

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Whitewood Creek, Lawrence County**  
**09-0056-00**  
**2018**

Table 1. Population and Biomass Estimates for Whitewood Creek

<b>Site Number:</b> 44	<b>Date Sampled:</b> 05/23/2018	<b>Conductivity (umhos/cm):</b>
<b>Site Midpoint (Latitude, Longitude):</b> 44.62092026, -103.47188053	<b>Site Length (m):</b> 100	<b>pH:</b>
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 7.6	<b>Water Temperature (C):</b> 18.0
<b>Stream Classification:</b> None	<b>Number of Pass:</b> 1	<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)
Channel Catfish	All	2	2	2	2	26	12	20	11	10.51	32	384.5	450.0
Creek Chub	All	5	5	5	5	65	1	50	26	0.85	80	93.4	14.5
Shorthead Redhorse	All	24	24	24	24	314	80	240	127	71.17	386	284.6	253.9
White Sucker	All	3	3	3	3	39	3	30	16	2.49	48	117.3	71.0

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<b>Site Number:</b> 131	<b>Date Sampled:</b> 08/03/2018	<b>Conductivity (umhos/cm):</b>
<b>Site Midpoint (Latitude, Longitude):</b> 44.58943150, -103.52027768	<b>Site Length (m):</b> 100	<b>pH:</b>
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 9.2	<b>Water Temperature (C):</b> 22.0
<b>Stream Classification:</b> None	<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)
Creek Chub	All	21	25	35	21	273	5	250	111	4.78	402	101.1	19.6
Longnose Dace	All	23	59	202	23	644	6	590	261	5.75	949	77.5	10.0
Mountain Sucker	All	2	2	6	2	22	0	20	9	0.37	32	104.0	19.0
Stone Cat	All	9	8	13	9	87	3	80	35	2.46	129	138.6	31.5

White Sucker All 15 17 24 15 186 27 170 75 24.21 274 231.8 146.0

**Site Number:** 383  
**Site Midpoint (Latitude, Longitude):** 44.46006016, -103.62011969  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR3

**Date Sampled:** 06/04/2018  
**Site Length (m):** 100  
**Mean Width (m):** 5.7  
**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)
Brown Trout	<200mm	6	6	9	6	106	3	60	43	2.77	97	133.0	29.3
Brown Trout	>=200mm	2	2	2	2	35	19	20	14	17.24	32	334.5	547.5
Brown Trout	All	8	8	10	8	141	22	80	57	20.01	129	183.4	158.9
Creek Chub	All	3	3	4	3	53	2	30	21	1.43	48	136.3	30.3
Mountain Sucker	All	14	16	23	14	282	7	160	114	5.81	257	117.8	23.1
White Sucker	All	42	50	64	42	881	85	500	357	75.94	805	154.8	96.5

**Site Number:** 409  
**Site Midpoint (Latitude, Longitude):** 44.44223417, -103.62944341  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR3

**Date Sampled:** 06/04/2018  
**Site Length (m):** 100  
**Mean Width (m):** 6.6  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):** 15.0  
**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)
Brown Trout	<200mm	8	8	10	8	121	4	80	49	3.74	129	136.1	34.6
Brown Trout	>=200mm	1	1	1	1	15	2	10	6	1.46	16	204.0	108.0
Brown Trout	All	9	9	11	9	136	6	90	55	5.33	145	143.7	43.8
Creek Chub	All	1	1	5	1	15	0	10	6	0.24	16	120.0	18.0

Mountain Sucker	All	14	14	16	14	212	4	140	86	3.83	225	120.6	20.2
White Sucker	All	27	27	29	27	409	15	270	166	13.01	434	113.0	35.6

**Site Number:** 539

**Site Midpoint (Latitude, Longitude):** 44.39558878, -103.70337461

**Survey Completed by:** South Dakota Game, Fish and Parks

**Stream Classification:** BR1

**Date Sampled:** 06/05/2018

**Site Length (m):** 100

**Mean Width (m):** 5.9

**Number of Pass:** 3

**Conductivity (umhos/cm):**

**pH:**

**Water Temperature (C):** 17.0

**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)
Brown Trout	<200mm	20	22	28	20	373	23	220	151	20.36	354	172.7	61.2
Brown Trout	>=200mm	23	24	28	23	407	114	240	165	101.63	386	286.7	279.8
Brown Trout	All	43	47	55	43	797	142	470	323	126.69	756	233.7	178.1
Longnose Dace	All	42	69	122	42	1169	18	690	474	16.29	1110	87.3	15.6
Mountain Sucker	All	9	40	380	9	678	22	400	275	19.67	644	126.0	32.5

**Site Number:** 558

**Site Midpoint (Latitude, Longitude):** 44.38550441, -103.71870274

**Survey Completed by:** South Dakota Game, Fish and Parks

**Stream Classification:** BR1

**Date Sampled:** 06/05/2018

**Site Length (m):** 100

**Mean Width (m):** 5.7

**Number of Pass:** 3

**Conductivity (umhos/cm):**

**pH:**

**Water Temperature (C):**

**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	50	51	54	50	902	38	510	365	33.55	821	148.3	41.7
Brown Trout	>=200mm	30	30	31	30	531	91	300	215	80.99	483	256.1	171.0
Brown Trout	All	80	81	84	80	1432	129	810	580	115.30	1303	188.7	90.2
Mountain Sucker	All	8	9	14	8	159	5	90	64	4.09	145	111.6	28.8

**Site Number:** 588  
**Site Midpoint (Latitude, Longitude):** 44.36654564, -103.73424434  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR1

**Date Sampled:** 07/30/2018  
**Site Length (m):** 100  
**Mean Width (m):** 4.2  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):** 11.0  
**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)
Brown Trout	<200mm	31	31	31	31	737	45	310	298	39.75	499	166.5	60.5
Brown Trout	>=200mm	16	16	16	16	380	60	160	154	53.54	257	243.9	157.8
Brown Trout	All	47	47	48	47	1117	104	470	452	93.29	756	192.9	93.6

**Site Number:** 599  
**Site Midpoint (Latitude, Longitude):** 44.36363265, -103.73830179  
**Survey Completed by:** GEI  
**Stream Classification:** BR3

**Date Sampled:** 08/22/2018  
**Site Length (m):**  
**Mean Width (m):** 9.1  
**Number of Pass:** 3  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):**  
**Voltage:** 160

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	93	94	97	93	0	0	0	0	0.00	0	138.0	34.1
Brown Trout	>=200mm	12	12	12	12	0	0	0	0	0.00	0	235.6	132.4
Brown Trout	All	105	106	109	105	0	0	0	0	0.00	0	149.1	45.4
Longnose Dace	All	1	1	2	1	0	0	0	0	0.00	0	101.0	9.0
Mountain Sucker	All	2	2	2	2	0	0	0	0	0.00	0	154.0	72.0

**Site Number:** 612  
**Site Midpoint (Latitude, Longitude):** 44.35478049, -103.73811696  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR2

**Date Sampled:** 07/30/2018  
**Site Length (m):** 100  
**Mean Width (m):** 5.1  
**Conductivity (umhos/cm):**  
**pH:**  
**Water Temperature (C):** 12.0

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	53	53	54	53	1039	47	530	421	41.74	853	155.6	45.0
Brown Trout	>=200mm	5	5	5	5	98	12	50	40	11.12	80	228.8	127.0
Brown Trout	All	58	58	59	58	1137	59	580	461	53.11	933	161.9	52.3

Site Number: 625

Date Sampled: 07/09/2018

Conductivity (umhos/cm):

Site Midpoint (Latitude, Longitude): 44.34842796, -103.74949926

Site Length (m): 100

pH:

Survey Completed by: South Dakota Game, Fish and Parks

Mean Width (m): 0.0

Water Temperature (C): 16.0

Stream Classification: BK0, BR3

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	4	4	4	4	0	0	40	0	0.00	64	166.3	52.5
Brook Trout	All	4	4	4	4	0	0	40	0	0.00	64	166.3	52.5
Brown Trout	<200mm	73	73	74	73	0	0	730	0	0.00	1175	147.7	37.7
Brown Trout	>=200mm	9	9	9	9	0	0	90	0	0.00	145	222.9	119.4
Brown Trout	All	82	82	83	82	0	0	820	0	0.00	1319	156.0	46.7

Site Number: 628

Date Sampled: 07/09/2018

Conductivity (umhos/cm):

Site Midpoint (Latitude, Longitude): 44.34916370, -103.75287279

Site Length (m): 100

pH:

Survey Completed by: South Dakota Game, Fish and Parks

Mean Width (m): 0.0

Water Temperature (C):

Stream Classification: BK0, BR3

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	2	2	2	2	0	0	20	0	0.00	32	153.5	50.0

Brook Trout	All	2	2	2	2	0	0	20	0	0.00	32	153.5	50.0
Brown Trout	<200mm	47	77	133	47	0	0	770	0	0.00	1239	155.0	48.7
Brown Trout	>=200mm	8	8	9	8	0	0	80	0	0.00	129	245.9	172.8
Brown Trout	All	55	75	105	55	0	0	750	0	0.00	1207	168.3	66.8

Site Number: 690

Site Midpoint (Latitude, Longitude): 44.31971358, -103.76779760

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK0, BR3

Date Sampled: 05/05/2018

Site Length (m): 100

Mean Width (m): 4.4

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 12.0

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)
Brook Trout	<200mm	79	80	83	79	1807	38	800	732	34.28	1287	109.5	21.2
Brook Trout	All	79	80	83	79	1807	38	800	732	34.28	1287	109.5	21.2
Brown Trout	<200mm	91	93	97	91	2101	49	930	851	43.66	1496	117.7	23.3
Brown Trout	>=200mm	1	1	1	1	23	4	10	9	3.39	16	246.0	168.0
Brown Trout	All	92	94	98	92	2123	53	940	860	47.44	1512	119.1	25.0

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 Whitewood Creek, 2008-2018

**Site 44**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout >=200mm	Oct 20, 2009	1	1-1	BR3
	May 23, 2016	3	3-3	BR3
Channel Catfish	May 23, 2018	2	2-2	
Creek Chub	Oct 20, 2009	8	8-10	
	Oct 31, 2011	48	48-50	
	Oct 24, 2012	20	19-24	
	May 23, 2018	5	5-5	

Green Sunfish	Oct 20, 2009	9	9-10
	May 23, 2016	6	6-7
Longnose Dace	Oct 20, 2009	108	89-130
	Oct 24, 2012	7	7-7
Mountain Sucker	Aug 17, 2009	3	3-3
	Oct 20, 2009	11	11-11
	Oct 31, 2011	24	24-26
	May 23, 2016	2	2-6
Sand Shiner	Oct 20, 2009	5	5-5
	Oct 24, 2012	4	4-5
Shorthead Redhorse	Aug 17, 2009	4	4-4
	Oct 20, 2009	6	6-7
	Oct 24, 2012	8	6-19
	May 23, 2016	5	5-5
	May 23, 2018	24	24-24
Stone Cat	Oct 20, 2009	87	56-137



Stone Cat	Oct 24, 2012	1	1-2
	May 23, 2016	46	37-62
White Sucker	Oct 20, 2009	1	1-5
	Oct 24, 2012	164	82-299
	May 23, 2016	6	6-6
	May 23, 2018	3	3-3

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**Site 131**

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<b>Species/Size</b>	<b>Date</b>	<b>Pop Est.</b>	<b>(95% C.I.)</b>	<b>Stream Classification</b>
Brown Trout <200mm	Oct 20, 2009	1	1-1	
	May 23, 2016	1	1-5	
Brown Trout >=200mm	May 23, 2016	1	1-1	BR3
Creek Chub	Oct 20, 2009	50	46-57	
	Nov 01, 2011	48	48-50	
	Oct 23, 2012	493	485-501	
	May 23, 2016	11	11-13	
	May 23, 2017	26	18-49	

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Creek Chub	Aug 03, 2018	25	21-35
Green Sunfish	Oct 20, 2009	4	4-6
	Nov 01, 2011	22	21-26
	May 23, 2016	2	2-2
	Jul 05, 2016	2	2-2
	May 23, 2017	2	2-2
Longnose Dace	Oct 20, 2009	446	385-507
	Nov 01, 2011	222	208-236
	Oct 23, 2012	46	46-46
	Aug 03, 2018	59	23-202
Mountain Sucker	Oct 20, 2009	37	27-59
	Nov 01, 2011	24	24-26
	Oct 23, 2012	8	8-9
	Jul 28, 2015	1	1-1
	Sep 09, 2015	1	1-1
	May 23, 2016	32	31-35

Mountain Sucker	Aug 03, 2018	2	2-6
Shorthead Redhorse	Oct 20, 2009	1	1-2
Stone Cat	Oct 20, 2009	18	19-26
	Nov 01, 2011	17	18-22
	Oct 23, 2012	4	4-5
	May 23, 2016	8	6-19
	May 23, 2017	13	14-18
	Aug 03, 2018	8	9-13
	White Sucker	Oct 20, 2009	58
Nov 01, 2011		46	45-49
Oct 23, 2012		60	58-64
Sep 09, 2015		5	5-5
May 23, 2016		31	20-62
Jul 05, 2016		2	2-2
May 23, 2017		17	17-18
Aug 03, 2018		17	15-24

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	May 20, 2016	4	4-4	
	Jun 04, 2018	6	6-9	
Brown Trout >=200mm	Jul 24, 2014	1	1-2	BR3
	May 20, 2016	12	12-12	BR2
	May 23, 2016	11	11-11	BR3
	May 24, 2017	12	12-12	BR2
	Jun 04, 2018	2	2-2	BR3
Creek Chub	May 23, 2016	5	5-5	
	May 24, 2017	6	6-6	
	Jun 04, 2018	3	3-4	
Mountain Sucker	Jul 24, 2014	340	331-349	
	May 20, 2016	1208	419-2018	
	May 23, 2016	527	509-545	
	May 24, 2017	57	39-91	

Mountain Sucker	Jun 04, 2018	16	14-23
White Sucker	Jul 24, 2014	1	1-2
	May 20, 2016	1	1-1
	May 23, 2016	50	49-53
	May 24, 2017	65	49-91
	Jun 04, 2018	50	42-64

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**Site 409**

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<b>Species/Size</b>	<b>Date</b>	<b>Pop Est.</b>	<b>(95% C.I.)</b>	<b>Stream Classification</b>
Brown Trout <200mm	May 31, 2016	9	8-14	
	Jun 04, 2018	8	8-10	
Brown Trout >=200mm	Jul 17, 2008	1	1-1	BR3
	Aug 10, 2015	4	4-4	BR3
	May 31, 2016	2	2-2	BR3
	Jun 04, 2018	1	1-1	BR3
Creek Chub	Aug 10, 2015	14	14-16	
	May 31, 2016	14	13-19	

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Creek Chub	Jun 04, 2018	1	1-5
Green Sunfish	Aug 10, 2015	1	1-5
Longnose Dace	Aug 10, 2015	1256	1194-1318
	May 31, 2016	2836	1818-3854
Mountain Sucker	Jul 17, 2008	308	308-308
	Aug 10, 2015	978	938-1018
	May 31, 2016	639	496-782
White Sucker	Jun 04, 2018	14	14-16
	Aug 10, 2015	39	39-40
	May 31, 2016	80	79-83
	Jun 04, 2018	27	27-29

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**Site 539**

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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	May 19, 2016	1	1-1	
Brook Trout >=200mm	Jul 11, 2013	1	1-1	BK3
Brown Trout <200mm	Jul 11, 2013	2	2-4	

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Brown Trout <200mm	May 19, 2016	26	26-28	
	May 12, 2017	46	16-207	
	Jun 05, 2018	22	20-28	
Brown Trout >=200mm	Aug 12, 2009	15	15-15	BR2
	Jul 11, 2013	32	31-36	BR1
	Jul 21, 2014	14	14-14	BR2
	May 19, 2016	24	24-25	BR2
	May 12, 2017	36	36-38	BR1
	Jun 05, 2018	24	23-28	BR1
Longnose Dace	Jul 21, 2014	81	52-130	
	May 12, 2017	149	150-171	
	Jun 05, 2018	69	42-122	
Mountain Sucker	Aug 12, 2009	91	91-91	
	Jul 11, 2013	108	71-160	
	Jul 21, 2014	43	43-43	
	May 19, 2016	119	55-258	

Mountain Sucker	May 12, 2017	32	33-42
	Jun 05, 2018	40	9-380

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**Site 558**

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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	May 19, 2016	3	3-3	
Brown Trout <200mm	Jul 16, 2008	4	4-4	
	Jul 12, 2013	43	42-46	
	Jul 28, 2014	15	15-17	
	May 19, 2016	151	133-169	
	Jul 08, 2016	124	120-130	
	May 24, 2017	41	41-43	
	Jun 05, 2018	51	50-54	
Brown Trout >=200mm	Jul 16, 2008	12	12-12	BR2
	Jul 12, 2013	55	55-56	BR1
	Jul 28, 2014	33	33-34	BR1
	May 19, 2016	55	55-55	BR1

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Brown Trout >=200mm	Jul 08, 2016	60	60-61	BR1
	May 24, 2017	72	72-73	BR1
	Jun 05, 2018	30	30-31	BR1
Longnose Dace	Jul 28, 2014	27	25-32	
	May 19, 2016	14	15-19	
Mountain Sucker	Jul 16, 2008	7	7-7	
	Jul 12, 2013	14	13-19	
	Jul 28, 2014	38	37-42	
	May 19, 2016	28	15-77	
	Jul 08, 2016	96	87-107	
	May 24, 2017	19	19-21	
	Jun 05, 2018	9	8-14	

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**Site 588**

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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	Jun 01, 2016	1	1-1	
	Jul 06, 2016	1	1-1	

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Brook Trout >=200mm	Sep 01, 2011	1	1-1	BK3
	Aug 25, 2015	1	1-1	BK3
	Jul 06, 2016	1	1-2	BK3
Brown Trout <200mm	Jul 15, 2008	7	7-7	
	Sep 01, 2011	64	59-72	
	Aug 27, 2013	31	31-32	
	Jul 28, 2014	16	16-17	
	Aug 25, 2015	28	19-53	
	Jun 01, 2016	47	46-50	
	Jul 06, 2016	21	21-23	
	May 12, 2017	19	18-23	
	Jul 30, 2018	31	31-31	
Brown Trout >=200mm	Jul 15, 2008	33	33-33	BR1
	Sep 01, 2011	22	15-44	BR3
	Aug 27, 2013	44	42-49	BR1
	Jul 28, 2014	43	43-44	BR1

Brown Trout >=200mm	Aug 25, 2015	58	56-62	BR3
	Jun 01, 2016	69	69-71	BR1
	Jul 06, 2016	60	59-63	BR1
	May 12, 2017	43	43-45	BR1
	Jul 30, 2018	16	16-16	BR1
Longnose Dace	Sep 01, 2011	3	3-5	
	Aug 27, 2013	1	1-2	
	May 12, 2017	1	1-5	
Mountain Sucker	Aug 27, 2013	2	2-4	
	Jul 28, 2014	2	2-4	
	Aug 25, 2015	6	6-7	
	Jul 06, 2016	2	2-2	
	May 12, 2017	1	1-1	

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**Site 599**

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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	Aug 31, 2011	1	1-5	

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Brook Trout <200mm	Aug 26, 2015	1	1-1	
	Aug 26, 2015	1	1-1	
Brook Trout >=200mm	Aug 31, 2011	1	1-5	BK3
Brown Trout <200mm	Aug 31, 2011	124	118-132	
	Aug 27, 2013	75	69-84	
	Aug 26, 2015	122	119-127	
	Aug 26, 2015	123	120-128	
	Aug 22, 2018	94	93-97	
Brown Trout >=200mm	Aug 31, 2011	27	27-28	BR1
	Aug 27, 2013	46	46-48	BR1
	Aug 26, 2015	59	57-63	BR3
	Aug 26, 2015	59	57-63	BR3
	Aug 22, 2018	12	12-12	BR3
Longnose Dace	Aug 27, 2013	3	3-4	
	Aug 22, 2018	1	1-2	
Mountain Sucker	Aug 31, 2011	2	2-2	

