

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Rapid Creek, Pennington County
02-0062-00
2005

Table 1. Population and Biomass Estimates for Rapid Creek

Site Number: 1363	Date Sampled: 10/12/2005	Conductivity (umhos/cm): 500
Site Midpoint (Latitude, Longitude): 44.07961205, -103.20426495	Site Length (m): 100	pH: 9.0
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 10.1	Water Temperature (C): 10.0
Stream Classification: BR2	Number of Pass: 3	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	122	135	149	122	1333	22	1350	540	19.57	2172	114.5	16.4
Brown Trout	>=200mm	25	25	26	25	247	51	250	100	45.74	402	267.3	207.5
Brown Trout	All	147	157	167	147	1550	76	1570	628	68.05	2526	140.5	49.2
Largemouth Bass	All	7	7	8	7	69	0	70	28	0.26	113	70.3	4.1
Longnose Dace	All	93	304	825	93	3002	5	3040	1216	4.51	4891	54.4	1.7
Mountain Sucker	All	3	3	4	3	30	1	30	12	0.86	48	130.7	32.7
Rock Bass	All	6	6	7	6	59	3	60	24	2.97	97	131.8	56.2
White Sucker	All	120	140	160	120	1382	62	1400	560	55.19	2253	93.3	44.7

Site Number: 1383	Date Sampled: 10/12/2005	Conductivity (umhos/cm): 480
Site Midpoint (Latitude, Longitude): 44.08487597, -103.22694435	Site Length (m): 100	pH: 8.9
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 9.9	Water Temperature (C): 10.0
Stream Classification: BR2	Number of Pass: 3	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	42	46	53	42	465	7	460	188	6.00	740	110.8	14.5
Brown Trout	>=200mm	13	13	14	13	131	34	130	53	30.02	209	287.9	256.1
Brown Trout	All	55	58	64	55	586	42	580	237	37.43	933	152.7	71.6
Largemouth Bass	All	22	22	23	22	222	1	220	90	0.78	354	65.6	4.0
Longnose Dace	All	1	1	1	1	10	0	10	4	0.04	16	72.0	4.0
White Sucker	All	21	23	29	21	232	21	230	94	18.55	370	114.1	89.4

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: 09/26/2005

Site Length (m): 100

Mean Width (m): 8.1

Number of Pass: 3

Conductivity (umhos/cm): 490

pH: 9.1

Water Temperature (C): 15.0

Voltage: 250

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	125	142	159	125	1751	27	1420	709	24.07	2285	107.5	15.4
Brown Trout	>=200mm	74	75	78	74	925	217	750	375	193.58	1207	278.5	234.4
Brown Trout	All	199	214	227	201	2639	256	2140	1069	228.18	3443	171.1	96.8
Green Sunfish	All	1	1	5	1	12	0	10	5	0.08	16	66.0	7.0
Largemouth Bass	All	37	61	112	37	752	4	610	305	3.52	981	69.4	5.2
Longnose Dace	All	1	1	1	1	12	0	10	5	0.01	16	56.0	1.0
White Sucker	All	219	272	310	234	3354	259	2720	1358	230.90	4376	114.0	77.1

Site Number: 1412

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

Date Sampled: 09/26/2005

Site Length (m): 100

Conductivity (umhos/cm): 355

pH: 8.8

Survey Completed by: South Dakota Game, Fish and Parks

Mean Width (m): 7.9

Water Temperature (C): 12.5

Stream Classification: BR1

Number of Pass: 3

Voltage: 250

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	250	261	271	251	3319	44	2610	1344	39.11	4199	102.7	13.2
Brown Trout	>=200mm	35	44	61	35	560	120	440	227	106.80	708	262.9	213.8
Brown Trout	All	285	301	313	289	3828	145	3010	1550	129.28	4843	122.4	37.8
Fathead Minnow	All	2	2	2	2	25	0	20	10	0.08	32	67.5	3.5
Green Sunfish	All	2	2	4	2	25	0	20	10	0.09	32	62.0	4.0
Largemouth Bass	All	2	2	4	2	25	0	20	10	0.16	32	83.5	7.0
Longnose Dace	All	3	3	4	3	38	0	30	15	0.19	48	66.0	5.5
Rock Bass	All	7	7	9	7	89	4	70	36	3.54	113	92.0	44.5
White Sucker	All	96	99	104	96	1259	121	990	510	108.48	1593	118.8	96.5

Site Number: 1444

Date Sampled: 09/22/2005

Conductivity (umhos/cm): 320

Site Midpoint (Latitude, Longitude): 44.06406624, -103.27603653

Site Length (m): 100

pH: 9.0

Survey Completed by: South Dakota Game, Fish and Parks

Mean Width (m): 11.1

Water Temperature (C): 14.5

Stream Classification: BR1, RB0

Number of Pass: 3

Voltage: 250

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	381	475	526	424	4262	46	4750	1726	41.44	7643	94.1	10.9
Brown Trout	>=200mm	51	51	52	51	458	147	510	185	131.01	821	311.1	320.7
Brown Trout	All	432	504	541	467	4522	215	5040	1831	191.63	8109	119.7	47.5
Longnose Dace	All	38	46	61	38	413	2	460	167	1.41	740	69.5	3.8
Rainbow Trout	<200mm	1	1	1	1	9	0	10	4	0.13	16	106.0	16.0

Rainbow Trout	All	1	1	1	1	9	0	10	4	0.13	16	106.0	16.0
White Sucker	All	46	64	94	46	574	69	640	233	61.55	1030	125.9	120.0

Site Number: 1606

Site Midpoint (Latitude, Longitude): 44.03917228, -103.38297329

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR2

Date Sampled: 09/22/2005

Site Length (m): 100

Mean Width (m): 10.3

Number of Pass: 3

Conductivity (umhos/cm): 230

pH: 9.2

Water Temperature (C): 11.0

Voltage: 250

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	228	264	290	238	2570	32	2640	1041	28.95	4248	101.3	12.6
Brown Trout	>=200mm	9	9	10	9	88	30	90	35	26.76	145	311.0	342.1
Brown Trout	All	237	273	298	248	2658	67	2730	1076	59.63	4393	109.2	25.1

Site Number: 1656

Site Midpoint (Latitude, Longitude): 44.05452135, -103.40589571

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR2

Date Sampled: 09/21/2005

Site Length (m): 100

Mean Width (m): 8.9

Number of Pass: 3

Conductivity (umhos/cm): 280

pH: 9.1

Water Temperature (C): 7.5

Voltage: 250

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	162	217	264	170	2436	35	2170	986	31.31	3492	104.6	14.4
Brown Trout	>=200mm	19	20	24	19	224	36	200	91	31.90	322	250.8	159.2
Brown Trout	All	181	235	278	192	2638	78	2350	1068	69.69	3781	119.9	29.6
Hatchery Rainbow Trout	>=200mm	4	4	4	4	45	16	40	18	14.37	64	334.0	358.5
Hatchery Rainbow Trout	All	4	4	4	4	45	16	40	18	14.37	64	334.0	358.5

