

**SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY**  
**Rapid Creek, Pennington County**  
**02-0062-00**  
**2003**

Table 1. Population and Biomass Estimates for Rapid Creek

<b>Site Number:</b> 1363	<b>Date Sampled:</b> 02/19/2003	<b>Conductivity (umhos/cm):</b> 390
<b>Site Midpoint (Latitude, Longitude):</b> 44.07961205, -103.20426495	<b>Site Length (m):</b> 100	<b>pH:</b> 9.0
<b>Survey Completed by:</b> South Dakota Game, Fish and Parks	<b>Mean Width (m):</b> 10.8	<b>Water Temperature (C):</b> 3.5
<b>Stream Classification:</b> BR1	<b>Number of Pass:</b> 4	<b>Voltage:</b> 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	78	83	90	78	765	18	830	310	16.08	1335	123.8	23.5
Brown Trout	>=200mm	42	42	43	42	387	71	420	157	63.12	676	265.6	182.5
Brown Trout	All	120	123	128	120	1134	90	1230	459	80.19	1979	173.4	79.2
Longnose Dace	All	3	3	4	3	28	0	30	11	0.11	48	73.3	4.3
Mountain Sucker	All	1	1	5	1	9	0	10	4	0.07	16	95.0	9.0
Rock Bass	All	3	3	5	3	28	1	30	11	0.78	48	110.7	31.7
White Sucker	All	65	66	69	65	609	289	660	246	258.26	1062	292.9	475.3

<b>Site Number:</b> 1383	<b>Date Sampled:</b> 04/17/2003	<b>Conductivity (umhos/cm):</b> 430
<b>Site Midpoint (Latitude, Longitude):</b> 44.08487597, -103.22694435	<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> 10.6	<b>Water Temperature (C):</b> 11.5
<b>Stream Classification:</b> BR1	<b>Number of Pass:</b> 4	<b>Voltage:</b> 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	37	46	62	37	433	11	460	175	9.83	740	132.5	25.4

Brown Trout	>=200mm	85	85	86	85	801	154	850	324	137.08	1368	271.5	191.8
Brown Trout	All	122	124	128	122	1168	165	1240	473	147.36	1995	229.3	141.3
Fathead Minnow	All	3	3	3	3	28	0	30	11	0.08	48	60.7	3.3
Green Sunfish	All	1	1	1	1	9	0	10	4	0.28	16	122.0	33.0
Longnose Dace	All	7	6	9	7	57	1	60	23	0.50	97	88.9	9.9
Mountain Sucker	All	2	2	5	2	19	1	20	8	0.78	32	150.5	46.5
Rock Bass	All	4	6	21	4	57	6	60	23	4.93	97	168.0	97.8
White Sucker	All	7	7	9	7	66	8	70	27	7.44	113	137.3	126.4

**Site Number:** 1393  
**Site Midpoint (Latitude, Longitude):** 44.08551436, -103.23872222  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR1

**Date Sampled:** 02/19/2003  
**Site Length (m):** 100  
**Mean Width (m):** 9.1  
**Number of Pass:** 4  
**Conductivity (umhos/cm):** 365  
**pH:** 8.6  
**Water Temperature (C):** 4.5  
**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)
Black Bullhead	All	1	1	1	1	11	0	10	4	0.44	16	148.0	45.0
Brown Trout	<200mm	70	76	85	70	831	18	760	337	16.01	1223	120.3	21.6
Brown Trout	>=200mm	120	121	124	120	1323	235	1210	536	209.45	1947	264.4	177.3
Brown Trout	All	190	196	203	190	2143	257	1960	868	229.49	3154	211.3	119.9
Longnose Dace	All	4	3	5	4	33	0	30	13	0.04	48	55.0	1.5
Mountain Sucker	All	1	1	5	1	11	0	10	4	0.40	16	150.0	41.0
Rock Bass	All	5	6	12	5	66	3	60	27	3.02	97	129.2	51.6
White Sucker	All	52	52	53	52	569	209	520	230	186.88	837	270.3	368.1

**Site Number:** 1412

Site Midpoint (Latitude, Longitude): 44.07907606, -103.25491933

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR1

Date Sampled: 03/05/2003

Site Length (m): 100

Mean Width (m): 7.3

Number of Pass: 4

Conductivity (umhos/cm): 320

pH: 8.8

Water Temperature (C): 5.0

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	93	101	111	93	1385	33	1010	561	29.53	1625	116.9	23.9
Brown Trout	>=200mm	109	110	113	109	1509	262	1100	611	234.16	1770	262.5	173.8
Brown Trout	All	202	208	215	202	2853	299	2080	1155	266.92	3347	195.5	104.8
Longnose Dace	All	4	3	7	4	41	1	30	17	0.96	48	111.0	26.3
Mountain Sucker	All	6	8	19	6	110	1	80	44	0.60	129	74.2	6.2
Rock Bass	All	3	3	5	3	41	0	30	17	0.31	48	73.7	8.3
White Sucker	All	28	28	30	28	384	184	280	156	163.84	451	301.8	477.8

Site Number: 1418

Site Midpoint (Latitude, Longitude): 44.07495337, -103.25792832

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR1

Date Sampled: 03/25/2003

Site Length (m): 100

Mean Width (m): 10.5

Number of Pass: 4

Conductivity (umhos/cm): 340

pH: 8.5

Water Temperature (C): 7.5

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	79	91	106	79	870	28	910	352	24.82	1464	129.1	32.0
Brown Trout	>=200mm	126	126	127	126	1204	197	1260	488	176.11	2027	258.7	163.8
Brown Trout	All	205	208	213	205	1988	225	2080	805	200.54	3347	208.8	113.0
Longnose Dace	All	2	2	3	2	19	0	20	8	0.04	32	64.0	2.5
Rock Bass	All	12	28	108	12	268	3	280	108	2.46	451	73.8	10.3

White Sucker All 63 64 67 63 612 327 640 248 291.82 1030 284.3 534.4

**Site Number:** 1420  
**Site Midpoint (Latitude, Longitude):** 44.07501237, -103.26040402  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR1

**Date Sampled:** 03/06/2003  
**Site Length (m):** 100  
**Mean Width (m):** 9.5  
**Number of Pass:** 4  
**Conductivity (umhos/cm):** 345  
**pH:** 8.9  
**Water Temperature (C):** 3.5  
**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	99	108	119	99	1138	19	1080	461	16.69	1738	109.7	16.4
Brown Trout	>=200mm	98	98	98	98	1033	178	980	418	158.64	1577	265.1	172.1
Brown Trout	All	197	200	204	197	2107	196	2000	853	175.08	3218	187.0	93.1
Longnose Dace	All	5	7	20	5	74	0	70	30	0.21	113	67.8	3.2
White Sucker	All	8	8	9	8	84	7	80	34	6.44	129	141.4	85.6

**Site Number:** 1434  
**Site Midpoint (Latitude, Longitude):** 44.06752736, -103.27112322  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR1

**Date Sampled:** 03/14/2003  
**Site Length (m):** 100  
**Mean Width (m):** 12.1  
**Number of Pass:** 4  
**Conductivity (umhos/cm):** 255  
**pH:** 8.5  
**Water Temperature (C):** 9.5  
**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	51	54	60	51	448	9	540	181	8.46	869	114.4	21.2
Brown Trout	>=200mm	113	113	114	113	937	173	1130	379	154.30	1818	267.4	184.5
Brown Trout	All	164	165	168	164	1368	182	1650	554	162.12	2655	219.8	132.8
Longnose Dace	All	6	14	73	6	116	0	140	47	0.31	225	73.2	3.0
Rock Bass	All	2	2	2	2	17	2	20	7	1.46	32	163.5	98.5

White Sucker All 57 57 57 57 472 202 570 191 180.14 917 300.9 427.0

**Site Number:** 1444  
**Site Midpoint (Latitude, Longitude):** 44.06406624, -103.27603653  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR1

**Date Sampled:** 03/07/2003  
**Site Length (m):** 100  
**Mean Width (m):** 11.6  
**Number of Pass:** 4  
**Conductivity (umhos/cm):** 240  
**pH:** 8.6  
**Water Temperature (C):** 4.5  
**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	69	74	81	69	639	10	740	259	9.36	1191	112.6	16.4
Brown Trout	>=200mm	62	62	62	62	536	115	620	217	103.12	998	282.2	215.6
Brown Trout	All	131	133	137	131	1149	127	1330	465	113.55	2140	192.9	110.7
Longnose Dace	All	2	1	1	2	9	0	10	3	0.02	16	59.5	2.5
White Sucker	All	15	15	15	15	130	66	150	52	58.60	241	316.7	506.3

**Site Number:** 1449  
**Site Midpoint (Latitude, Longitude):** 44.06128245, -103.28022267  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR1

**Date Sampled:** 03/07/2003  
**Site Length (m):** 100  
**Mean Width (m):** 8.6  
**Number of Pass:** 4  
**Conductivity (umhos/cm):** 250  
**pH:** 8.8  
**Water Temperature (C):** 5.0  
**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	40	42	47	40	488	8	420	198	6.70	676	110.7	15.4
Brown Trout	>=200mm	66	66	67	66	767	177	660	311	157.88	1062	292.8	230.4
Brown Trout	All	106	106	108	106	1233	184	1060	499	164.27	1706	224.1	149.3
Hatchery Rainbow Trout	>=200mm	1	1	1	1	12	6	10	5	5.46	16	400.0	526.0
Hatchery Rainbow Trout	All	1	1	1	1	12	6	10	5	5.46	16	400.0	526.0

Longnose Dace	All	1	1	5	1	12	0	10	5	0.03	16	74.0	3.0
White Sucker	All	30	30	31	30	349	204	300	141	181.75	483	365.2	583.5

**Site Number:** 1468  
**Site Midpoint (Latitude, Longitude):** 44.05764432, -103.29966114  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR3, RB0

**Date Sampled:** 03/13/2003  
**Site Length (m):** 100  
**Mean Width (m):** 7.1  
**Number of Pass:** 5  
**Conductivity (umhos/cm):** 212  
**pH:** 8.2  
**Water Temperature (C):** 2.0  
**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	173	190	204	176	2666	33	1900	1080	29.57	3057	102.1	12.4
Brown Trout	>=200mm	3	3	4	3	42	11	30	17	10.20	48	274.7	271.3
Brown Trout	All	176	194	209	179	2722	46	1940	1102	40.92	3121	105.0	16.8
Hatchery Rainbow Trout	<200mm	1	1	1	1	14	0	10	6	0.38	16	145.0	30.0
Hatchery Rainbow Trout	>=200mm	7	7	7	7	98	57	70	40	51.19	113	368.3	583.7
Hatchery Rainbow Trout	All	8	8	8	8	112	58	80	45	51.56	129	340.4	514.5
Longnose Dace	All	3	3	4	3	42	0	30	17	0.13	48	75.7	3.3
Rainbow Trout	<200mm	1	1	1	1	14	0	10	6	0.14	16	105.0	11.0
Rainbow Trout	All	1	1	1	1	14	0	10	6	0.14	16	105.0	11.0

**Site Number:** 1476  
**Site Midpoint (Latitude, Longitude):** 44.05345478, -103.30577465  
**Survey Completed by:** South Dakota Game, Fish and Parks  
**Stream Classification:** BR3, RB0

**Date Sampled:** 03/13/2003  
**Site Length (m):** 100  
**Mean Width (m):** 10.6  
**Number of Pass:** 4  
**Conductivity (umhos/cm):** 220  
**pH:** 8.2  
**Water Temperature (C):** 3.5  
**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	269	327	364	290	3085	32	3270	1249	28.64	5261	99.0	10.4
Brown Trout	>=200mm	4	4	6	4	38	6	40	15	5.47	64	257.5	162.3
Brown Trout	All	273	332	369	295	3132	40	3320	1268	35.30	5342	101.4	12.6
Longnose Dace	All	5	5	7	5	47	0	50	19	0.22	80	77.4	5.2
Rainbow Trout	<200mm	13	28	95	13	264	3	280	107	2.56	451	104.5	10.8
Rainbow Trout	All	13	28	95	13	264	3	280	107	2.56	451	104.5	10.8

Site Number: 1483

Site Midpoint (Latitude, Longitude): 44.05216048, -103.31387353

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR3

Date Sampled: 03/14/2003

Site Length (m): 100

Mean Width (m): 11.4

Number of Pass: 4

Conductivity (umhos/cm): 210

pH: 8.4

Water Temperature (C): 2.5

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	106	145	186	106	1272	14	1450	515	12.82	2333	102.7	11.3
Brown Trout	>=200mm	2	2	2	2	18	2	20	7	1.84	32	232.0	117.5
Brown Trout	All	108	144	181	108	1263	17	1440	512	14.95	2317	105.1	13.3

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 Rapid Creek, 1993-2003

**Site 1363**

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 28, 1993	28	19-53	
	Oct 04, 1996	66	55-82	
	Oct 06, 1999	278	184-372	
	Oct 18, 2000	153	153-153	
	Oct 19, 2001	78	76-82	
	Oct 16, 2002	120	109-132	
	Feb 19, 2003	83	78-90	



Brown Trout >=200mm	Sep 28, 1993	22	20-28	BR2
	Oct 04, 1996	29	26-36	BR2
	Oct 06, 1999	105	79-137	BR1
	Oct 18, 2000	150	150-150	BR1
	Oct 19, 2001	90	90-91	BR1
	Oct 16, 2002	33	32-36	BR2
	Feb 19, 2003	42	42-43	BR1
Fathead Minnow	Oct 18, 2000	1	1-3	
Green Sunfish	Sep 28, 1993	3	3-4	
Hatchery Rainbow Trout >=200mm	Sep 28, 1993	1	1-1	
	Oct 18, 2000	2	2-2	
Longnose Dace	Sep 28, 1993	139	132-147	
	Oct 04, 1996	13	14-17	
	Oct 06, 1999	3	3-4	
	Oct 18, 2000	86	80-94	
	Oct 19, 2001	5	5-6	

Longnose Dace	Oct 16, 2002	4	4-5
	Feb 19, 2003	3	3-4
Mountain Sucker	Sep 28, 1993	44	44-46
	Oct 04, 1996	11	11-12
	Oct 06, 1999	2	2-4
	Oct 18, 2000	14	14-14
	Oct 19, 2001	3	3-3
	Feb 19, 2003	1	1-5
Rock Bass	Sep 28, 1993	2	2-2
	Oct 04, 1996	5	3-24
	Oct 06, 1999	2	2-4
	Oct 18, 2000	1	1-3
	Oct 19, 2001	21	11-65
	Oct 16, 2002	6	6-8
	Feb 19, 2003	3	3-5
White Sucker	Sep 28, 1993	147	140-155

White Sucker	Oct 04, 1996	40	35-50
	Oct 06, 1999	26	26-28
	Oct 18, 2000	40	40-41
	Oct 19, 2001	9	9-10
	Oct 16, 2002	48	47-51
	Feb 19, 2003	66	65-69

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**Site 1383**

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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 06, 1999	50	46-57	
	Oct 18, 2000	95	90-102	
	Oct 19, 2001	65	64-68	
	Oct 16, 2002	119	84-161	
	Apr 17, 2003	46	37-62	
Brown Trout >=200mm	Oct 06, 1999	115	112-120	BR1
	Oct 18, 2000	163	162-165	BR1
	Oct 19, 2001	169	169-170	BR1

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Brown Trout >=200mm	Oct 16, 2002	66	66-67	BR1
	Apr 17, 2003	85	85-86	BR1
Fathead Minnow	Apr 17, 2003	3	3-3	
Green Sunfish	Oct 06, 1999	6	5-13	
	Oct 18, 2000	9	9-10	
	Oct 19, 2001	6	4-21	
	Oct 16, 2002	1	1-3	
	Apr 17, 2003	1	1-1	
Hatchery Rainbow Trout >=200mm	Oct 06, 1999	1	1-1	
	Oct 18, 2000	2	2-2	
	Oct 19, 2001	1	1-1	
	Oct 16, 2002	1	1-1	
Longnose Dace	Oct 06, 1999	1	1-2	
	Oct 18, 2000	20	21-32	
	Oct 19, 2001	3	3-4	
	Oct 16, 2002	9	8-15	

Longnose Dace	Apr 17, 2003	6	7-9	
Mountain Sucker	Oct 18, 2000	2	2-3	
	Apr 17, 2003	2	2-5	
Rainbow Trout >=200mm	Oct 16, 2002	2	2-2	RB2
Rock Bass	Oct 18, 2000	1	1-1	
	Oct 19, 2001	2	2-4	
	Oct 16, 2002	1	1-5	
	Apr 17, 2003	6	4-21	
White Sucker	Oct 06, 1999	14	14-14	
	Oct 18, 2000	9	9-10	
	Oct 19, 2001	8	8-8	
	Oct 16, 2002	29	20-53	
	Apr 17, 2003	7	7-9	

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**Site 1393**

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<b>Species/Size</b>	<b>Date</b>	<b>Pop Est.</b>	<b>(95% C.I.)</b>	<b>Stream Classification</b>
Black Bullhead	Feb 19, 2003	1	1-1	

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Brown Trout <200mm	Oct 10, 1996	199	182-216	
	Oct 05, 1999	25	25-27	
	Oct 17, 2000	86	85-89	
	Oct 09, 2001	91	91-92	
	Oct 15, 2002	127	117-138	
	Feb 19, 2003	76	70-85	
Brown Trout >=200mm	Oct 10, 1996	92	91-95	BR1
	Oct 05, 1999	80	67-97	BR1
	Oct 17, 2000	199	196-203	BR1
	Oct 09, 2001	200	200-201	BR1
	Oct 15, 2002	132	131-134	BR1
	Feb 19, 2003	121	120-124	BR1
Green Sunfish	Oct 10, 1996	1	1-1	
Longnose Dace	Oct 10, 1996	4	5-8	
	Oct 17, 2000	1	1-5	
	Oct 09, 2001	5	5-5	

Longnose Dace	Oct 15, 2002	6	6-8
	Feb 19, 2003	3	4-5
Mountain Sucker	Oct 10, 1996	2	2-3
	Feb 19, 2003	1	1-5
Rock Bass	Oct 10, 1996	1	1-1
	Oct 05, 1999	2	2-4
	Oct 17, 2000	1	1-2
	Oct 09, 2001	3	3-3
	Oct 15, 2002	5	5-7
	Feb 19, 2003	6	5-12
	White Sucker	Oct 10, 1996	70
White Sucker	Oct 05, 1999	43	36-56
	Oct 17, 2000	58	58-60
	Oct 09, 2001	51	51-52
	Oct 15, 2002	73	71-77
	Feb 19, 2003	52	52-53

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Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 28, 1993	142	116-168	
	Sep 29, 1994	314	245-383	
	Oct 03, 1995	215	171-259	
	Sep 26, 1996	151	152-172	
	Oct 05, 1999	149	127-171	
	Oct 17, 2000	216	214-220	
	Oct 17, 2001	141	139-145	
	Oct 10, 2002	306	293-319	
	Mar 05, 2003	101	93-111	
Brown Trout >=200mm	Sep 28, 1993	164	113-219	BR1
	Sep 29, 1994	86	82-92	BR1
	Oct 03, 1995	96	92-102	BR1
	Sep 26, 1996	120	90-155	BR1
	Oct 05, 1999	88	80-99	BR1

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Brown Trout >=200mm	Oct 17, 2000	185	185-186	BR1
	Oct 17, 2001	201	200-204	BR1
	Oct 10, 2002	140	139-143	BR1
	Mar 05, 2003	110	109-113	BR1
Green Sunfish	Sep 28, 1993	2	2-2	
	Sep 29, 1994	1	1-2	
	Oct 17, 2001	3	3-3	
Longnose Dace	Sep 28, 1993	2	2-4	
	Sep 29, 1994	12	9-25	
	Oct 03, 1995	2	2-3	
	Sep 26, 1996	1	1-2	
	Oct 17, 2000	10	10-11	
	Oct 17, 2001	7	7-8	
	Oct 10, 2002	9	9-11	
	Mar 05, 2003	3	4-7	
Mountain Sucker	Sep 28, 1993	1	1-2	

Mountain Sucker	Sep 29, 1994	4	4-6
	Oct 03, 1995	3	3-3
	Mar 05, 2003	8	6-19
Rock Bass	Sep 29, 1994	1	1-1
	Oct 03, 1995	2	2-4
	Sep 26, 1996	2	2-2
	Oct 05, 1999	1	1-1
	Oct 17, 2001	16	16-16
	Oct 10, 2002	15	15-17
	Mar 05, 2003	3	3-5
White Sucker	Sep 28, 1993	56	56-58
	Sep 29, 1994	76	75-79
	Oct 03, 1995	70	70-71
	Sep 26, 1996	85	70-104
	Oct 05, 1999	37	37-39
	Oct 17, 2000	59	59-59

White Sucker	Oct 17, 2001	88	88-89
	Oct 10, 2002	69	68-72
	Mar 05, 2003	28	28-30

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**Site 1418**

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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 19, 2000	246	240-252	
	Oct 18, 2001	220	209-231	
	Oct 17, 2002	263	252-274	
	Mar 25, 2003	91	79-106	
Brown Trout >=200mm	Oct 19, 2000	229	227-232	BR1
	Oct 18, 2001	175	174-178	BR1
	Oct 17, 2002	187	187-188	BR1
	Mar 25, 2003	126	126-127	BR1
Longnose Dace	Oct 18, 2001	3	3-5	
	Oct 17, 2002	1	1-2	
	Mar 25, 2003	2	2-3	

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Rock Bass	Oct 19, 2000	1	1-1
	Oct 18, 2001	4	4-6
	Oct 17, 2002	2	2-2
	Mar 25, 2003	28	12-108
White Sucker	Oct 19, 2000	114	114-115
	Oct 18, 2001	106	104-110
	Oct 17, 2002	127	126-130
	Mar 25, 2003	64	63-67

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**Site 1420**

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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 16, 2000	202	174-230	
	Oct 18, 2001	179	163-195	
	Oct 09, 2002	327	307-347	
	Mar 06, 2003	108	99-119	
Brown Trout >=200mm	Oct 16, 2000	235	233-239	BR1
	Oct 18, 2001	171	169-175	BR1

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Brown Trout >=200mm	Oct 09, 2002	172	172-173	BR1
	Mar 06, 2003	98	98-98	BR1
Hatchery Rainbow Trout >=200mm	Oct 09, 2002	1	1-1	
Longnose Dace	Oct 18, 2001	1	1-5	
	Oct 09, 2002	1	1-3	
	Mar 06, 2003	7	5-20	
Rainbow Trout <200mm	Oct 09, 2002	1	1-3	
Rock Bass	Oct 09, 2002	1	1-2	
White Sucker	Oct 16, 2000	13	13-14	
	Oct 18, 2001	12	12-13	
	Oct 09, 2002	19	18-23	
	Mar 06, 2003	8	8-9	

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**Site 1434**

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Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Nov 10, 1994	335	335-336	
	Sep 24, 1999	136	92-190	

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Brown Trout <200mm	Oct 16, 2000	158	145-171	
	Oct 16, 2001	147	141-154	
	Oct 15, 2002	103	96-112	
	Mar 14, 2003	54	51-60	
Brown Trout >=200mm	Nov 10, 1994	163	163-164	BR1
	Sep 24, 1999	167	133-201	BR1
	Oct 16, 2000	269	269-271	BR1
	Oct 16, 2001	288	287-291	BR1
	Oct 15, 2002	183	182-186	BR1
	Mar 14, 2003	113	113-114	BR1
Green Sunfish	Oct 16, 2001	3	3-4	
Longnose Dace	Nov 10, 1994	3	4-5	
	Oct 16, 2001	5	5-5	
	Mar 14, 2003	14	6-73	
Rainbow Trout >=200mm	Nov 10, 1994	2	2-2	RB2
Rock Bass	Oct 16, 2001	5	5-6	

Rock Bass	Oct 15, 2002	7	7-7
	Mar 14, 2003	2	2-2
White Sucker	Nov 10, 1994	123	123-123
	Sep 24, 1999	62	61-65
	Oct 16, 2000	62	62-64
	Oct 16, 2001	94	92-98
	Oct 15, 2002	27	27-29
	Mar 14, 2003	57	57-57

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**Site 1444**

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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	Aug 23, 1996	45	41-53	
	Oct 29, 1997	39	34-49	
	Oct 12, 1999	158	133-183	
	Oct 10, 2000	694	623-765	
	Oct 16, 2001	223	186-260	
	Oct 07, 2002	370	357-383	

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Brown Trout <200mm	Mar 07, 2003	74	69-81	
Brown Trout >=200mm	Aug 23, 1996	133	122-145	BR1
	Oct 29, 1997	231	207-255	BR1
	Oct 12, 1999	178	159-197	BR1
	Oct 10, 2000	198	181-215	BR1
	Oct 16, 2001	143	142-146	BR1
	Oct 07, 2002	64	64-64	BR1
	Mar 07, 2003	62	62-62	BR1
Hatchery Rainbow Trout >=200mm	Aug 23, 1996	1	1-5	
Longnose Dace	Aug 23, 1996	9	9-11	
	Oct 29, 1997	3	3-5	
	Oct 10, 2000	6	3-36	
	Oct 16, 2001	2	2-3	
	Oct 07, 2002	15	16-20	
	Mar 07, 2003	1	2-1	
Mountain Sucker	Oct 29, 1997	1	1-2	