Mountain Sucker	Aug 26, 2015	3	3-4
	Aug 26, 2015	3	3-4
	Aug 22, 2018	2	2-2

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**Site 612**


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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	Aug 30, 2011	31	28-38	
	Aug 28, 2013	18	18-19	
	Aug 25, 2015	4	4-4	
	May 30, 2017	4	4-5	
Brook Trout >=200mm	Aug 30, 2011	4	4-5	BK2
	Aug 28, 2013	1	1-1	BK3
	Jul 08, 2016	2	2-2	BK3
	May 30, 2017	1	1-1	BK3
Brown Trout <200mm	Aug 14, 2009	30	30-30	
	Aug 30, 2011	122	114-131	
	Aug 28, 2013	46	43-52	

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Brown Trout <200mm	Aug 25, 2015	96	88-106	
	Sep 17, 2015	84	71-101	
	Jul 08, 2016	61	61-62	
	May 30, 2017	60	55-68	
	Jul 30, 2018	53	53-54	
Brown Trout >=200mm	Aug 14, 2009	22	22-22	BR1
	Aug 30, 2011	22	22-23	BR1
	Aug 28, 2013	23	22-27	BR1
	Aug 25, 2015	37	36-40	BR3
	Sep 17, 2015	28	28-28	BR1
	Jul 08, 2016	25	25-25	BR1
	May 30, 2017	17	17-17	BR2
	Jul 30, 2018	5	5-5	BR2
Longnose Dace	Aug 25, 2015	2	2-3	

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jul 24, 2014	2	2-4	
	Jul 09, 2018	4	4-4	
Brook Trout >=200mm	Jul 24, 2014	1	1-2	BK3
Brown Trout <200mm	Jul 24, 2014	49	50-59	
	Jul 09, 2018	73	73-74	
Brown Trout >=200mm	Jul 24, 2014	25	25-27	BR1
	Jul 09, 2018	9	9-9	BR3
Longnose Dace	Jul 24, 2014	9	10-14	

**Site 628**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 17, 2009	12	12-12	
	Jul 22, 2014	4	4-5	
	May 30, 2017	1	1-2	
	Jul 09, 2018	2	2-2	
Brown Trout <200mm	Aug 17, 2009	58	58-58	

Brown Trout <200mm	Jul 22, 2014	74	64-88	
	May 30, 2017	119	115-125	
	Jul 09, 2018	77	47-133	
Brown Trout >=200mm	Aug 17, 2009	34	34-34	BR1
	Jul 22, 2014	36	36-36	BR1
	May 30, 2017	30	30-31	BR1
	Jul 09, 2018	8	8-9	BR3

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**Site 690**

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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	Aug 12, 2008	48	48-48	
	Jun 08, 2015	79	75-86	
	May 24, 2016	58	58-60	
	May 16, 2017	116	114-120	
	May 05, 2018	80	79-83	
Brook Trout >=200mm	Aug 12, 2008	5	5-5	BK2
	Jun 08, 2015	5	5-5	BK2

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Brook Trout >=200mm	May 24, 2016	2	2-3	BK3
	May 16, 2017	1	1-1	BK3
Brown Trout <200mm	Aug 12, 2008	5	5-5	
	Jun 08, 2015	37	35-42	
	May 24, 2016	94	94-96	
	May 16, 2017	163	158-169	
	May 05, 2018	93	91-97	
Brown Trout >=200mm	Jun 08, 2015	25	23-30	BR1
	May 24, 2016	21	21-21	BR1
	May 16, 2017	13	13-13	BR2
	May 05, 2018	1	1-1	BR3
Longnose Dace	Jun 08, 2015	1	1-1	
Mountain Sucker	Jul 05, 2016	301	284-318	

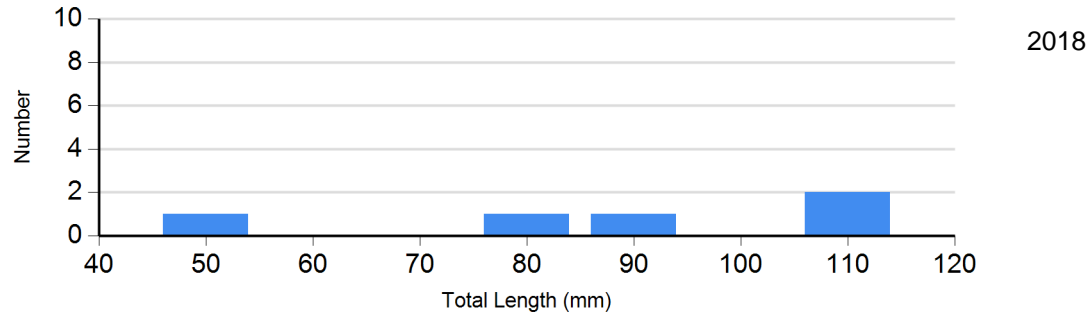
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## Length Frequency Distribution

Length frequency histogram of species sampled by year.

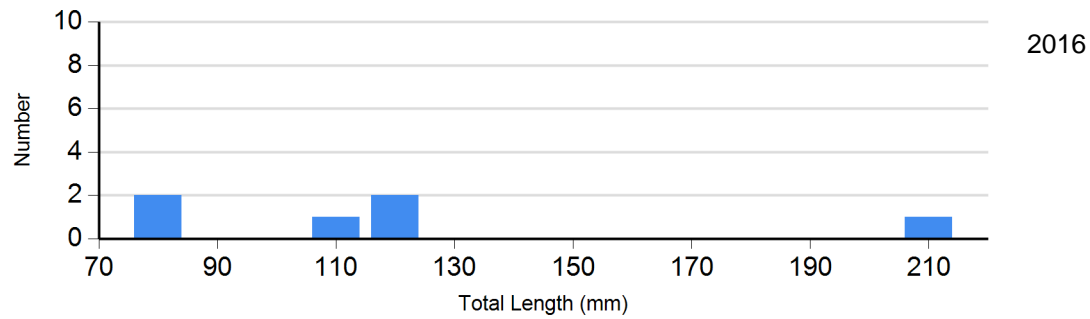
**Site:** 44

**Species:** Creek Chub



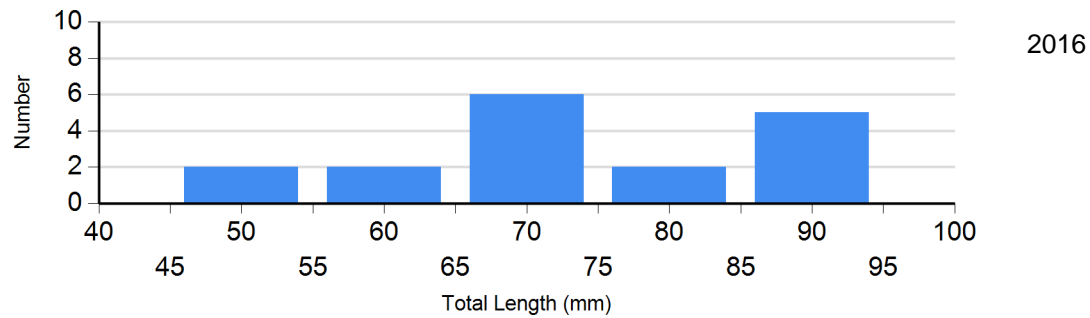
**Site:** 44

**Species:** Green Sunfish

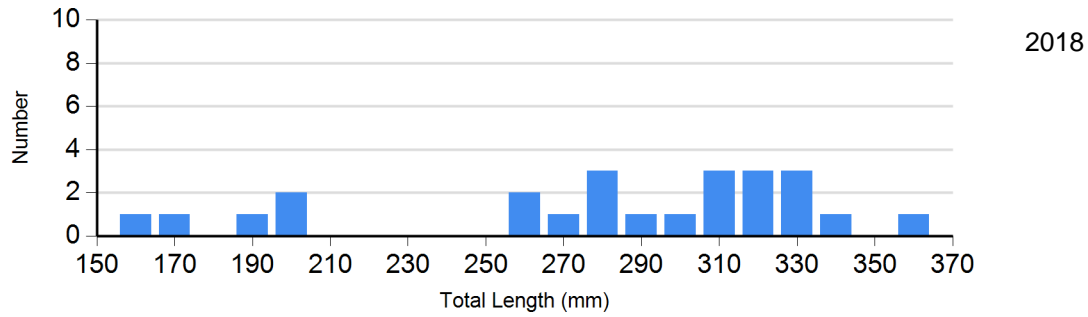
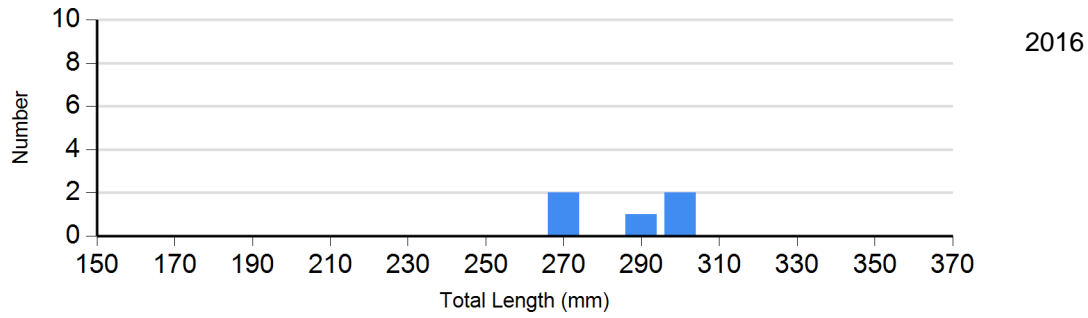


**Site:** 44

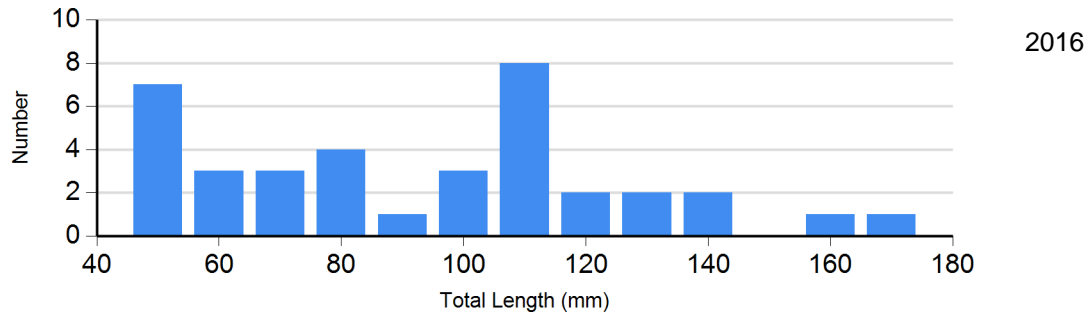
**Species:** Longnose Dace



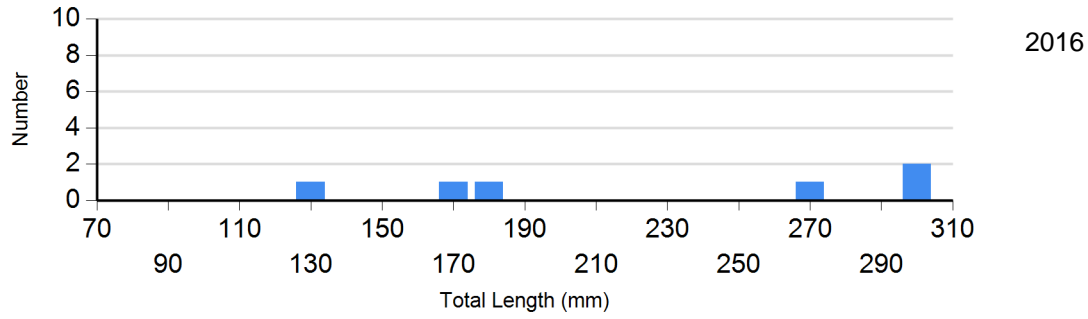
**Site: 44**  
**Species: Shorthead Redhorse**



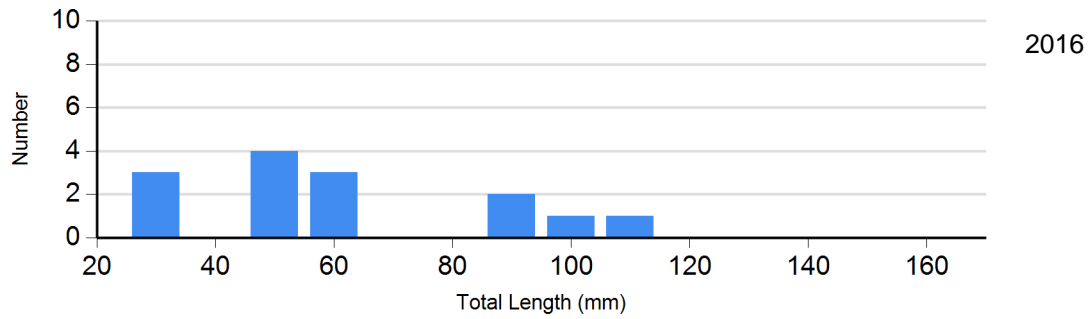
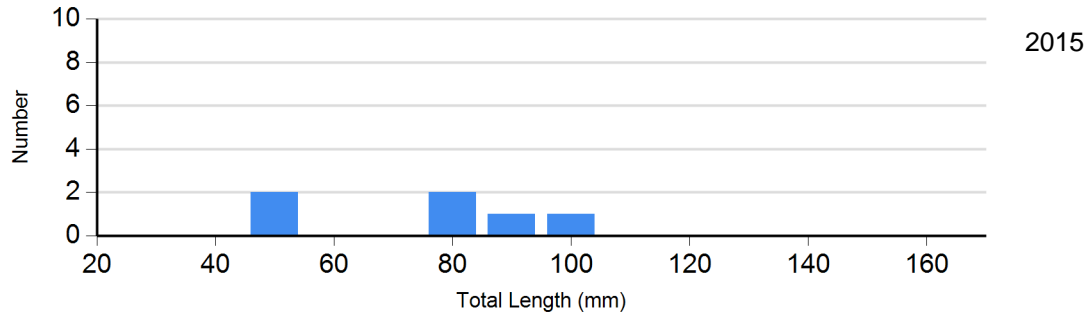
**Site: 44**  
**Species: Stone Cat**

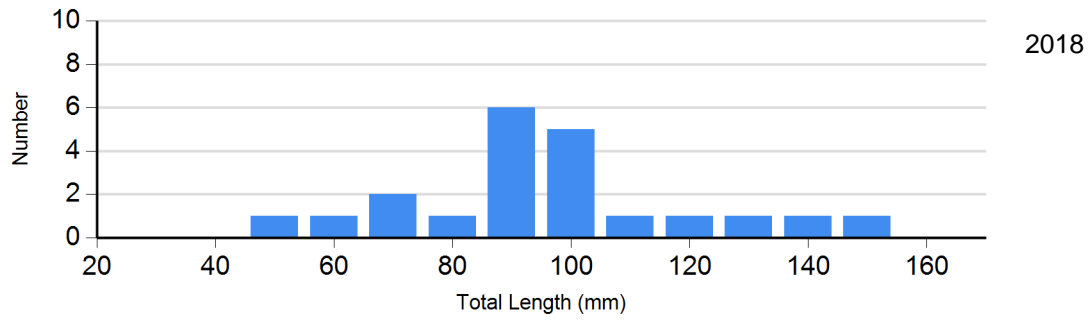
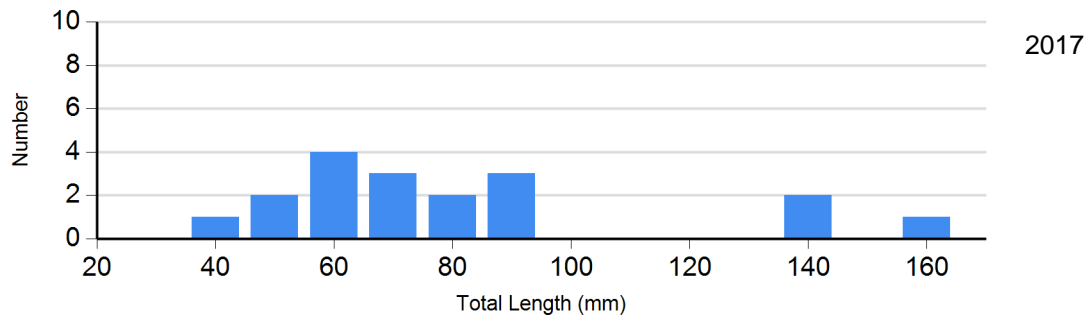


**Site: 44**  
**Species: White Sucker**

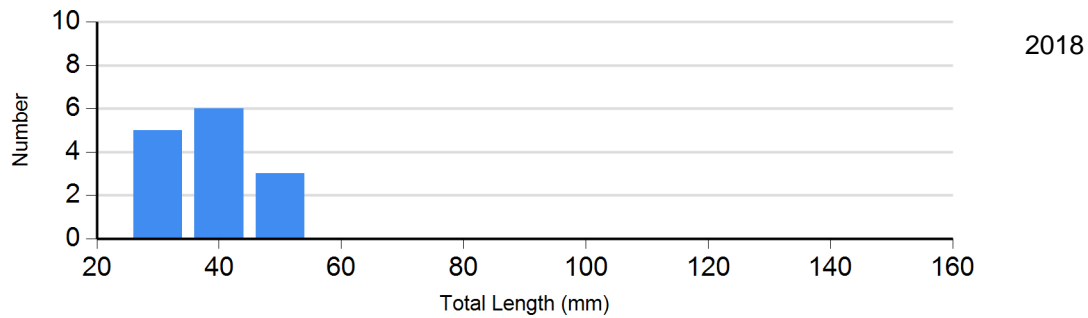
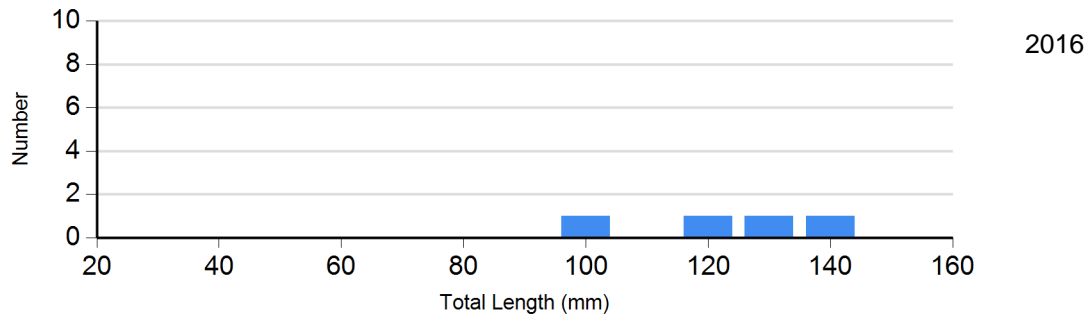