Site Number: 1752

Site Midpoint (Latitude, Longitude): 44.07974011, -103.42967056

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR2

Date Sampled: 09/21/2005

Site Length (m): 100

Mean Width (m): 10.6

Number of Pass: 3

Conductivity (umhos/cm): 280

pH: 9.1

Water Temperature (C): 12.0

Voltage: 250

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	167	241	307	175	2279	21	2410	923	18.55	3878	86.8	9.1
Brown Trout	>=200mm	11	11	12	11	104	33	110	42	29.41	177	311.6	316.5
Brown Trout	All	178	245	301	189	2317	65	2450	938	58.17	3942	100.7	28.1
Hatchery Rainbow Trout	>=200mm	1	1	1	1	9	5	10	4	4.39	16	363.0	520.0
Hatchery Rainbow Trout	All	1	1	1	1	9	5	10	4	4.39	16	363.0	520.0

Site Number: 1812

Site Midpoint (Latitude, Longitude): 44.07679180, -103.46254687

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK0, BR3

Date Sampled: 09/30/2005

Site Length (m): 100

Mean Width (m): 9.7

Number of Pass: 3

Conductivity (umhos/cm): 290

pH: 9.1

Water Temperature (C): 14.5

Voltage: 250

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	1	1	2	1	10	0	10	4	0.06	16	87.0	7.0
Brook Trout	All	1	1	2	1	10	0	10	4	0.06	16	87.0	7.0
Brown Trout	<200mm	196	202	209	196	2081	20	2020	843	17.58	3250	86.5	9.5
Brown Trout	>=200mm	2	2	2	2	21	2	20	8	1.91	32	214.5	104.0
Brown Trout	All	232	273	302	244	2812	29	2730	1139	26.16	4393	87.8	10.4
Hatchery Rainbow Trout	>=200mm	2	2	3	2	21	8	20	8	6.80	32	330.0	369.5
Hatchery Rainbow Trout	All	2	2	3	2	21	8	20	8	6.80	32	330.0	369.5

Site Number: 1833
Site Midpoint (Latitude, Longitude): 44.07611720, -103.47551527
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BR3, RB2

Date Sampled: 09/20/2005 **Conductivity (umhos/cm):** 285
Site Length (m): 100 **pH:** 9.2
Mean Width (m): 10.2 **Water Temperature (C):** 12.5
Number of Pass: 3 **Voltage:** 250

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	290	437	538	336	4277	43	4370	1732	38.41	7031	87.7	10.1
Brown Trout	>=200mm	5	5	5	5	49	15	50	20	13.28	80	279.6	304.0
Brown Trout	All	295	432	524	340	4228	64	4320	1712	56.78	6951	91.0	15.0
Hatchery Rainbow Trout	>=200mm	2	2	4	2	20	7	20	8	6.02	32	329.0	344.5
Hatchery Rainbow Trout	All	2	2	4	2	20	7	20	8	6.02	32	329.0	344.5
Rainbow Trout	<200mm	10	12	20	10	117	0	120	48	0.36	193	65.7	3.4
Rainbow Trout	>=200mm	2	2	2	2	20	10	20	8	9.02	32	359.5	516.0
Rainbow Trout	All	12	13	18	12	127	11	130	52	10.09	209	114.7	88.8

Site Number: 1843
Site Midpoint (Latitude, Longitude): 44.07203156, -103.47488319
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK0, BR3, RB2

Date Sampled: 09/19/2005 **Conductivity (umhos/cm):** 280
Site Length (m): 100 **pH:** 8.9
Mean Width (m): 7.8 **Water Temperature (C):** 11.5
Number of Pass: 3 **Voltage:** 250

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	6	2	26	0	20	10	0.18	32	94.5	8.0
Brook Trout	All	2	2	6	2	26	0	20	10	0.18	32	94.5	8.0
Brown Trout	<200mm	396	597	716	478	7645	46	5970	3096	41.30	9606	75.5	6.1
Brown Trout	>=200mm	2	2	3	2	26	11	20	10	9.56	32	329.5	418.0

Brown Trout	All	398	599	717	481	7671	62	5990	3107	55.65	9638	76.8	8.1
Hatchery Brown Trout	>=200mm	1	1	2	1	13	7	10	5	6.46	16	380.0	565.0
Hatchery Brown Trout	All	1	1	2	1	13	7	10	5	6.46	16	380.0	565.0
Hatchery Rainbow Trout	>=200mm	2	2	2	2	26	12	20	10	10.82	32	354.0	473.0
Hatchery Rainbow Trout	All	2	2	2	2	26	12	20	10	10.82	32	354.0	473.0
Rainbow Trout	<200mm	21	27	42	21	346	1	270	140	0.49	434	55.6	1.6
Rainbow Trout	>=200mm	2	2	2	2	26	17	20	10	15.08	32	377.5	659.5
Rainbow Trout	All	23	27	37	23	346	21	270	140	18.96	434	83.6	61.4

Site Number: 1853
Site Midpoint (Latitude, Longitude): 44.07655505, -103.48401117
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK3, BR2, RB2

Date Sampled: 09/19/2005
Site Length (m): 100
Mean Width (m): 10.8
Number of Pass: 3
Conductivity (umhos/cm): 275
pH: 8.6
Water Temperature (C):
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)
Brook Trout	<200mm	92	104	118	92	960	14	1040	389	12.26	1673	98.1	14.3
Brook Trout	>=200mm	5	5	6	5	46	30	50	19	26.73	80	334.0	648.4
Brook Trout	All	98	111	126	98	1025	48	1110	415	42.60	1786	110.2	46.6
Brown Trout	<200mm	161	237	306	168	2188	16	2370	886	14.26	3813	76.5	7.3
Brown Trout	>=200mm	17	17	18	17	157	112	170	64	99.82	274	355.5	712.2
Brown Trout	All	178	243	297	189	2244	167	2430	909	149.49	3910	103.2	74.6
Hatchery Rainbow Trout	>=200mm	2	2	2	2	18	16	20	7	13.99	32	388.0	848.5
Hatchery Rainbow Trout	All	2	2	2	2	18	16	20	7	13.99	32	388.0	848.5
Rainbow Trout	<200mm	29	28	35	29	259	1	280	105	1.23	451	69.5	5.3

Rainbow Trout >=200mm	3	5	24	3	46	57	50	19	50.50	80	440.7	1225.0
Rainbow Trout All	32	31	39	32	286	34	310	116	30.59	499	104.3	119.7

Stream sites are classified based on the estimates of adult trout over eight inches that exist within the site. Estimates are derived from 3-pass backpack electrofishing surveys at 100-meter sites within streams. While all fish in the site are collected and measured, only trout species are used for classifications. Sites are numbered in accordance for the distance (m) from the stream confluence of a higher order stream/river.