Mountain Sucker	Oct 12, 1999	1	1-1	
Rainbow Trout >=200mm	Oct 29, 1997	1	1-1	RB2
White Sucker	Aug 23, 1996	22	22-23	
	Oct 29, 1997	18	18-18	
	Oct 12, 1999	12	12-12	
	Oct 10, 2000	10	10-12	
	Oct 16, 2001	8	8-8	
	Oct 07, 2002	7	7-7	
	Mar 07, 2003	15	15-15	

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**Site 1449**

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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	Aug 23, 1996	42	34-57	
	Oct 29, 1997	126	94-162	
	Oct 12, 1999	192	101-321	
	Oct 11, 2000	401	367-435	
	Oct 17, 2001	142	134-151	

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Brown Trout <200mm	Oct 07, 2002	228	208-248	
	Mar 07, 2003	42	40-47	
Brown Trout >=200mm	Aug 23, 1996	91	77-108	BR1
	Oct 29, 1997	54	51-60	BR1
	Oct 12, 1999	193	170-216	BR1
	Oct 11, 2000	170	159-181	BR1
	Oct 17, 2001	80	79-83	BR1
	Oct 07, 2002	77	75-81	BR1
	Mar 07, 2003	66	66-67	BR1
Hatchery Rainbow Trout >=200mm	Mar 07, 2003	1	1-1	
Longnose Dace	Aug 23, 1996	2	2-3	
	Oct 12, 1999	2	2-4	
	Oct 17, 2001	1	1-3	
	Oct 07, 2002	1	1-1	
	Mar 07, 2003	1	1-5	
Rainbow Trout <200mm	Oct 11, 2000	1	1-2	

White Sucker	Aug 23, 1996	32	31-36
	Oct 29, 1997	14	14-15
	Oct 12, 1999	33	33-35
	Oct 11, 2000	22	22-23
	Oct 17, 2001	37	36-40
	Oct 07, 2002	44	44-45
	Mar 07, 2003	30	30-31

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**Site 1468**

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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 24, 2000	252	206-298	
	Oct 11, 2001	466	293-639	
	Oct 08, 2002	380	335-425	
	Mar 13, 2003	190	176-204	
Brown Trout >=200mm	Oct 24, 2000	23	23-25	BR2
	Oct 11, 2001	21	21-21	BR2
	Oct 08, 2002	14	14-14	BR2

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Brown Trout >=200mm	Mar 13, 2003	3	3-4	BR3
Hatchery Rainbow Trout <200mm	Mar 13, 2003	1	1-1	
Hatchery Rainbow Trout >=200mm	Oct 24, 2000	3	3-3	
	Oct 11, 2001	2	2-2	
	Mar 13, 2003	7	7-7	
Longnose Dace	Oct 24, 2000	3	4-6	
	Oct 11, 2001	3	3-6	
	Oct 08, 2002	22	20-28	
	Mar 13, 2003	3	3-4	
Rainbow Trout <200mm	Oct 24, 2000	20	18-26	
	Oct 11, 2001	2	2-4	
	Oct 08, 2002	2	2-2	
	Mar 13, 2003	1	1-1	
Rainbow Trout >=200mm	Oct 08, 2002	5	5-5	RB1
White Sucker	Oct 11, 2001	1	1-3	
	Oct 08, 2002	4	4-4	

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 05, 2000	475	399-551	
	Oct 10, 2001	605	537-673	
	Sep 24, 2002	536	516-556	
	Mar 13, 2003	327	290-364	
Brown Trout >=200mm	Oct 05, 2000	14	14-14	BR2
	Oct 10, 2001	7	7-7	BR3
	Sep 24, 2002	5	5-5	BR3
	Mar 13, 2003	4	4-6	BR3
Hatchery Rainbow Trout >=200mm	Oct 10, 2001	2	2-3	
Longnose Dace	Oct 05, 2000	3	4-6	
	Oct 10, 2001	11	12-15	
	Sep 24, 2002	13	13-15	
	Mar 13, 2003	5	5-7	
Rainbow Trout <200mm	Oct 05, 2000	13	10-25	

Rainbow Trout <200mm	Oct 10, 2001	14	14-15
	Sep 24, 2002	44	44-46
	Mar 13, 2003	28	13-95
White Sucker	Oct 10, 2001	4	4-5

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**Site 1483**

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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 25, 2000	448	422-474	
	Oct 03, 2001	592	496-688	
	Sep 30, 2002	449	416-482	
	Mar 14, 2003	145	106-186	
Brown Trout >=200mm	Oct 25, 2000	22	22-23	BR2
	Oct 03, 2001	18	18-18	BR2
	Sep 30, 2002	11	11-11	BR2
	Mar 14, 2003	2	2-2	BR3
Hatchery Rainbow Trout >=200mm	Sep 30, 2002	1	1-1	
Mountain Sucker	Oct 03, 2001	1	1-3	

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Rainbow Trout <200mm	Oct 25, 2000	2	2-2
	Oct 03, 2001	30	11-145
White Sucker	Sep 30, 2002	3	3-3

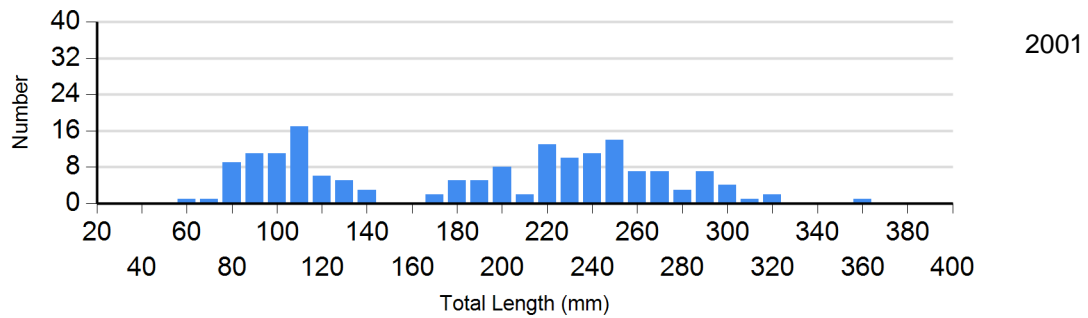
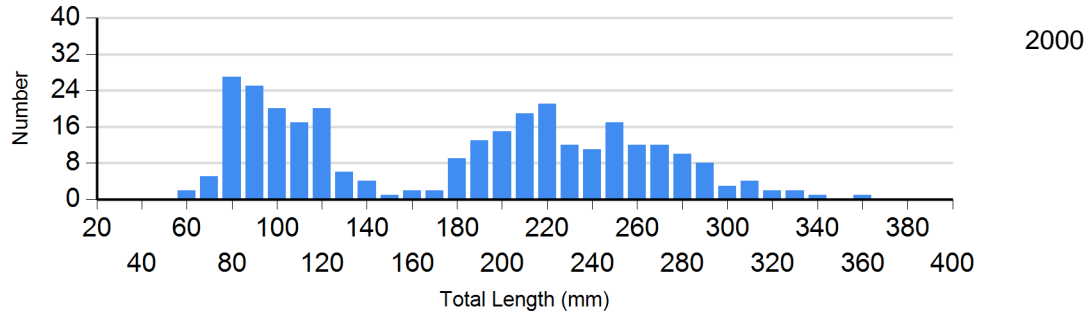
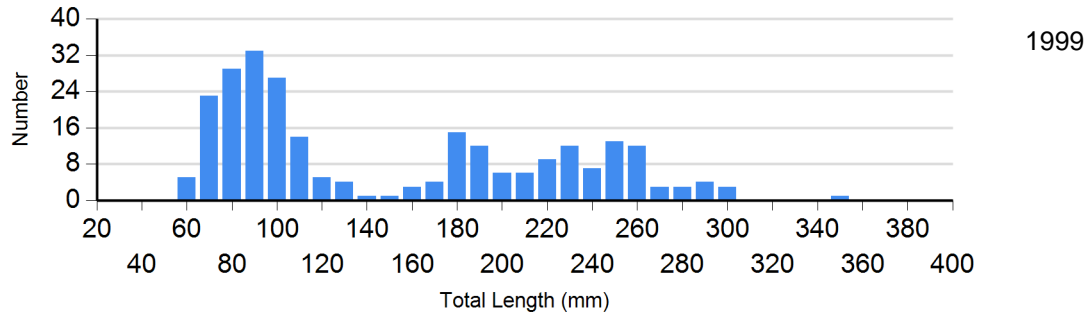
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## Length Frequency Distribution

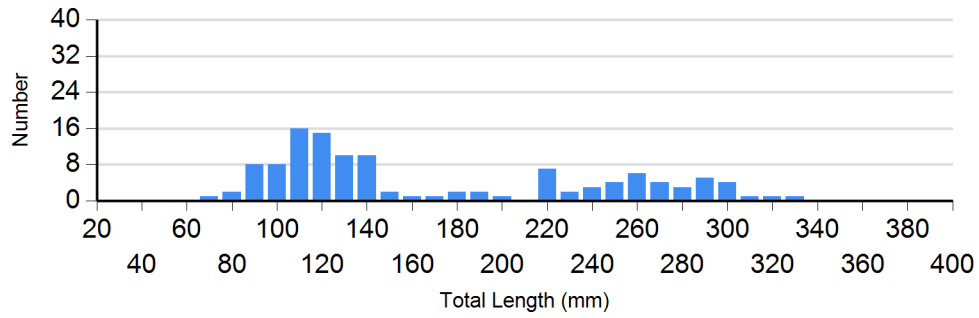
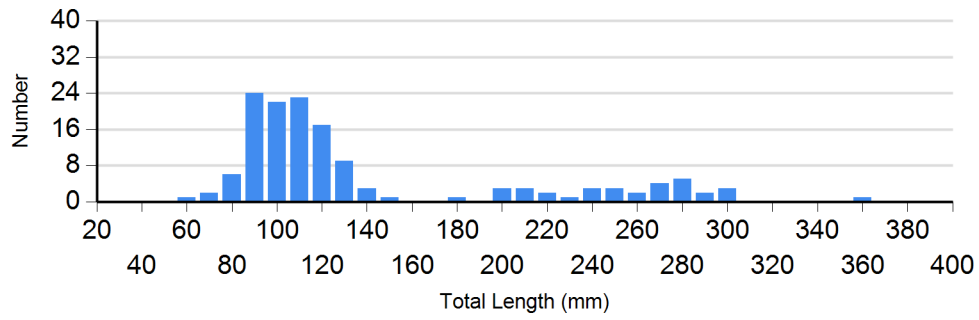
Length frequency histogram of species sampled by year.

**Site:** 1363

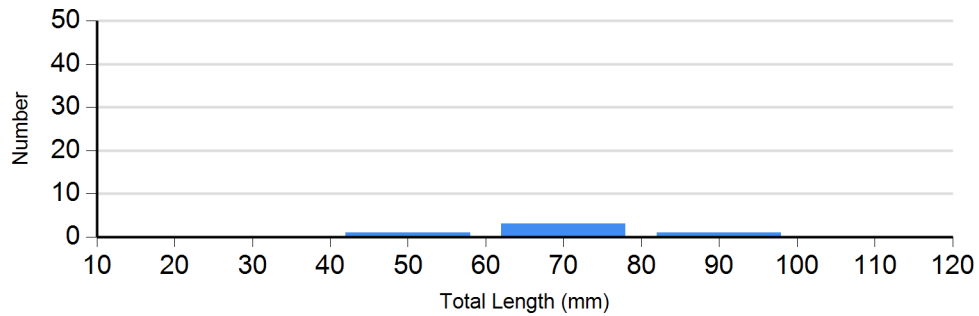
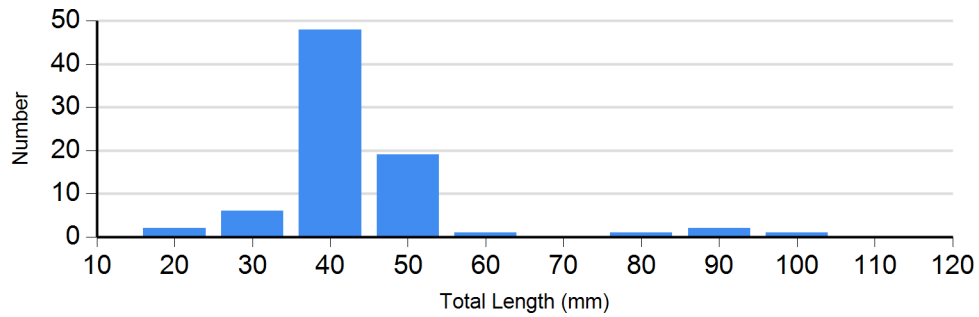
**Species:** Brown Trout

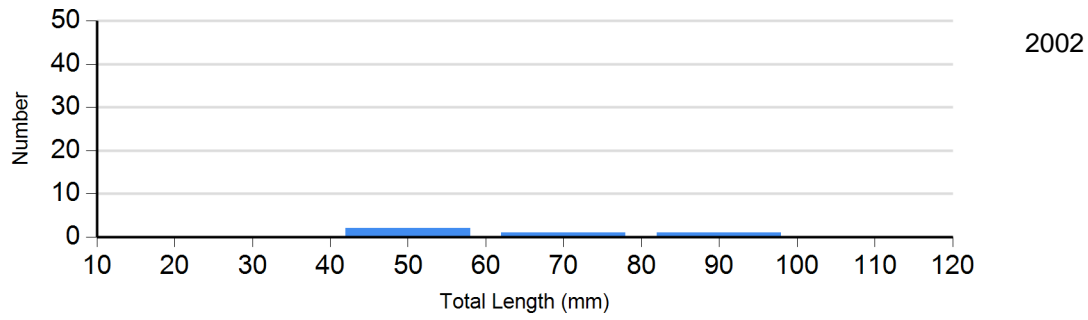




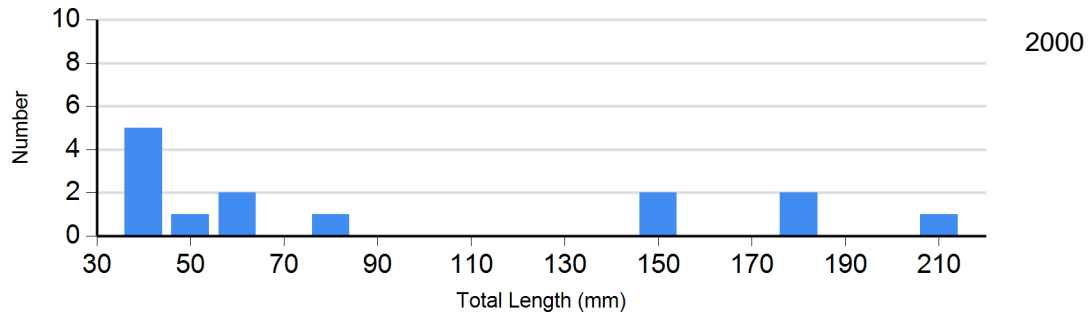


**Site:** 1363  
**Species:** Longnose Dace

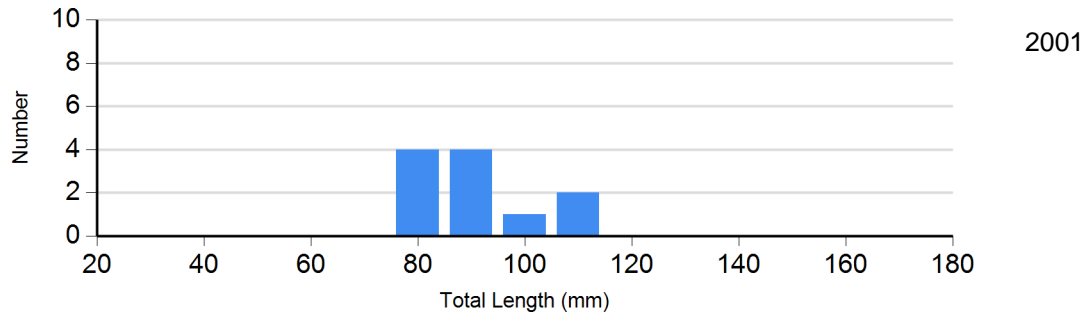


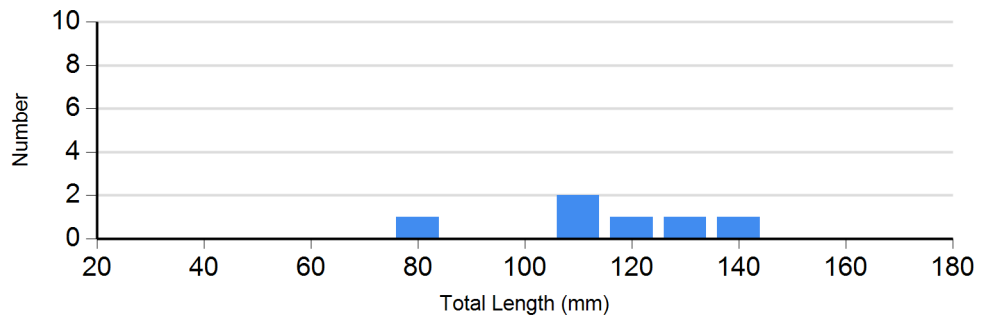


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**Species:** Mountain Sucker

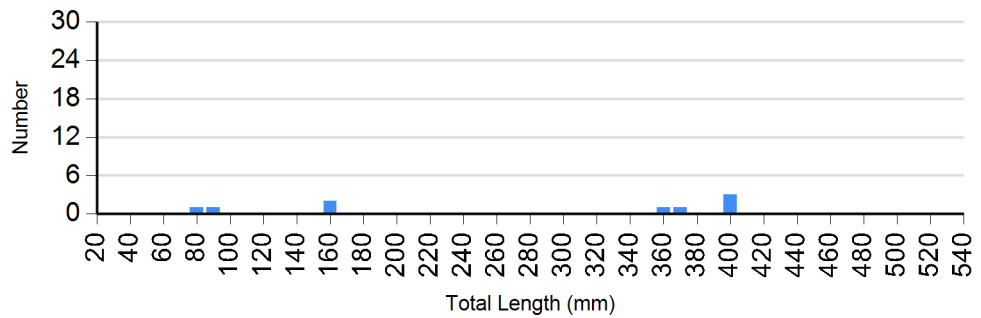
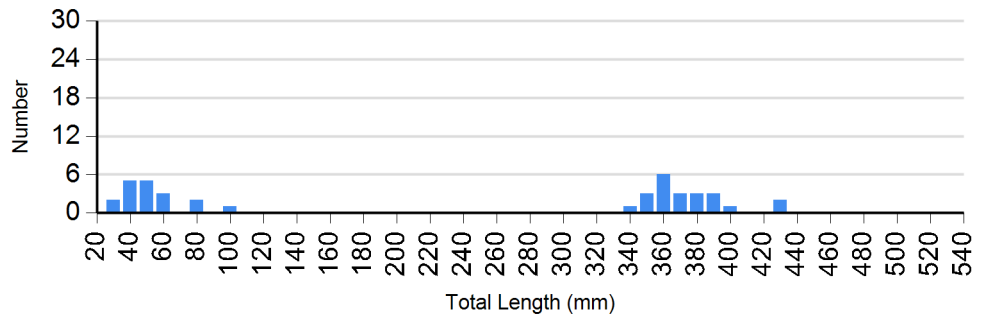
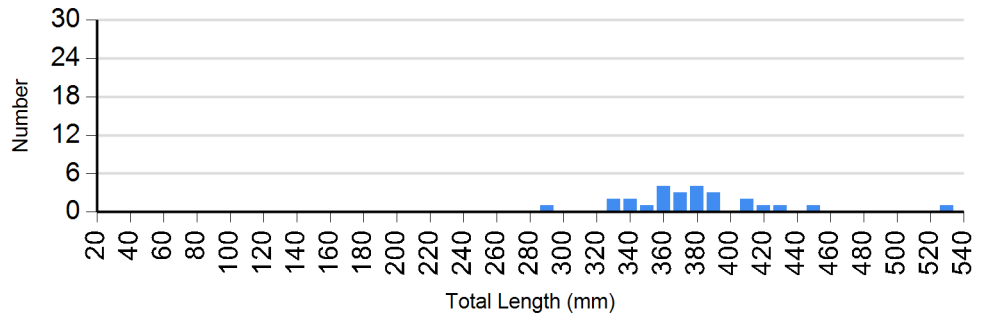


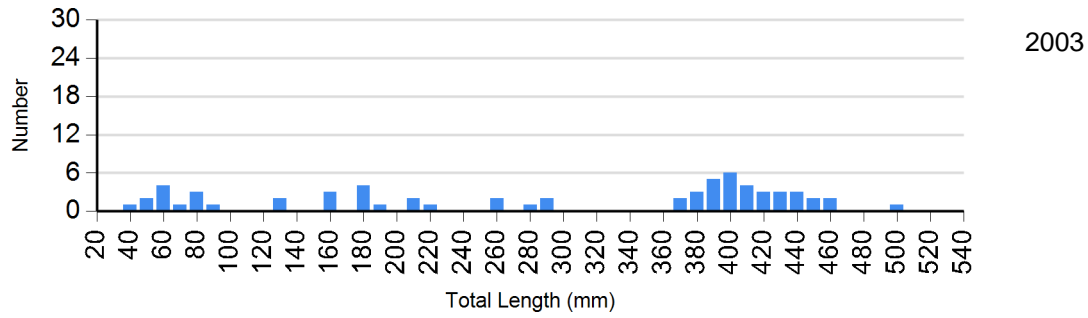
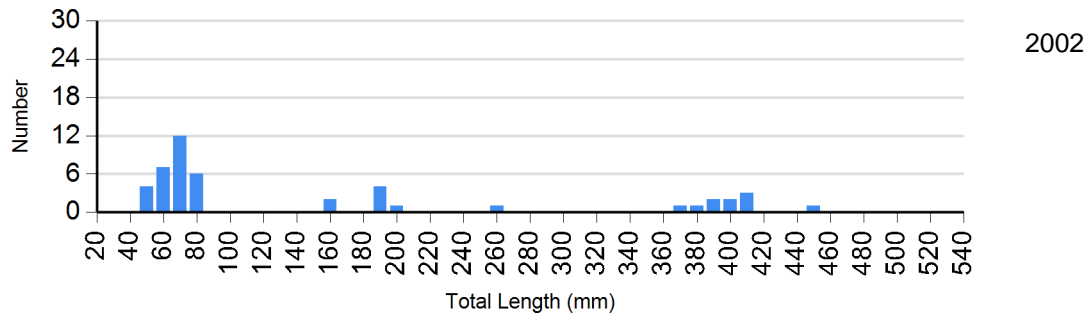
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**Species:** Rock Bass



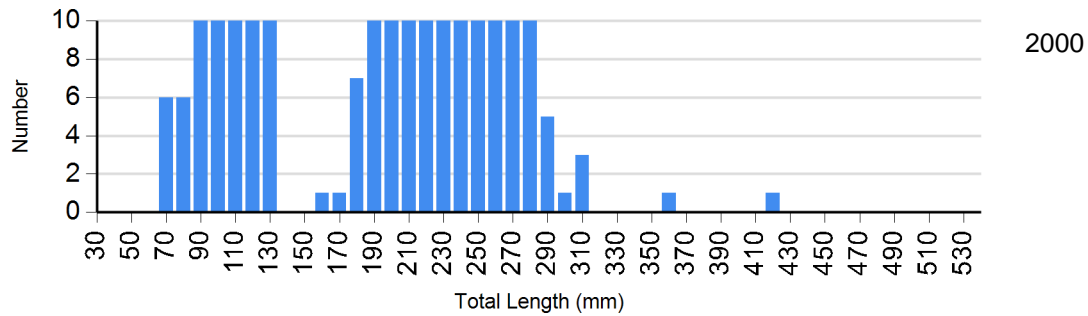
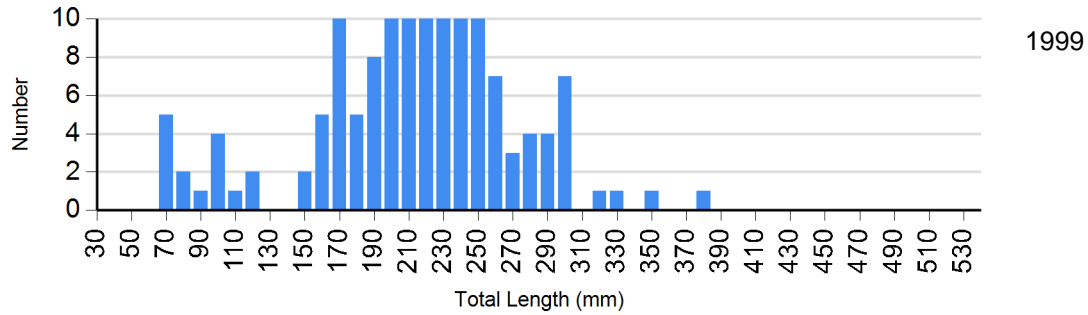