**Site: 131**  
**Species: Creek Chub**

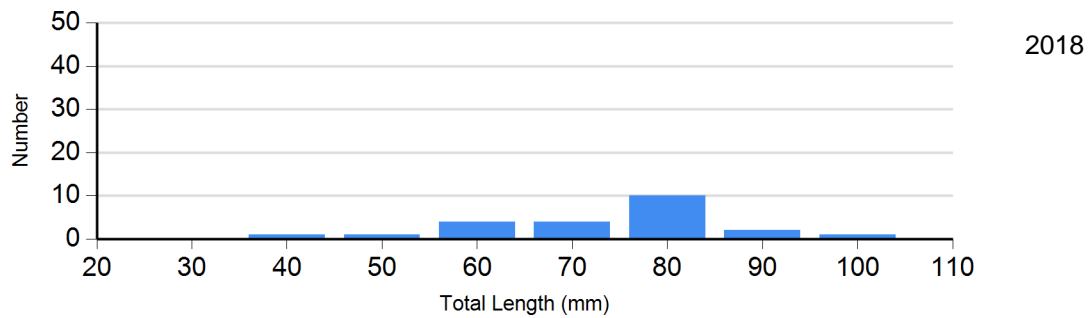
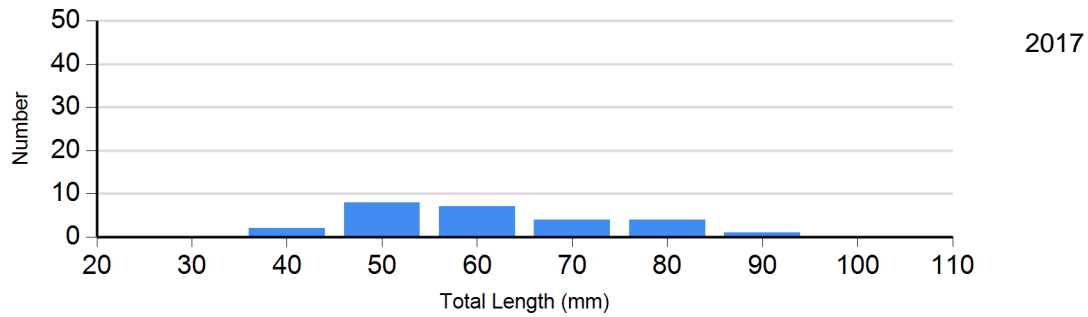
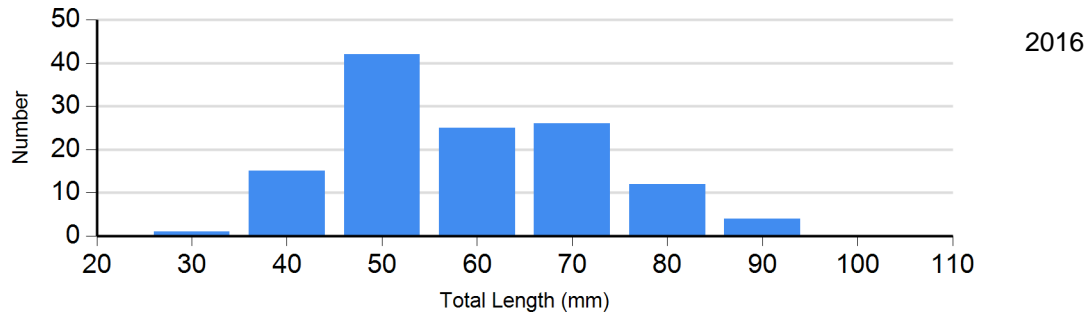
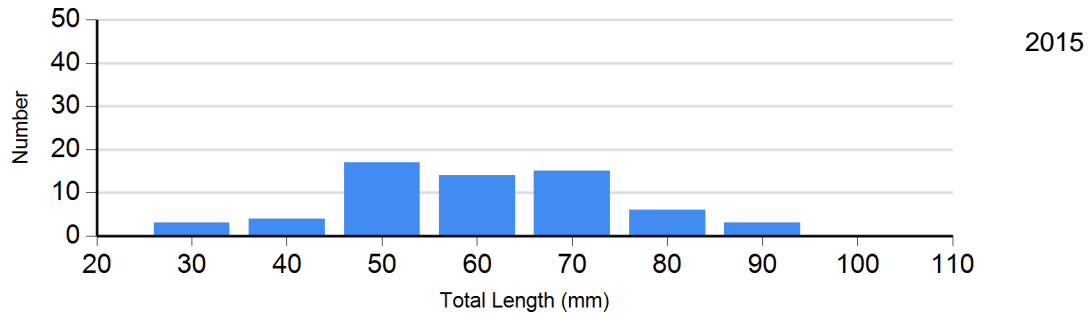




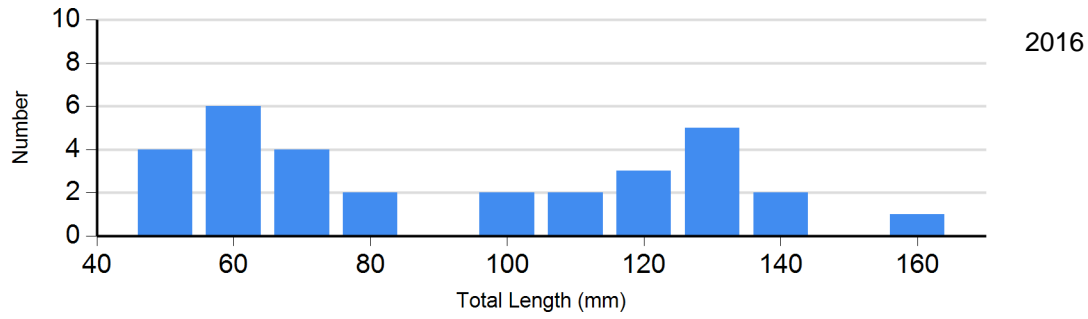
**Site:** 131  
**Species:** Green Sunfish



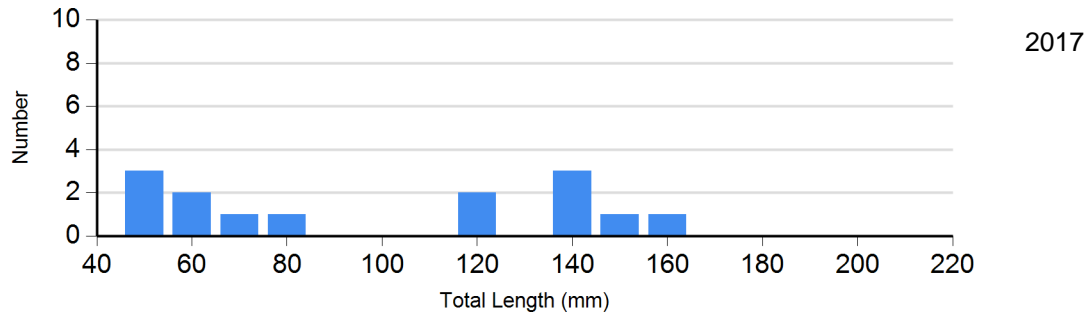
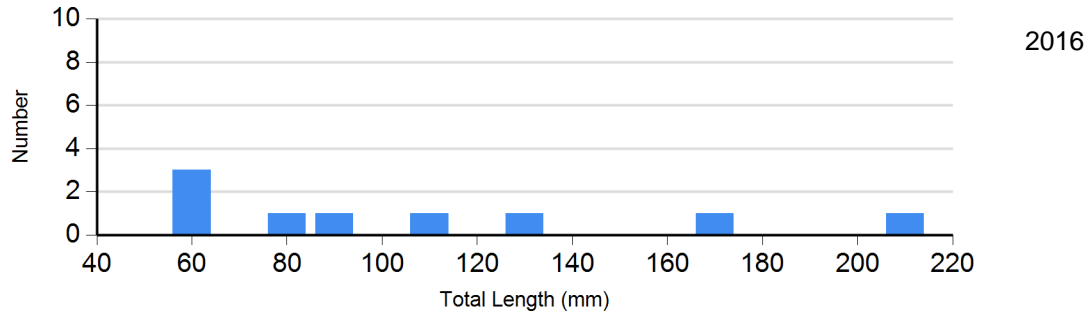
Site: 131  
Species: Longnose Dace

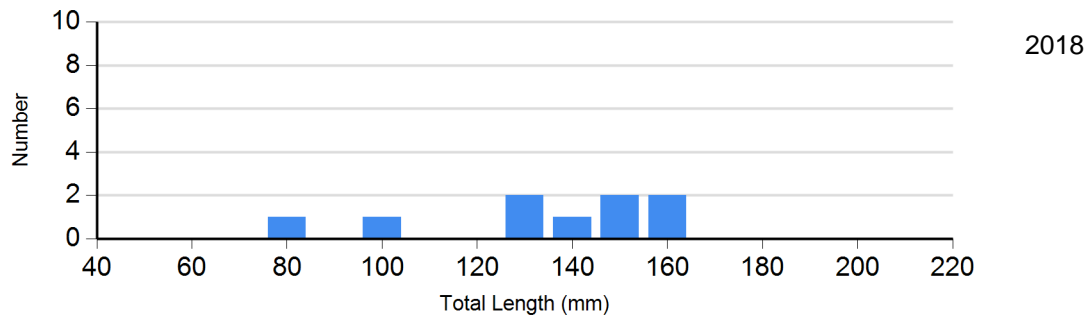


**Site: 131**  
**Species: Mountain Sucker**

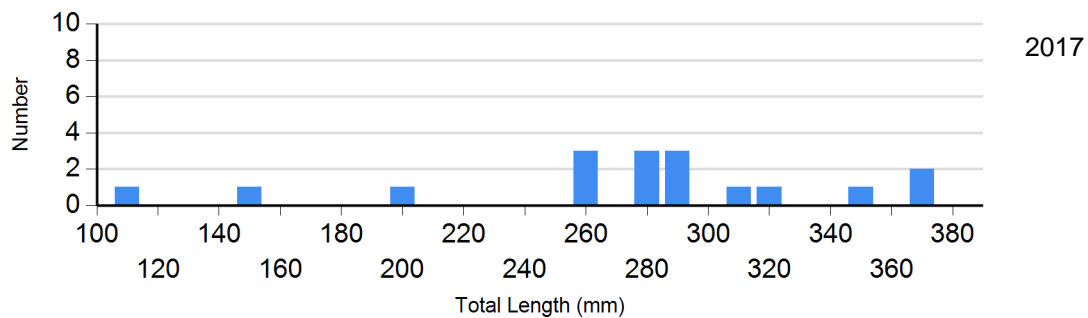
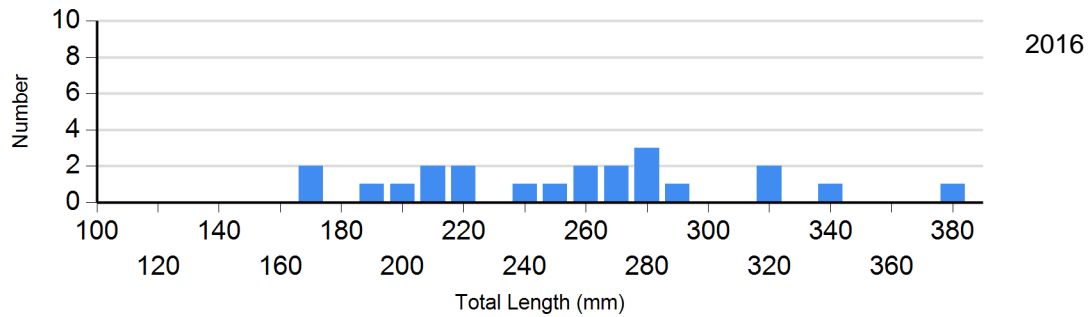
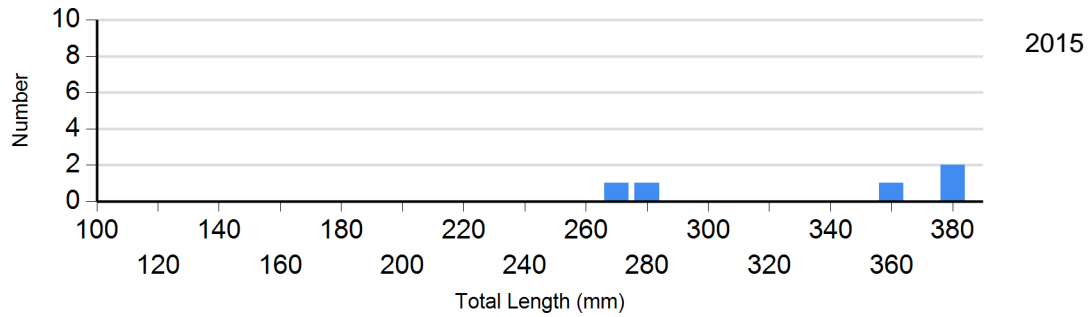


**Site: 131**  
**Species: Stone Cat**

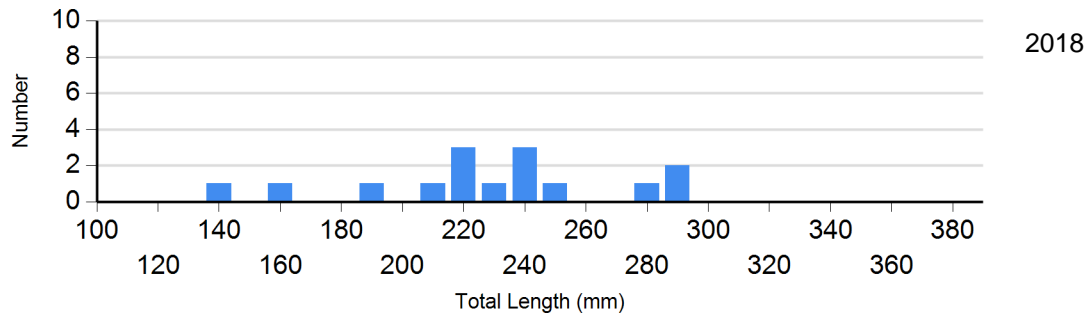




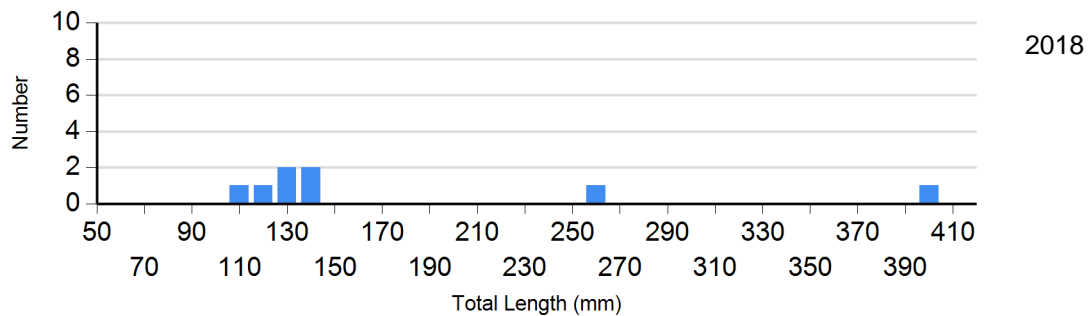
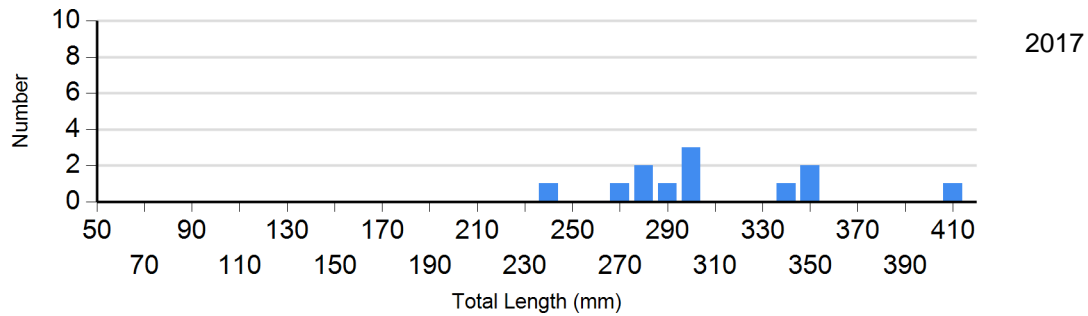
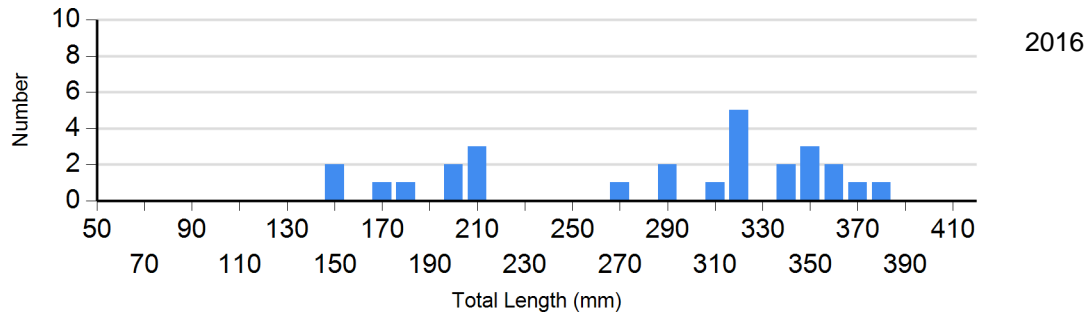
Site: 131  
Species: White Sucker



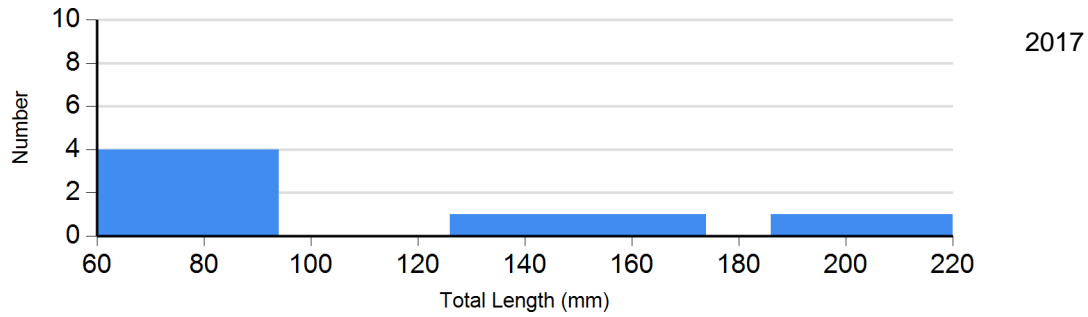
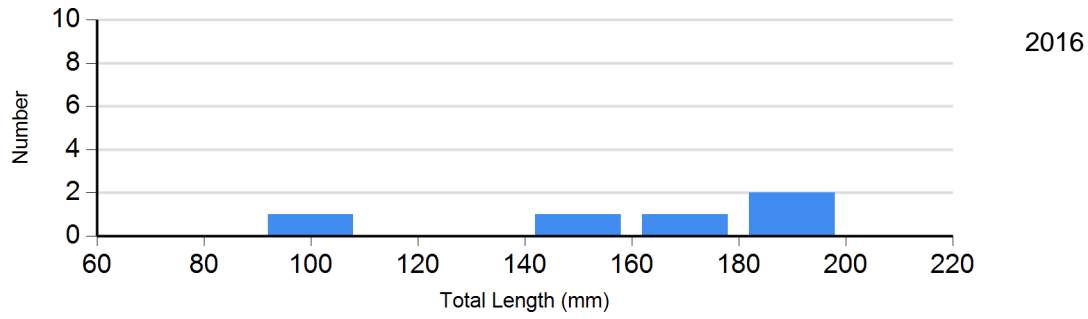




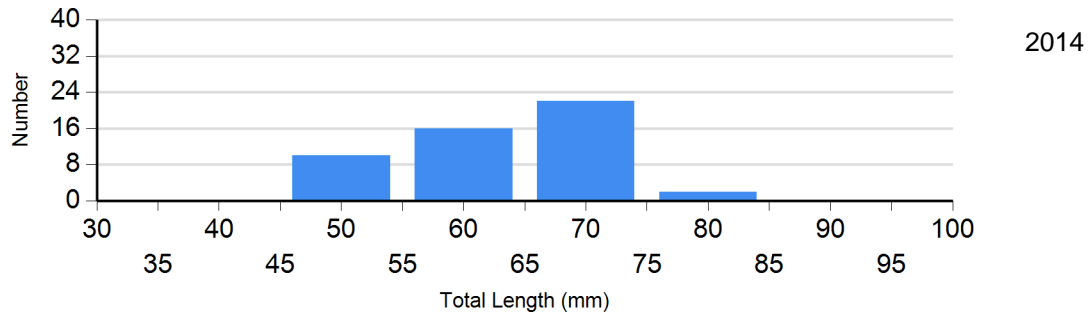
**Site:** 383  
**Species:** Brown Trout