Based on number of trout in excess of eight inches	
Class BR1	Number of wild Brown Trout exceeds 150 per acre
Class BR2	Number of wild Brook Trout ranges from 25 to 150 per acre
Class BR3	Number of wild Brown Trout is less than 25 per acre
Class BK1	Number of wild Brook Trout exceeds 150 per acre
Class BK2	Number of wild Brook Trout ranges from 25 to 150 per acre
Class BK3	Number of wild Brook Trout is less than 25 per acre
Class RB1	Number of wild Rainbow Trout exceeds 25 per acre
Class RB2	Number of wild Rainbow Trout is less than 25 per acre

Table 2. Species composition and population estimates on Rapid Creek, 1995-2005

Site 1363

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	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	
	Oct 12, 2005	135	122-149	

Brown Trout >=200mm	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
	Oct 12, 2005	25	25-26	BR2
Fathead Minnow	Oct 18, 2000	1	1-3	
Hatchery Brown Trout <200mm	Oct 06, 1999	64	40-112	
Hatchery Brown Trout >=200mm	Oct 04, 1996	5	5-6	
	Oct 06, 1999	9	9-11	
	Oct 18, 2000	14	14-14	
Hatchery Rainbow Trout >=200mm	Oct 18, 2000	2	2-2	
Largemouth Bass	Oct 04, 1996	2	2-2	
	Oct 12, 2005	7	7-8	
Longnose Dace	Oct 04, 1996	13	14-17	

Longnose Dace	Oct 06, 1999	3	3-4
	Oct 18, 2000	86	80-94
	Oct 19, 2001	5	5-6
	Oct 16, 2002	4	4-5
	Feb 19, 2003	3	3-4
	Oct 12, 2005	304	93-825
Mountain Sucker	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
	Oct 12, 2005	3	3-4
Rock Bass	Oct 04, 1996	5	3-24
	Oct 06, 1999	2	2-4
	Oct 18, 2000	1	1-3
	Oct 19, 2001	21	11-65

Rock Bass	Oct 16, 2002	6	6-8
	Feb 19, 2003	3	3-5
	Oct 12, 2005	6	6-7
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
	Oct 12, 2005	140	120-160

Site 1383

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
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	

Brown Trout <200mm	Apr 17, 2003	46	37-62	
	Oct 12, 2005	46	42-53	
Brown Trout >=200mm	Oct 06, 1999	115	112-120	BR1
	Oct 18, 2000	163	162-165	BR1
	Oct 19, 2001	169	169-170	BR1
	Oct 16, 2002	66	66-67	BR1
	Apr 17, 2003	85	85-86	BR1
	Oct 12, 2005	13	13-14	BR2
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	

Hatchery Rainbow Trout >=200mm	Oct 19, 2001	1	1-1	
	Oct 16, 2002	1	1-1	
Largemouth Bass	Oct 06, 1999	20	20-20	
	Oct 18, 2000	2	2-2	
	Oct 19, 2001	12	11-17	
	Oct 16, 2002	5	5-6	
	Oct 12, 2005	22	22-23	
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	
	Apr 17, 2003	6	7-9	
	Oct 12, 2005	1	1-1	
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
	Oct 12, 2005	23	21-29

Site 1393

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
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	

Brown Trout <200mm	Oct 15, 2002	127	117-138	
	Feb 19, 2003	76	70-85	
	Sep 26, 2005	142	125-159	
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
	Sep 26, 2005	75	74-78	BR1
Green Sunfish	Oct 10, 1996	1	1-1	
	Sep 26, 2005	1	1-5	
Hatchery Brown Trout <200mm	Oct 05, 1999	2	2-2	
Hatchery Brown Trout >=200mm	Oct 05, 1999	5	5-7	
Largemouth Bass	Oct 09, 2001	1	1-2	
	Sep 26, 2005	61	37-112	

Longnose Dace	Oct 10, 1996	4	5-8
	Oct 17, 2000	1	1-5
	Oct 09, 2001	5	5-5
	Oct 15, 2002	6	6-8
	Feb 19, 2003	3	4-5
	Sep 26, 2005	1	1-1
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	64-79
	Oct 05, 1999	43	36-56

White Sucker	Oct 17, 2000	58	58-60
	Oct 09, 2001	51	51-52
	Oct 15, 2002	73	71-77
	Feb 19, 2003	52	52-53
	Sep 26, 2005	272	234-310

Site 1412

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	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	
	Sep 26, 2005	261	251-271	
Brown Trout >=200mm	Oct 03, 1995	96	92-102	BR1

Brown Trout >=200mm	Sep 26, 1996	120	90-155	BR1
	Oct 05, 1999	88	80-99	BR1
	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
	Sep 26, 2005	44	35-61	BR1
Fathead Minnow	Sep 26, 2005	2	2-2	
Green Sunfish	Oct 17, 2001	3	3-3	
	Sep 26, 2005	2	2-4	
Largemouth Bass	Sep 26, 2005	2	2-4	
Longnose Dace	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	

Longnose Dace	Mar 05, 2003	3	4-7
	Sep 26, 2005	3	3-4
Mountain Sucker	Oct 03, 1995	3	3-3
	Mar 05, 2003	8	6-19
Rock Bass	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
	Sep 26, 2005	7	7-9
White Sucker	Oct 03, 1995	70	70-71
	Sep 26, 1996	85	70-104
	Oct 05, 1999	37	37-39
	Oct 17, 2000	59	59-59
	Oct 17, 2001	88	88-89

White Sucker	Oct 10, 2002	69	68-72
	Mar 05, 2003	28	28-30
	Sep 26, 2005	99	96-104

Site 1444

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
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	
	Mar 07, 2003	74	69-81	
	Sep 22, 2005	475	424-526	
Brown Trout >=200mm	Aug 23, 1996	133	122-145	BR1
	Oct 29, 1997	231	207-255	BR1
	Oct 12, 1999	178	159-197	BR1

Brown Trout >=200mm	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
	Sep 22, 2005	51	51-52	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	
	Sep 22, 2005	46	38-61	
Mountain Sucker	Oct 29, 1997	1	1-2	
	Oct 12, 1999	1	1-1	
Rainbow Trout <200mm	Sep 22, 2005	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	
	Sep 22, 2005	64	46-94	

Site 1606

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jun 24, 2004	515	433-597	
	Sep 22, 2005	264	238-290	
Brown Trout >=200mm	Jun 24, 2004	1	1-1	BR3
	Sep 22, 2005	9	9-10	BR2

