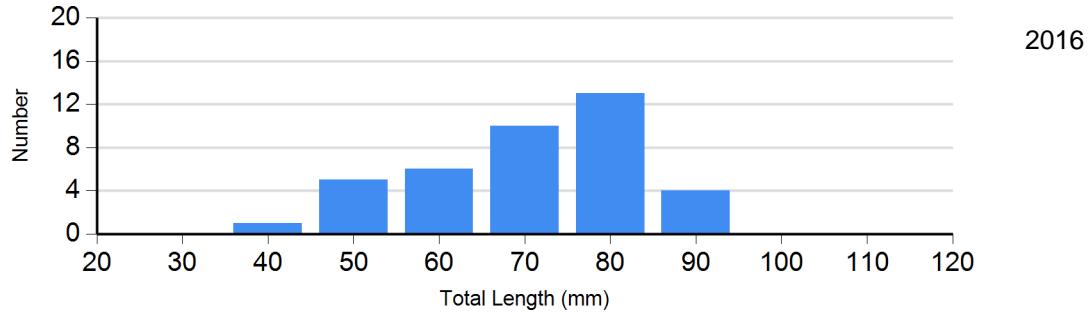
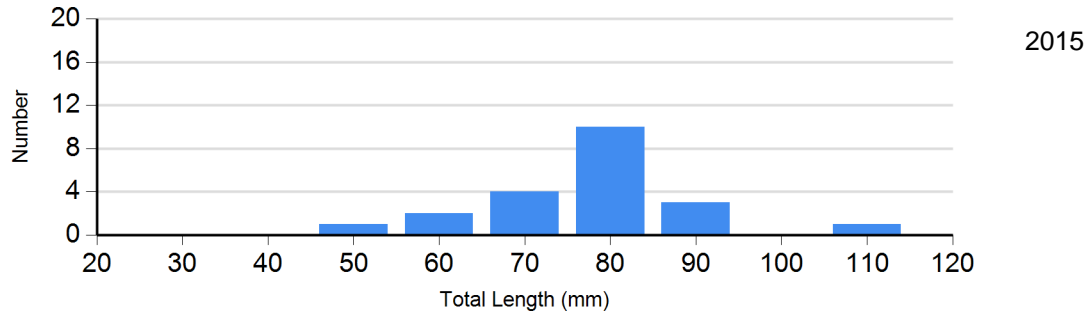
Species: Brown Trout



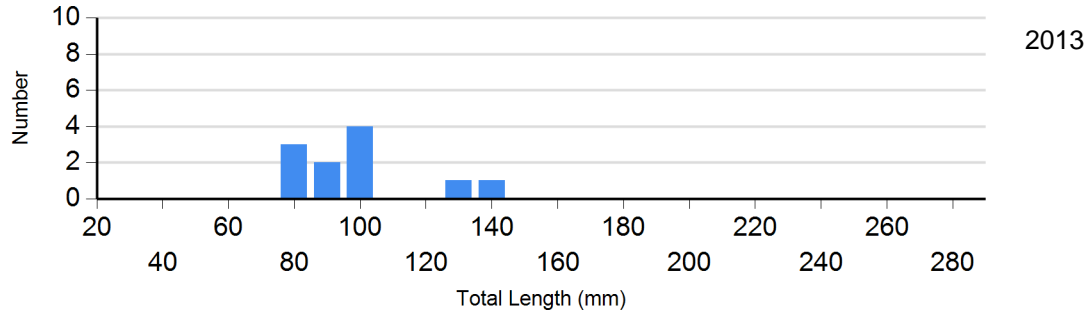
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Species: Creek Chub