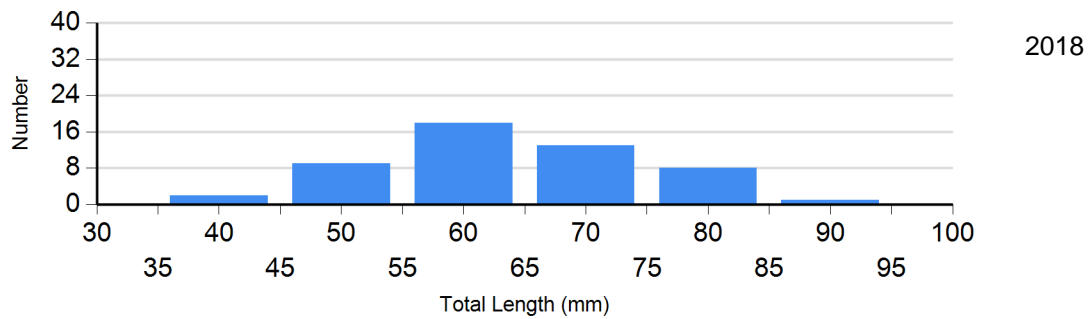
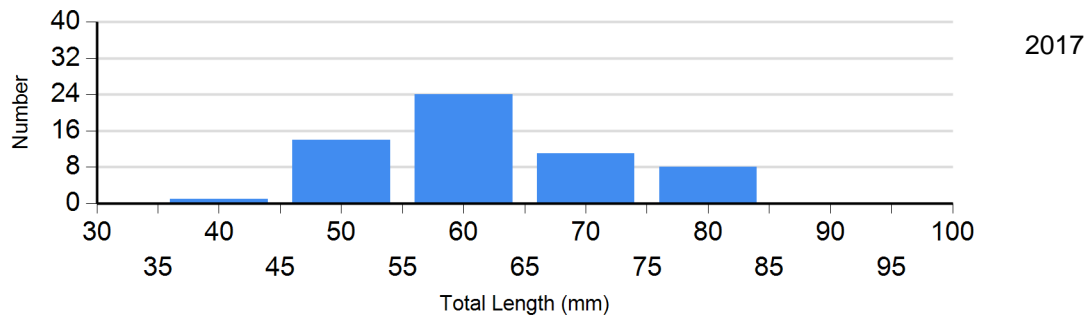
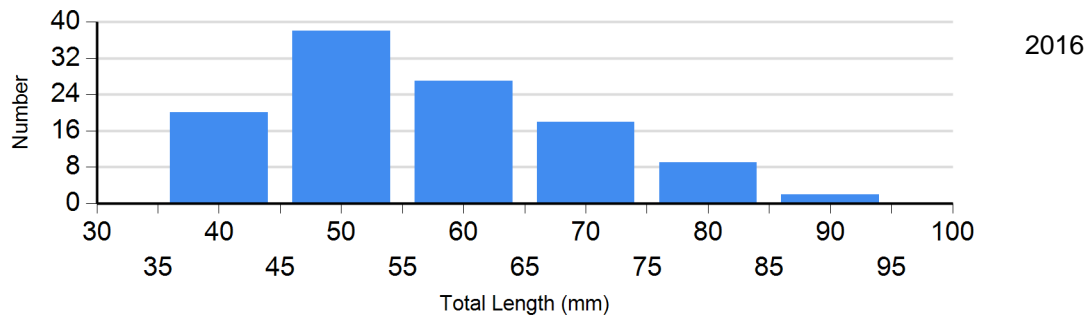


**Site:** 383  
**Species:** Creek Chub

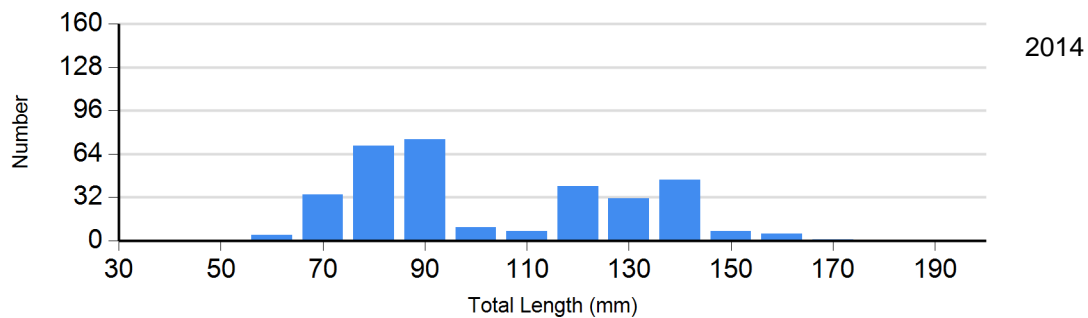


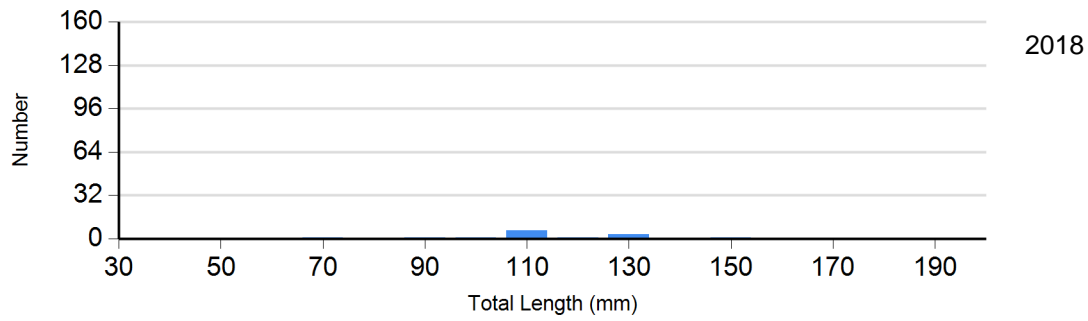
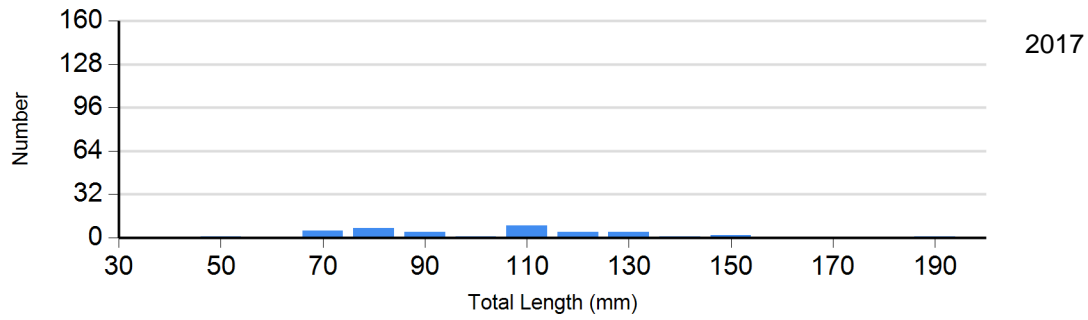
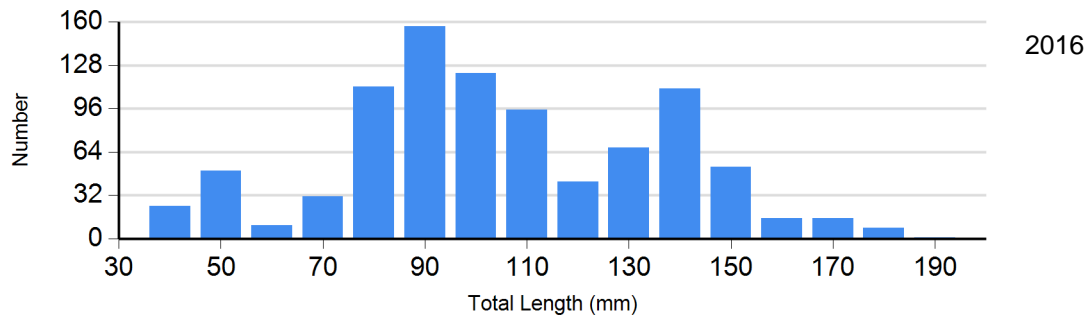
**Site:** 383  
**Species:** Longnose Dace



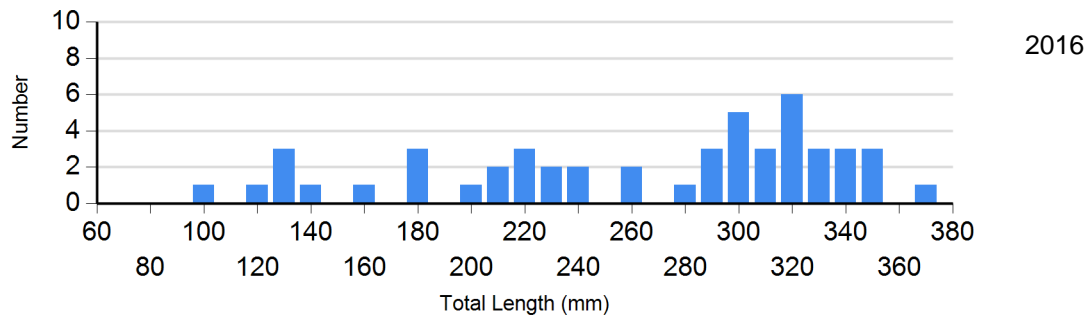


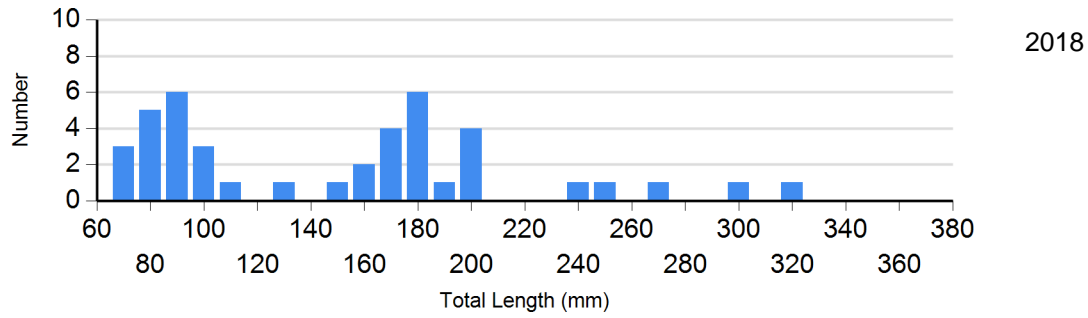
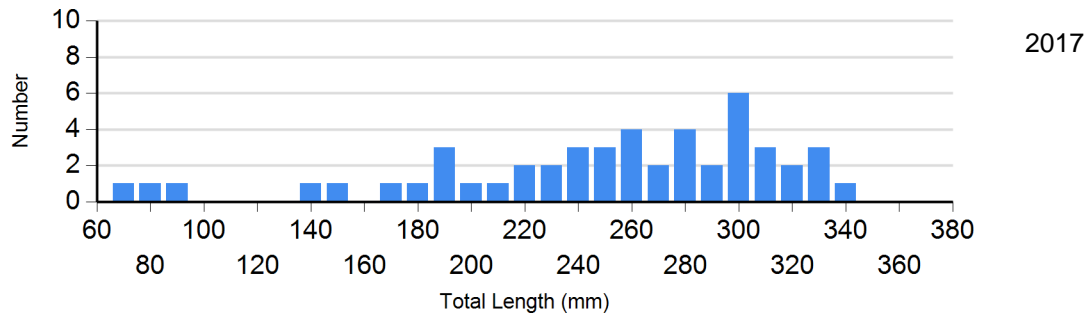
**Site:** 383  
**Species:** Mountain Sucker



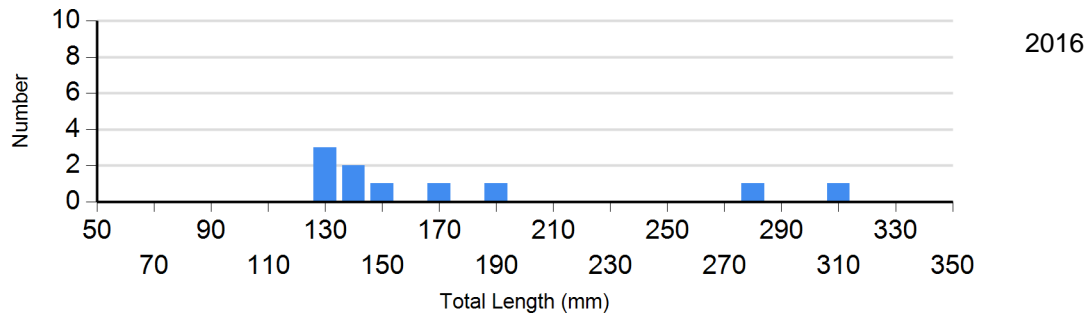
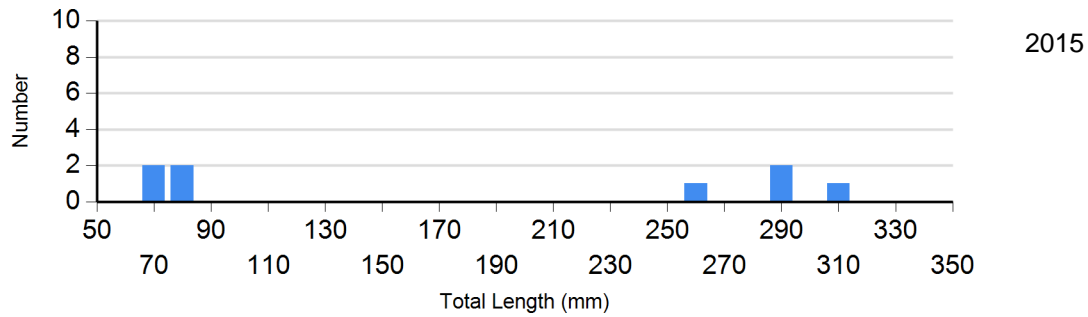


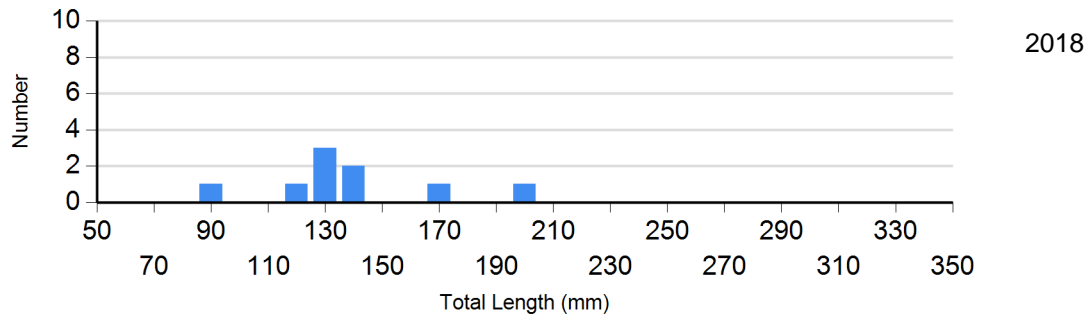
**Site:** 383  
**Species:** White Sucker



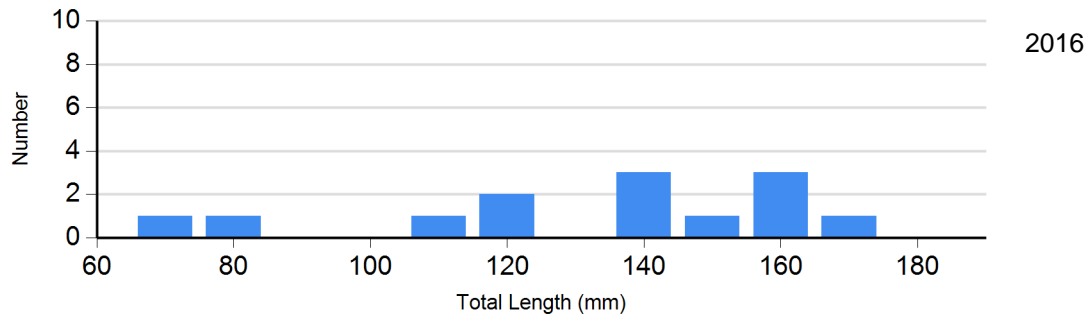
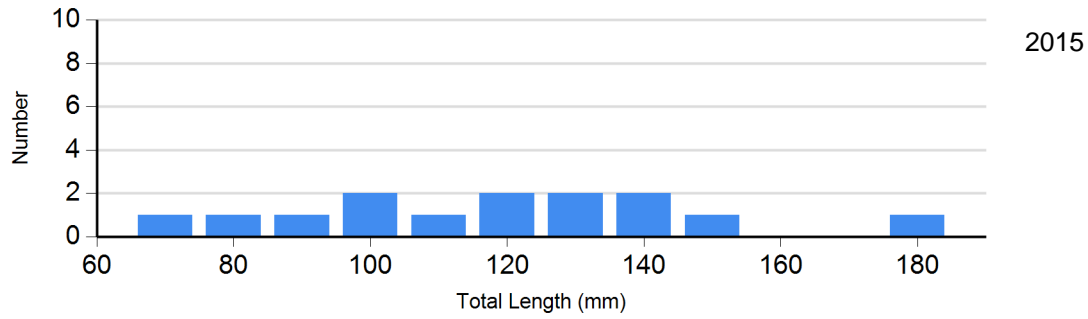


**Site:** 409  
**Species:** Brown Trout

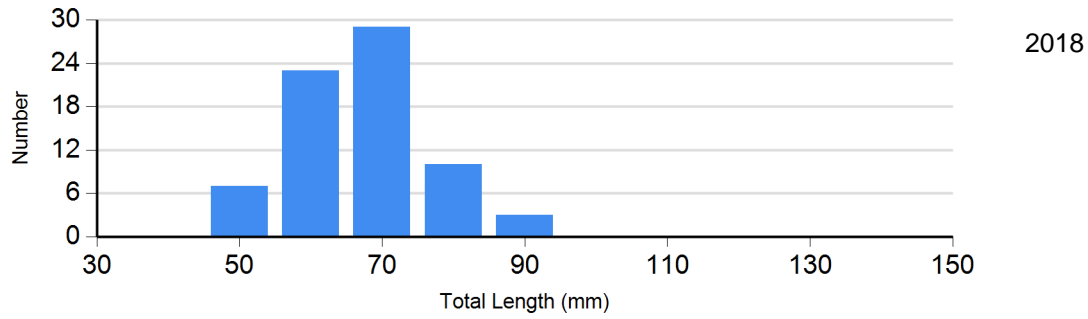
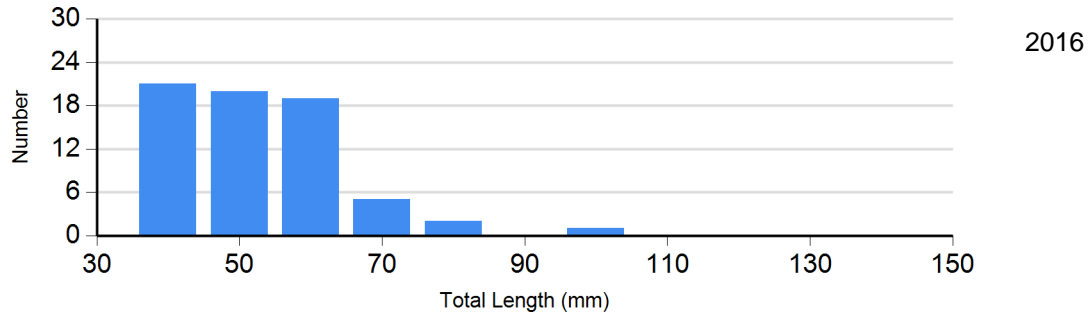
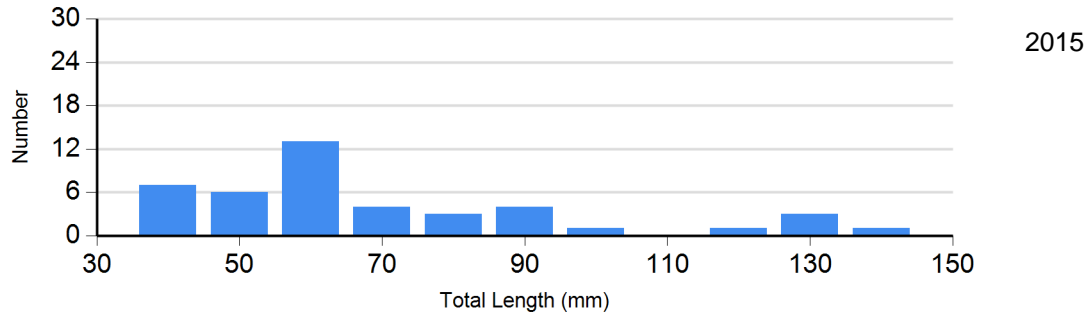