Site 1656

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 03, 1995	213	203-223	
	Oct 02, 1996	222	199-245	
	Sep 29, 1999	189	131-247	
	Oct 04, 2000	205	184-226	
	Oct 01, 2001	249	213-285	
	Oct 25, 2002	152	127-177	
	Jun 09, 2004	166	167-183	
	Sep 21, 2005	217	170-264	
Brown Trout >=200mm	Oct 03, 1995	109	108-112	BR1
	Oct 02, 1996	79	68-94	BR1
	Sep 29, 1999	98	90-108	BR1
	Oct 04, 2000	84	84-85	BR1
	Oct 01, 2001	43	43-44	BR1
	Oct 25, 2002	30	30-30	BR1
	Jun 09, 2004	15	15-17	BR2

Brown Trout >=200mm	Sep 21, 2005	20	19-24	BR2
Hatchery Rainbow Trout >=200mm	Sep 21, 2005	4	4-4	

Site 1752

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 20, 1999	115	99-133	
	Jun 09, 2004	147	90-223	
	Sep 21, 2005	241	175-307	
Brown Trout >=200mm	Oct 20, 1999	138	135-143	BR1
	Jun 09, 2004	24	24-24	BR2
	Sep 21, 2005	11	11-12	BR2
Hatchery Rainbow Trout >=200mm	Sep 21, 2005	1	1-1	

Site 1812

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 18, 1999	1	1-2	
	Sep 30, 2005	1	1-2	
Brown Trout <200mm	Oct 18, 1999	120	92-152	
	Jun 24, 2004	613	210-1205	

Brown Trout <200mm	Sep 30, 2005	202	196-209	
Brown Trout >=200mm	Oct 18, 1999	70	68-74	BR1
	Jun 24, 2004	9	9-9	BR2
	Sep 30, 2005	2	2-2	BR3
Hatchery Rainbow Trout >=200mm	Sep 30, 2005	2	2-3	

Site 1833

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 16, 1996	2	2-4	
	Oct 28, 1997	2	2-2	
	Oct 14, 1999	2	2-3	
	Oct 03, 2000	3	3-4	
	Oct 02, 2001	7	7-8	
	Oct 28, 2002	2	2-4	
	Oct 13, 2004	2	2-3	
Brook Trout >=200mm	Oct 28, 1997	1	1-2	BK3
Brown Trout <200mm	Oct 16, 1996	293	275-311	

Brown Trout <200mm	Oct 28, 1997	128	105-152	
	Oct 23, 1998	76	66-90	
	Oct 14, 1999	48	40-62	
	Oct 03, 2000	107	82-137	
	Oct 02, 2001	222	110-383	
	Oct 28, 2002	84	71-101	
	Oct 13, 2004	492	425-559	
	Sep 20, 2005	437	336-538	
Brown Trout >=200mm	Oct 16, 1996	30	30-31	BR2
	Oct 28, 1997	32	32-33	BR2
	Oct 23, 1998	66	65-69	BR1
	Oct 14, 1999	61	61-62	BR1
	Oct 03, 2000	89	89-91	BR1
	Oct 02, 2001	62	62-63	BR1
	Oct 28, 2002	37	36-40	BR1
	Oct 13, 2004	7	7-7	BR2

Brown Trout >=200mm	Sep 20, 2005	5	5-5	BR3
Hatchery Rainbow Trout >=200mm	Sep 20, 2005	2	2-4	
Rainbow Trout <200mm	Oct 23, 1998	1	1-1	
	Oct 14, 1999	5	5-7	
	Oct 03, 2000	9	9-11	
	Oct 02, 2001	1	1-1	
	Oct 28, 2002	2	2-3	
	Oct 13, 2004	4	4-6	
	Sep 20, 2005	12	10-20	
Rainbow Trout >=200mm	Oct 14, 1999	1	1-1	RB2
	Oct 03, 2000	1	1-1	RB2
	Oct 02, 2001	3	3-4	RB2
	Oct 28, 2002	1	1-5	RB2
	Sep 20, 2005	2	2-2	RB2
Rock Bass	Oct 02, 2001	1	1-1	

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 04, 1995	40	39-43	
	Sep 27, 1996	14	12-21	
	Oct 22, 1997	13	5-87	
	Oct 04, 1999	1	1-1	
	Oct 01, 2001	8	7-14	
	Oct 25, 2002	6	6-6	
	Jul 07, 2004	4	4-4	
	Sep 19, 2005	2	2-6	
Brook Trout >=200mm	Oct 04, 1995	7	7-7	BK2
	Oct 22, 1997	2	2-4	BK3
Brown Trout <200mm	Oct 04, 1995	125	83-180	
	Sep 27, 1996	810	431-1189	
	Oct 22, 1997	241	171-311	
	Oct 23, 1998	94	81-110	
	Oct 04, 1999	27	24-34	

Brown Trout <200mm	Oct 02, 2000	21	16-36	
	Oct 01, 2001	53	28-121	
	Oct 25, 2002	31	25-44	
	Jul 07, 2004	83	72-97	
	Sep 19, 2005	597	478-716	
Brown Trout >=200mm	Oct 04, 1995	28	28-28	BR1
	Sep 27, 1996	11	10-16	BR2
	Oct 22, 1997	46	42-53	BR1
	Oct 23, 1998	152	117-187	BR1
	Oct 04, 1999	68	67-71	BR1
	Oct 02, 2000	37	36-40	BR1
	Oct 01, 2001	58	58-58	BR1
	Oct 25, 2002	38	38-39	BR1
	Jul 07, 2004	9	9-9	BR2
	Sep 19, 2005	2	2-3	BR3
Hatchery Brown Trout >=200mm	Sep 19, 2005	1	1-2	

Hatchery Rainbow Trout >=200mm	Sep 19, 2005	2	2-2	
Rainbow Trout <200mm	Sep 27, 1996	1	1-5	
	Oct 23, 1998	7	7-7	
	Oct 04, 1999	4	4-5	
	Oct 02, 2000	2	2-6	
	Sep 19, 2005	27	21-42	
Rainbow Trout >=200mm	Oct 23, 1998	1	1-2	RB2
	Oct 02, 2000	1	1-2	RB2
	Oct 01, 2001	1	1-1	RB2
	Sep 19, 2005	2	2-2	RB2

Site 1853

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 22, 1998	16	13-26	
	Oct 04, 1999	18	18-20	
	Oct 03, 2000	11	12-15	
	Oct 02, 2001	17	17-17	