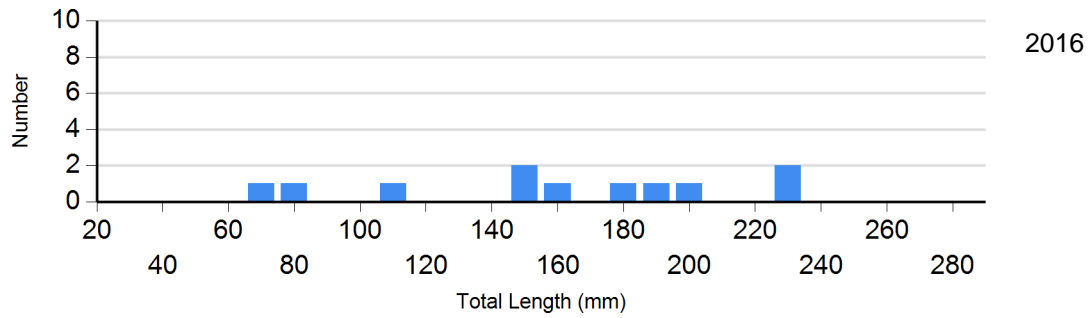


Site: 875
Species: Longnose Dace

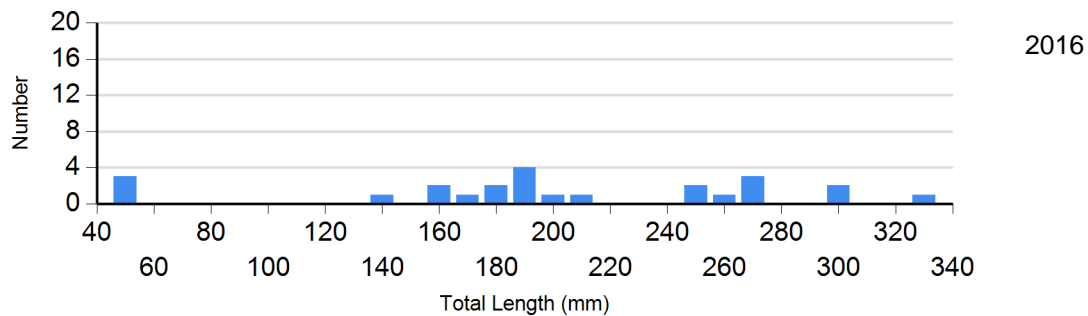
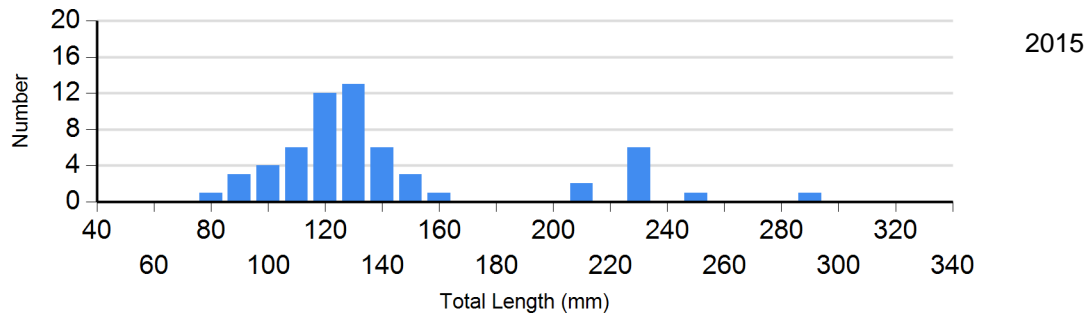
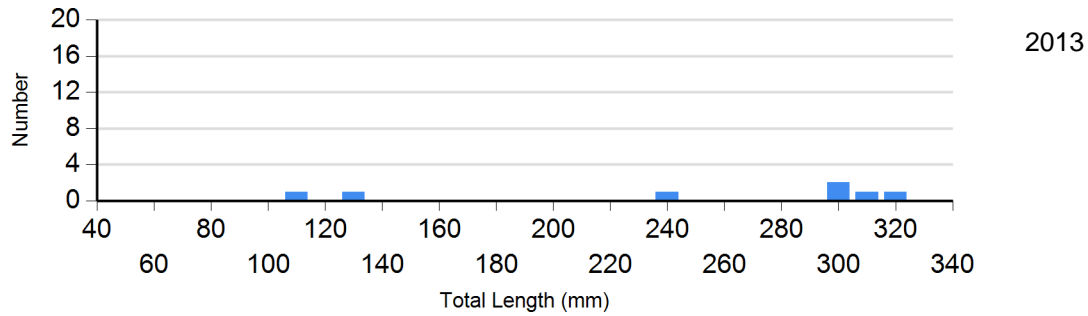