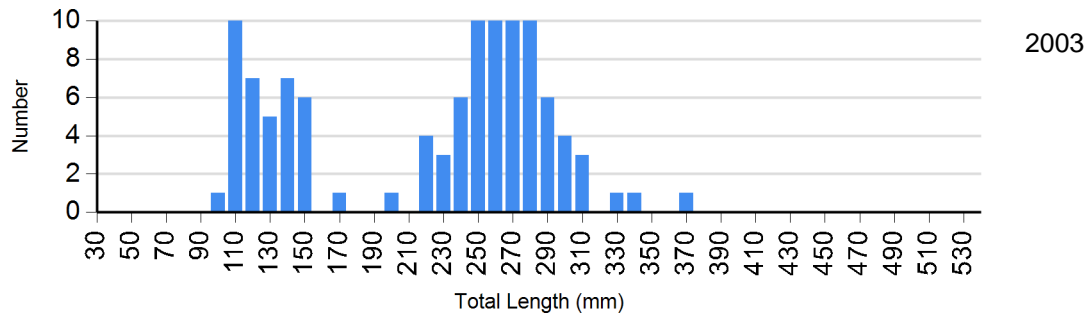
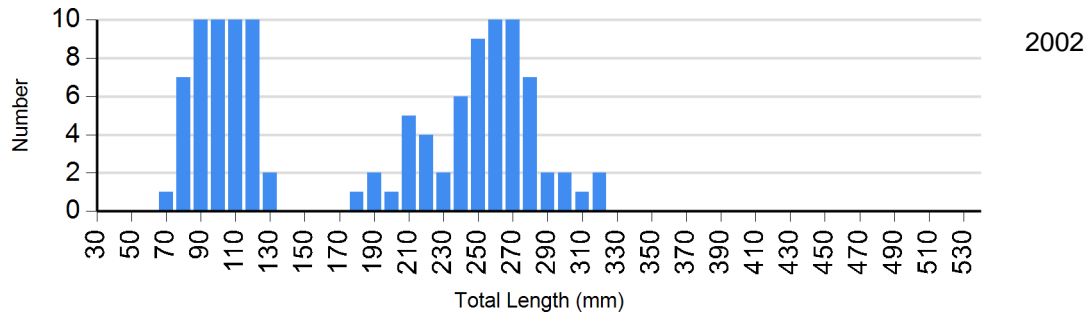
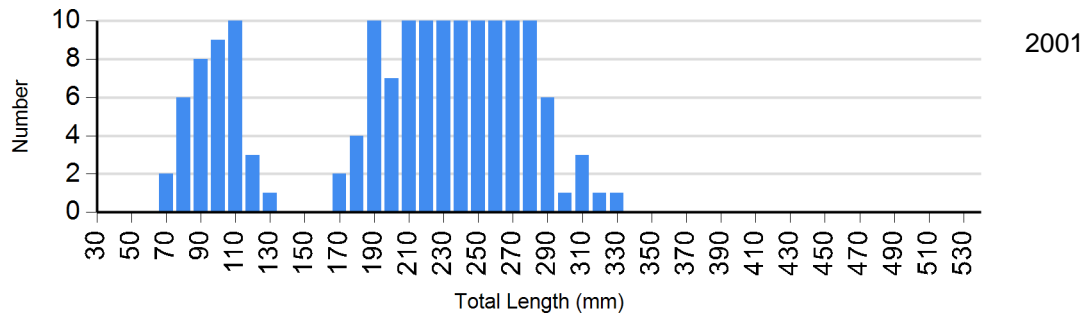
Site: 1363  
Species: White Sucker



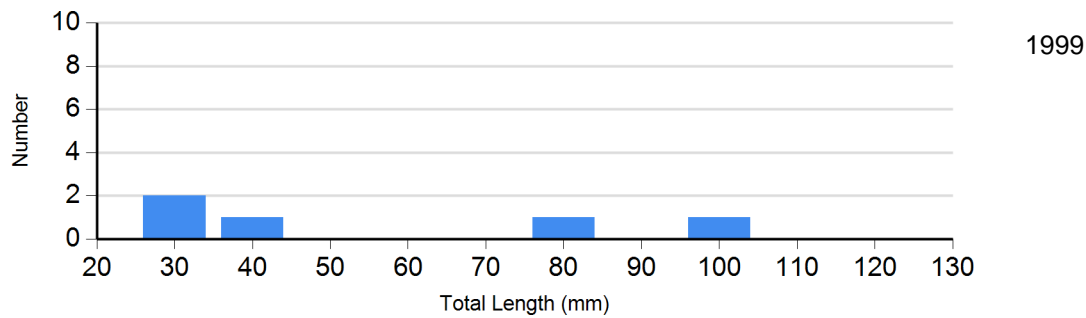


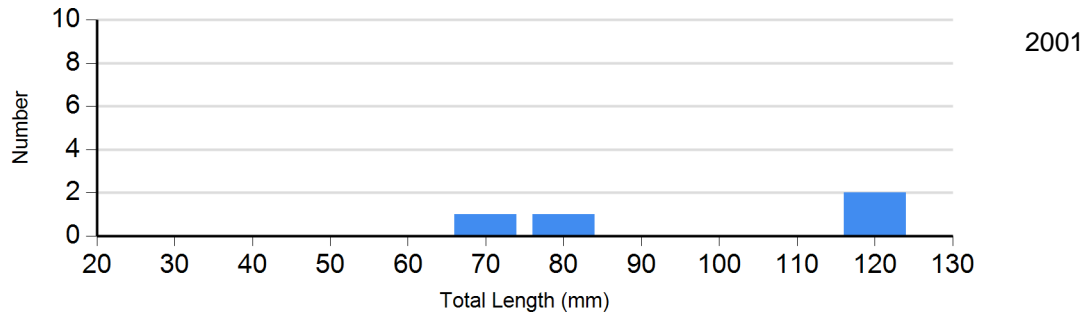
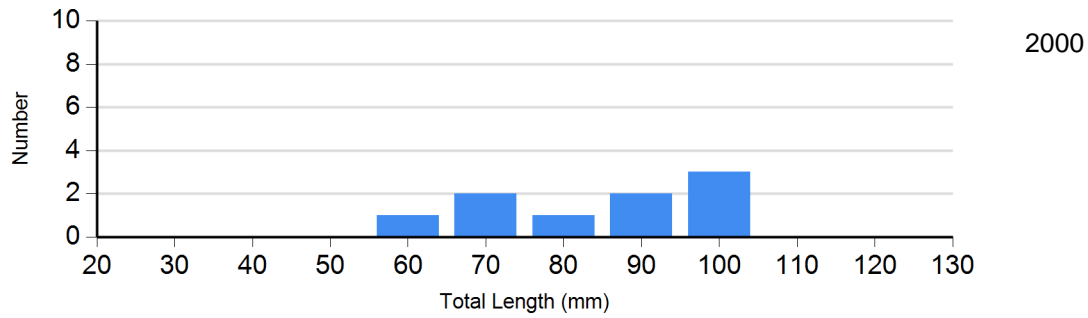
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Species: Brown Trout



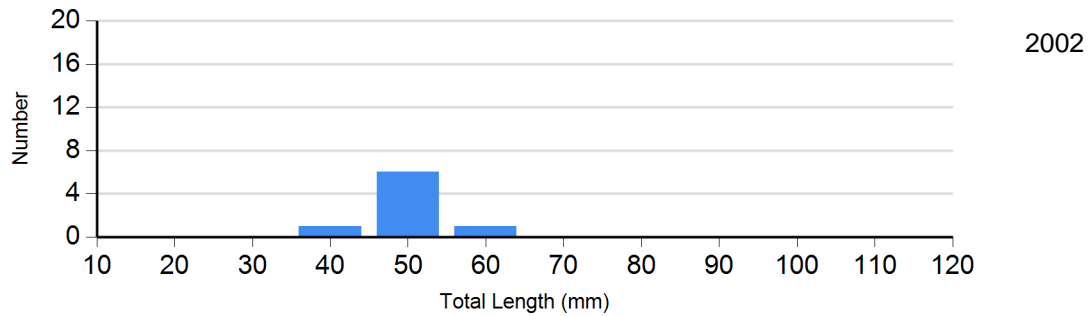
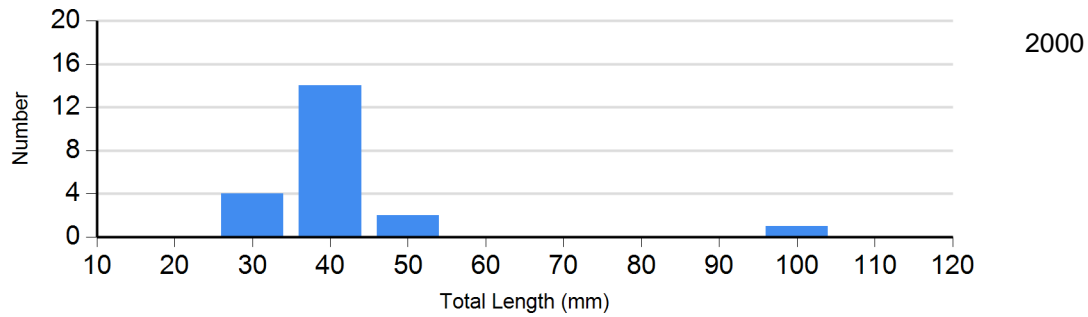


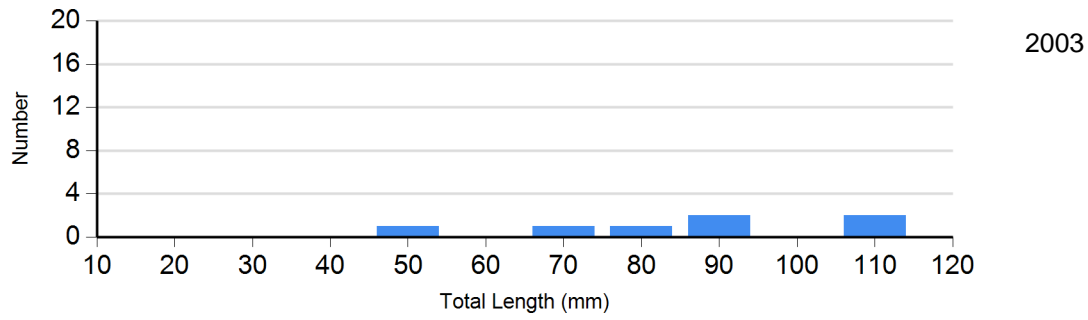
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**Species:** Green Sunfish



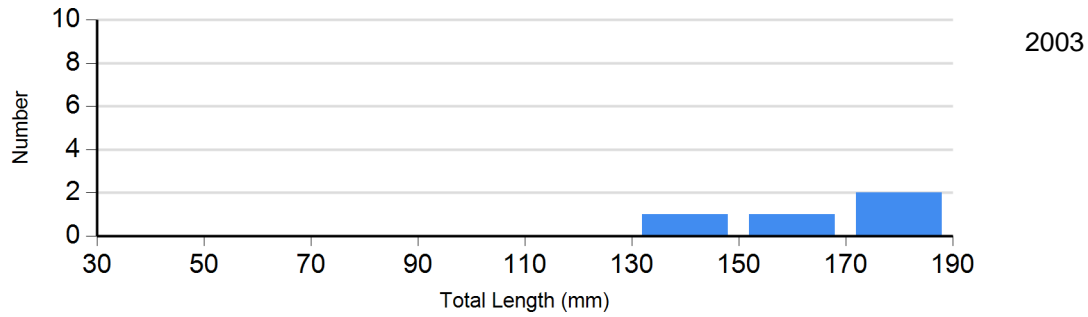


**Site:** 1383  
**Species:** Longnose Dace

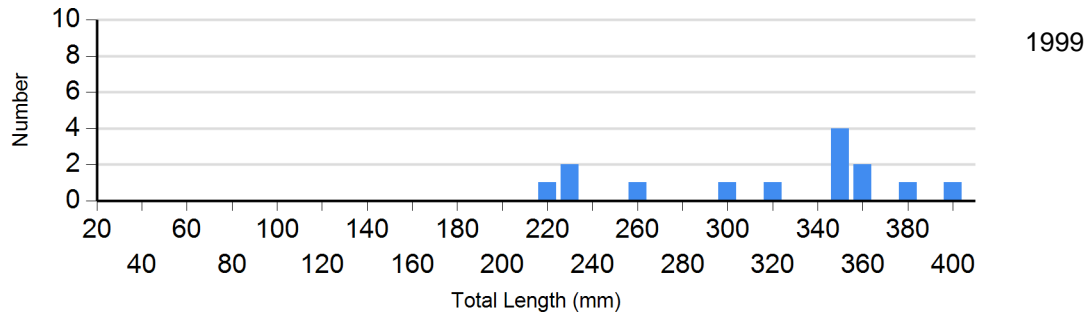


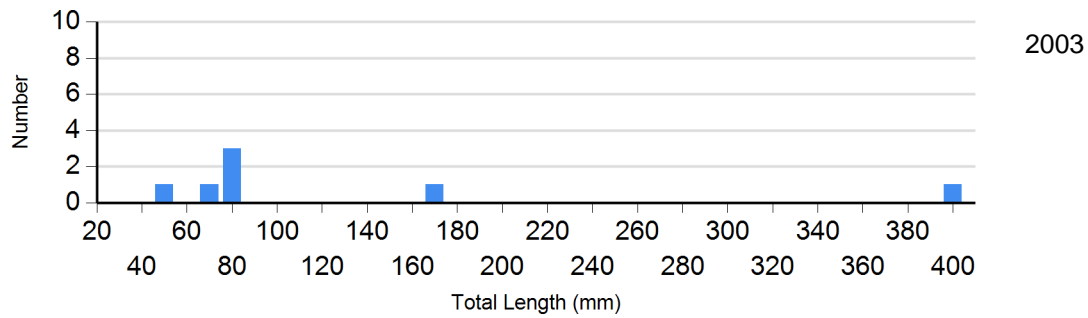
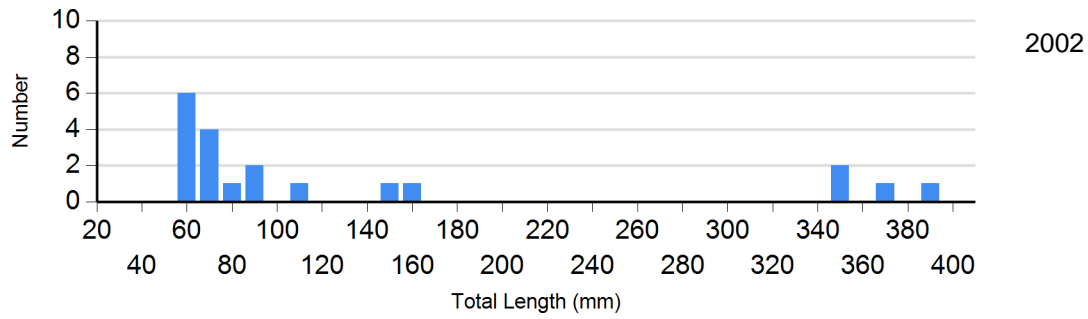
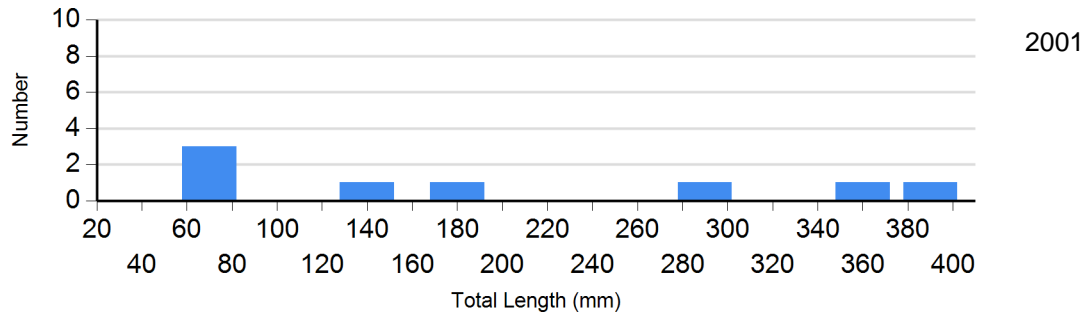
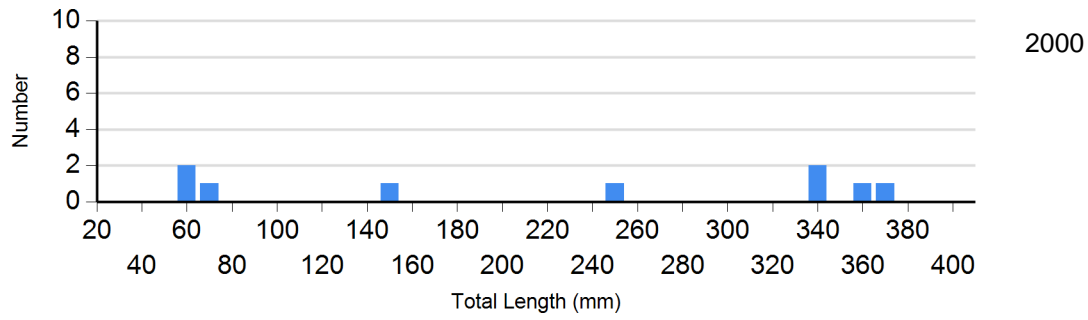


**Site:** 1383  
**Species:** Rock Bass



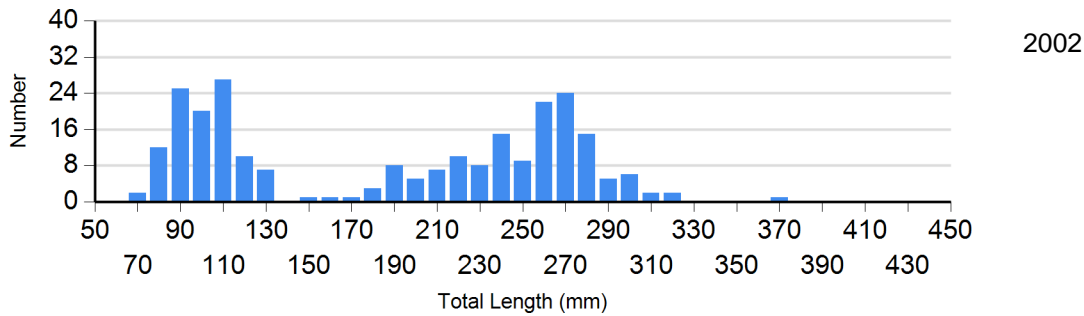
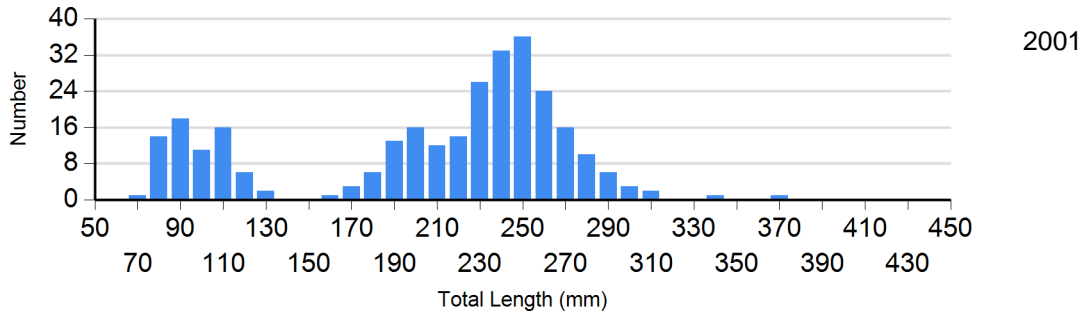
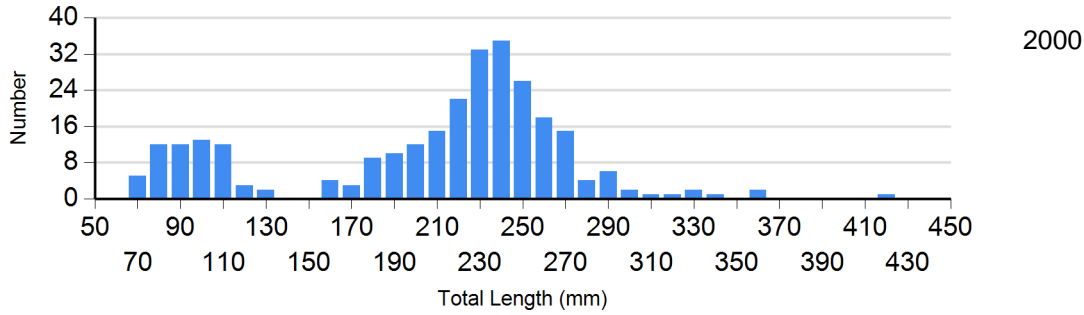
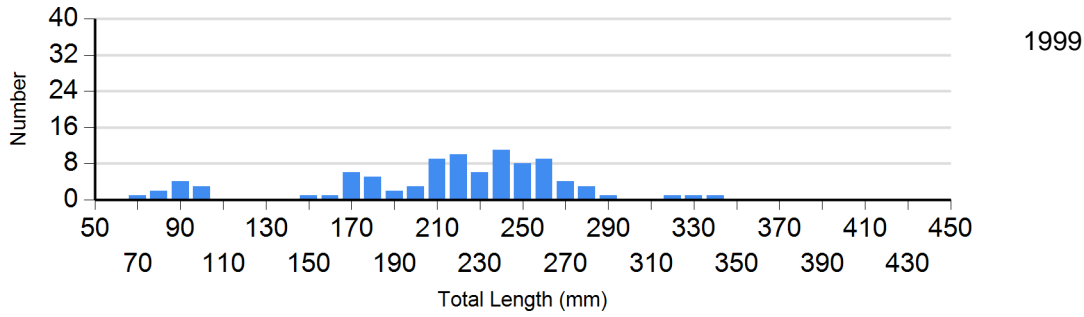
**Site:** 1383  
**Species:** White Sucker

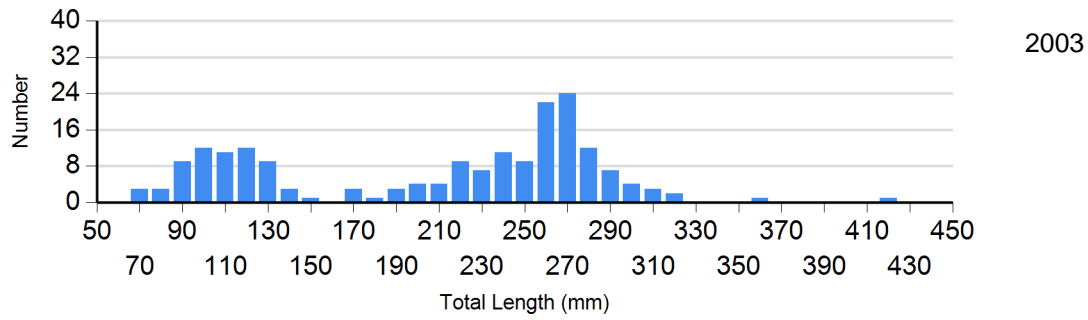




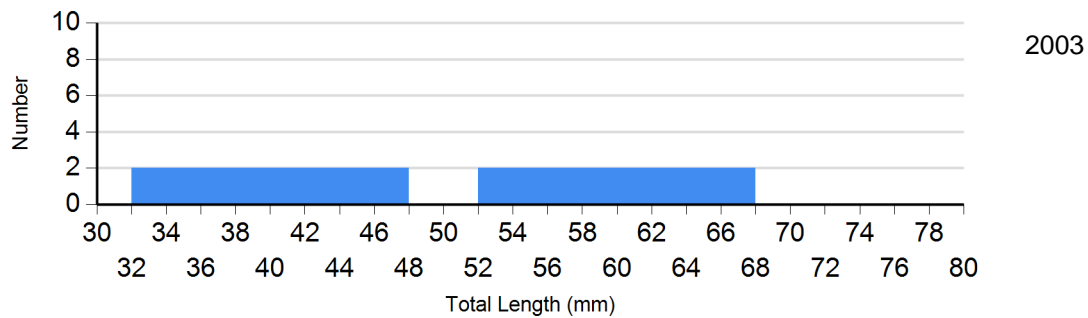
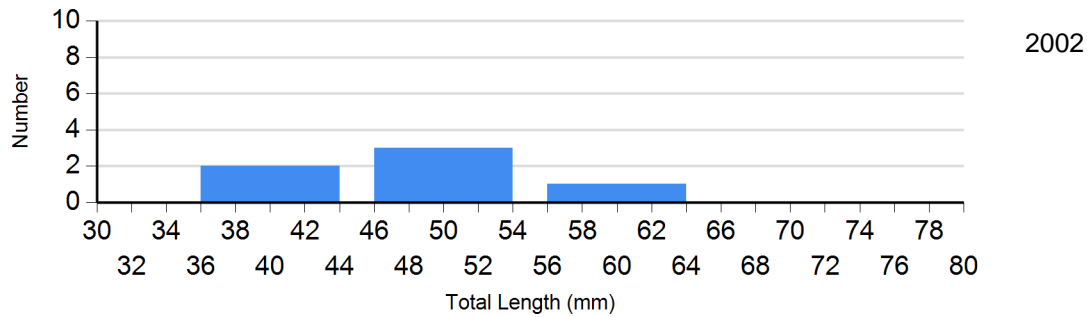
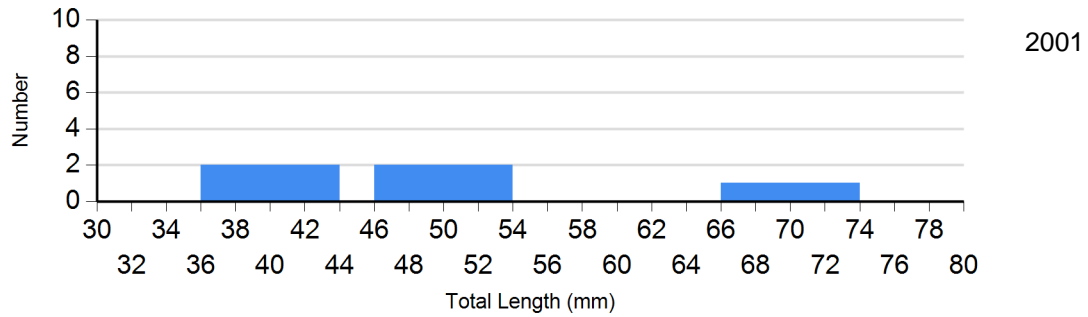