Brook Trout <200mm	Sep 23, 2002	18	18-20	
	Jul 07, 2004	24	24-25	
	Sep 19, 2005	104	92-118	
Brook Trout >=200mm	Oct 22, 1998	1	1-1	BK3
	Oct 04, 1999	3	3-4	BK3
	Oct 03, 2000	6	6-9	BK2
	Oct 02, 2001	10	8-19	BK2
	Sep 23, 2002	3	3-4	BK3
	Jul 07, 2004	1	1-1	BK3
	Sep 19, 2005	5	5-6	BK3
Brown Trout <200mm	Oct 04, 1995	56	53-62	
	Oct 02, 1996	156	126-186	
	Oct 22, 1997	263	118-483	
	Oct 22, 1998	148	94-216	
	Oct 04, 1999	67	63-74	
	Oct 03, 2000	42	42-43	

Brown Trout <200mm	Oct 02, 2001	81	72-93	
	Sep 23, 2002	68	48-101	
	Jul 07, 2004	40	33-53	
	Sep 19, 2005	237	168-306	
Brown Trout >=200mm	Oct 04, 1995	27	27-28	BR2
	Oct 02, 1996	17	17-19	BR2
	Oct 22, 1997	44	39-54	BR1
	Oct 22, 1998	76	53-113	BR1
	Oct 04, 1999	51	50-54	BR1
	Oct 03, 2000	35	34-39	BR2
	Oct 02, 2001	53	53-55	BR1
	Sep 23, 2002	28	28-28	BR2
	Jul 07, 2004	18	18-18	BR2
	Sep 19, 2005	17	17-18	BR2
Hatchery Rainbow Trout >=200mm	Sep 19, 2005	2	2-2	
Rainbow Trout <200mm	Oct 04, 1995	25	24-29	

Rainbow Trout <200mm	Oct 02, 1996	28	28-29	
	Oct 22, 1997	2	2-2	
	Oct 22, 1998	1	1-2	
	Oct 04, 1999	44	34-63	
	Oct 03, 2000	118	93-146	
	Oct 02, 2001	43	43-45	
	Sep 23, 2002	5	5-7	
	Jul 07, 2004	7	6-13	
	Sep 19, 2005	28	29-35	
Rainbow Trout >=200mm	Oct 04, 1995	1	1-2	RB2
	Oct 02, 1996	5	3-24	RB2
	Oct 22, 1997	3	3-4	RB2
	Oct 22, 1998	4	4-7	RB2
	Oct 04, 1999	3	3-5	RB2
	Oct 03, 2000	26	24-32	RB1
	Oct 02, 2001	20	20-21	RB1

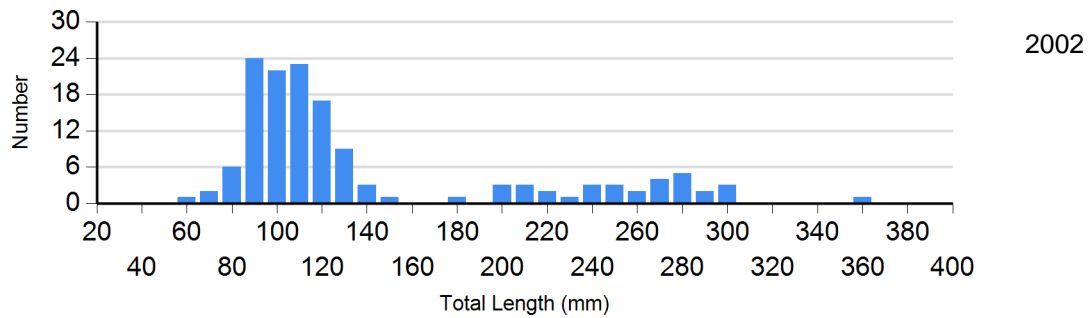
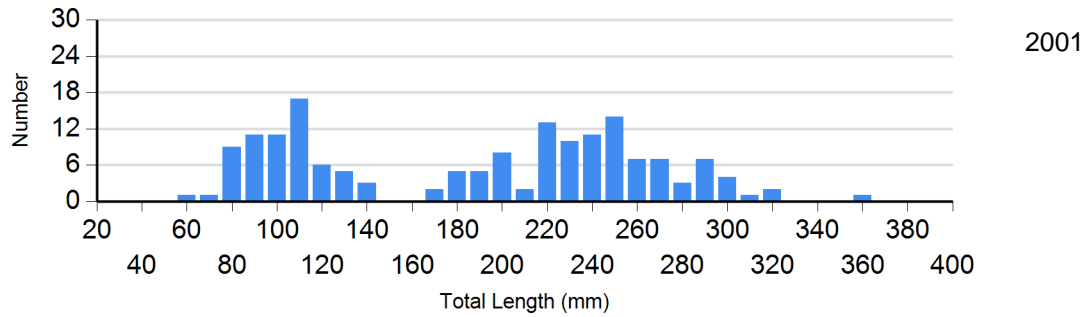
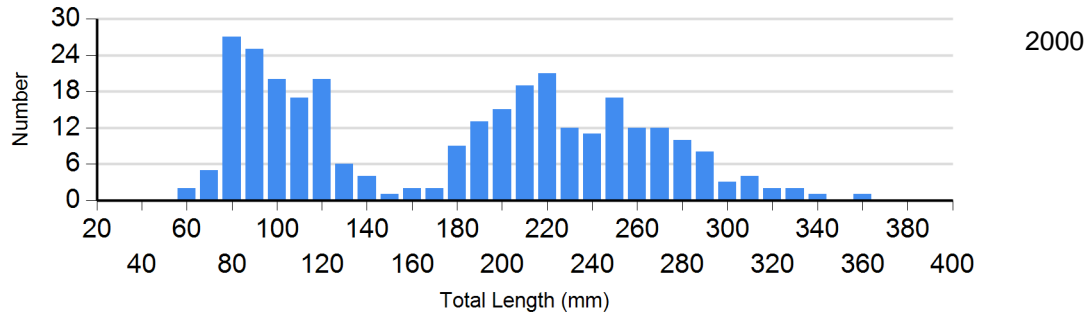
Rainbow Trout >=200mm	Sep 23, 2002	24	24-25	RB1
	Jul 07, 2004	6	6-7	RB2
	Sep 19, 2005	5	3-24	RB2