Site: 875
Species: White Sucker

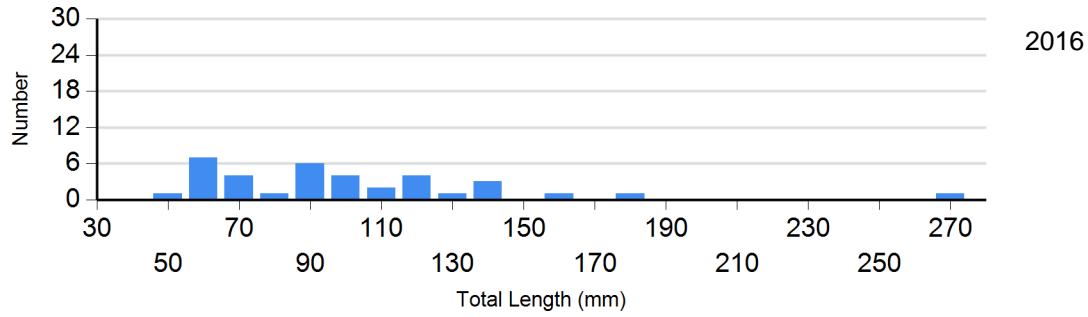
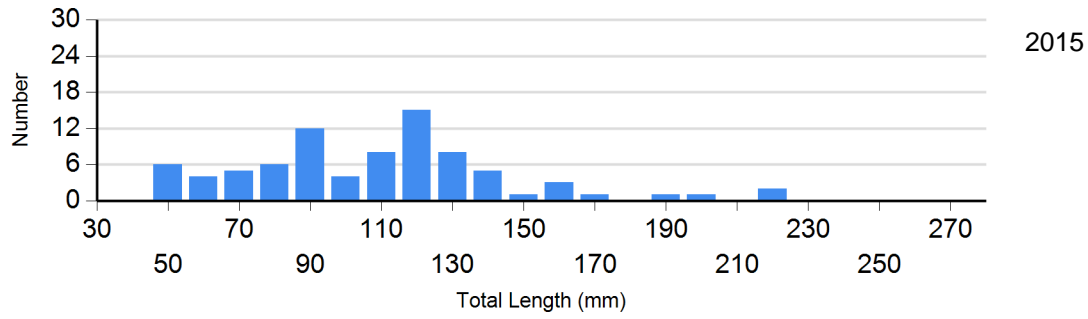
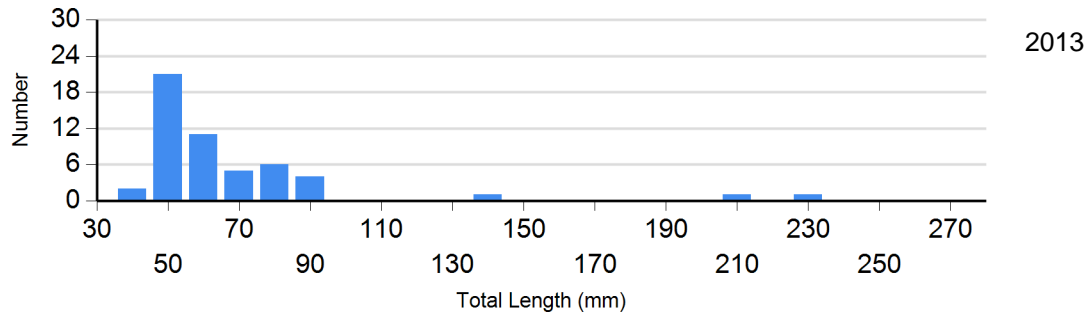