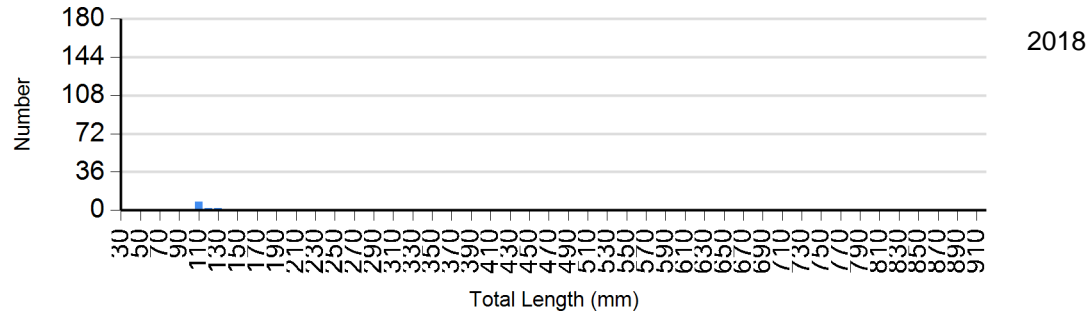
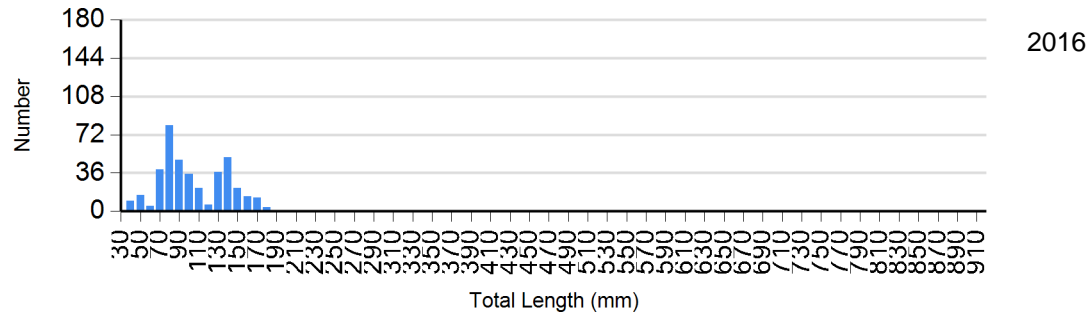
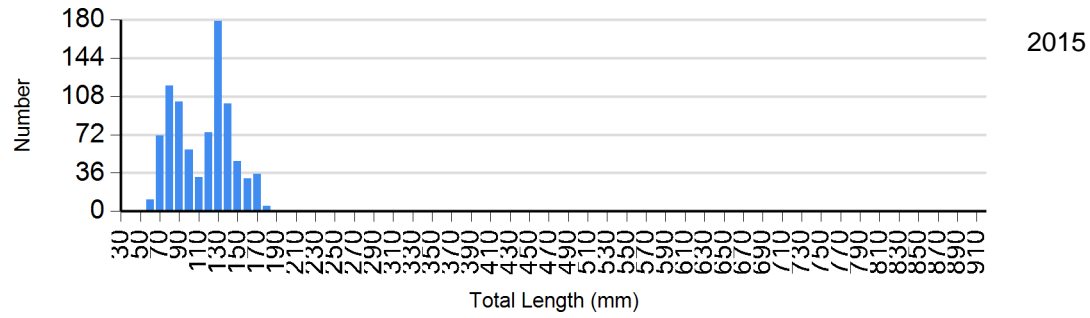
Site: 409  
Species: Creek Chub



Site: 409  
Species: Longnose Dace

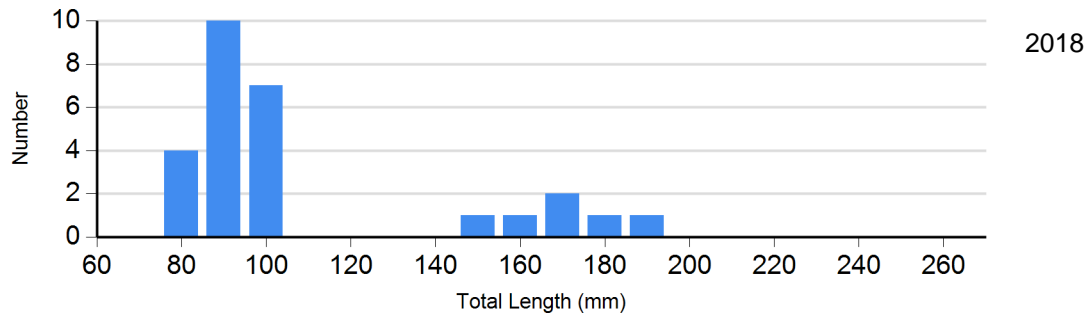
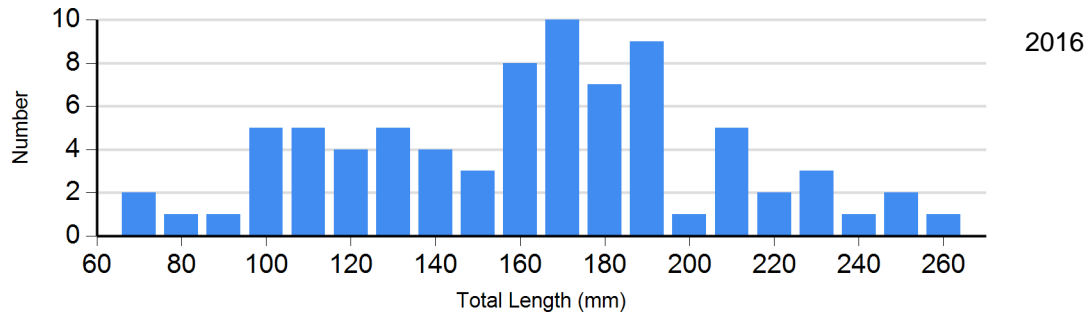
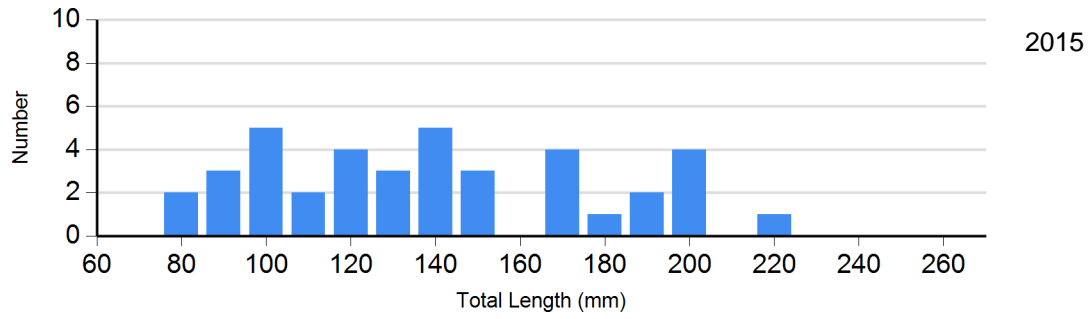


Site: 409  
Species: Mountain Sucker

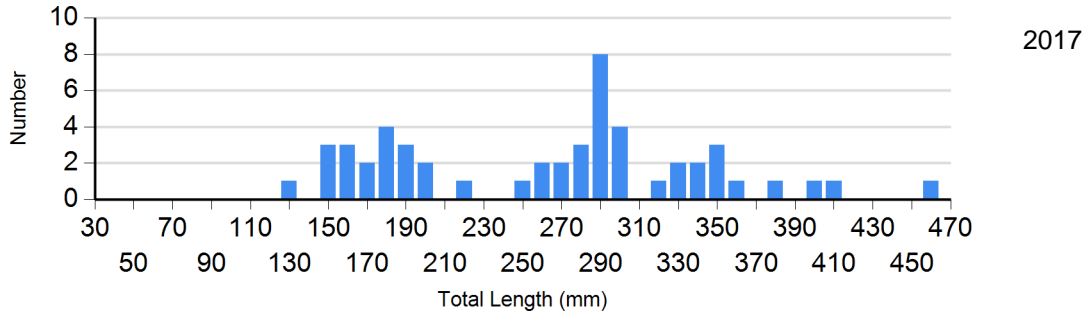
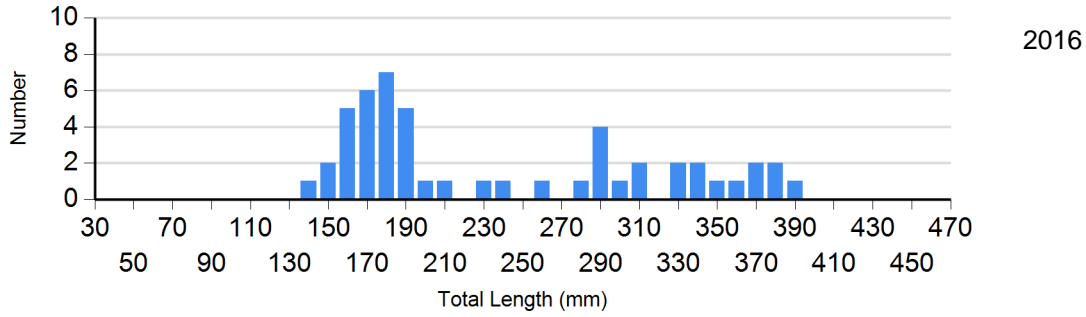
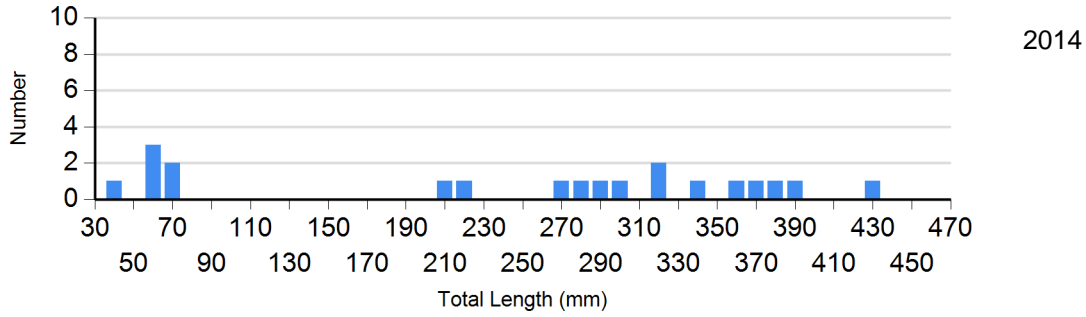
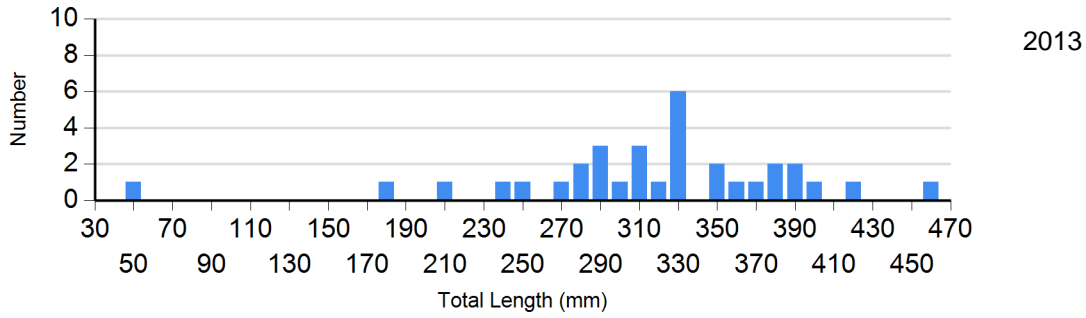


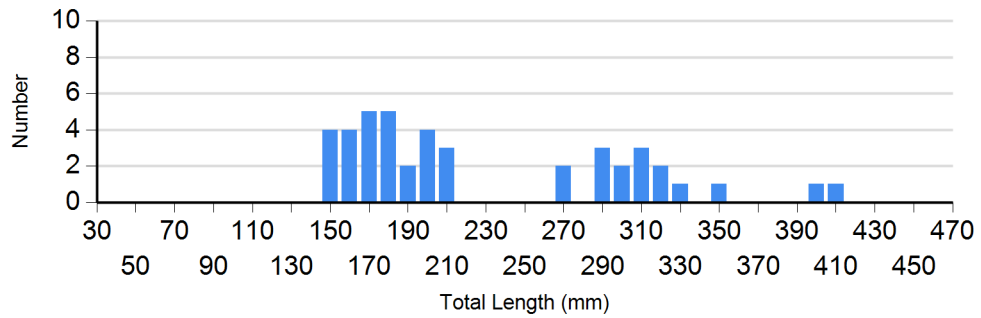


Site: 409  
Species: White Sucker

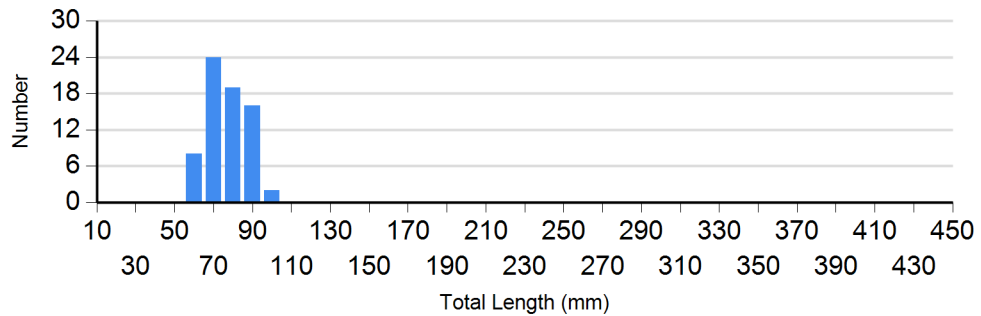
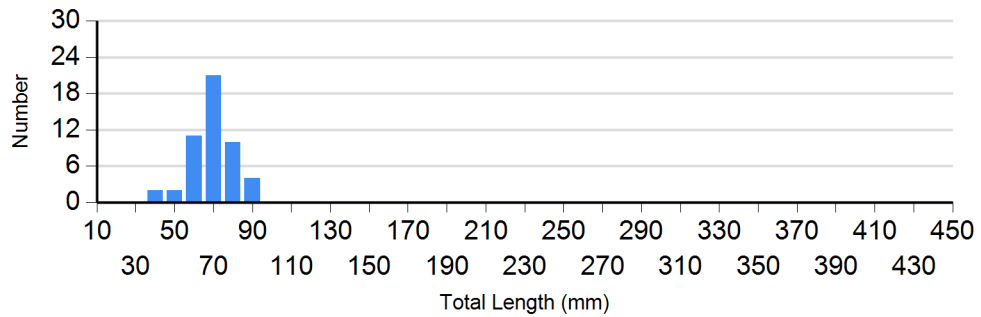
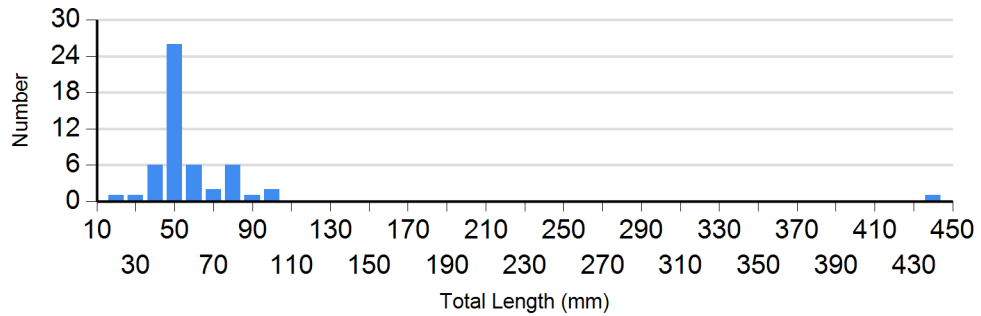


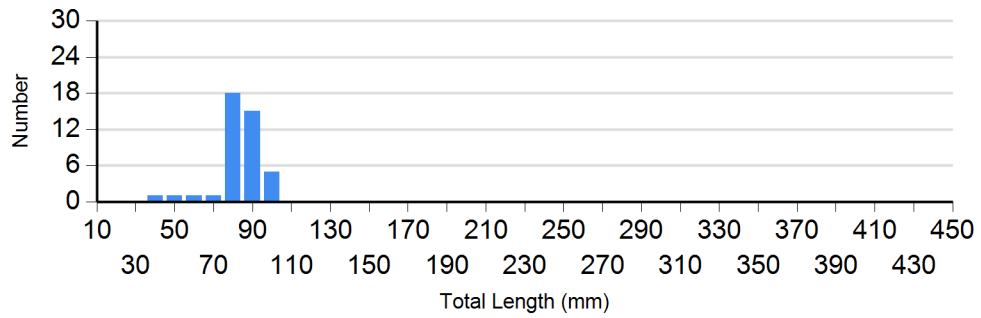
Site: 539  
Species: Brown Trout



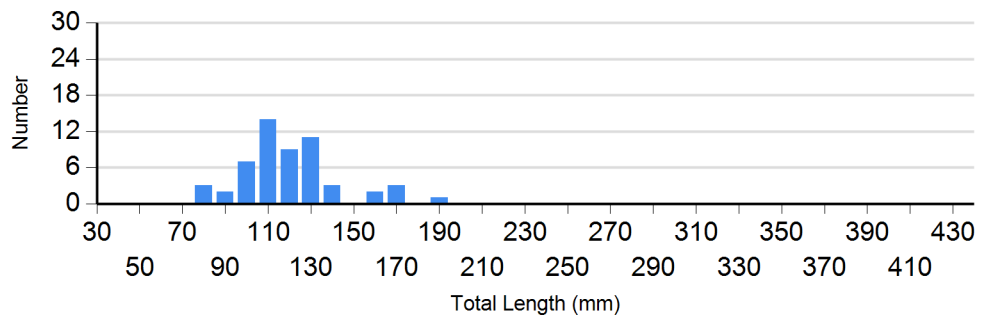
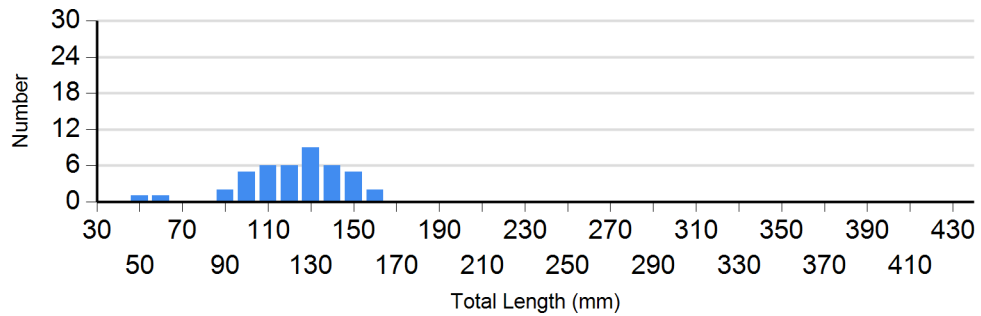
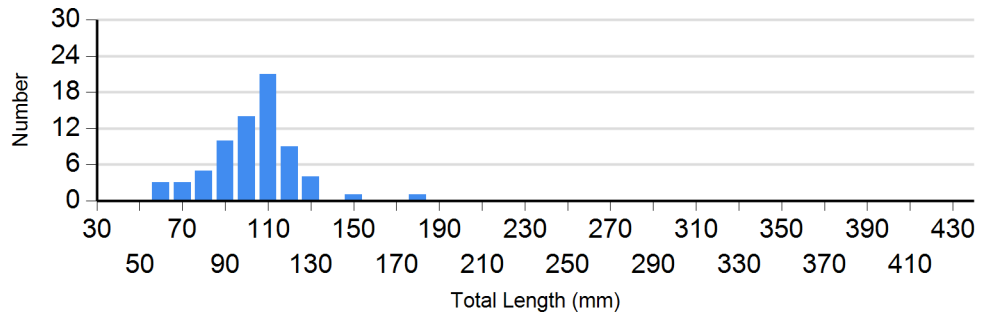