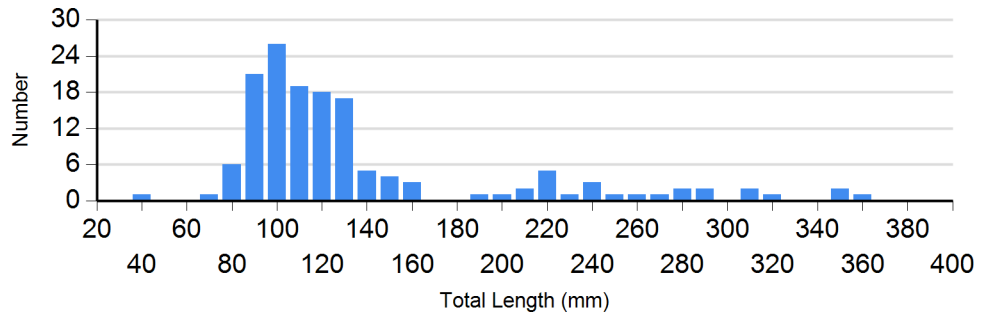
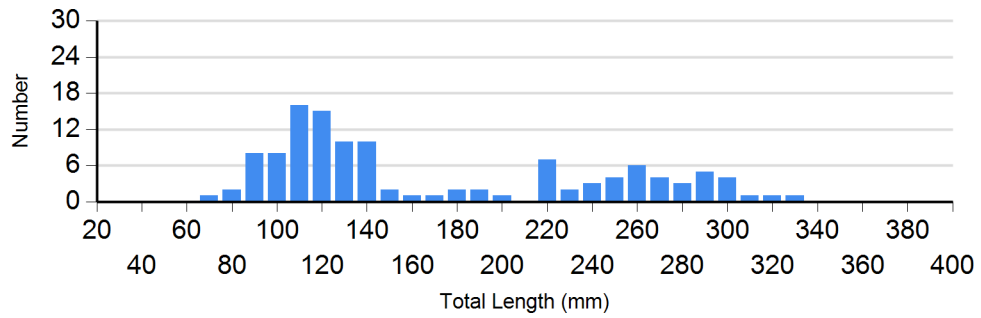
Length Frequency Distribution

Length frequency histogram of species sampled by year.

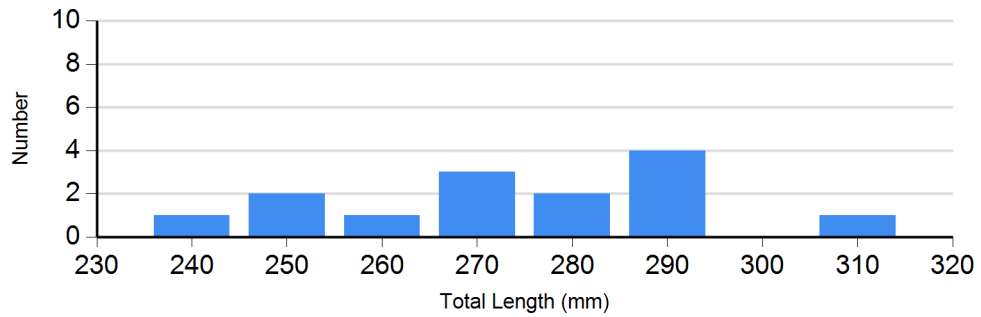
Site: 1363

Species: Brown Trout

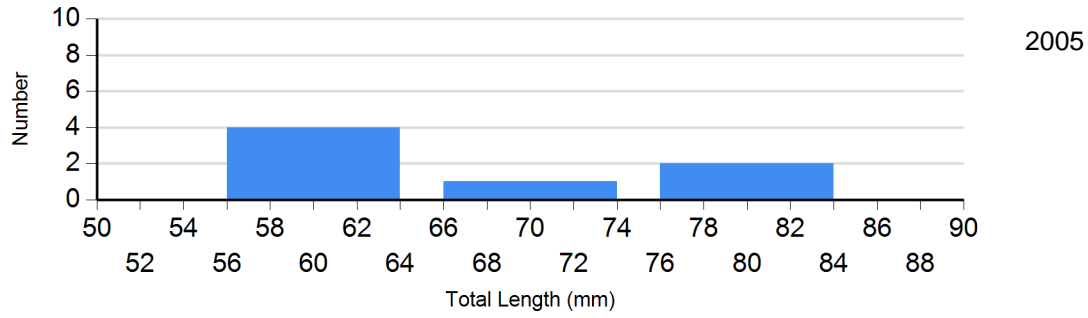




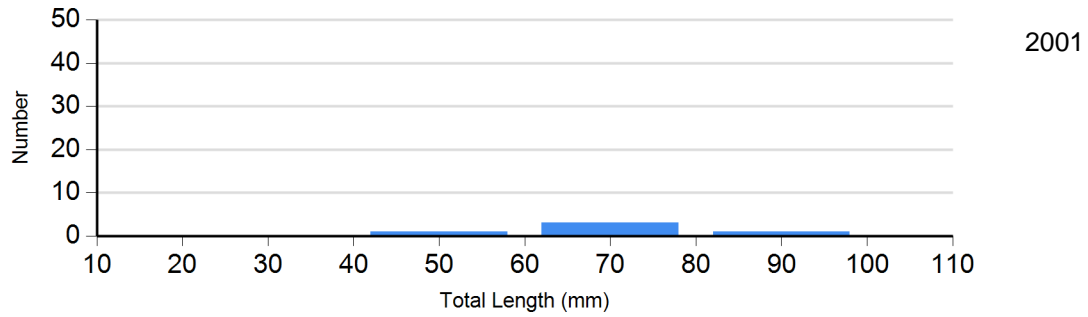
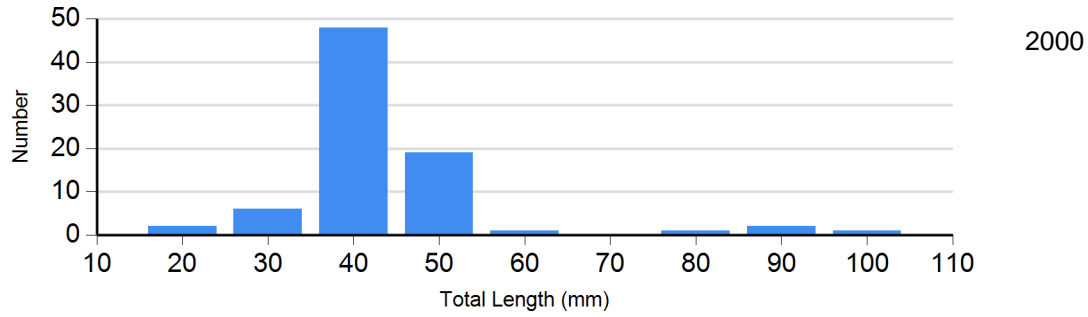
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Species: Hatchery Brown Trout