Site: 1393  
Species: Brown Trout

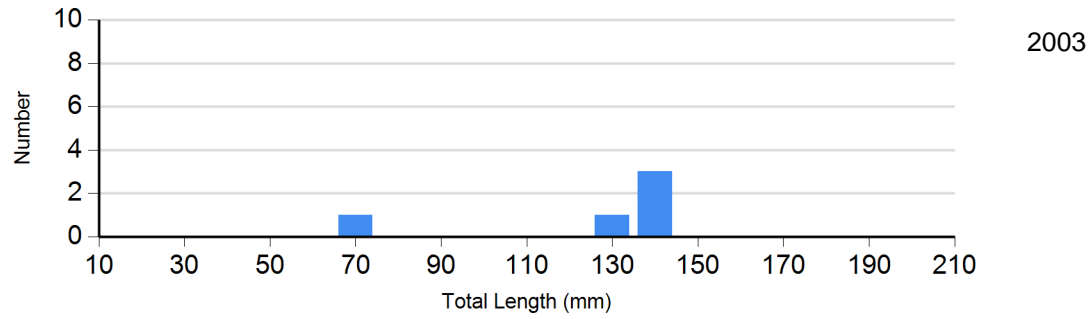
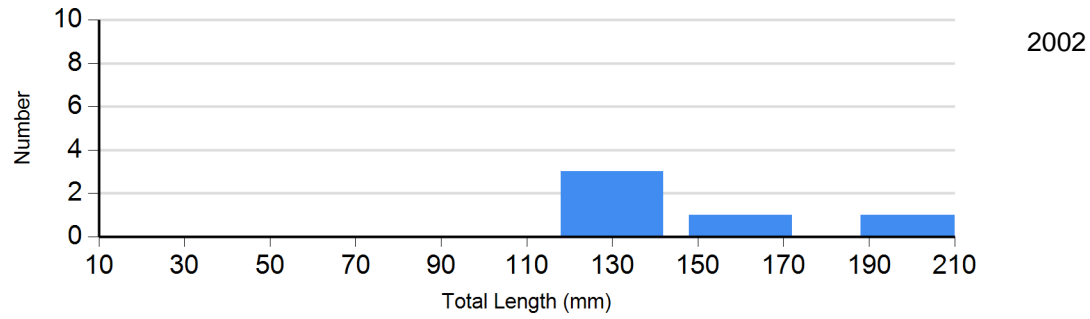




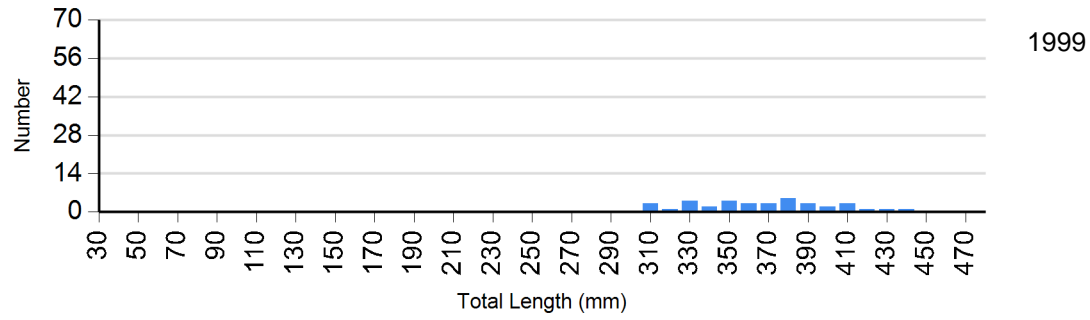
Site: 1393  
Species: Longnose Dace

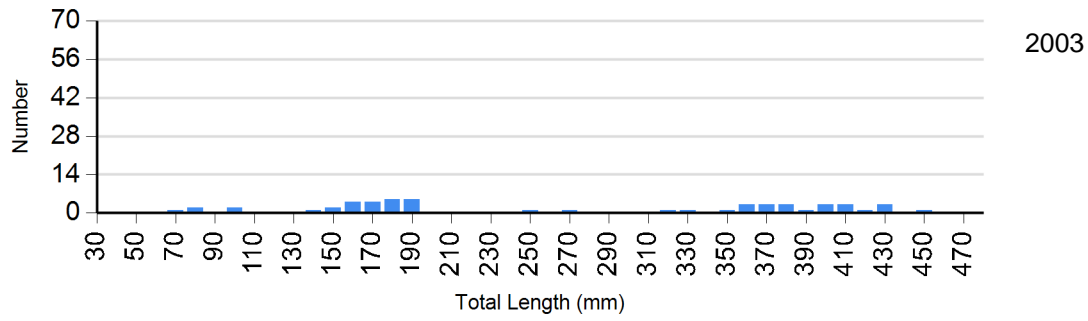
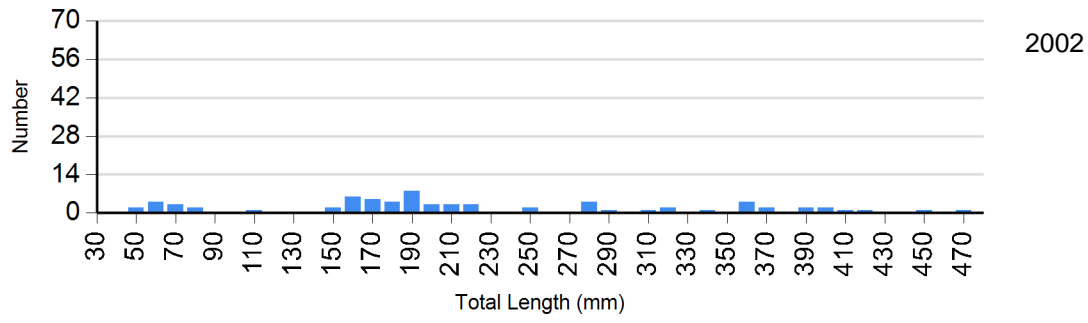
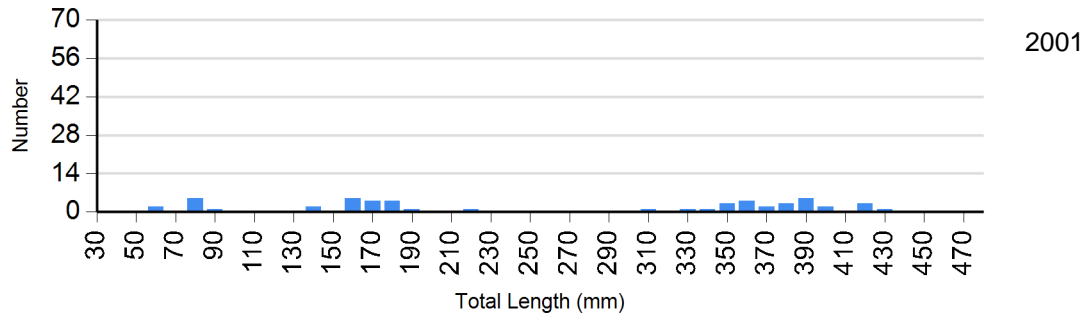
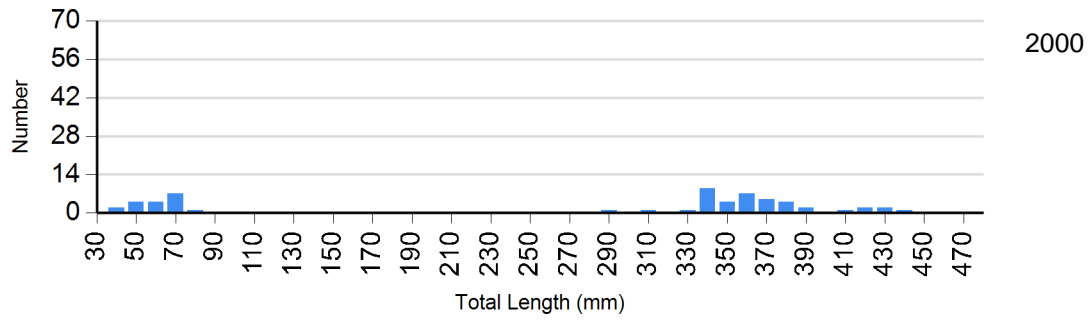


**Site:** 1393  
**Species:** Rock Bass

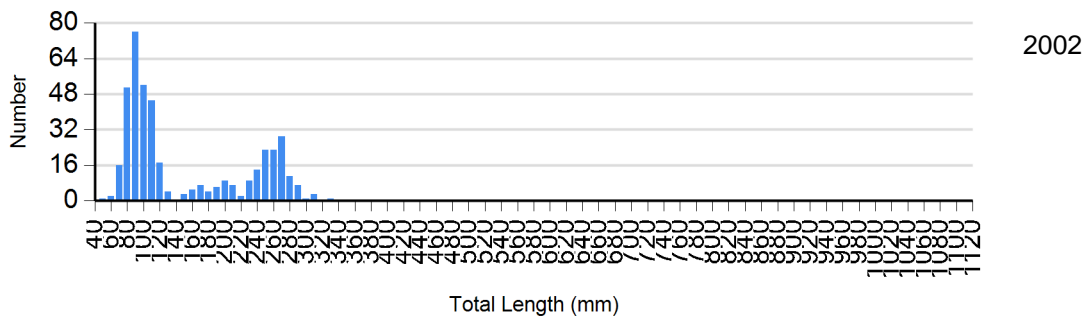
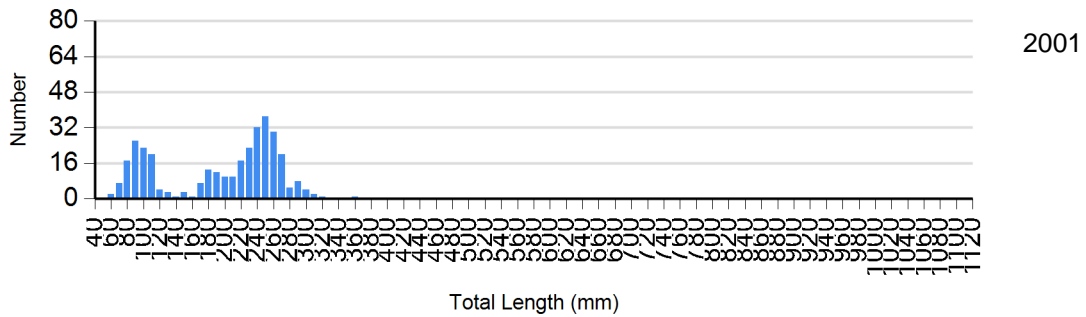
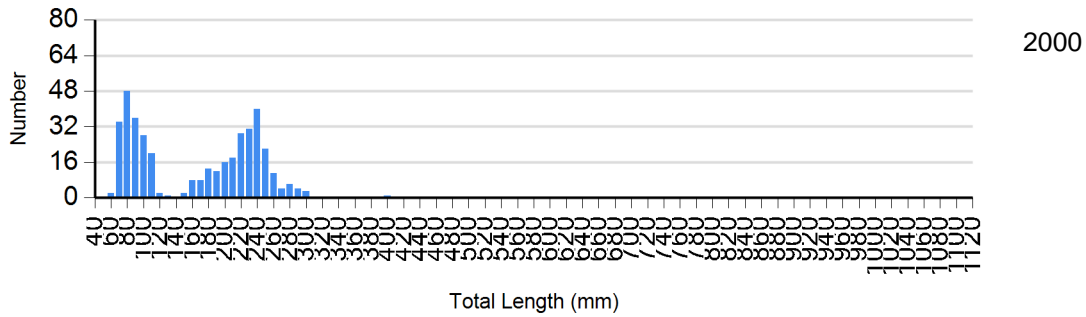
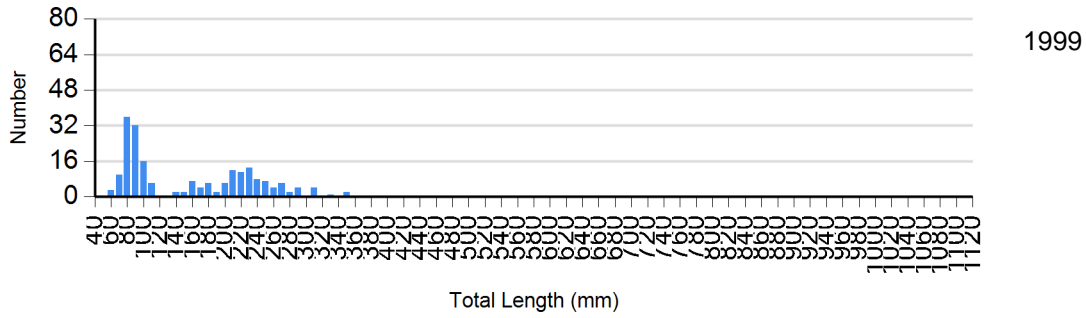


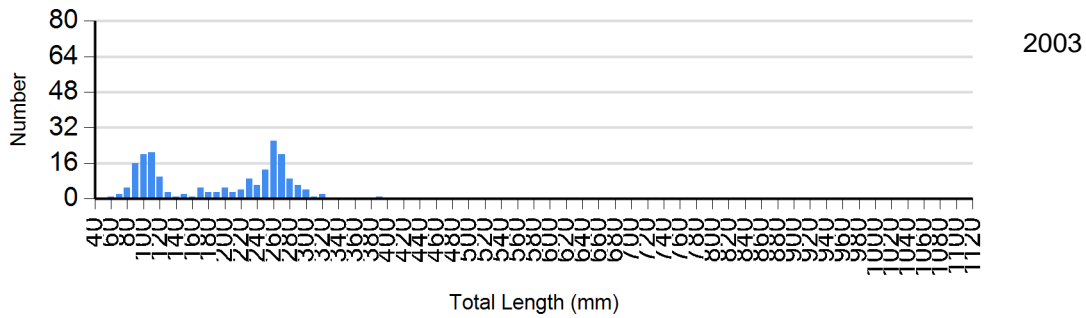
**Site:** 1393  
**Species:** White Sucker



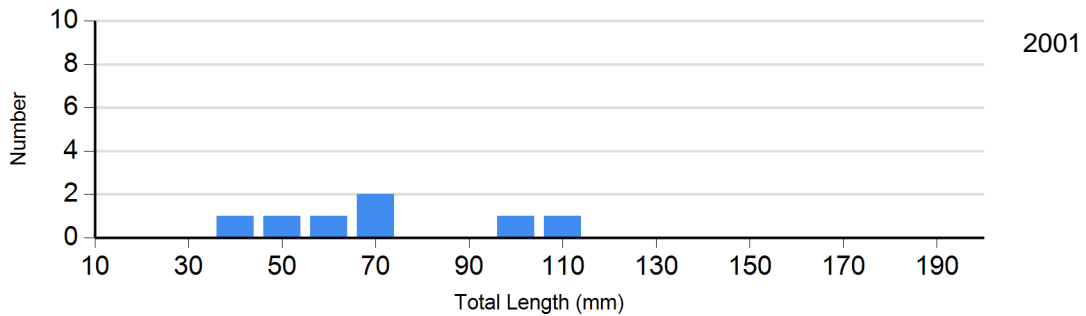
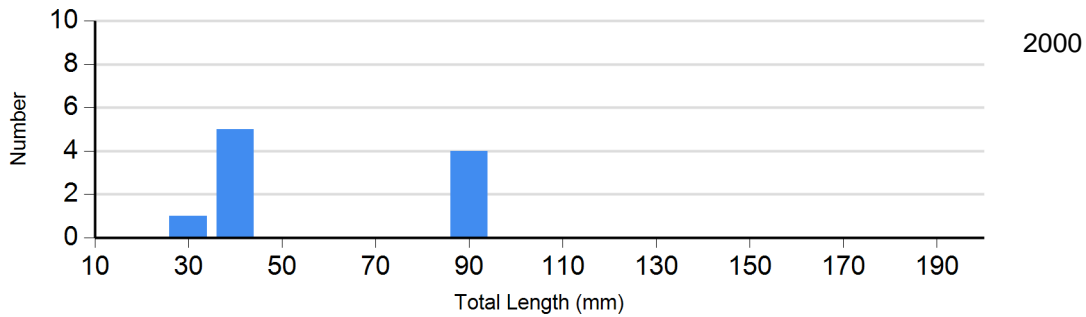
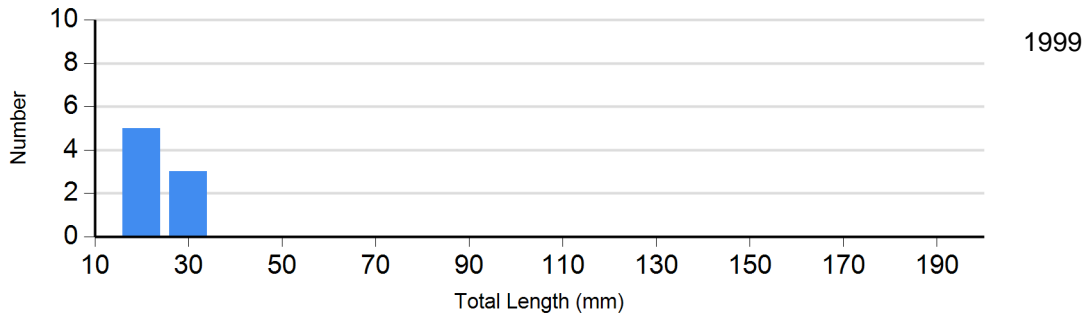


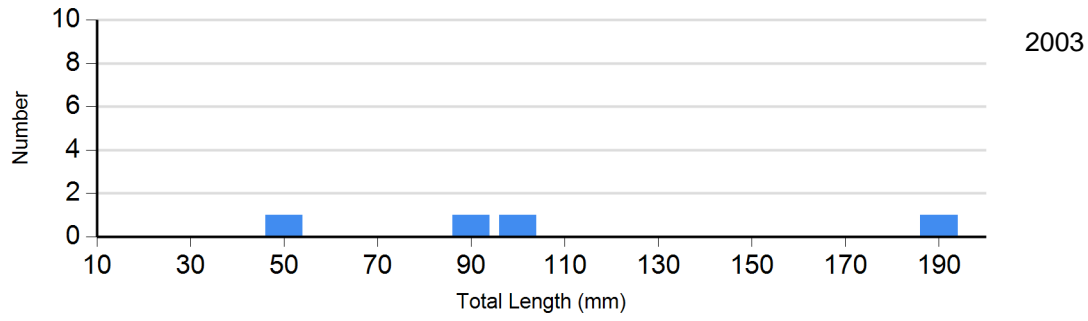
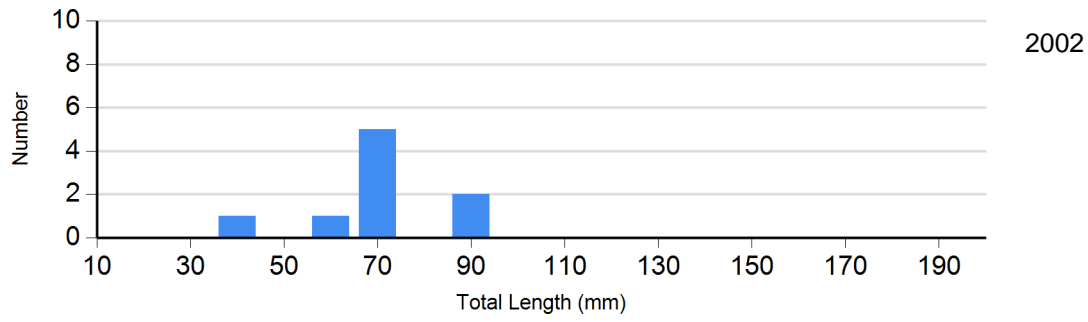
Site: 1412  
Species: Brown Trout



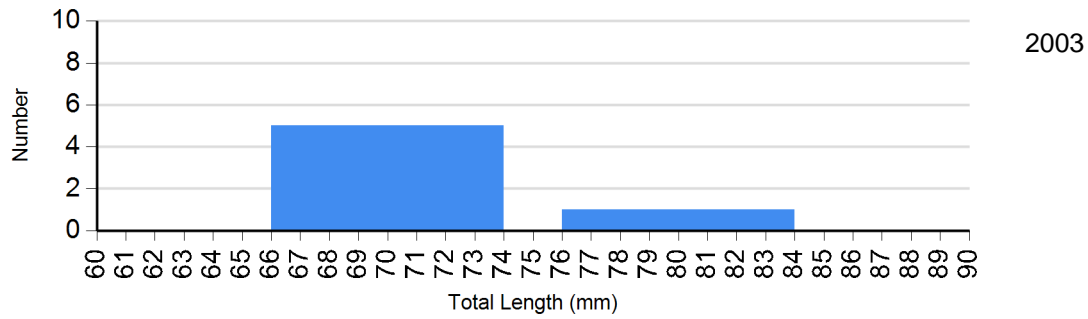


Site: 1412  
Species: Longnose Dace

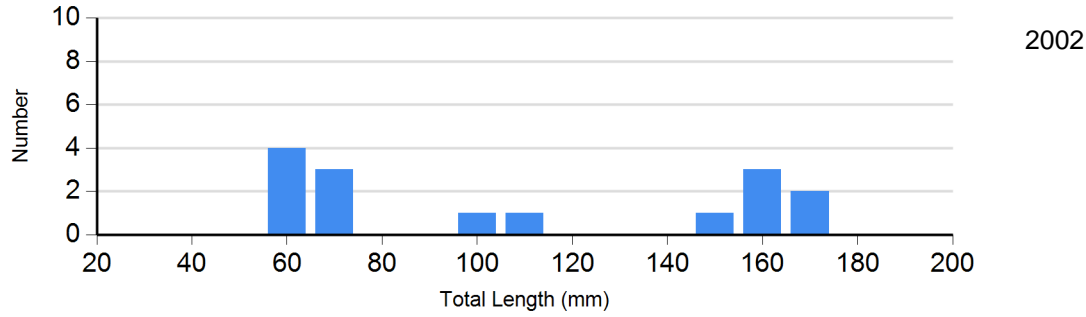
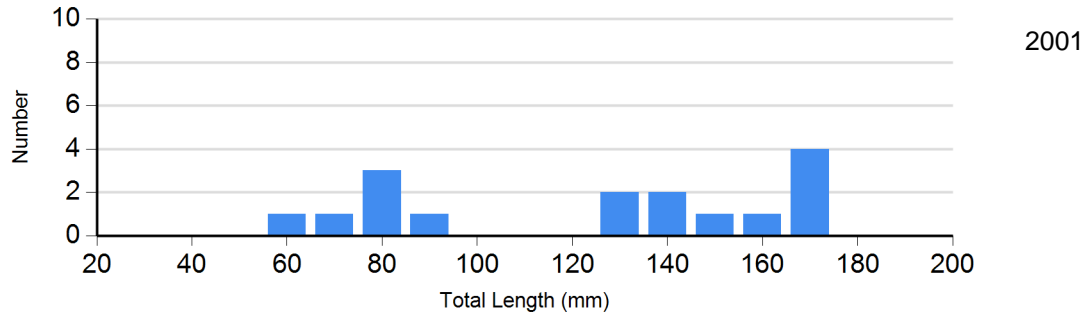