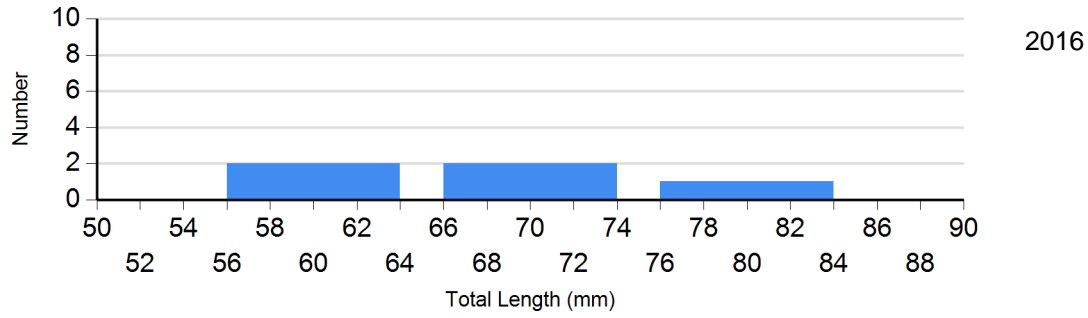
Site: 1129
Species: Brown Trout



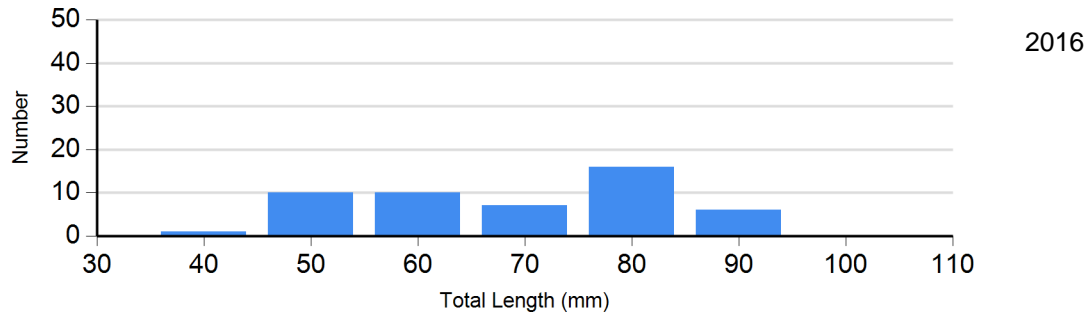
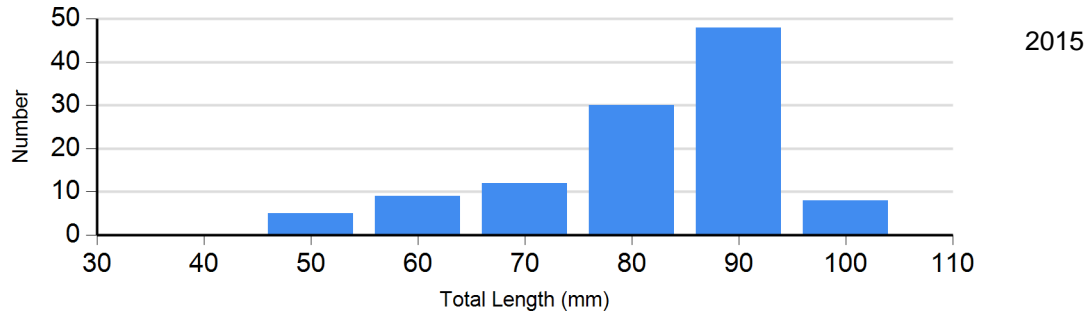
Site: 1129
Species: Creek Chub