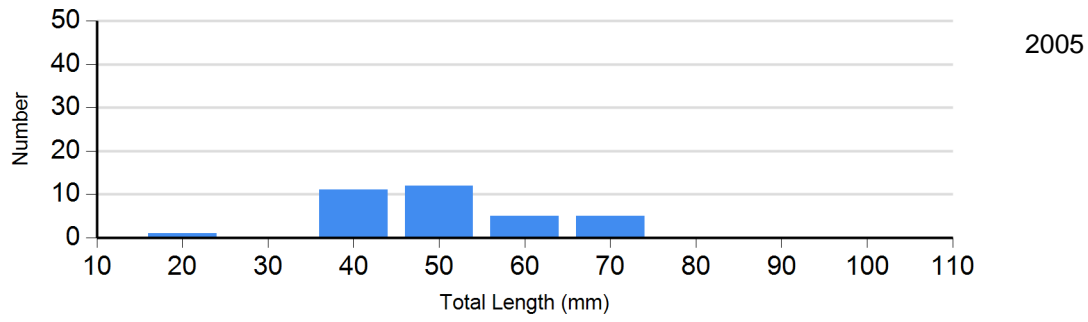
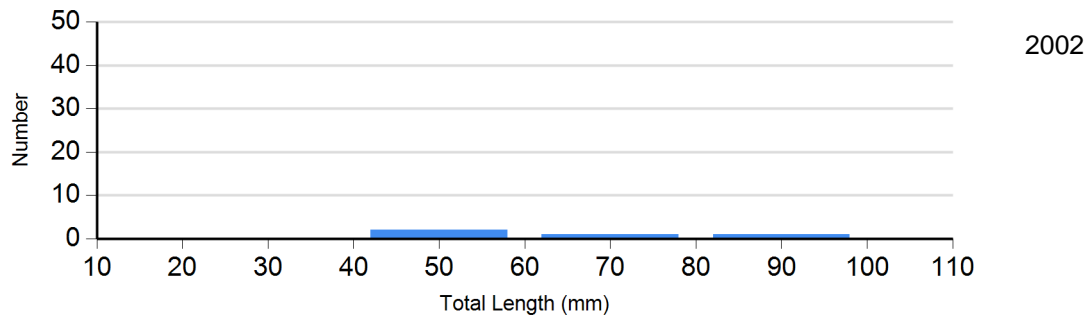


Site: 1363
Species: Largemouth Bass

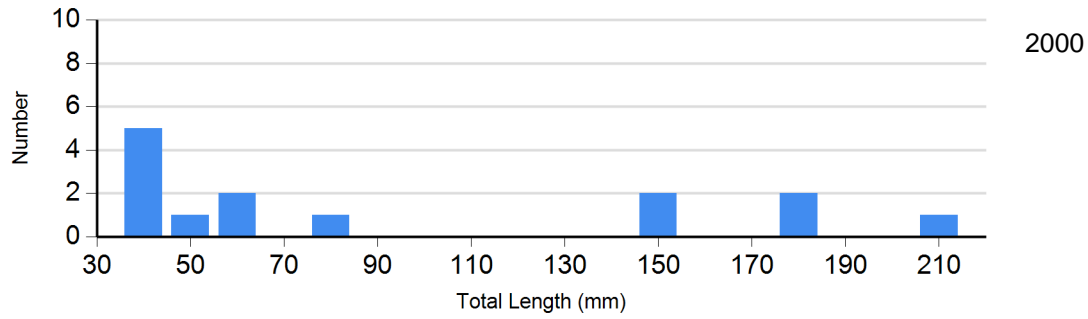


Site: 1363
Species: Longnose Dace

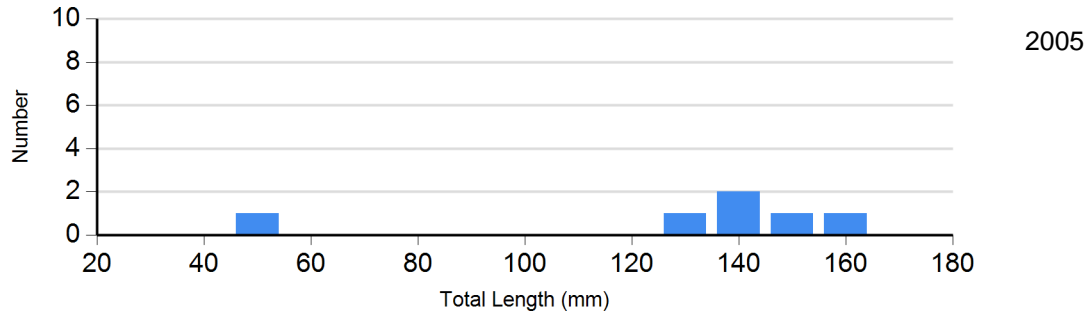
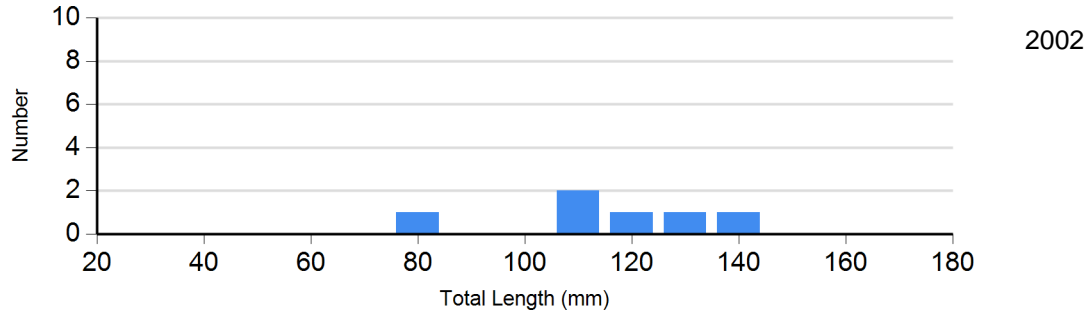
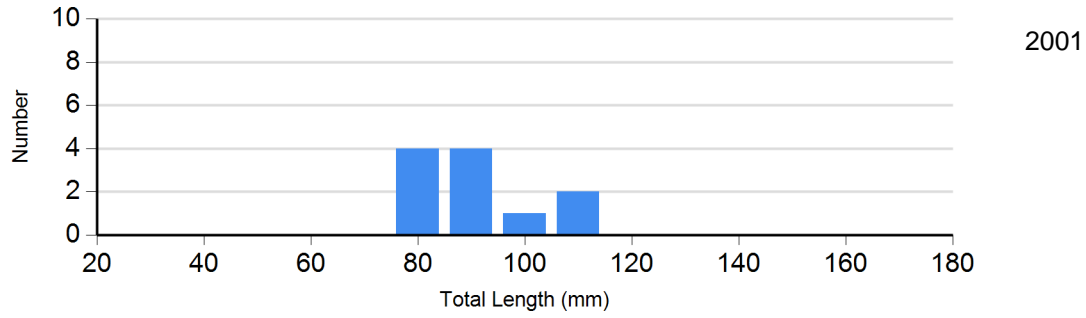