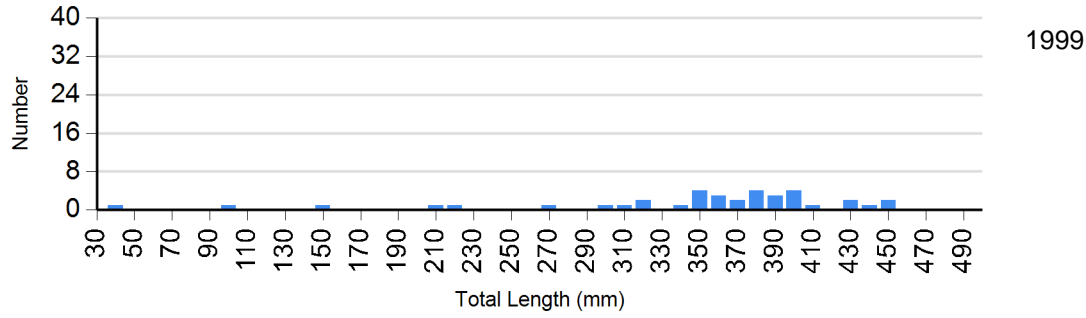
**Site:** 1412  
**Species:** Mountain Sucker



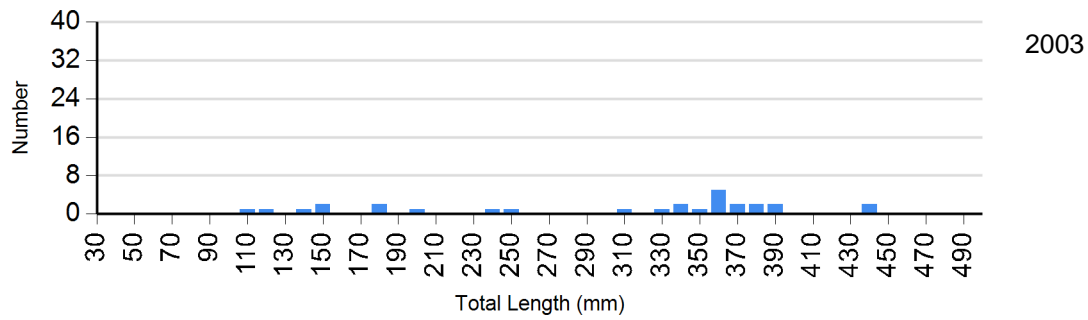
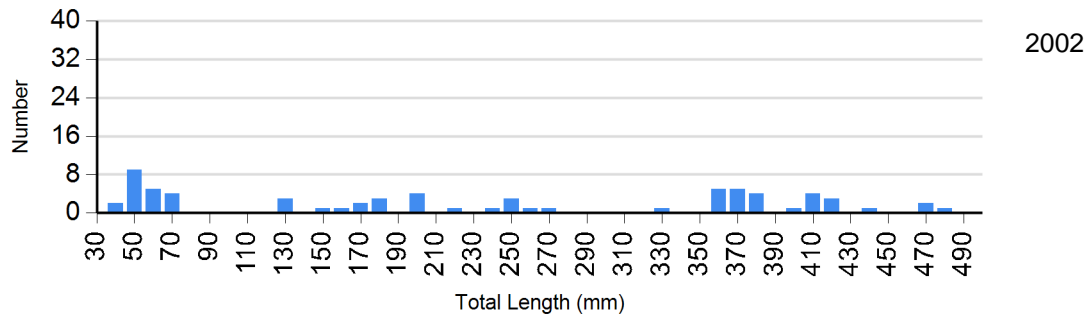
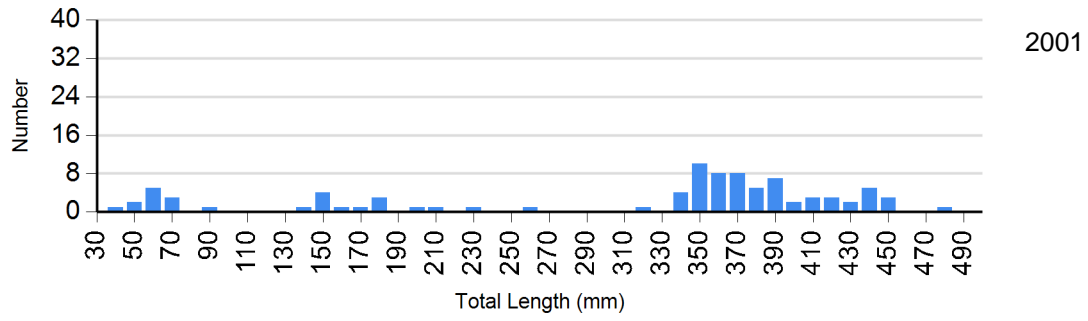
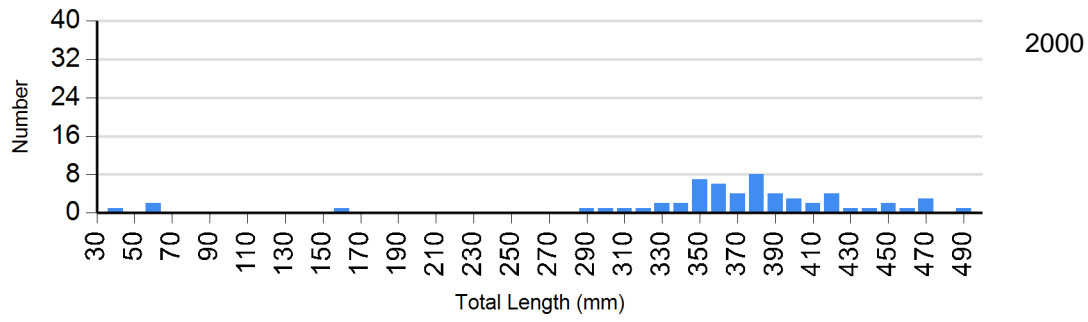
**Site:** 1412  
**Species:** Rock Bass



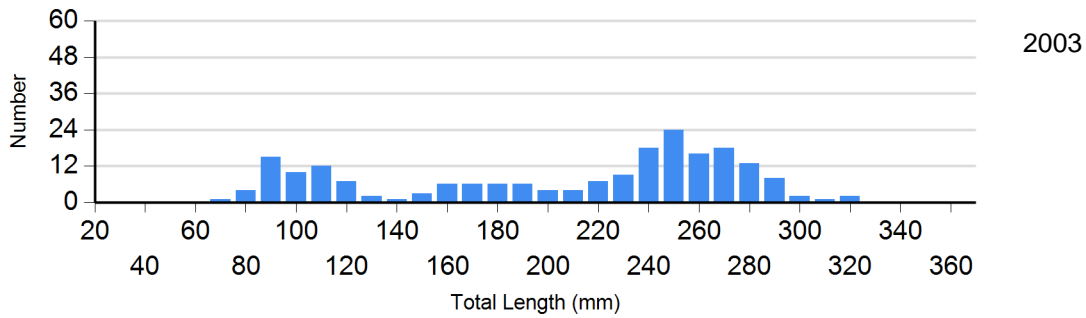
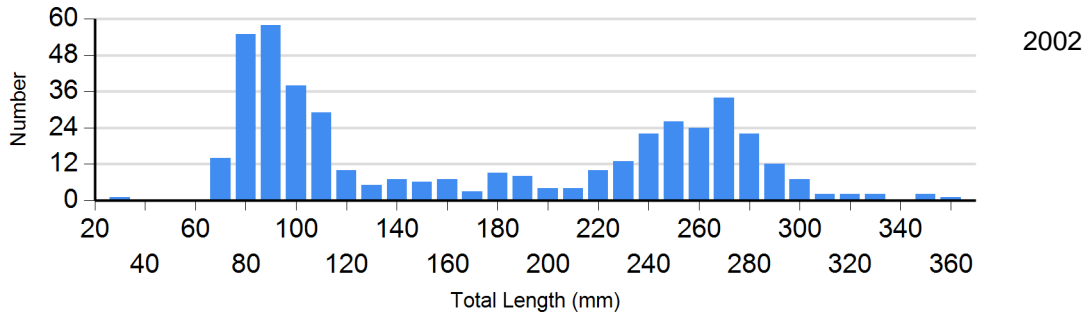
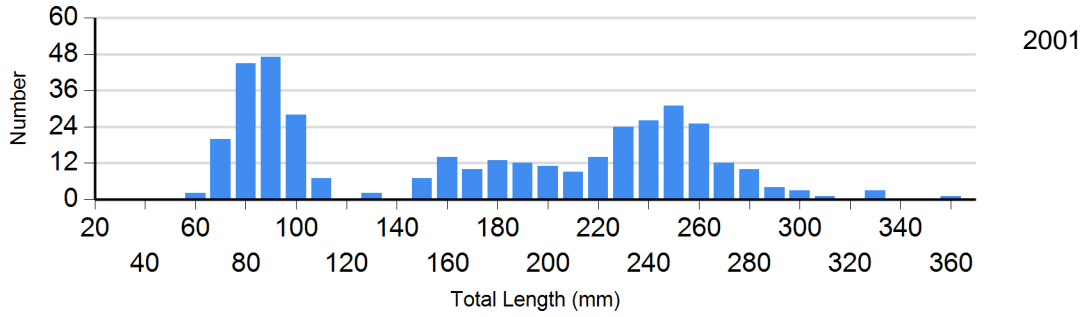
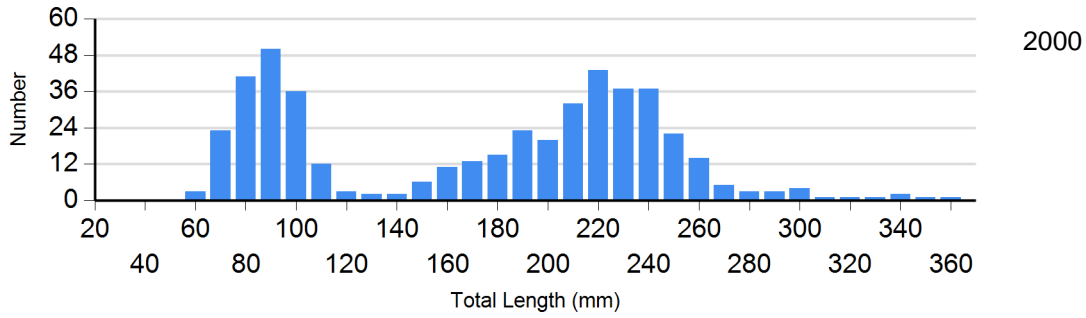
**Site:** 1412  
**Species:** White Sucker



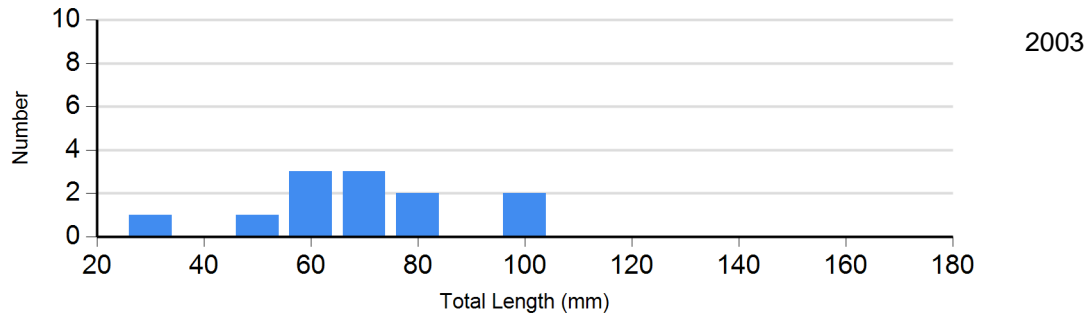
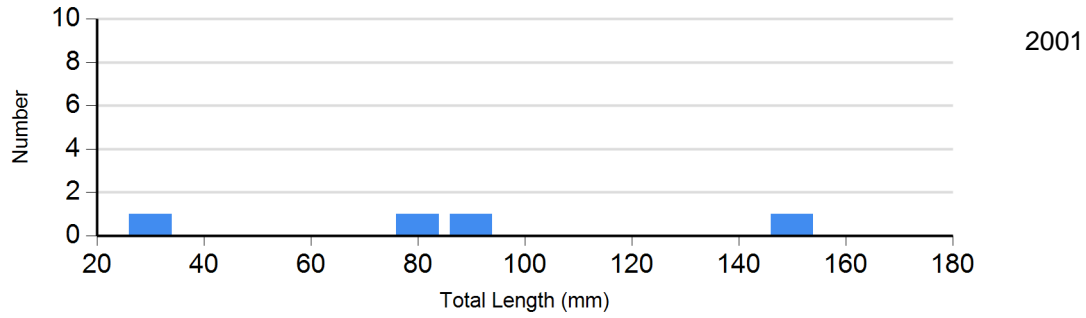




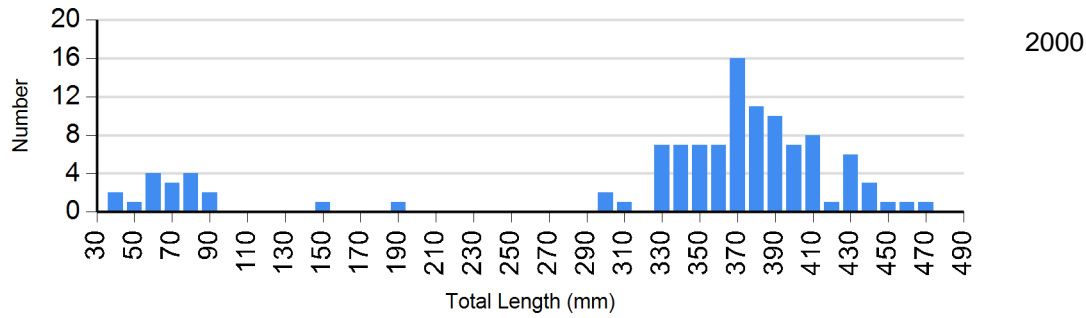
Site: 1418  
Species: Brown Trout

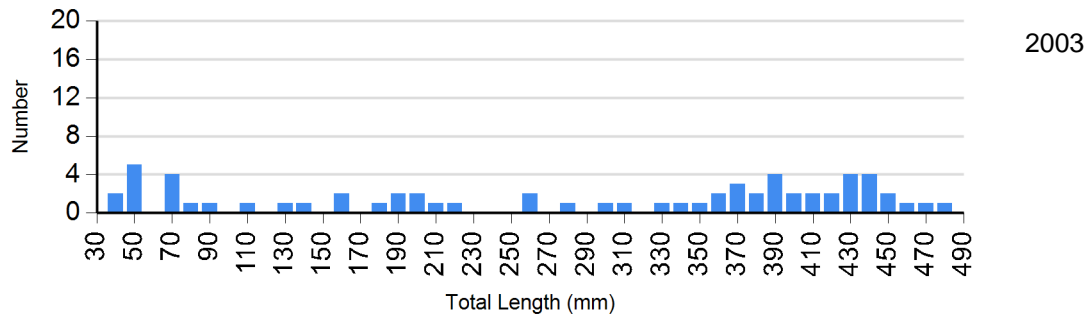
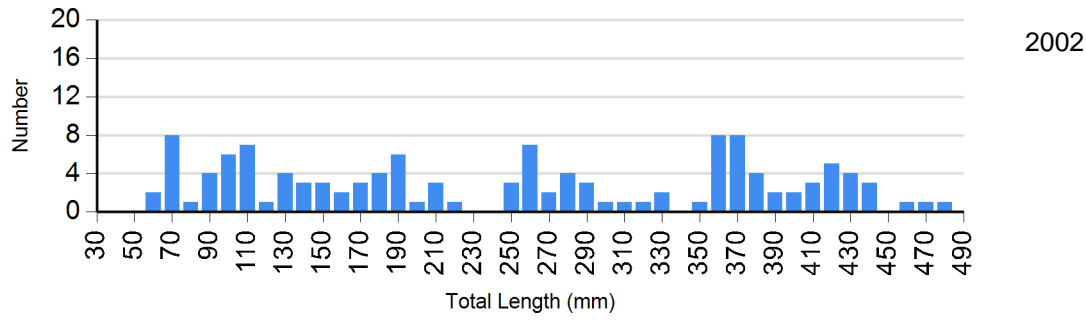
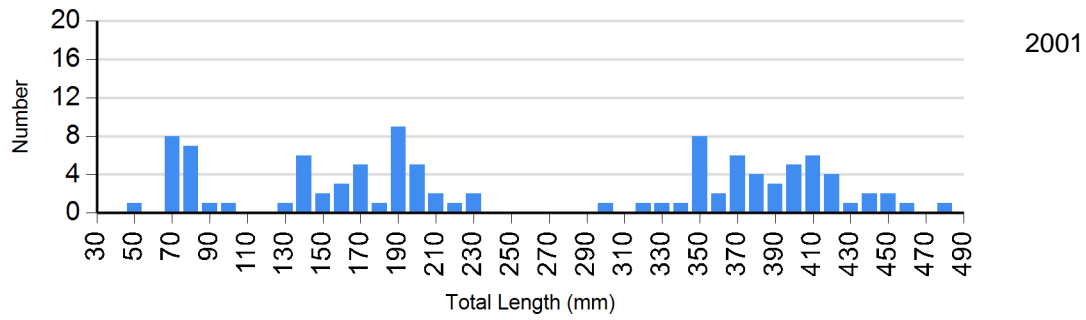


**Site: 1418**  
**Species: Rock Bass**

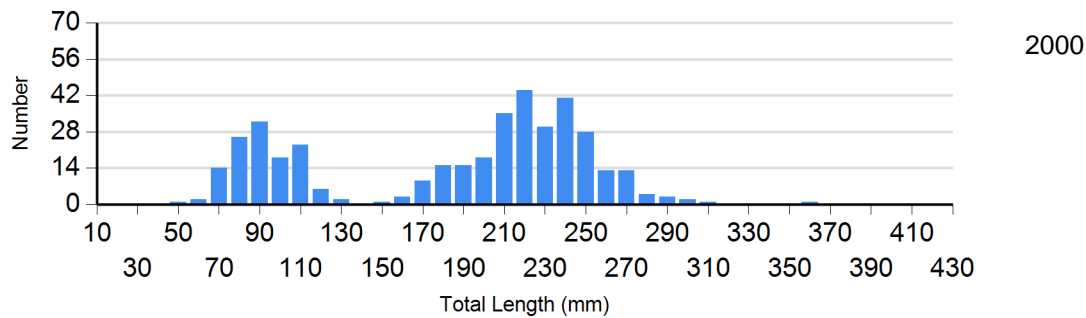


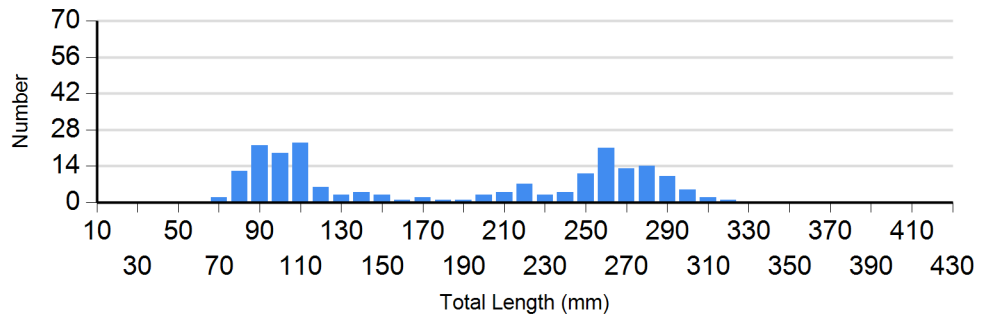
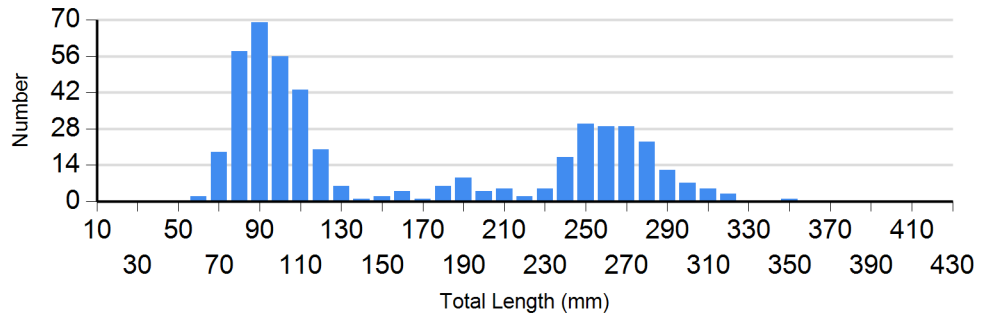
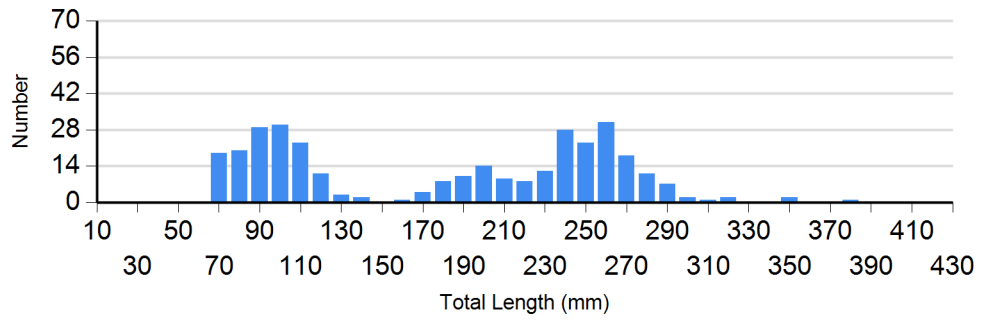
**Site: 1418**  
**Species: White Sucker**



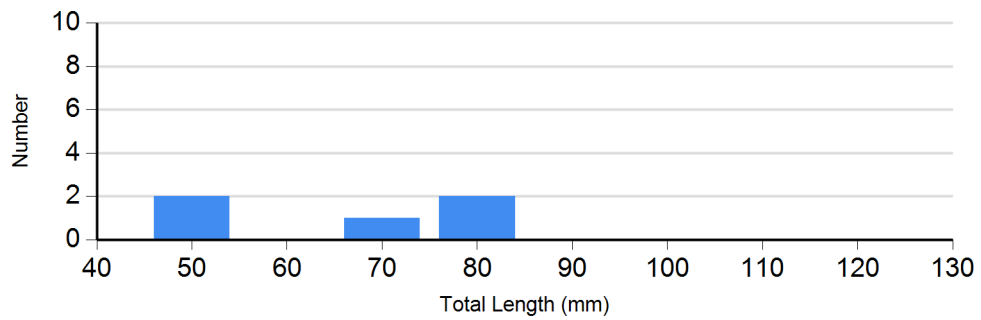


Site: 1420  
Species: Brown Trout

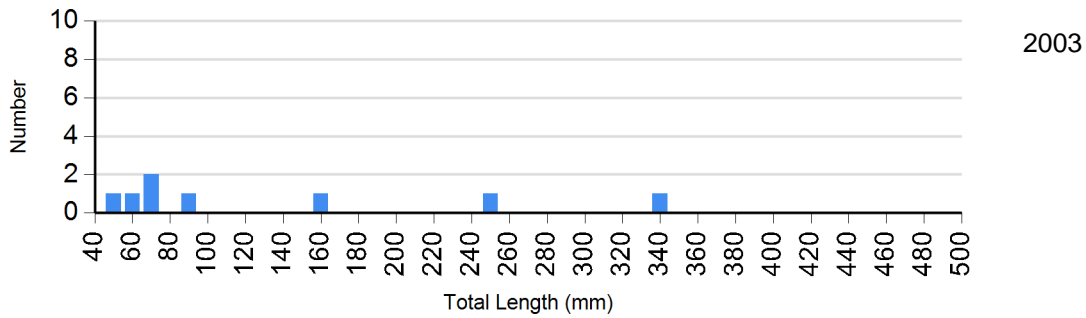
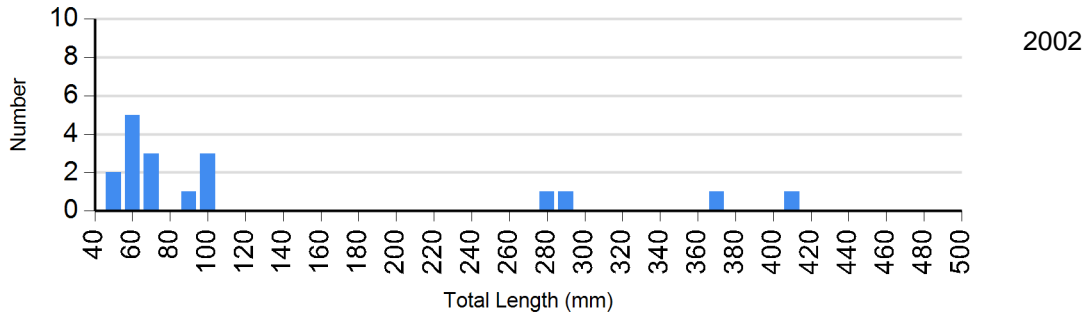
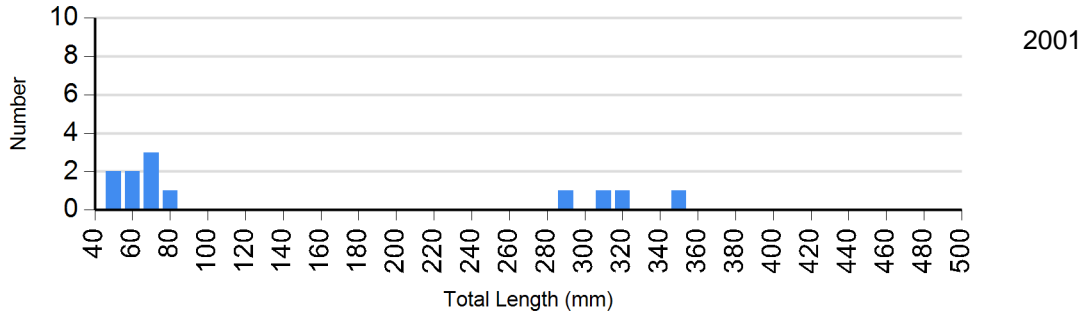
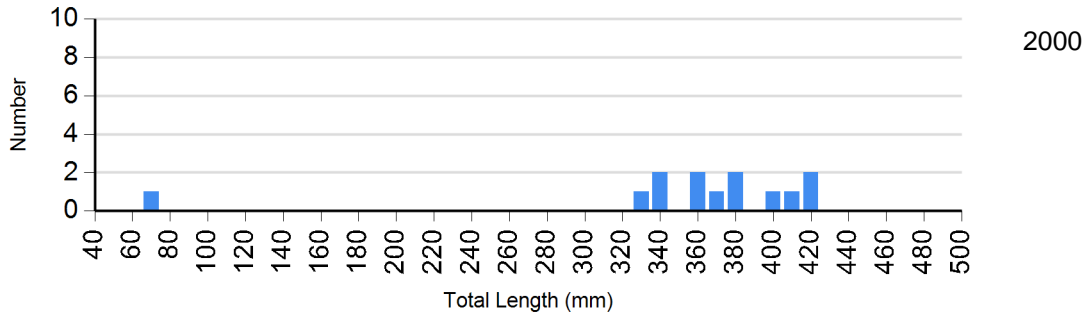