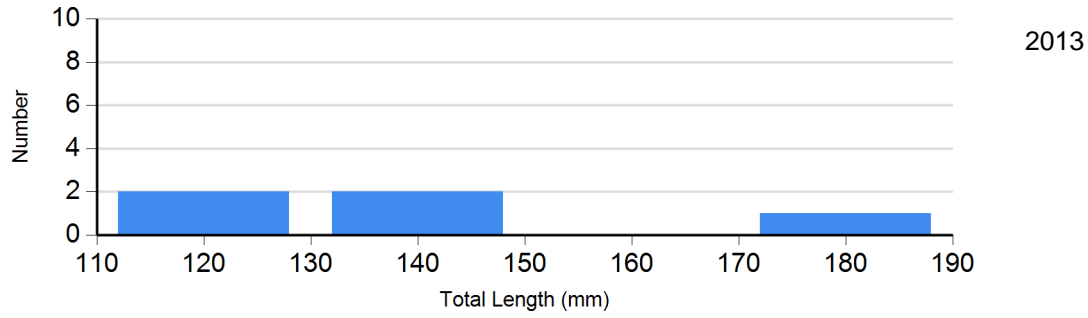
Site: 1129
Species: Fathead Minnow



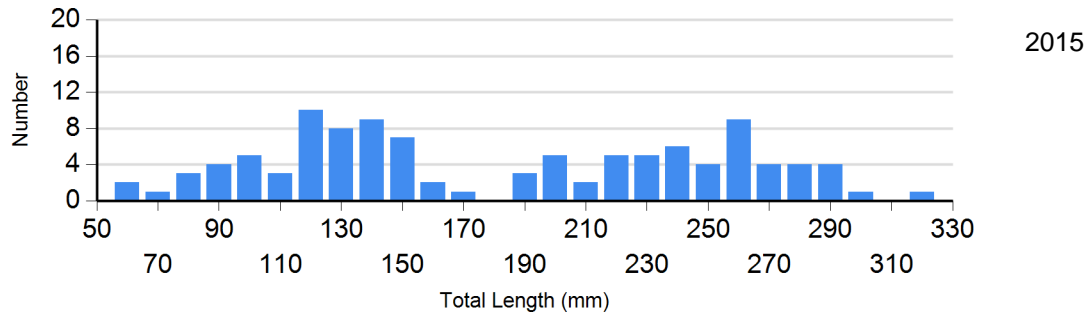
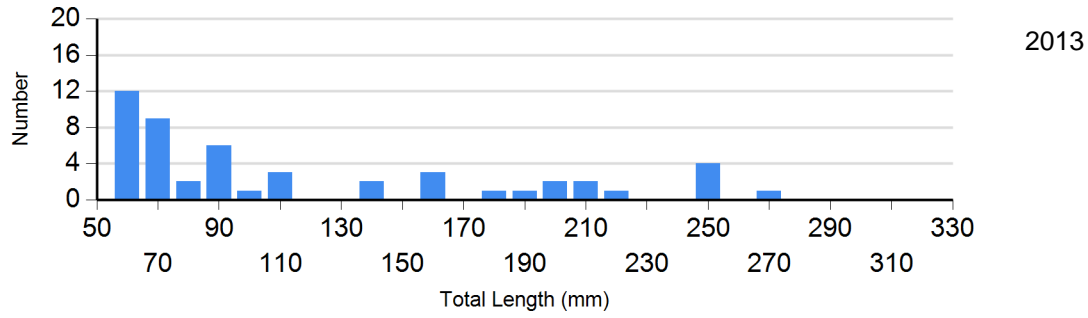
Site: 1129
Species: Longnose Dace

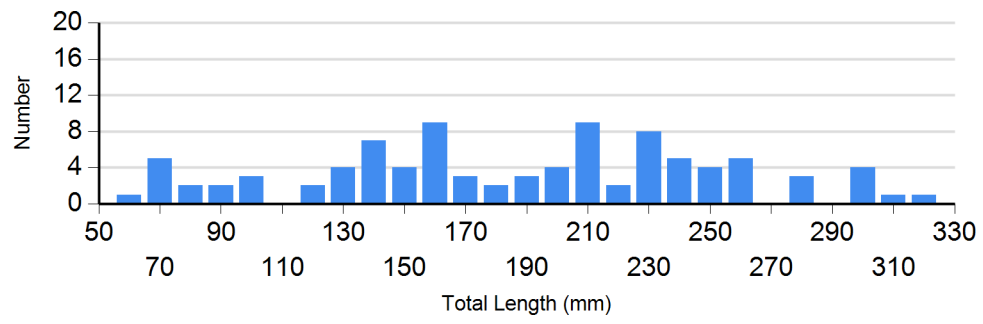


Site: 1129
Species: Mountain Sucker



Site: 1129
Species: White Sucker





2016