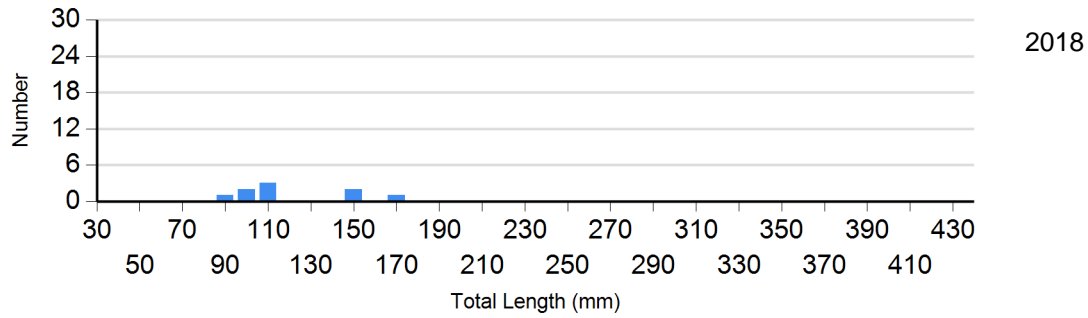
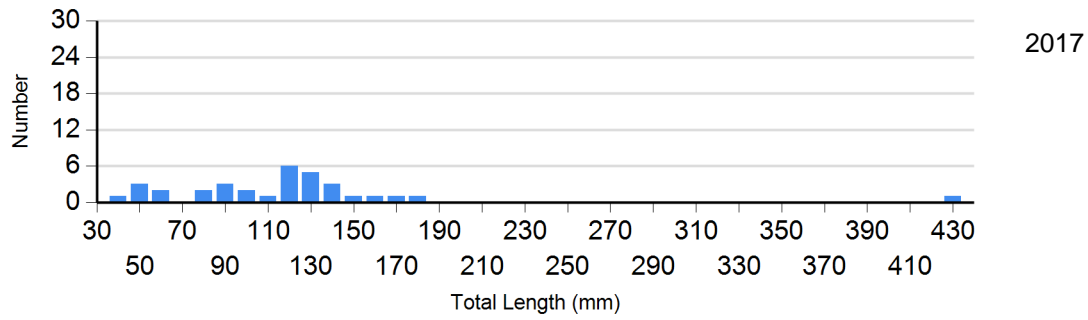
**Site:** 539  
**Species:** Longnose Dace



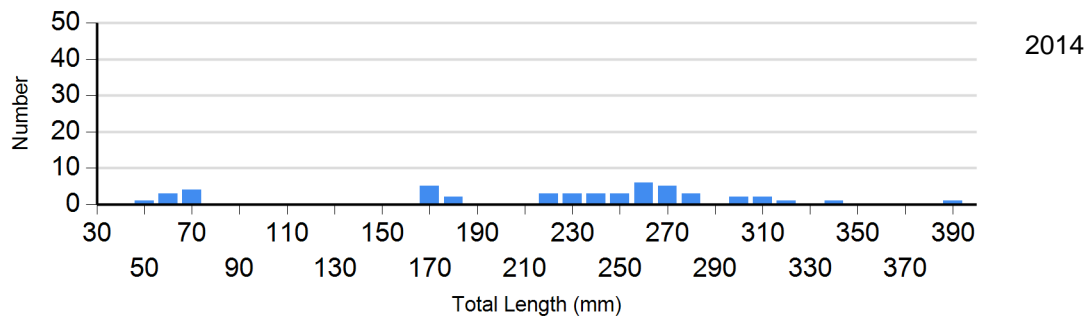
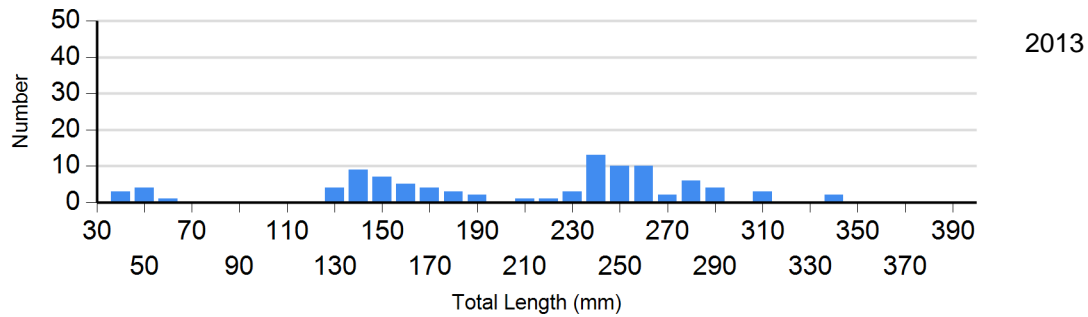


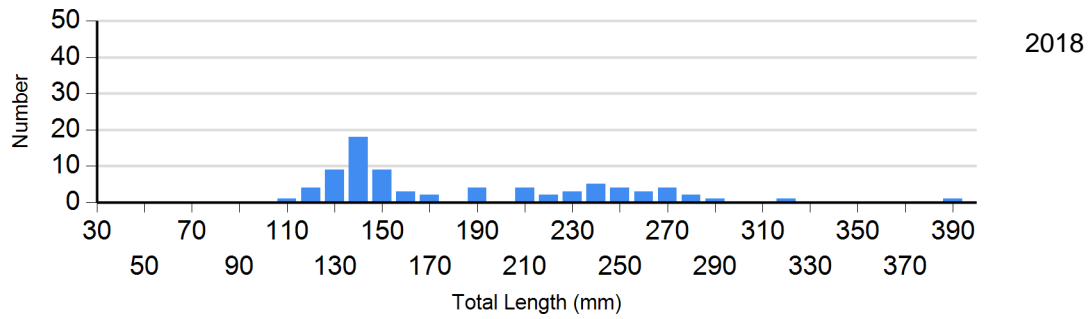
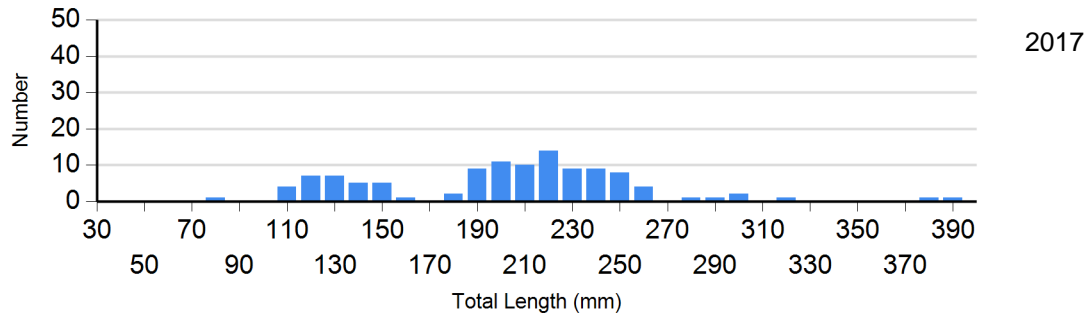
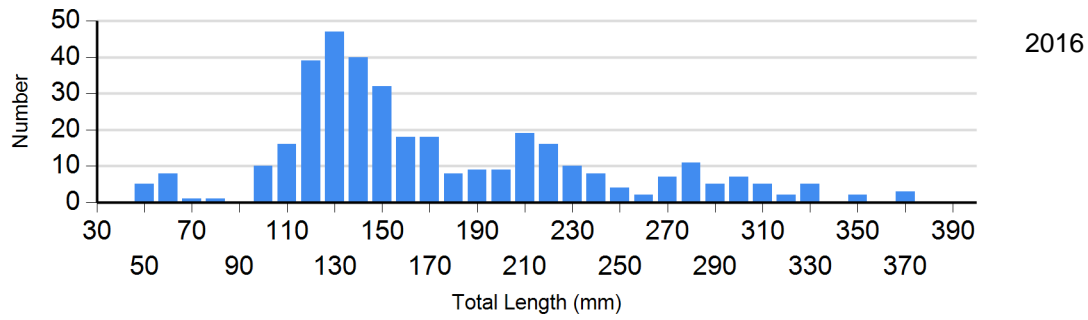
Site: 539  
Species: Mountain Sucker



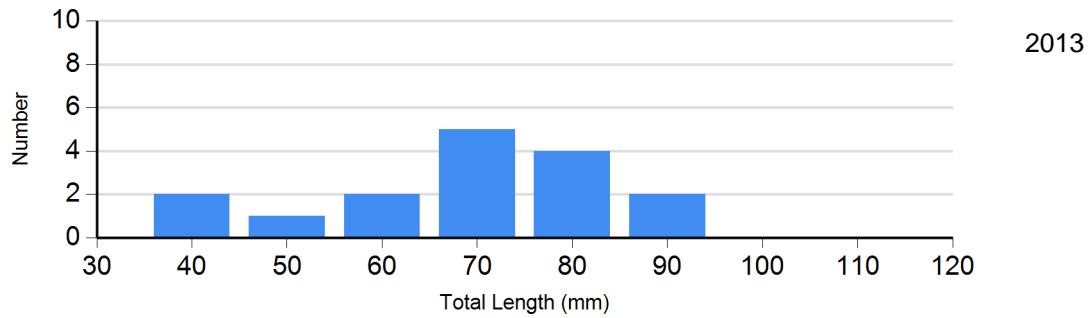


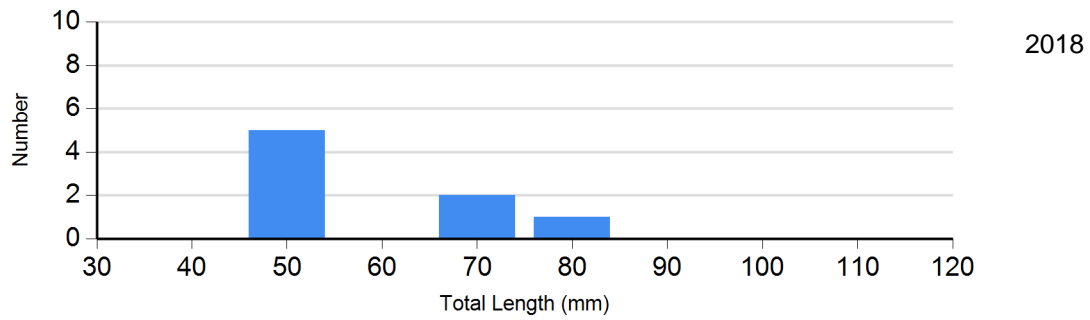
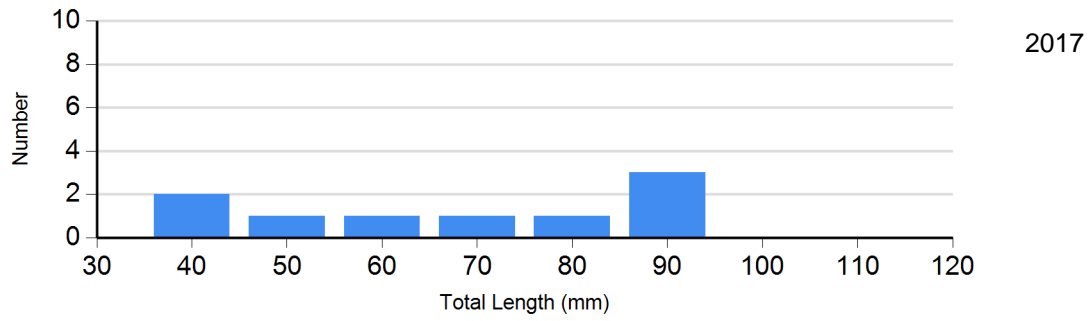
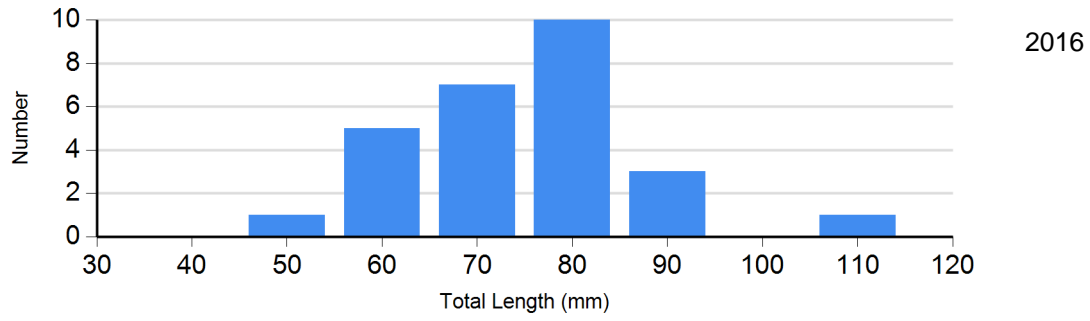
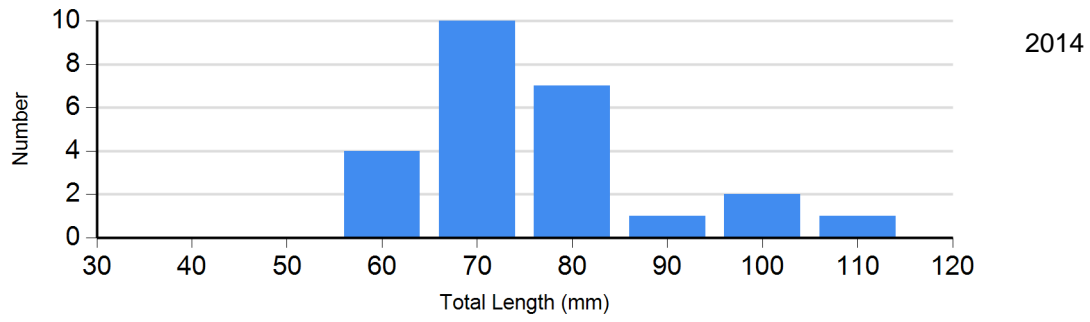
**Site:** 558  
**Species:** Brown Trout



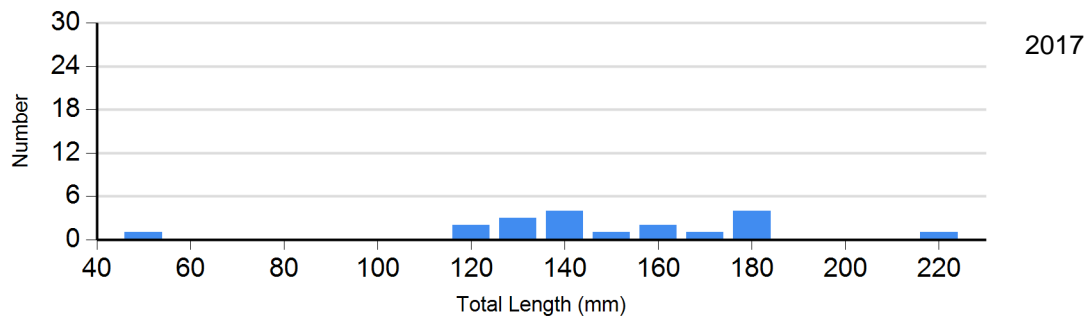
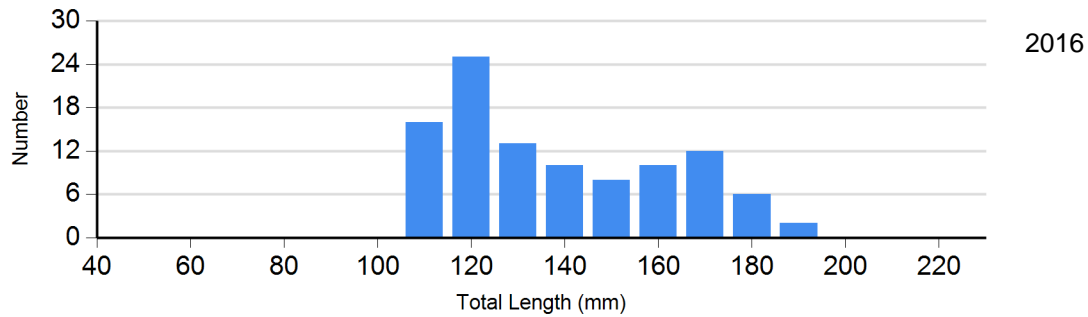
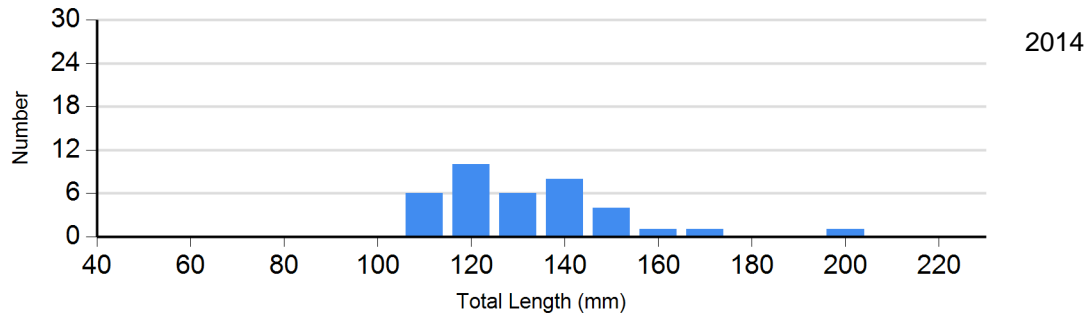
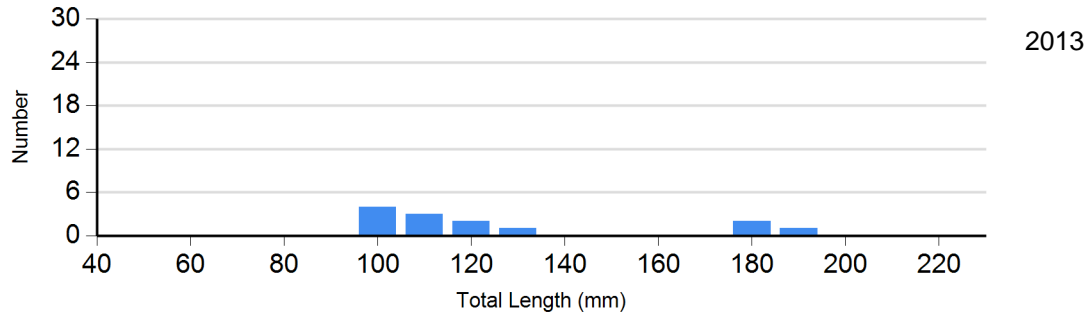


**Site:** 558  
**Species:** Longnose Dace

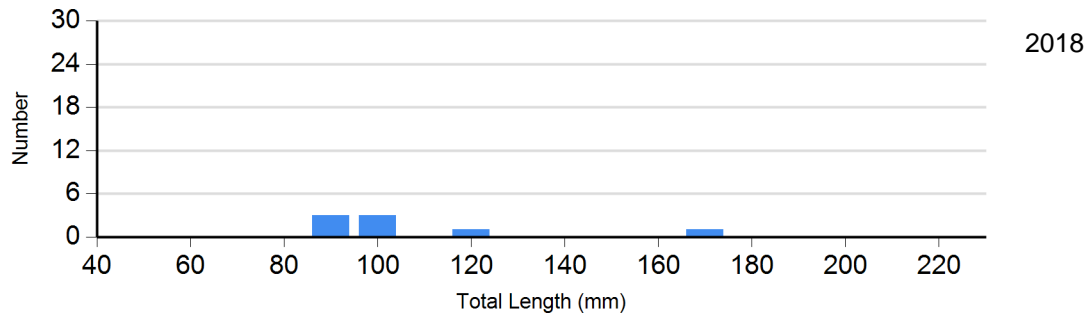




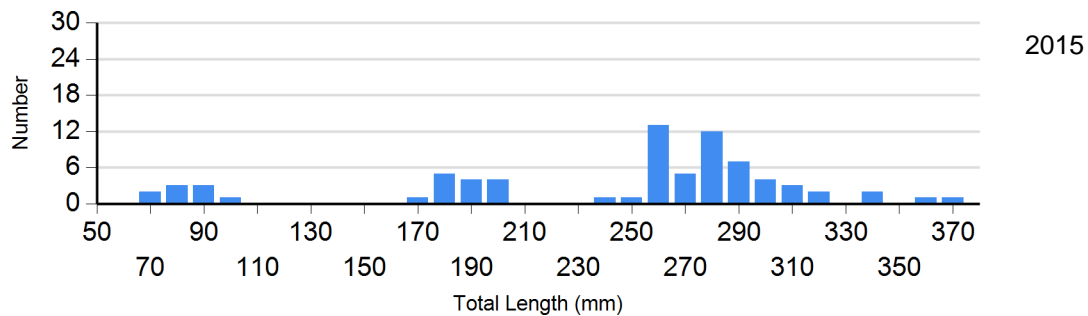
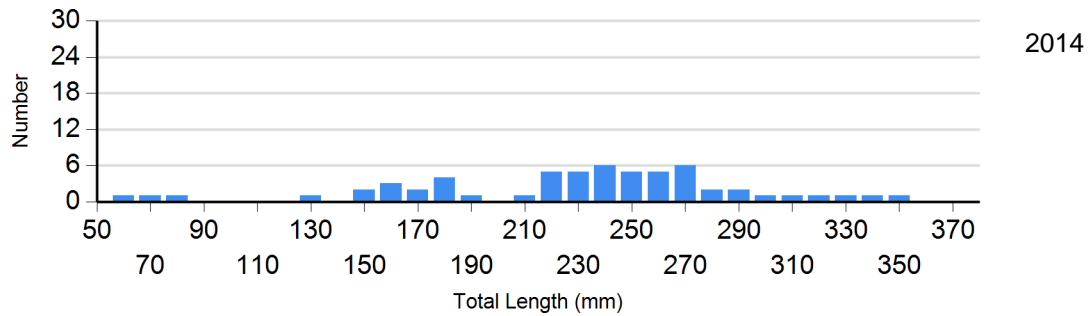
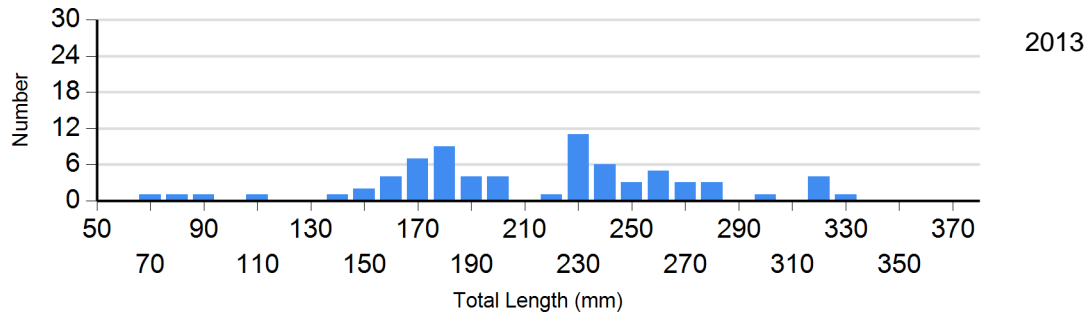
Site: 558  
Species: Mountain Sucker