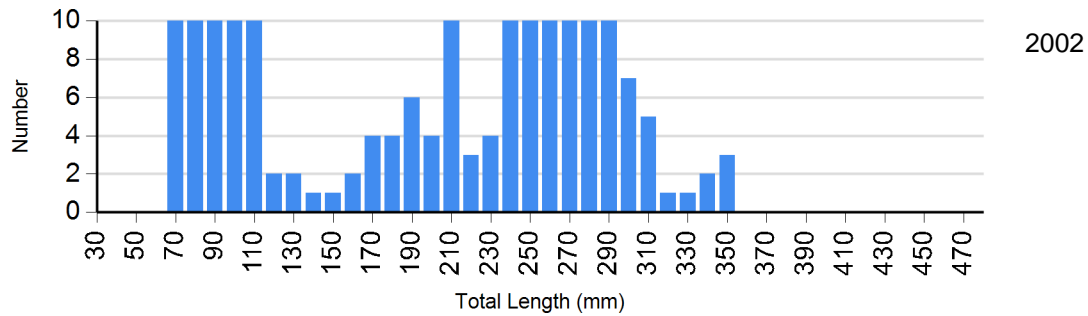
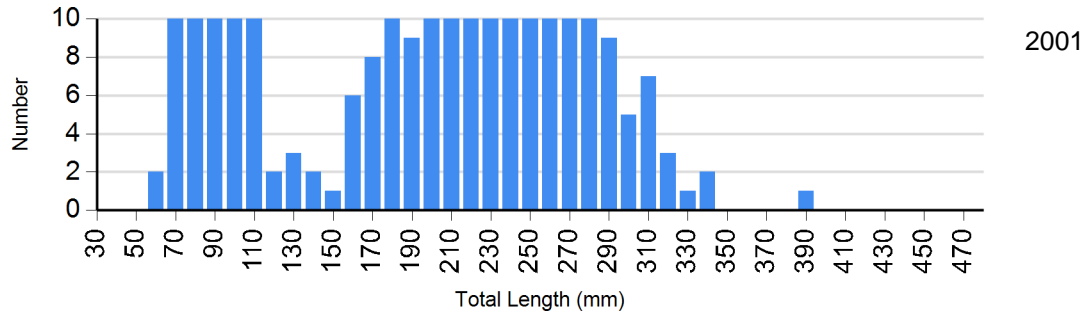
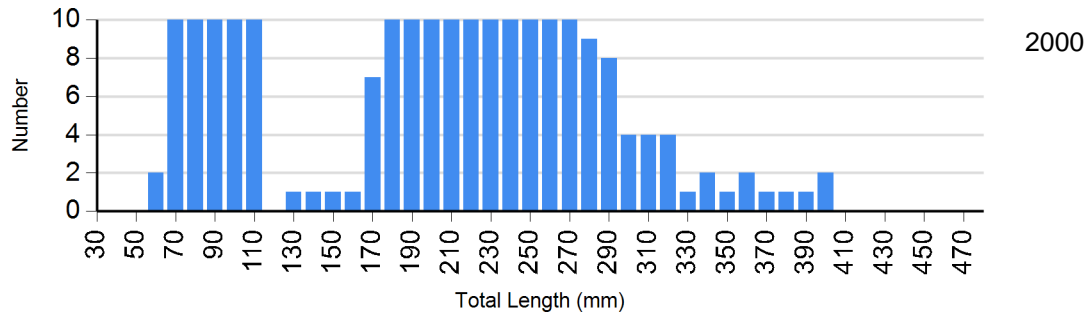
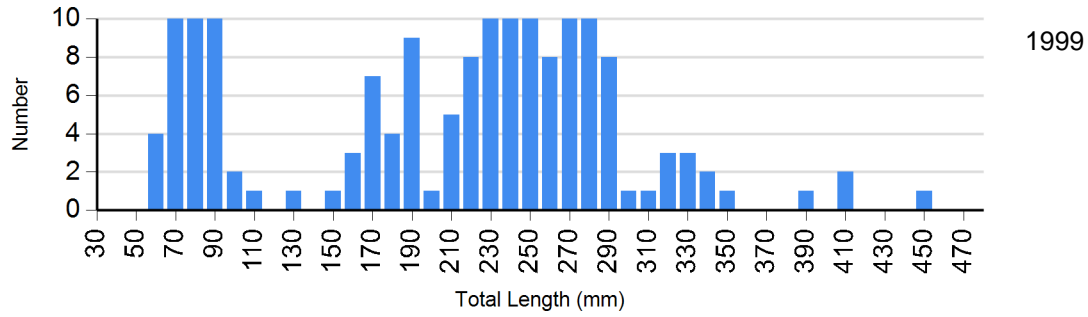
Site: 1420  
Species: Longnose Dace

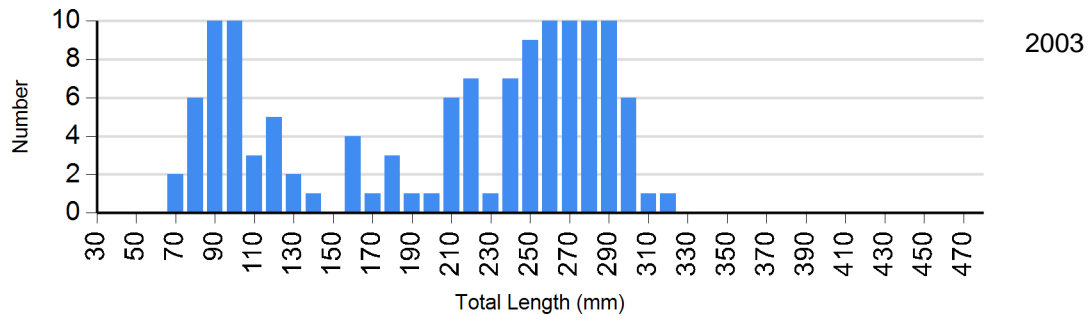


Site: 1420  
Species: White Sucker

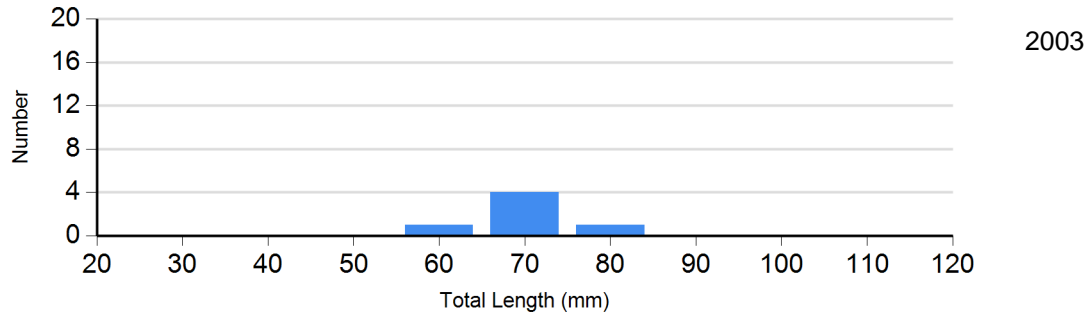
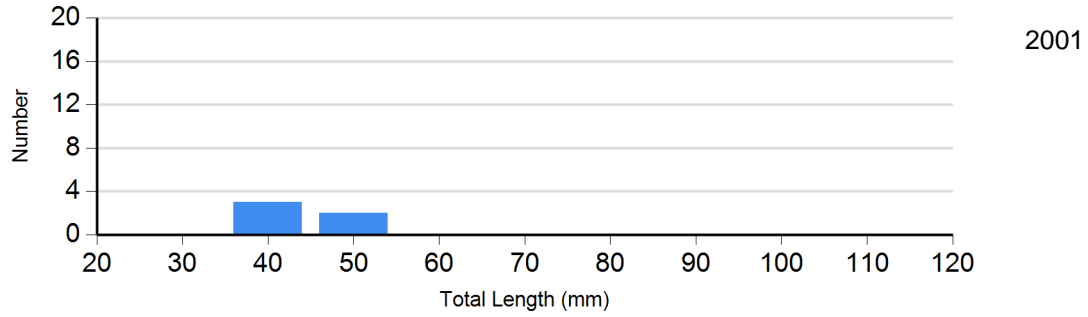


Site: 1434  
Species: Brown Trout



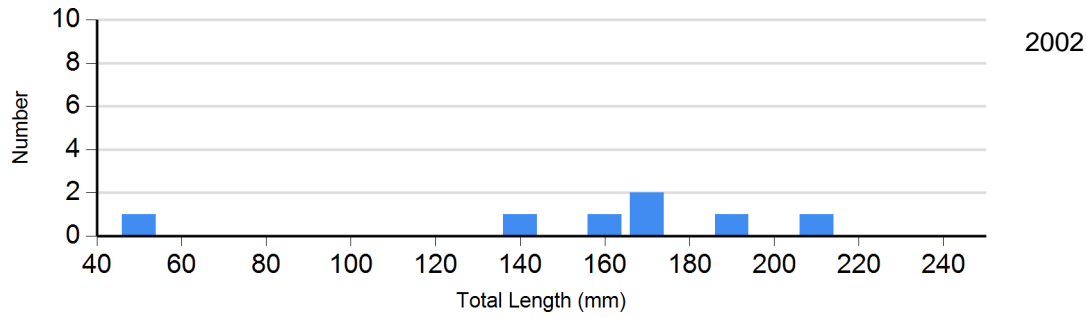
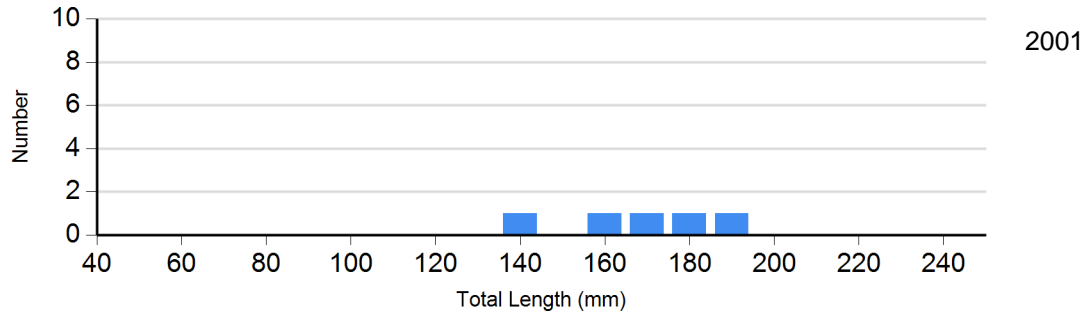


Site: 1434  
Species: Longnose Dace

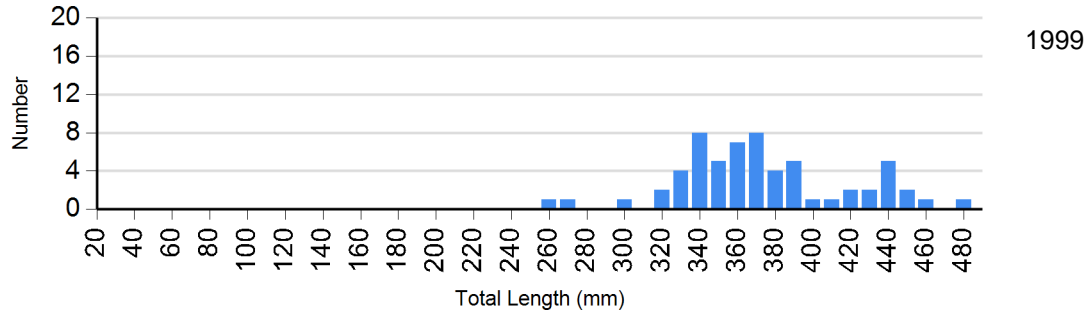


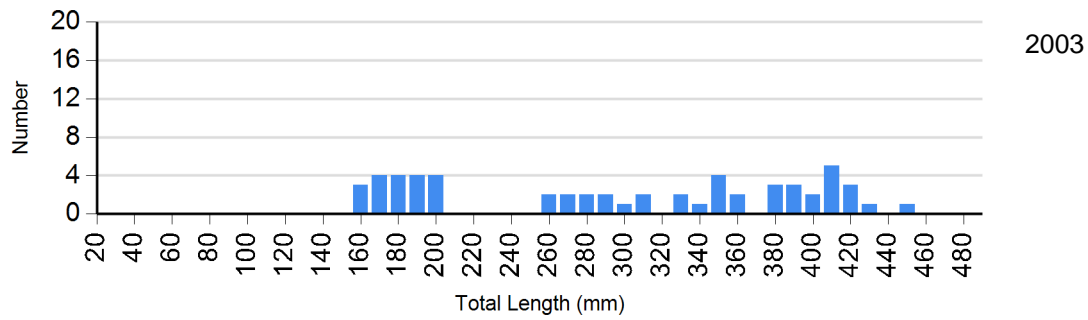
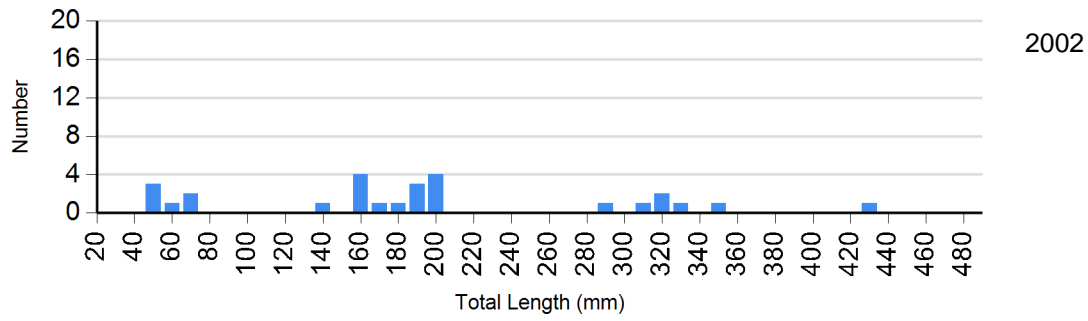
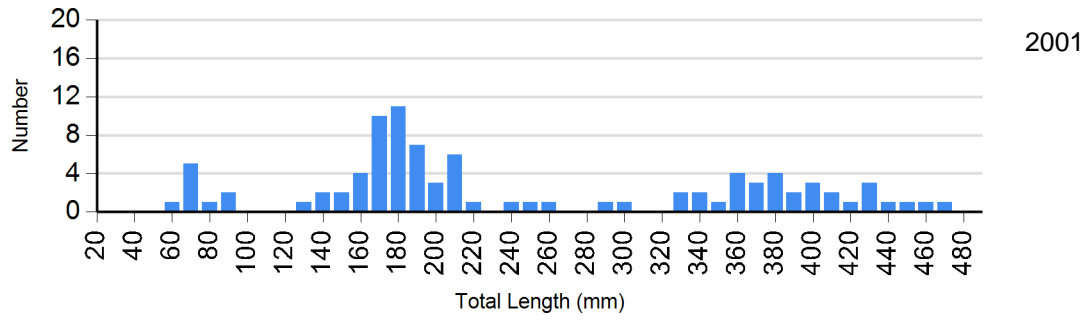
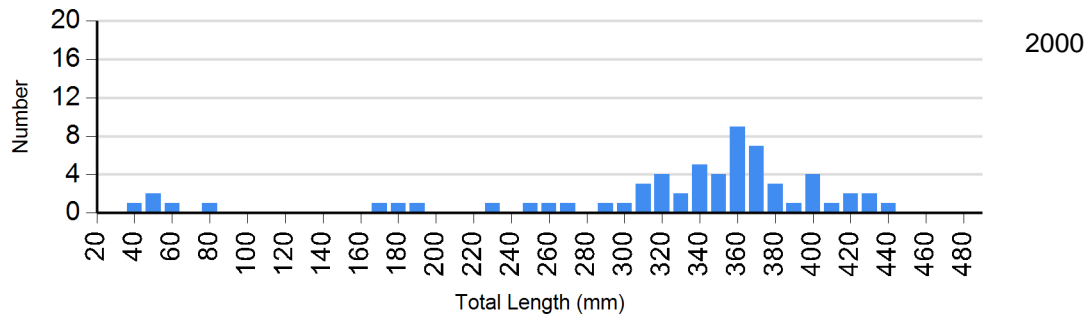


**Site:** 1434  
**Species:** Rock Bass

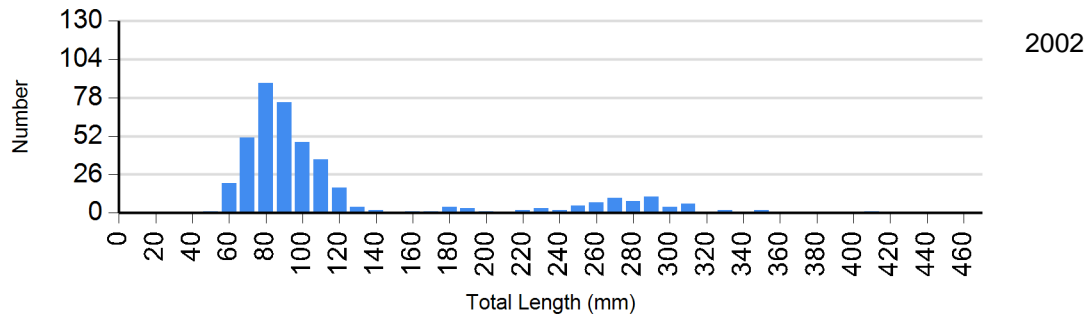
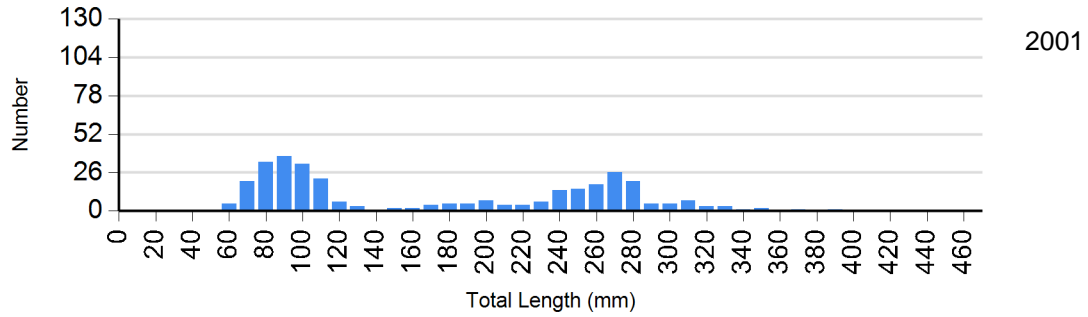
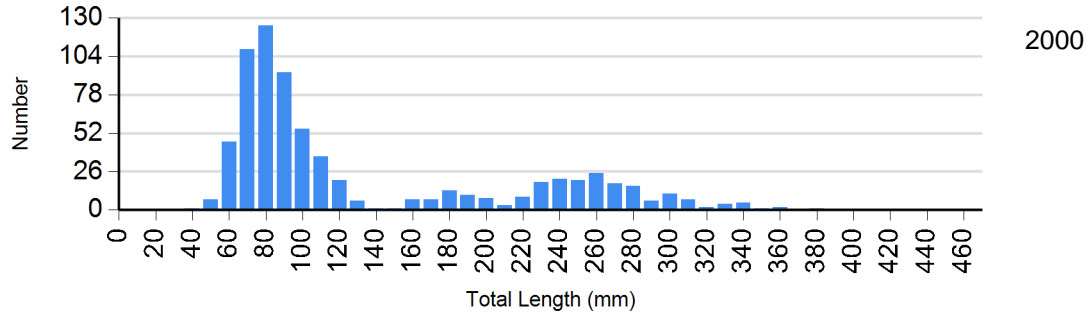
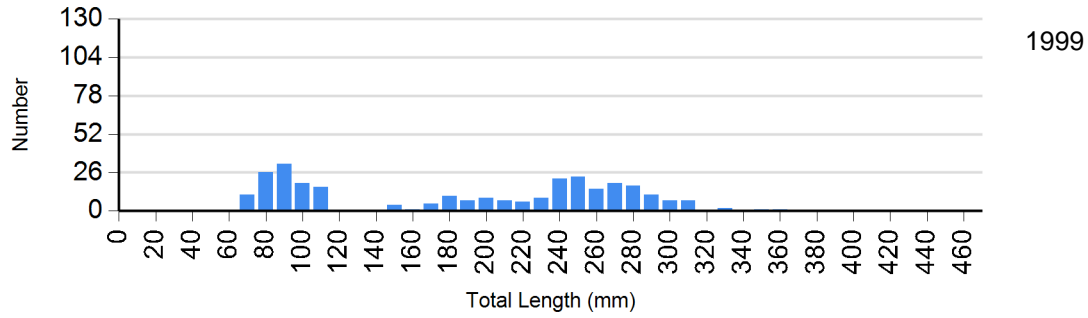


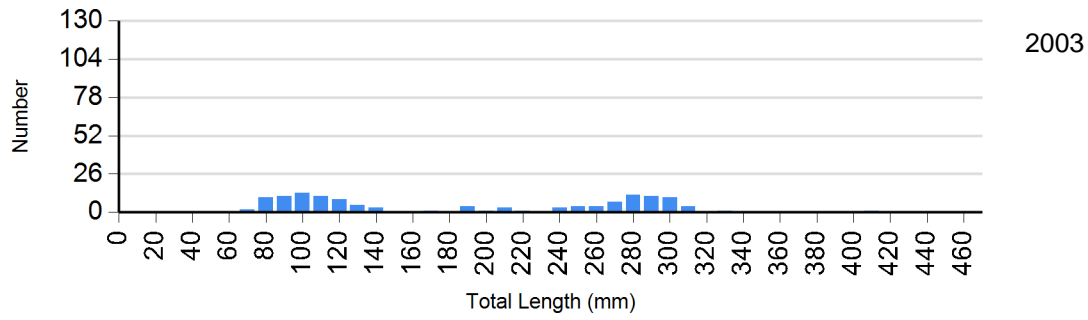
**Site:** 1434  
**Species:** White Sucker