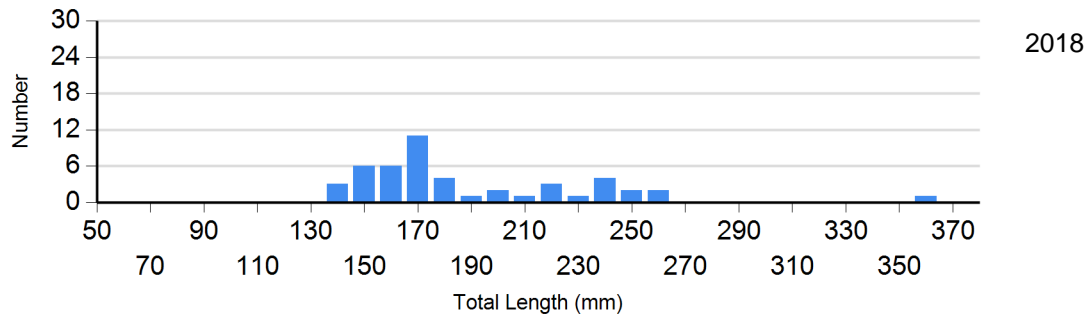
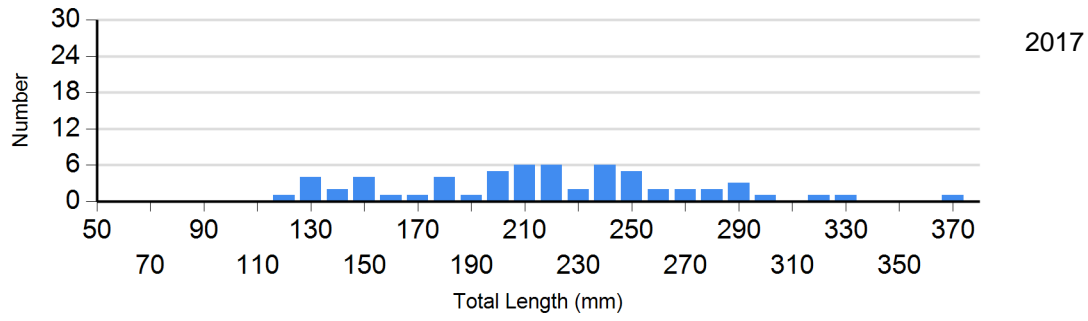
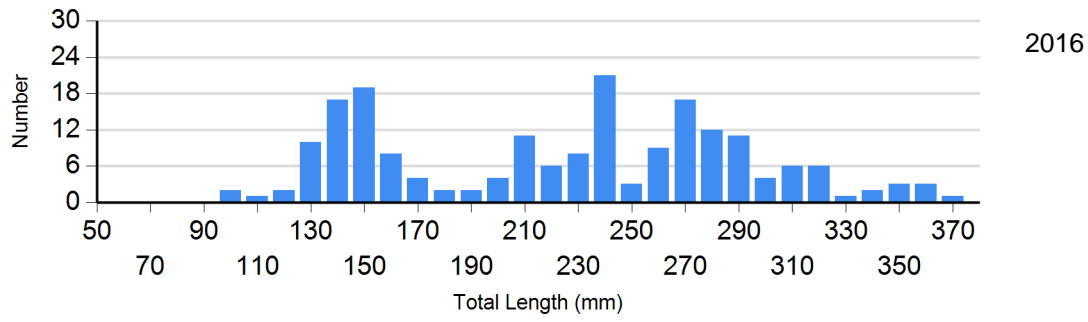




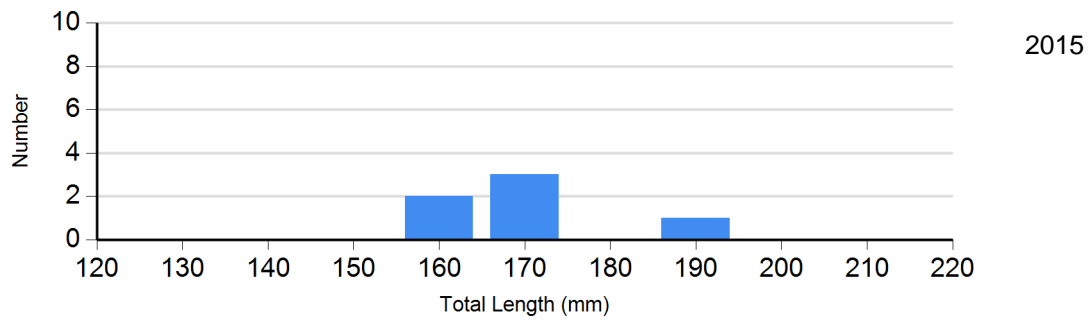


Site: 588  
Species: Brown Trout

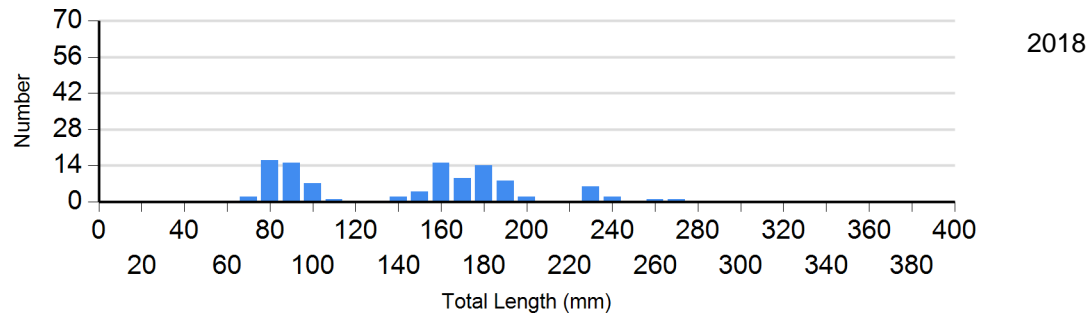
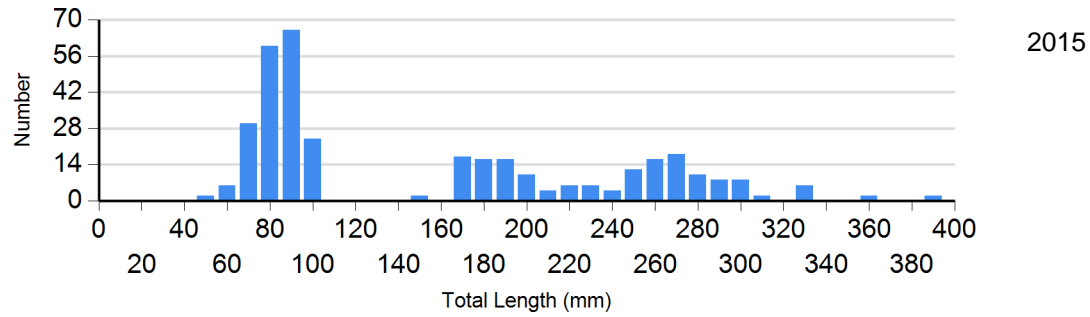
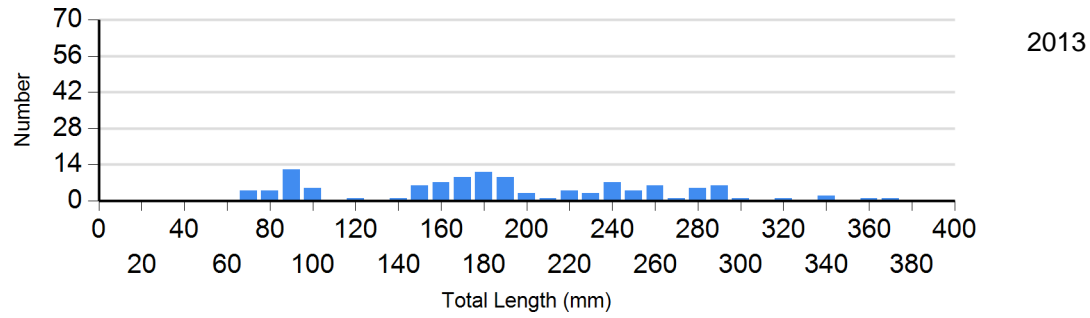




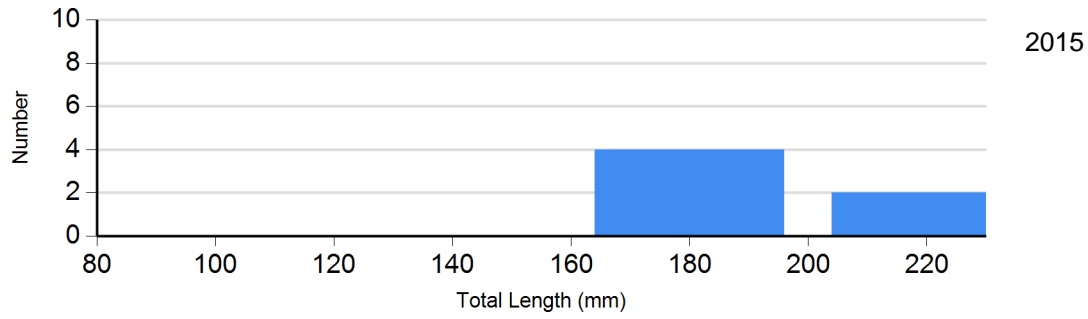
**Site:** 588  
**Species:** Mountain Sucker



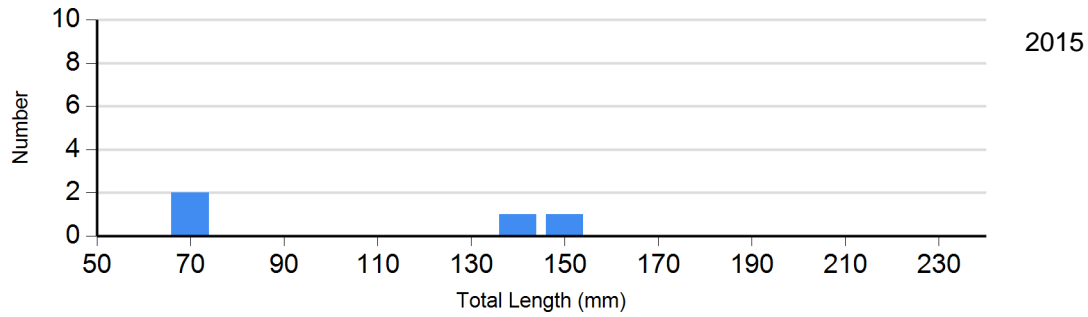
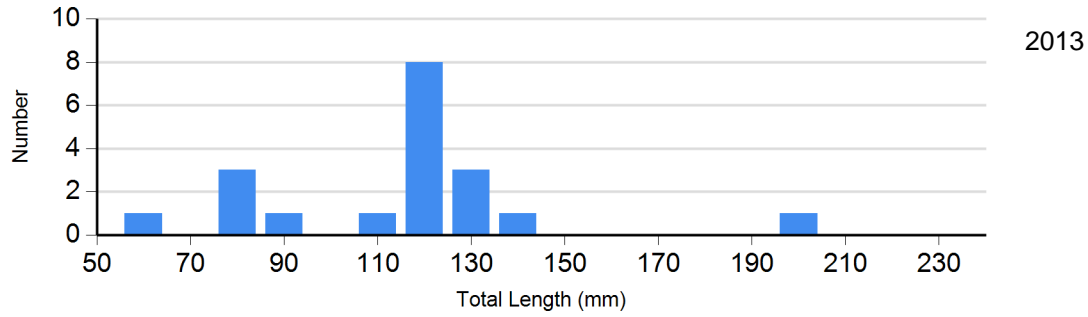
Site: 599  
Species: Brown Trout

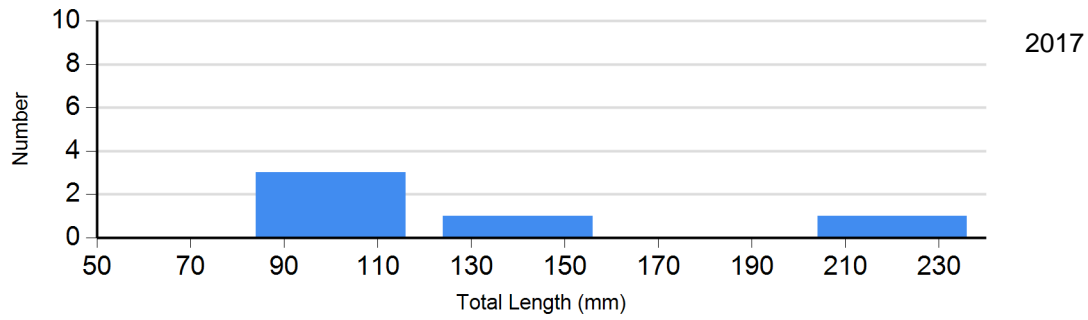


**Site:** 599  
**Species:** Mountain Sucker

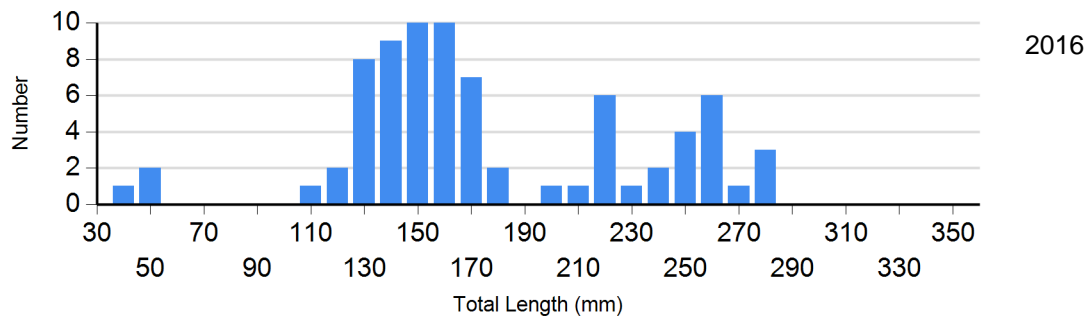
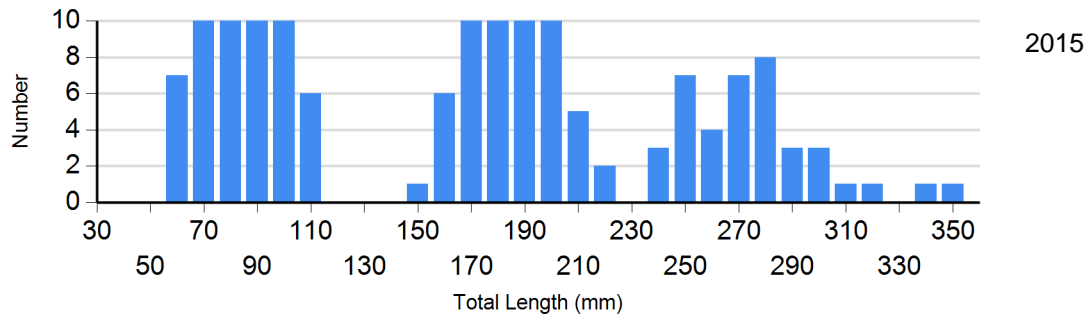
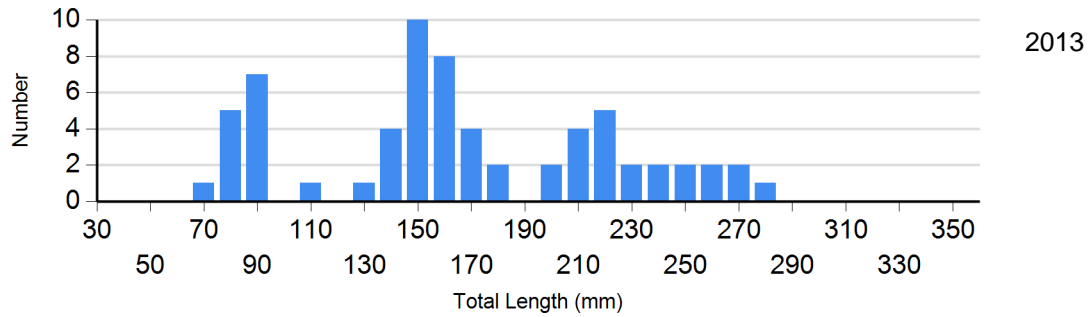


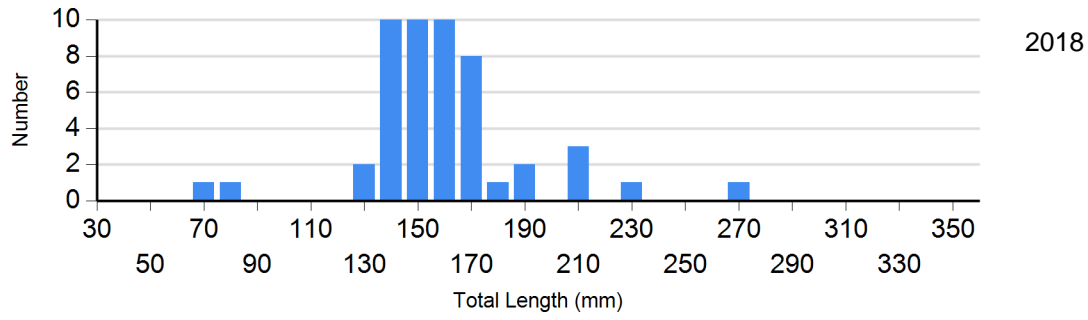
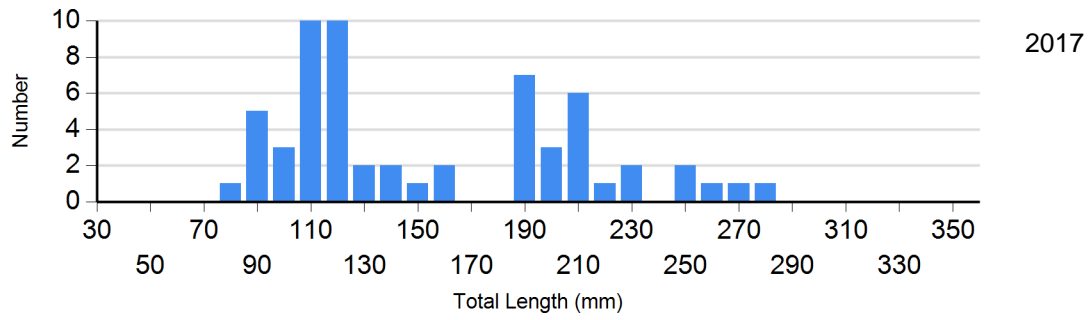
**Site:** 612  
**Species:** Brook Trout