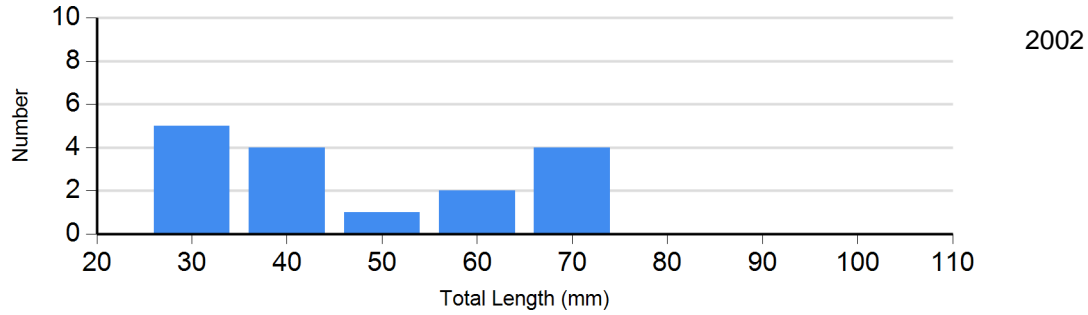


Site: 1444  
Species: Brown Trout

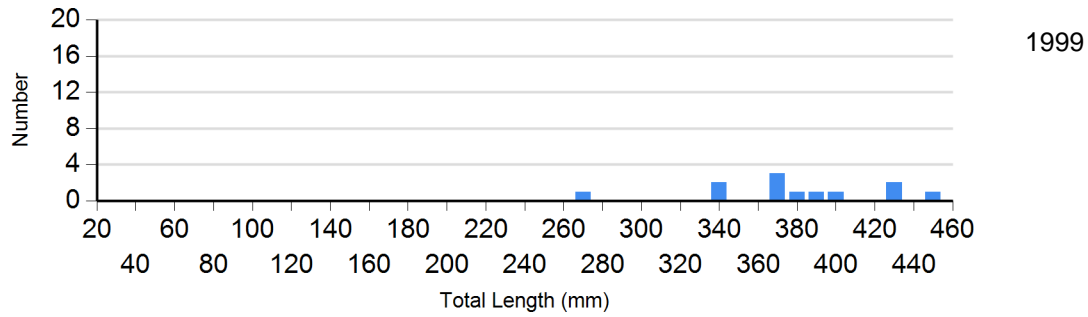


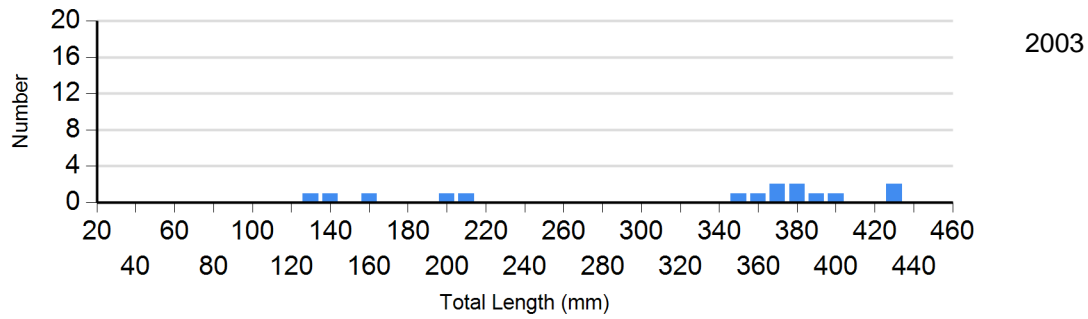
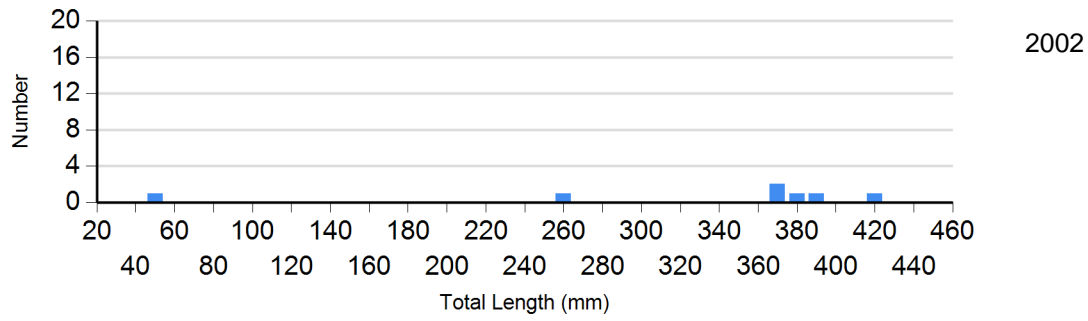
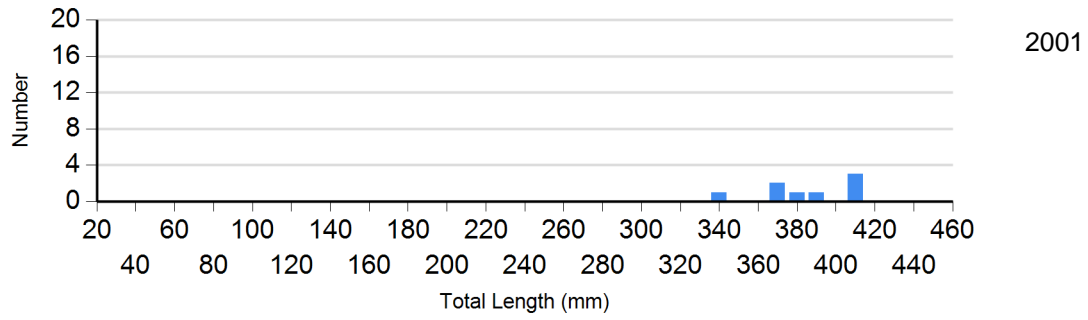
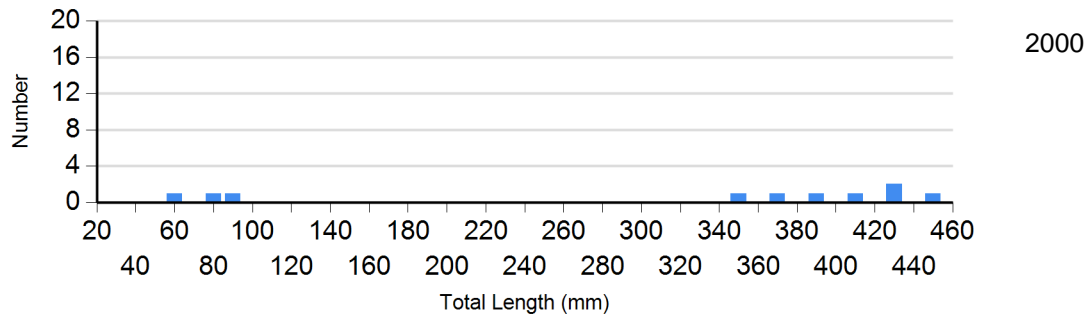


**Site:** 1444  
**Species:** Longnose Dace

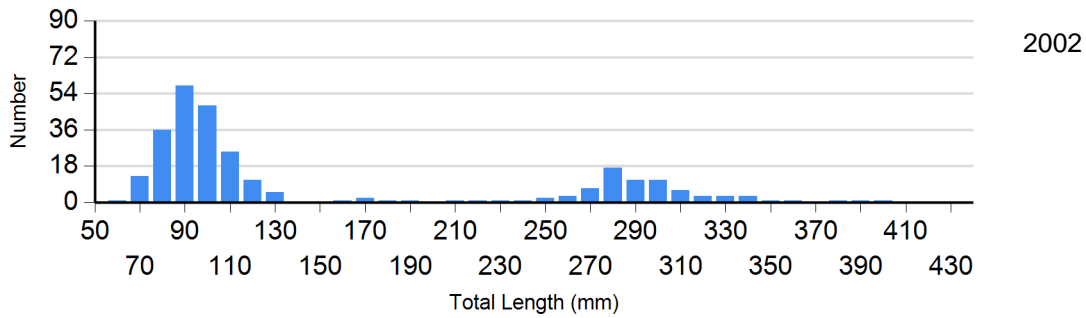
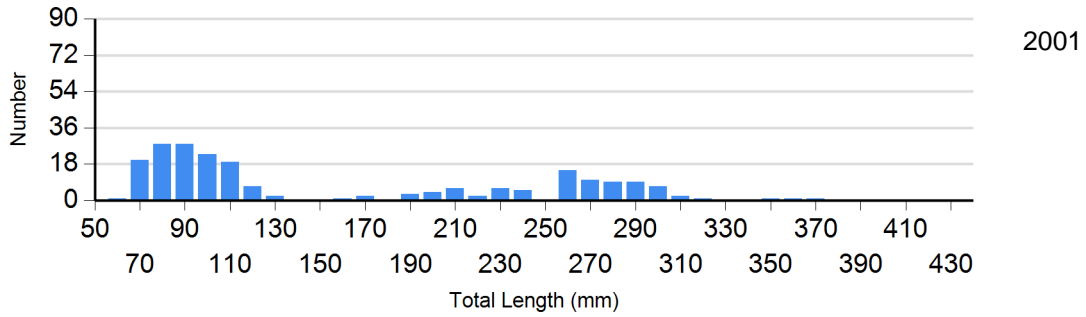
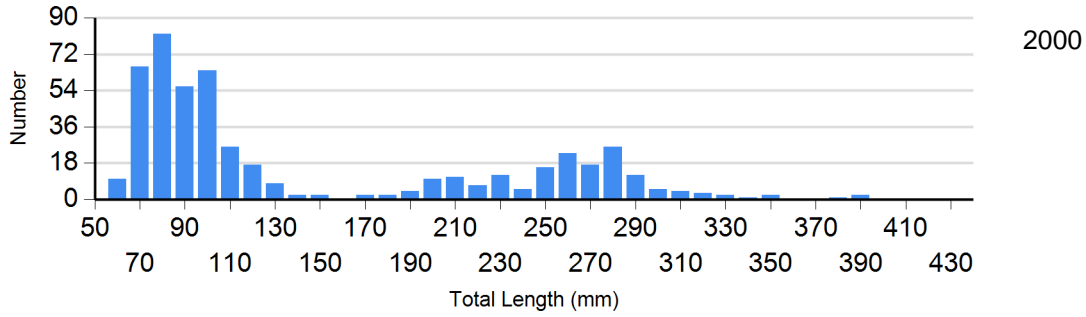
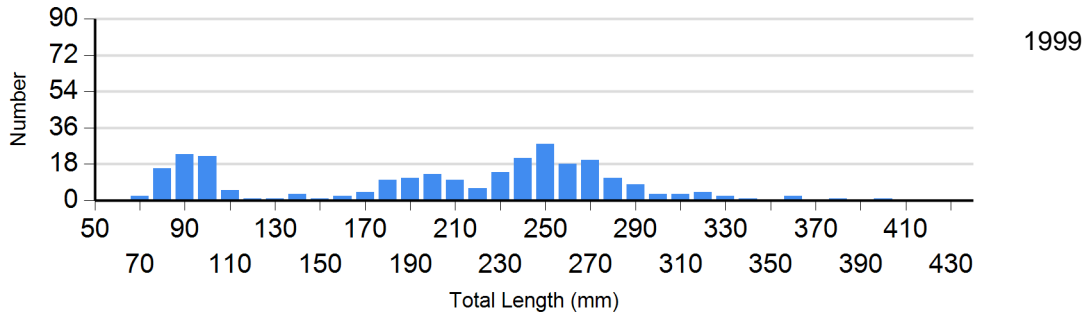


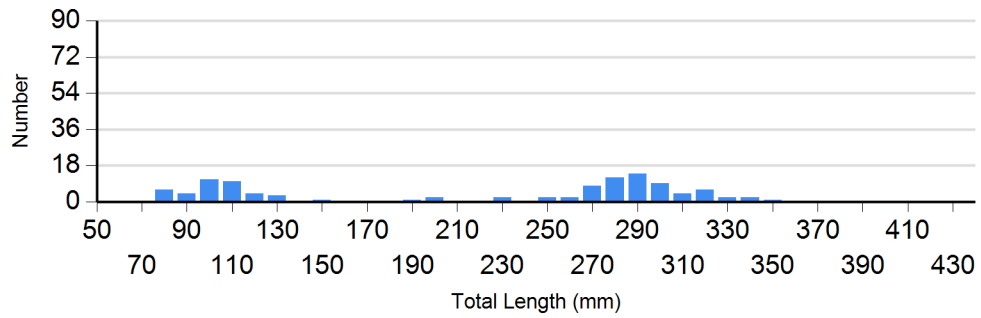
**Site:** 1444  
**Species:** White Sucker



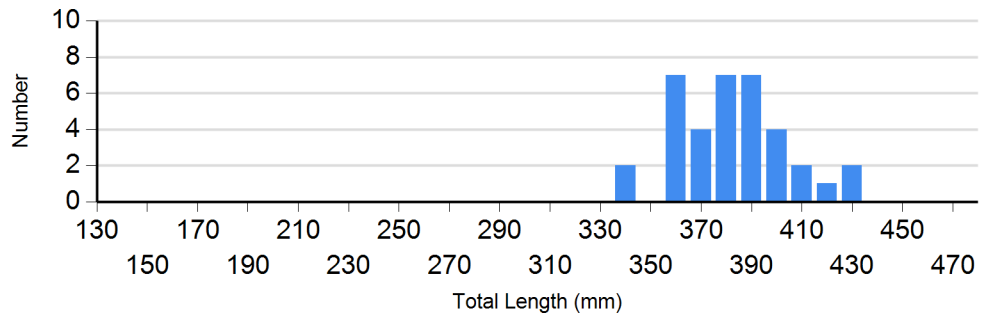
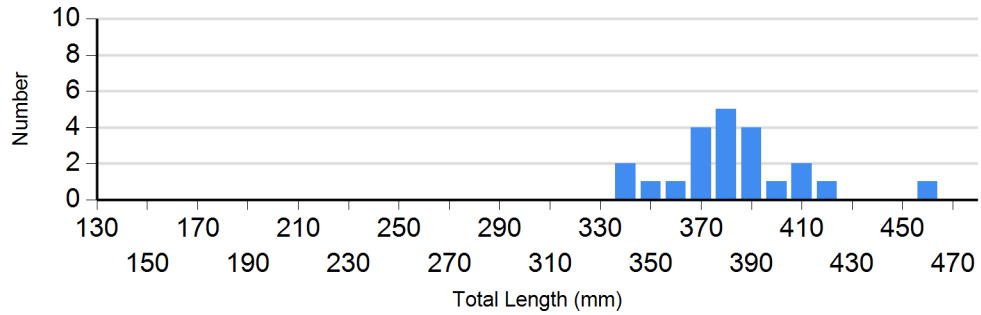
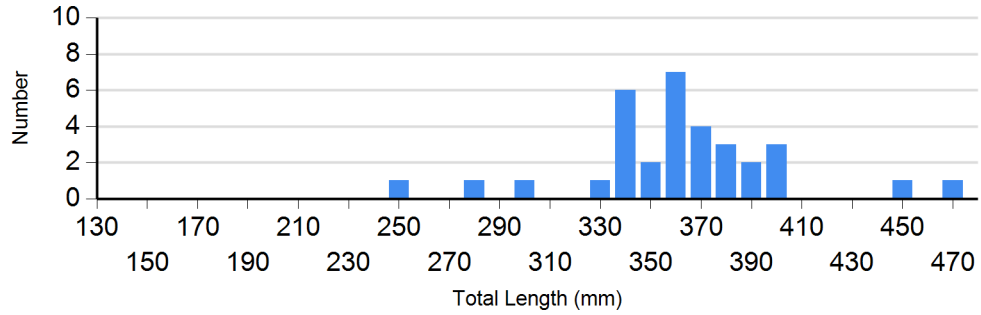


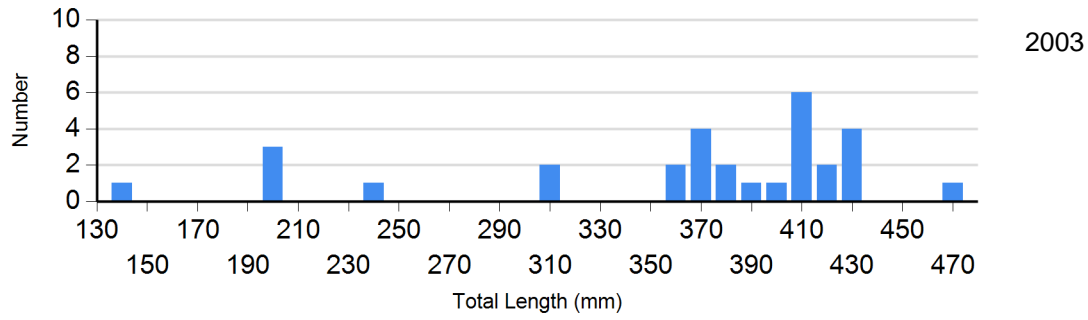
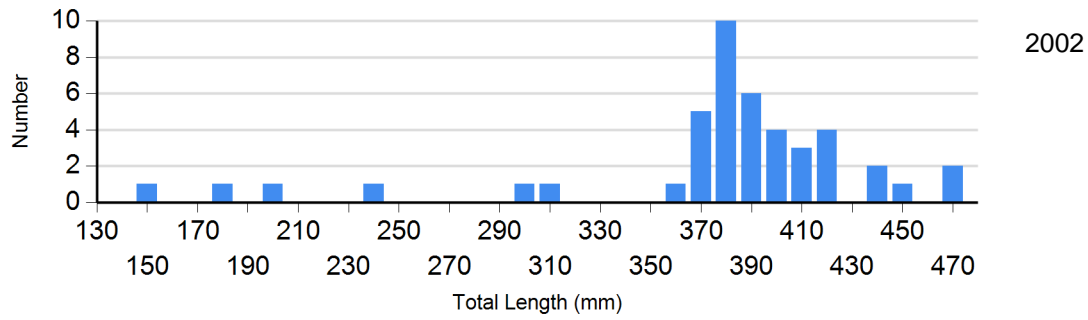
Site: 1449  
Species: Brown Trout



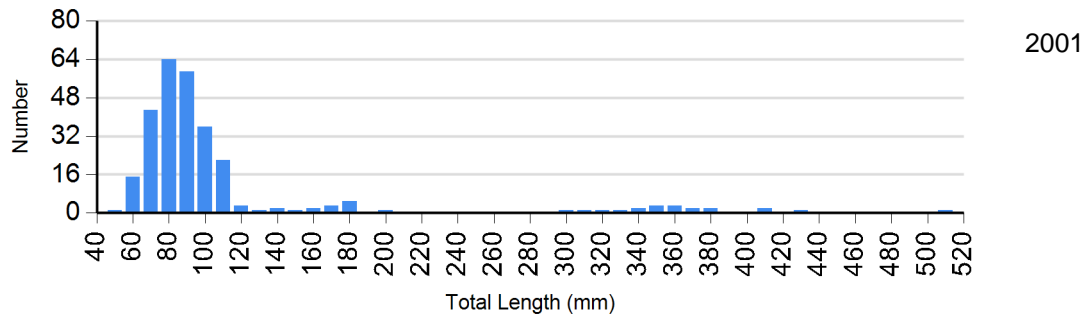
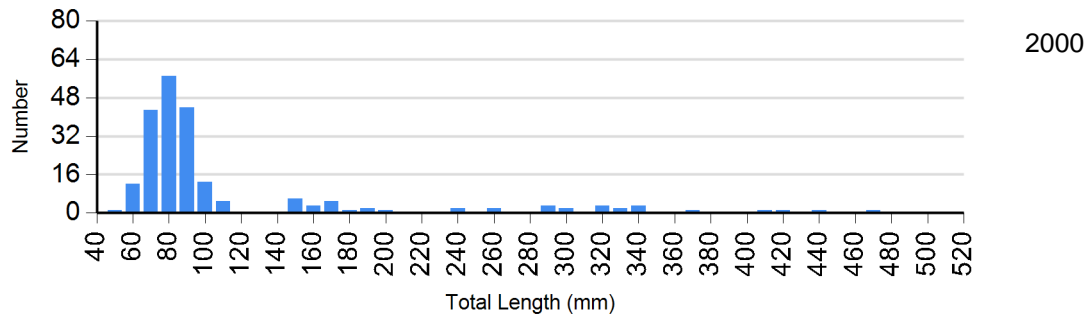


Site: 1449  
Species: White Sucker

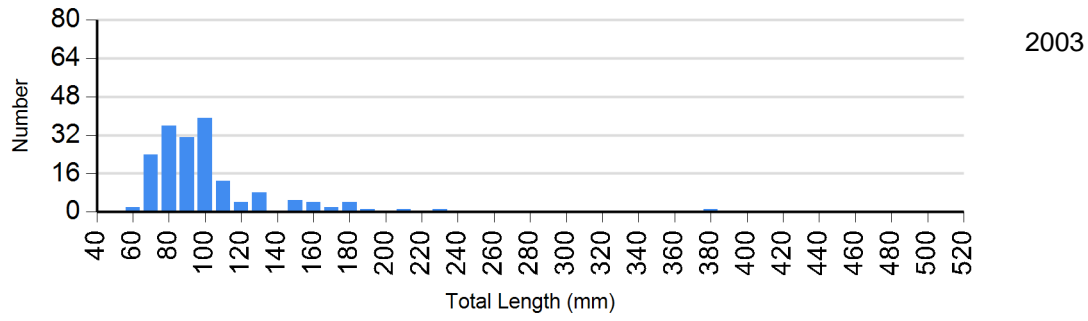
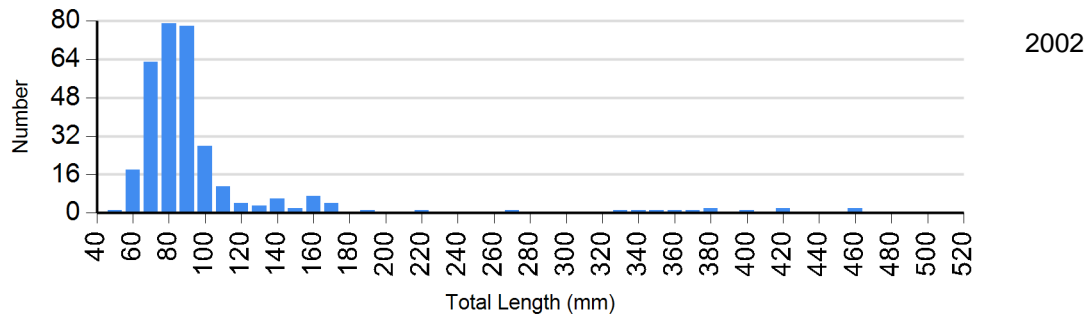




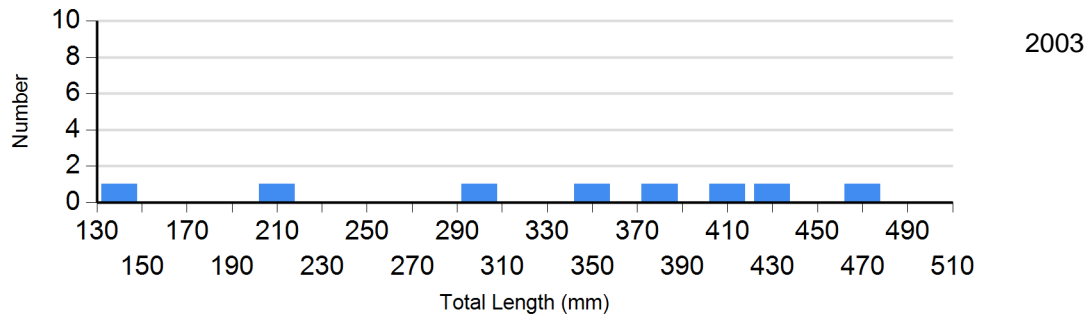
**Site:** 1468  
**Species:** Brown Trout



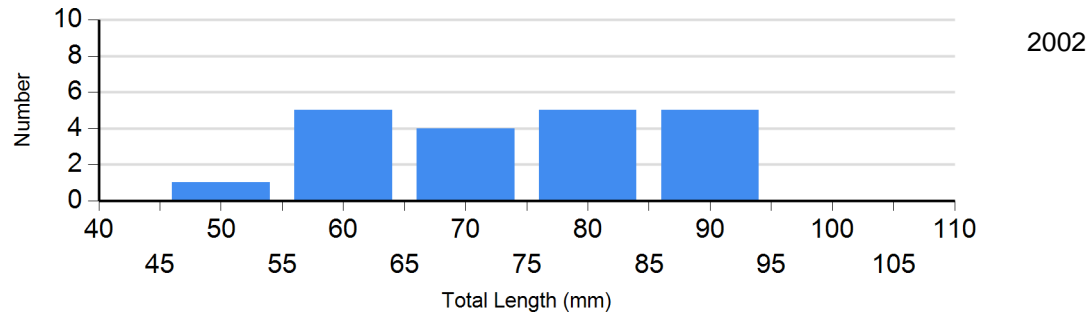
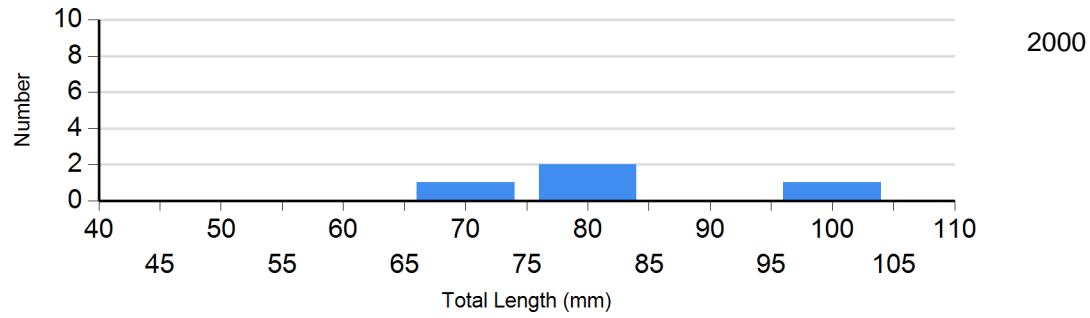