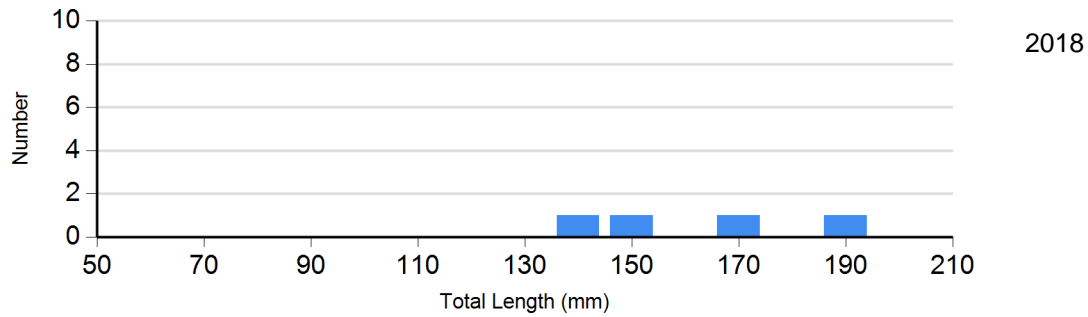


Site: 612  
Species: Brown Trout

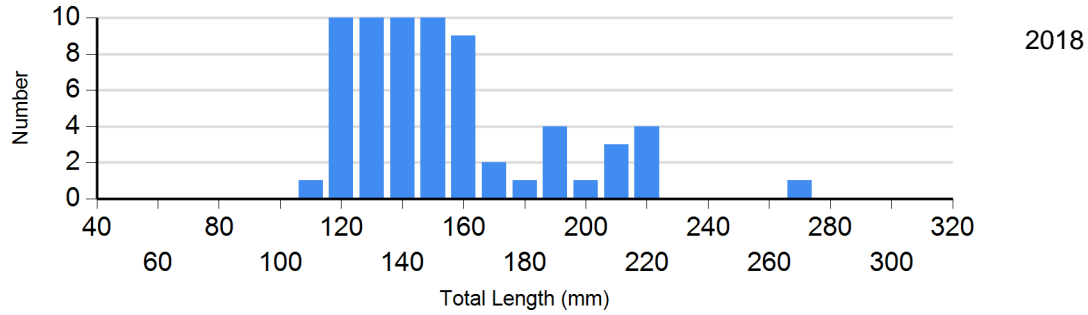
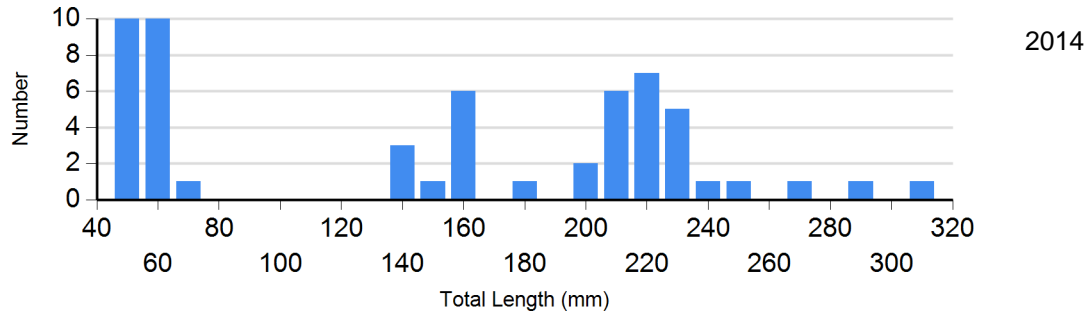




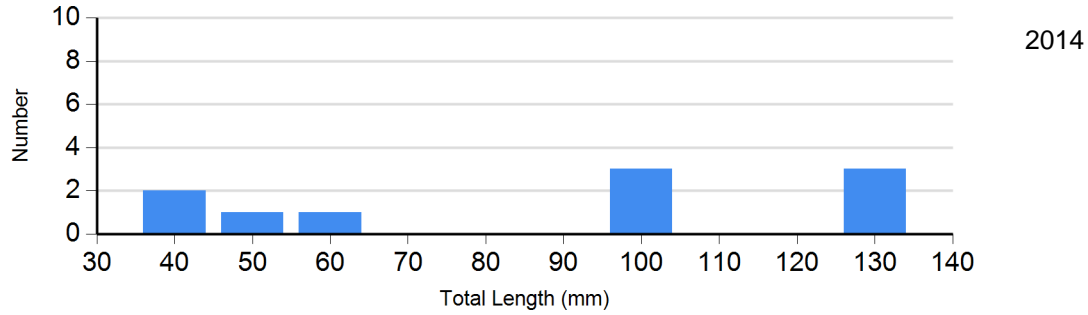
**Site:** 625  
**Species:** Brook Trout



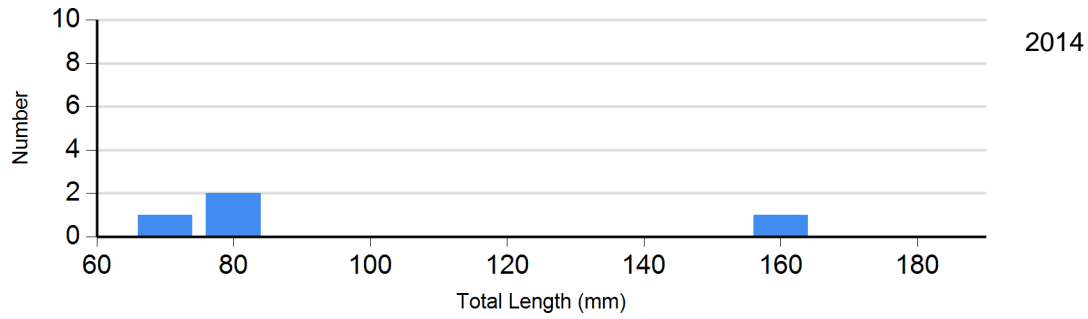
Site: 625  
Species: Brown Trout



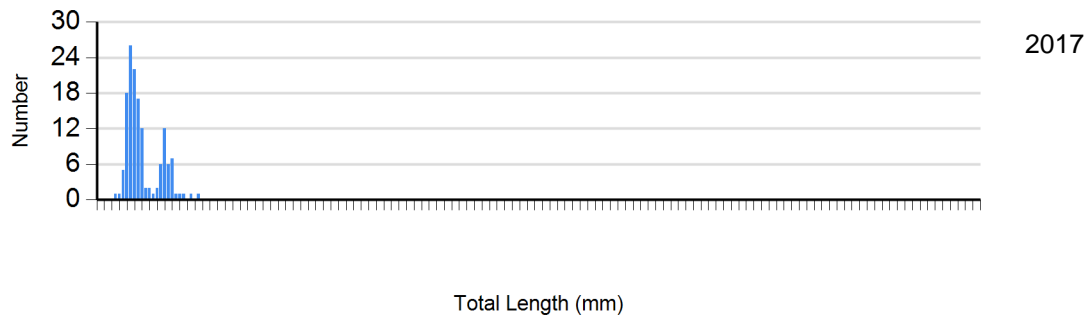
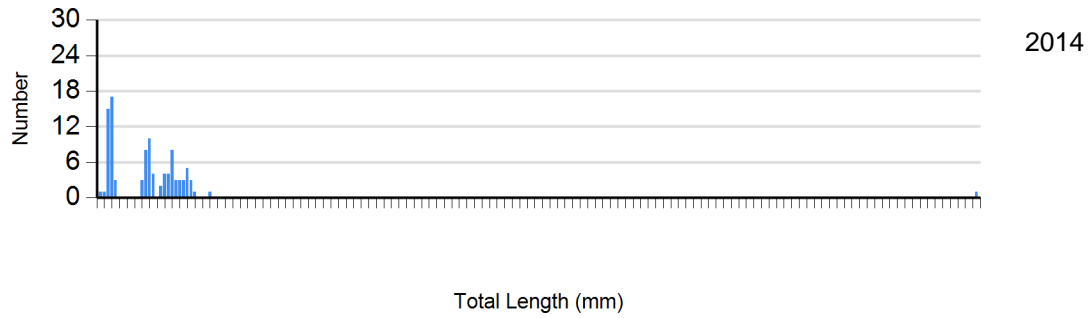
Site: 625  
Species: Longnose Dace



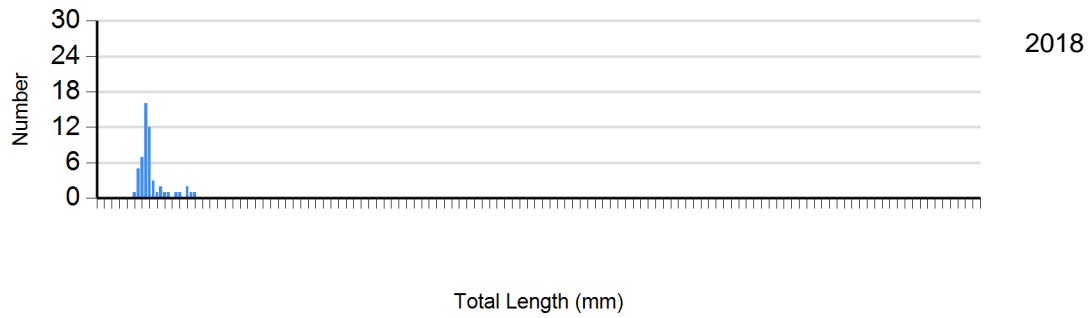
Site: 628  
Species: Brook Trout



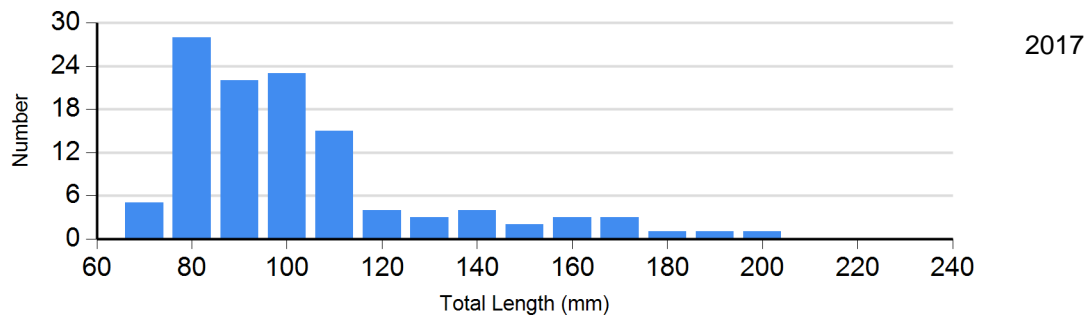
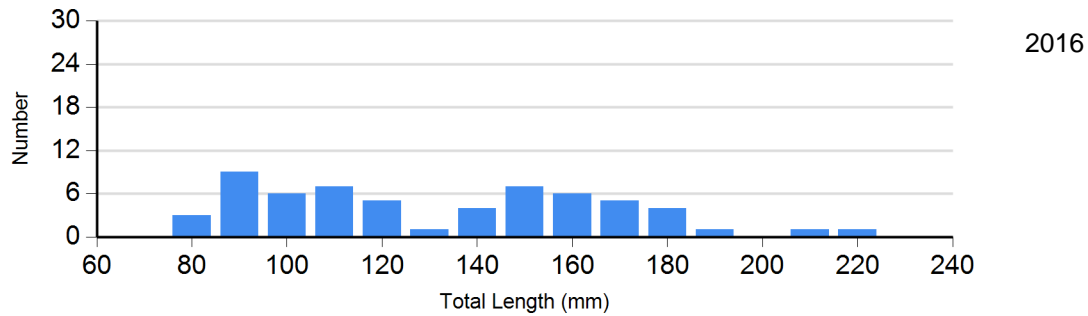
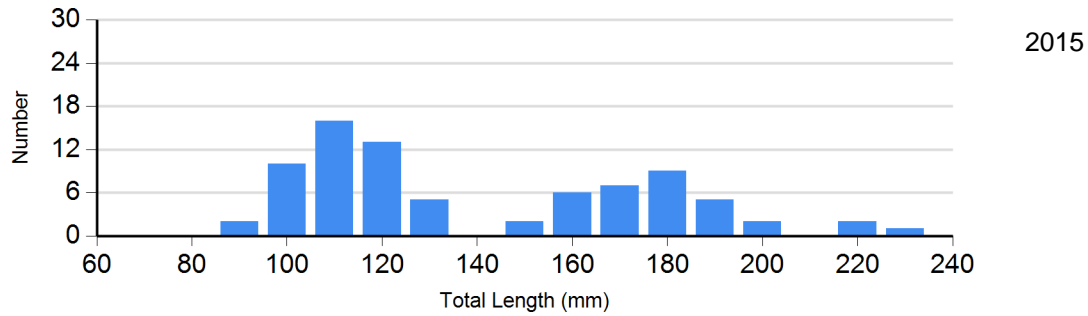
Site: 628  
Species: Brown Trout

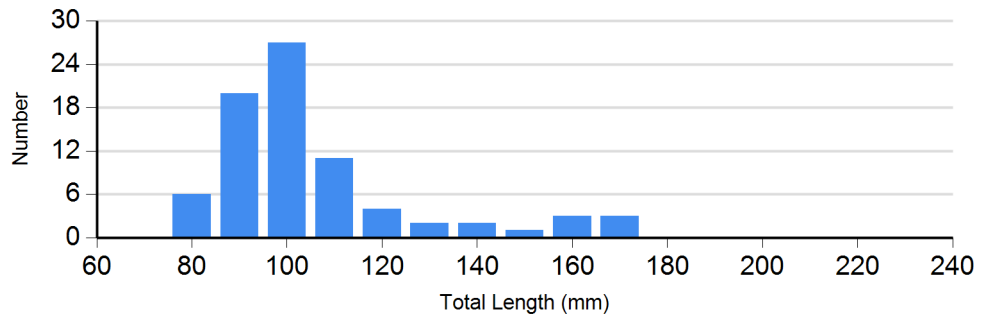




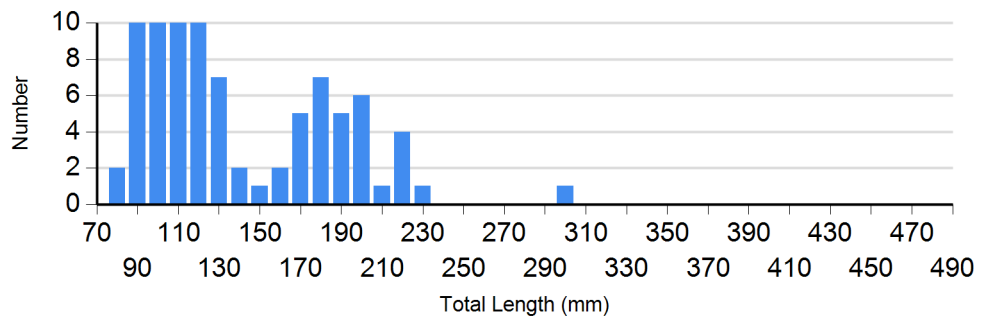
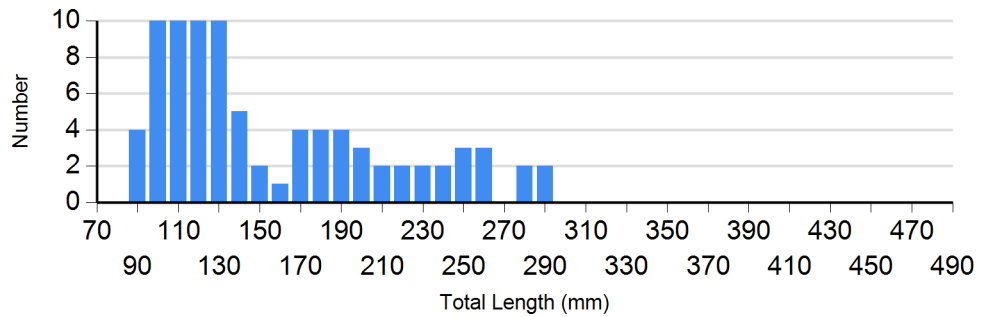
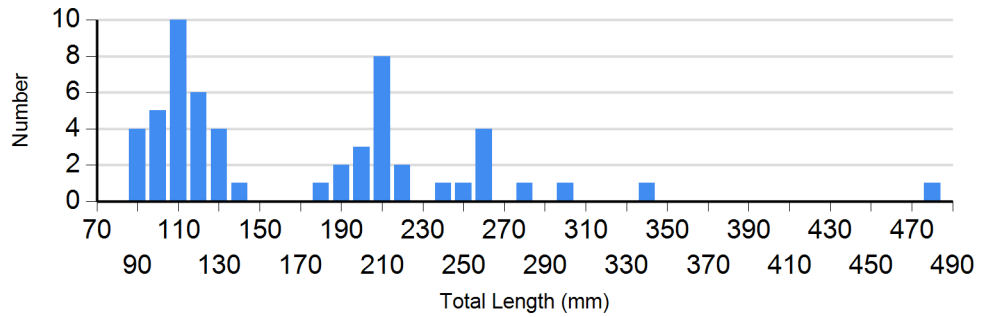


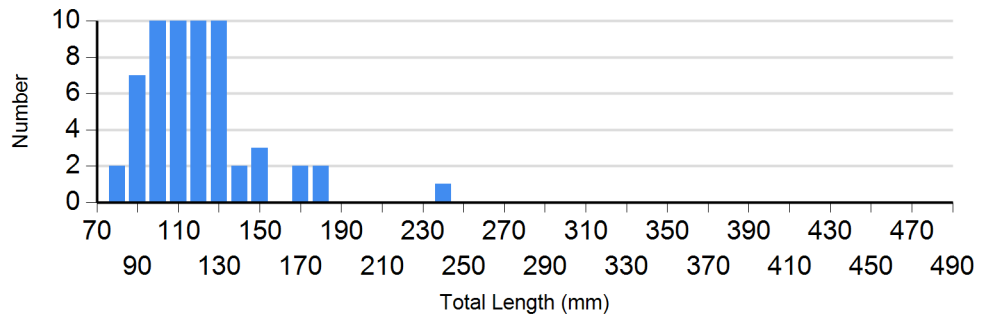
Site: 690  
Species: Brook Trout





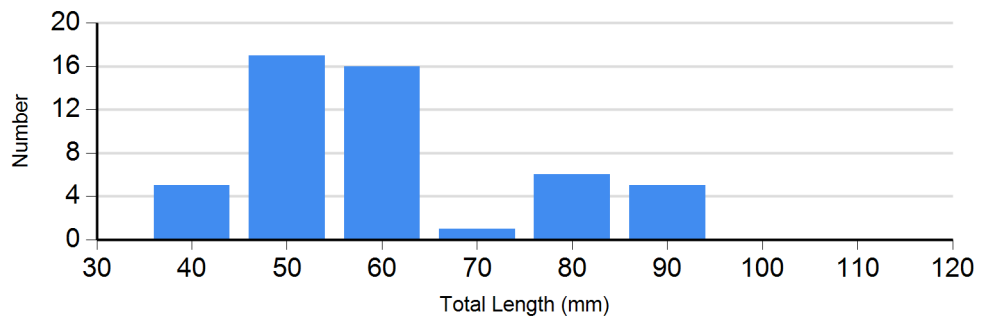
Site: 690  
Species: Brown Trout





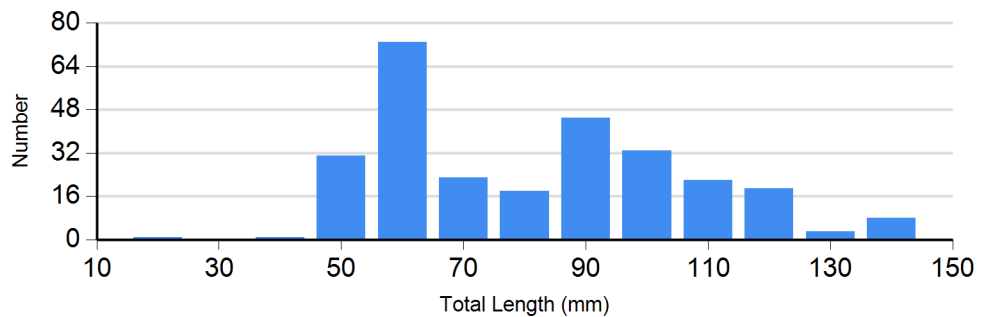
2018

**Site:** 690  
**Species:** Longnose Dace



2016

**Site:** 690  
**Species:** Mountain Sucker



2016