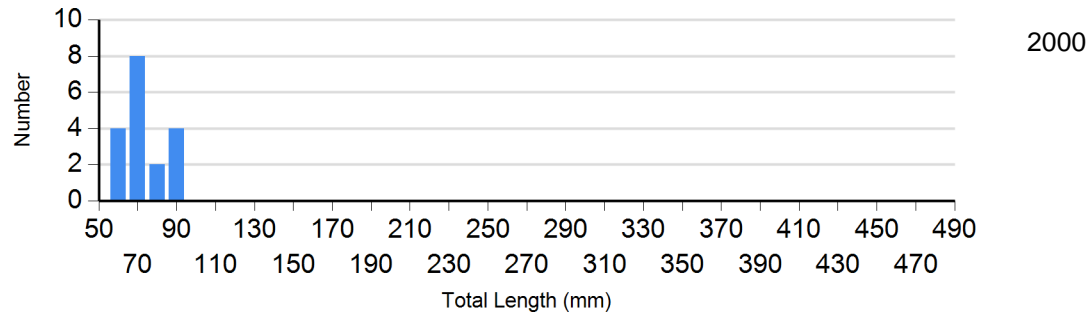
**Site:** 1468  
**Species:** Hatchery Rainbow Trout

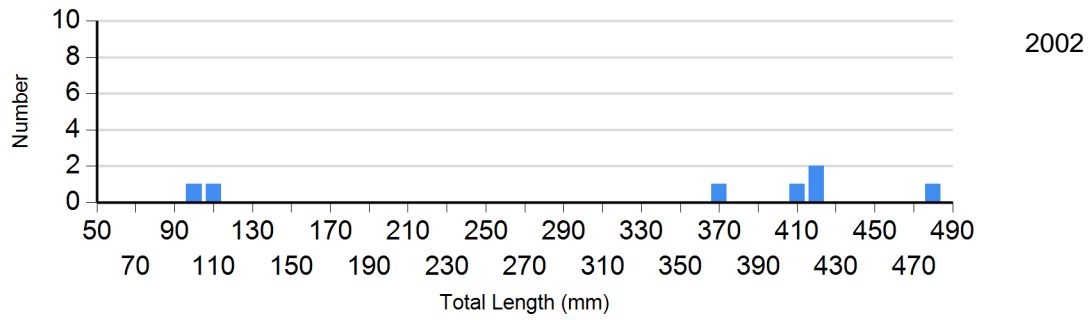


**Site:** 1468  
**Species:** Longnose Dace

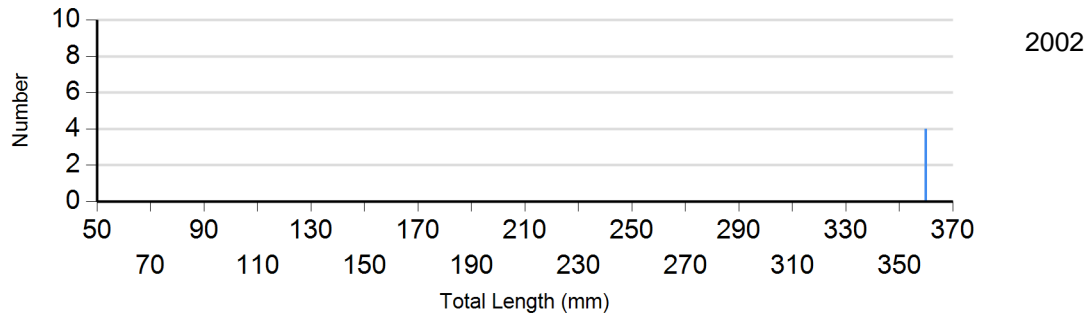


**Site:** 1468  
**Species:** Rainbow Trout

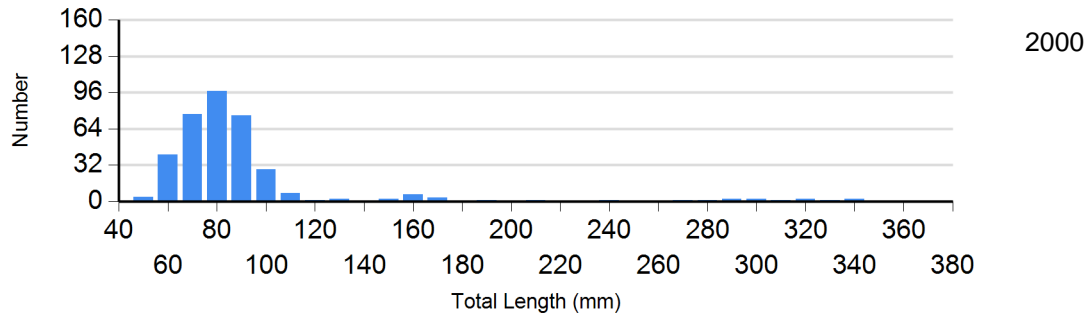


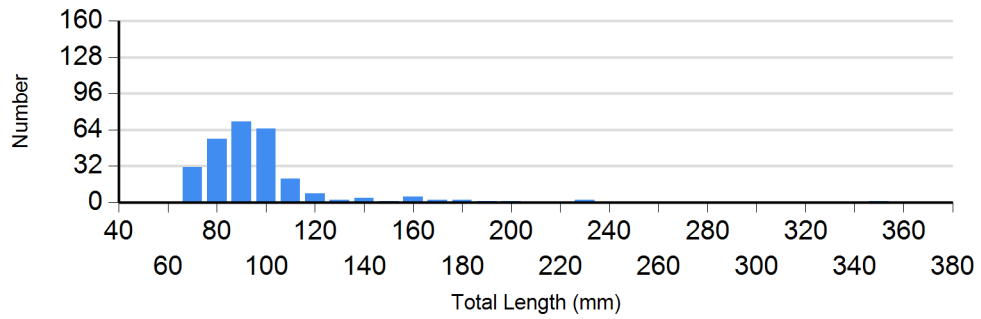
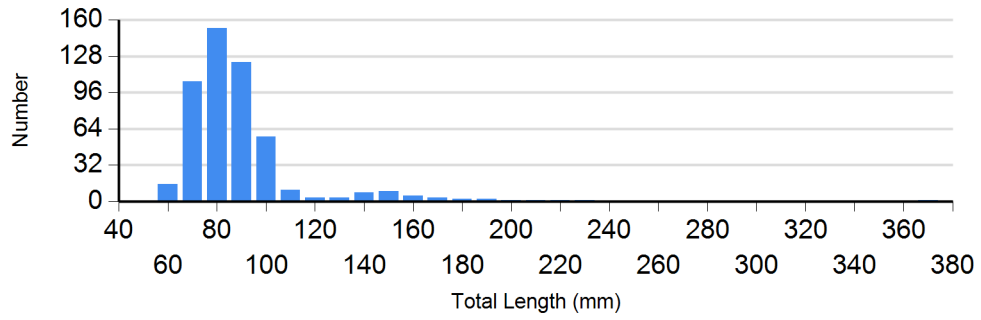
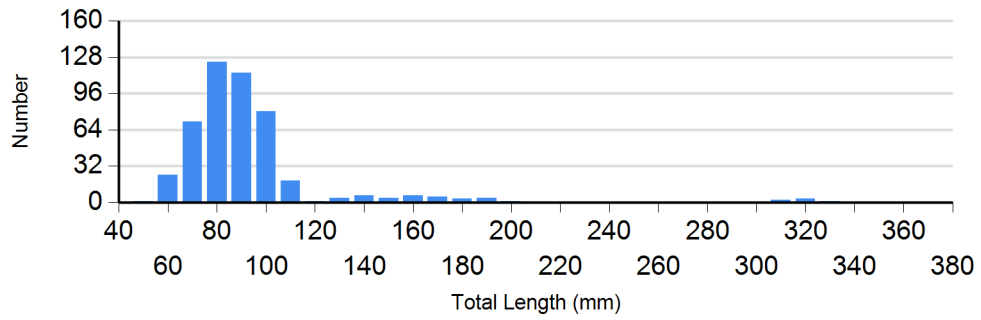


**Site: 1468**  
**Species: White Sucker**

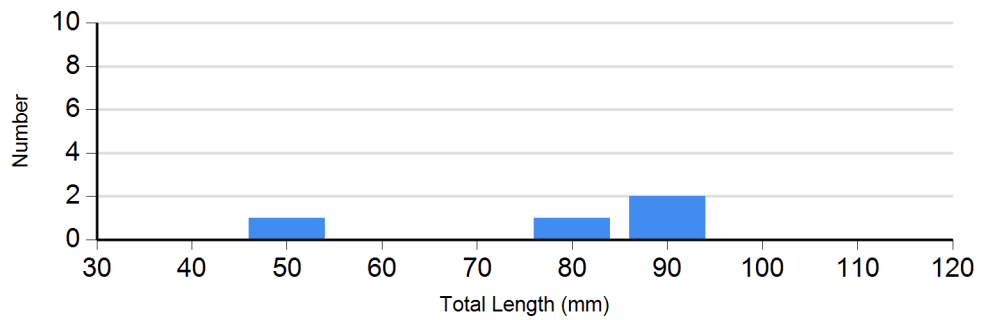


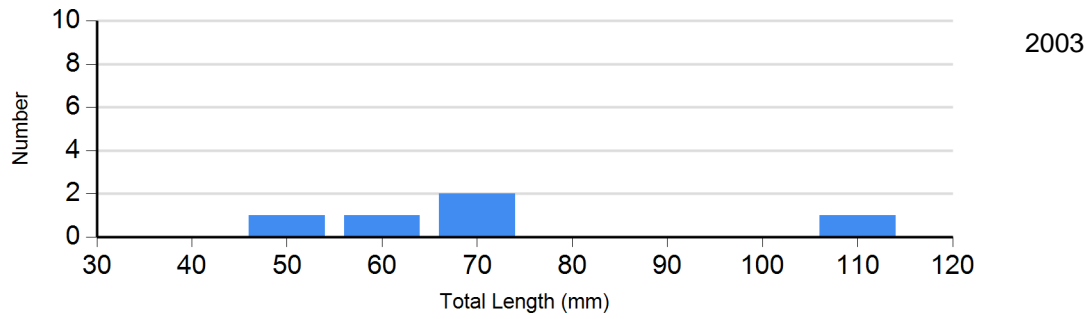
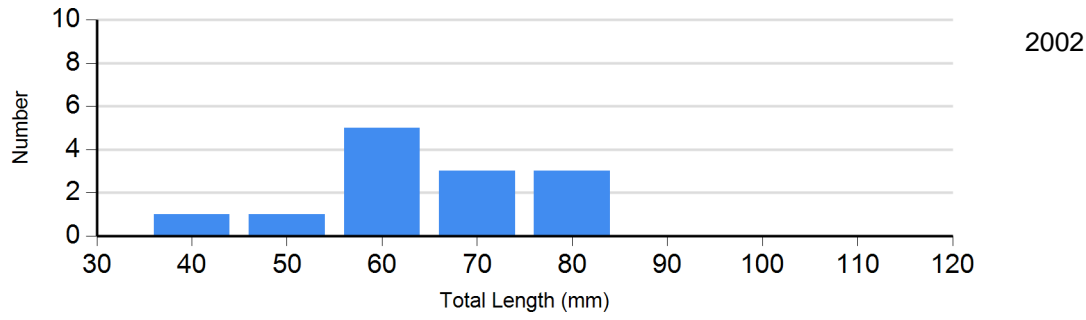
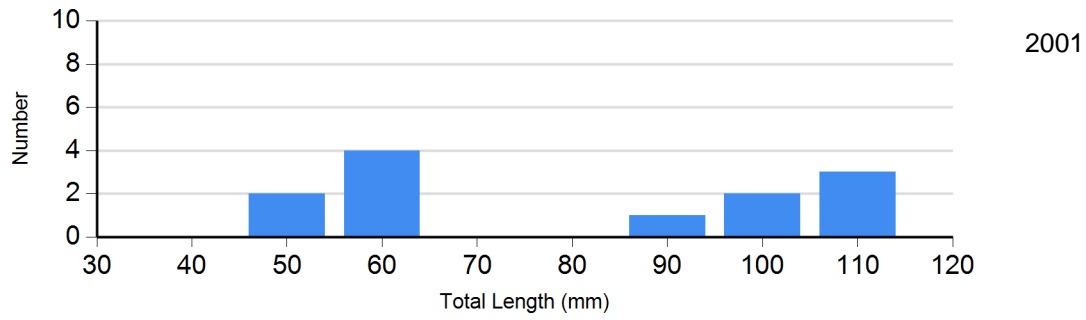
**Site: 1476**  
**Species: Brown Trout**



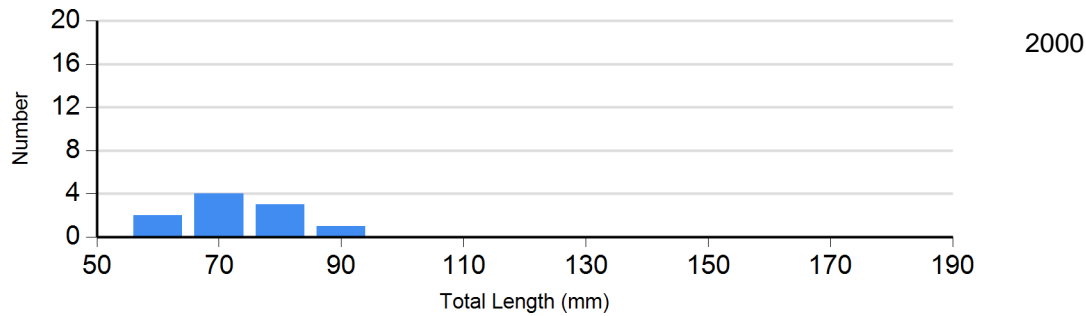


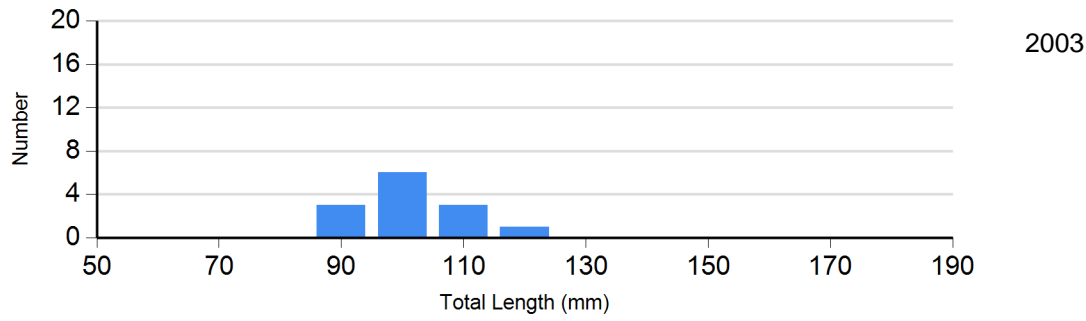
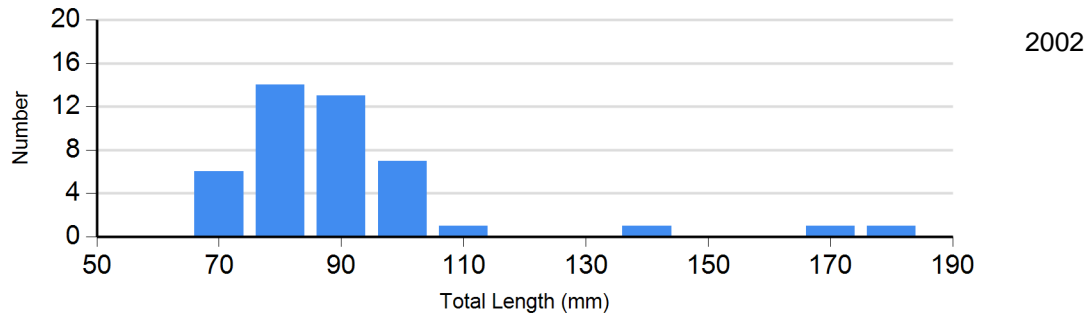
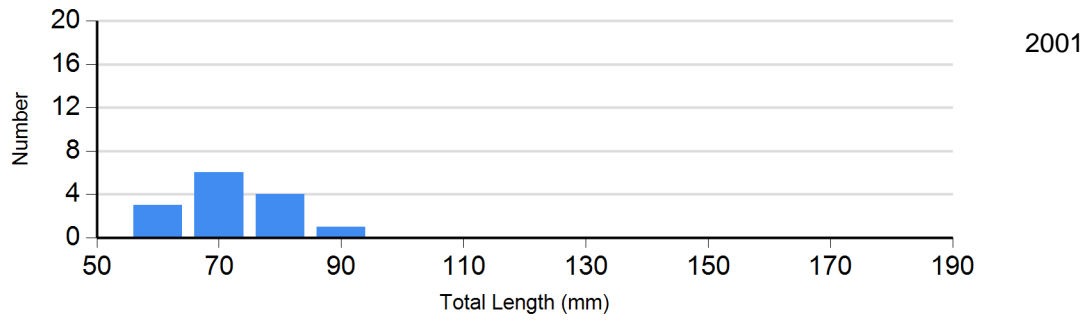
Site: 1476  
Species: Longnose Dace



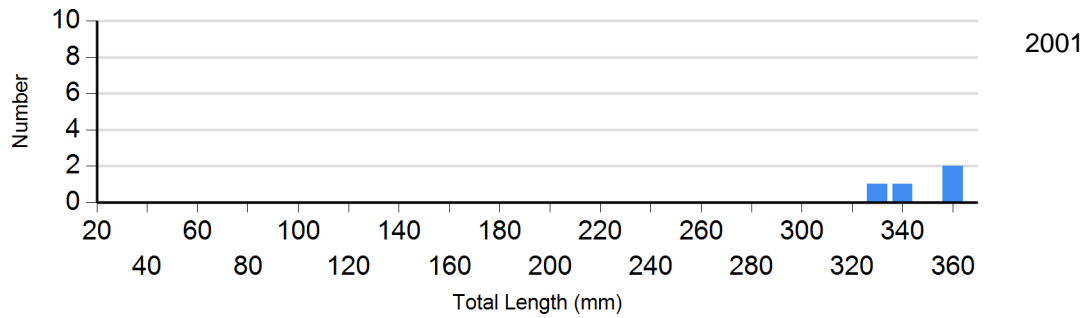


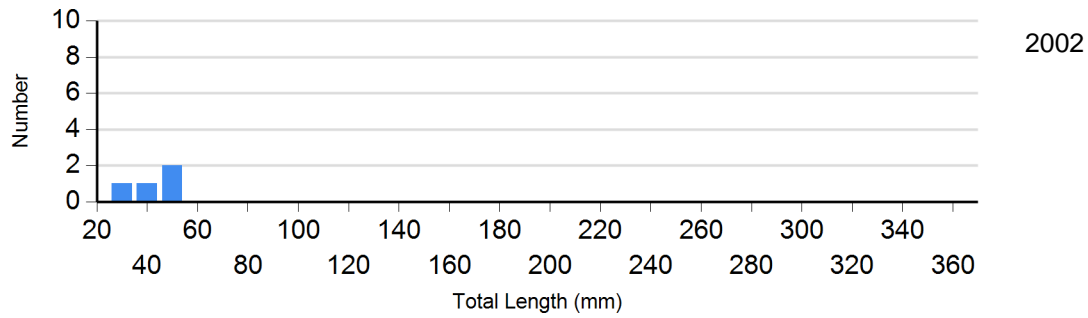
**Site:** 1476  
**Species:** Rainbow Trout



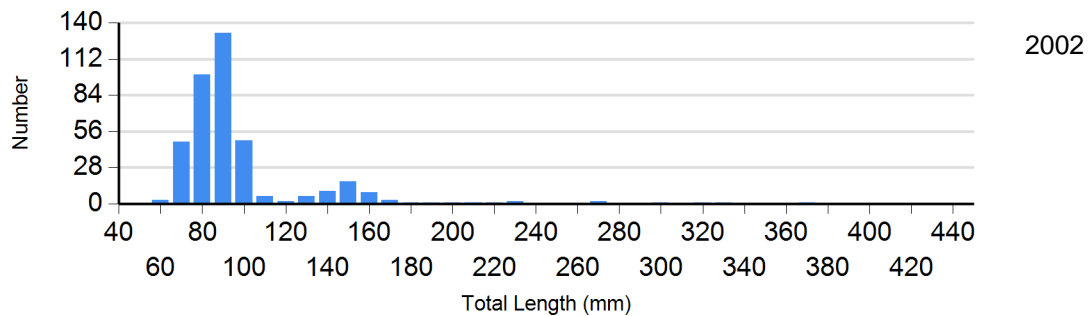
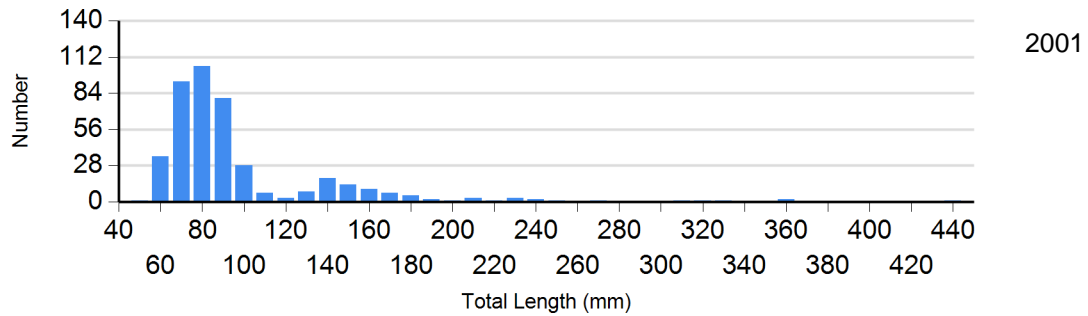
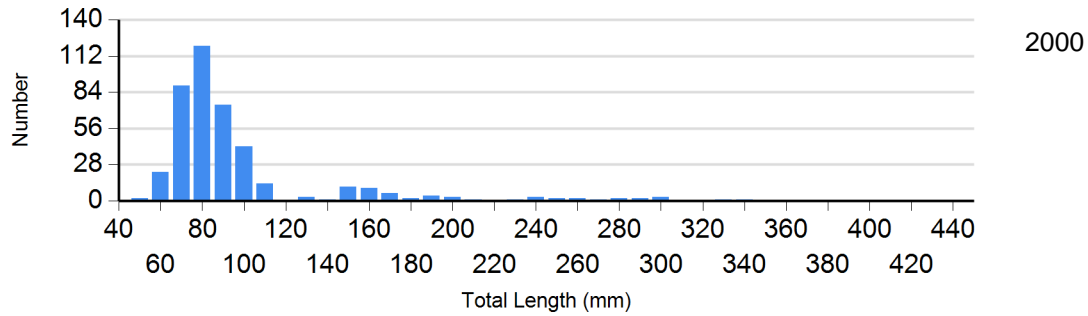


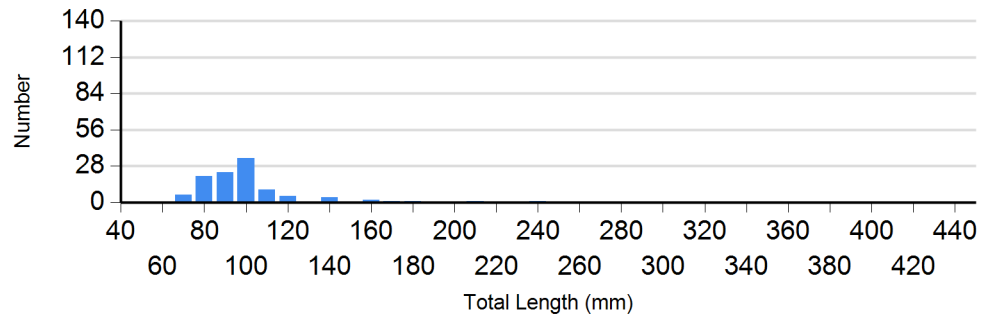
**Site:** 1476  
**Species:** White Sucker





Site: 1483  
Species: Brown Trout





**Site:** 1483  
**Species:** Rainbow Trout