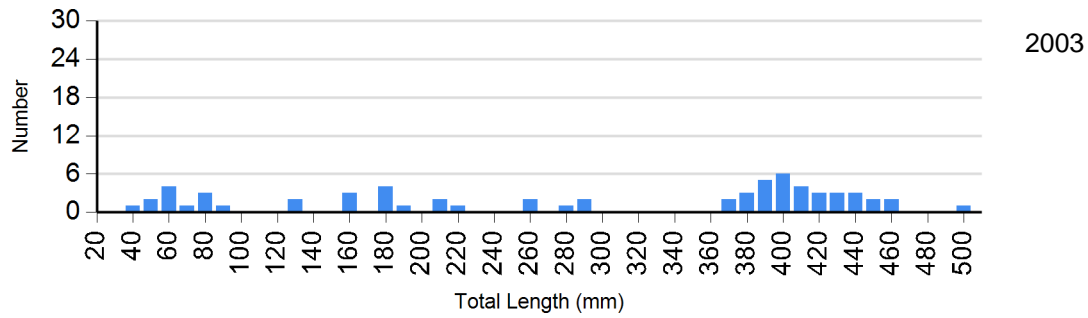
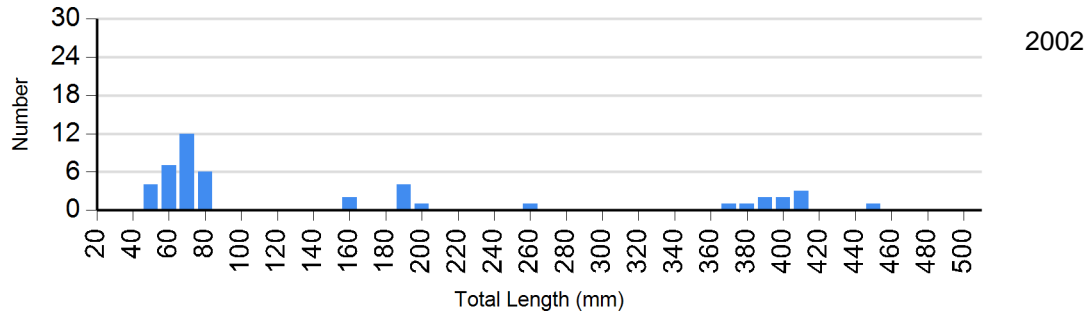
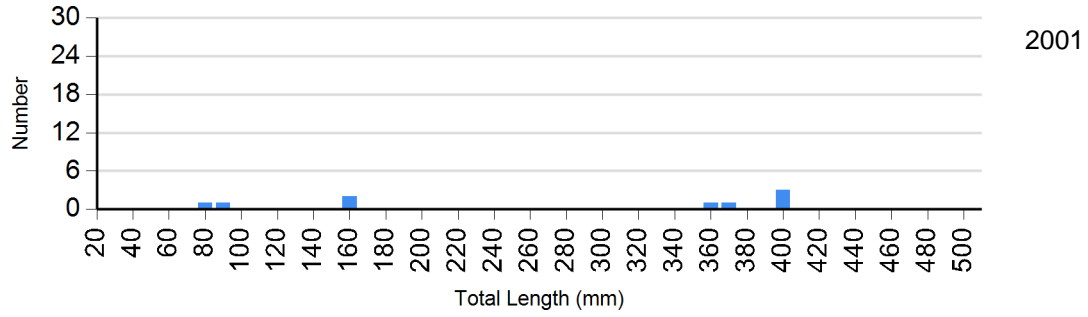
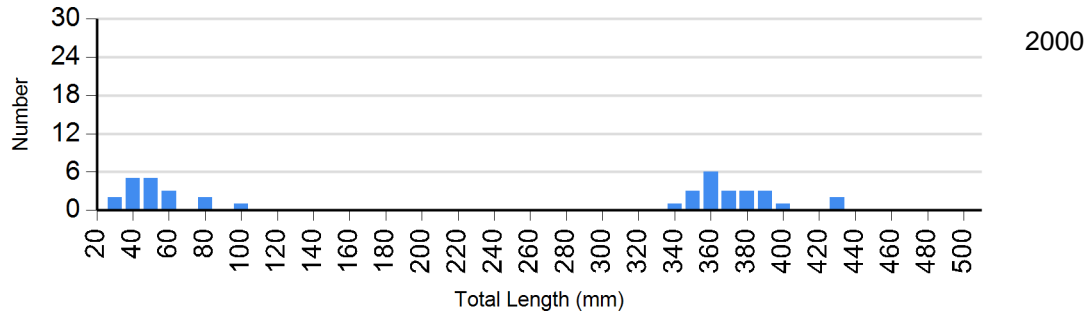
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Species: Mountain Sucker

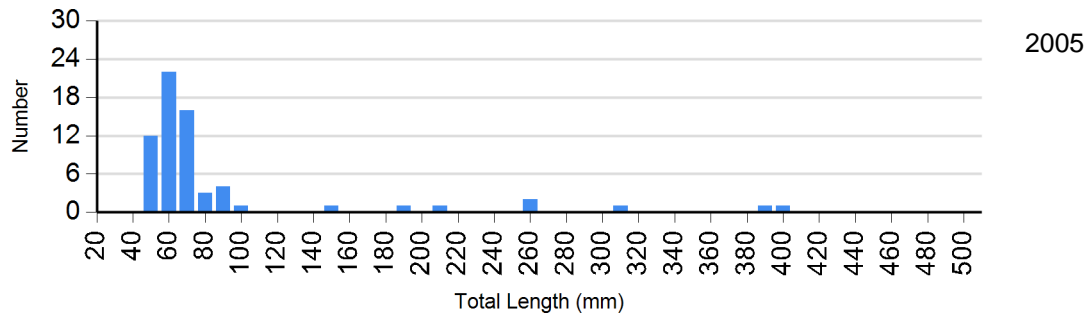


Site: 1363
Species: Rock Bass

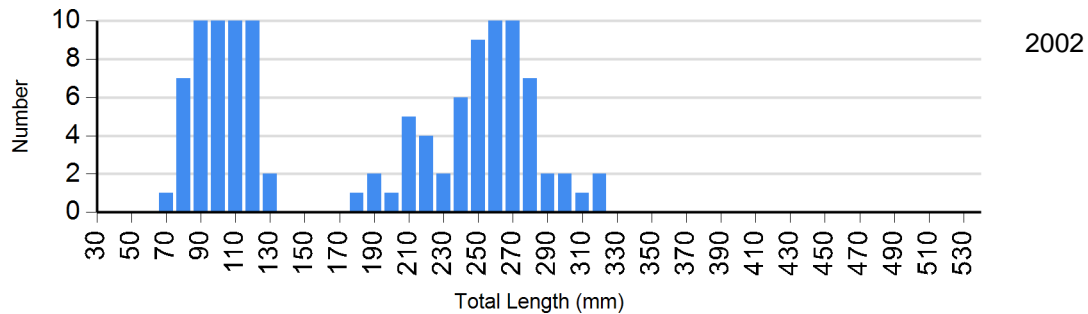
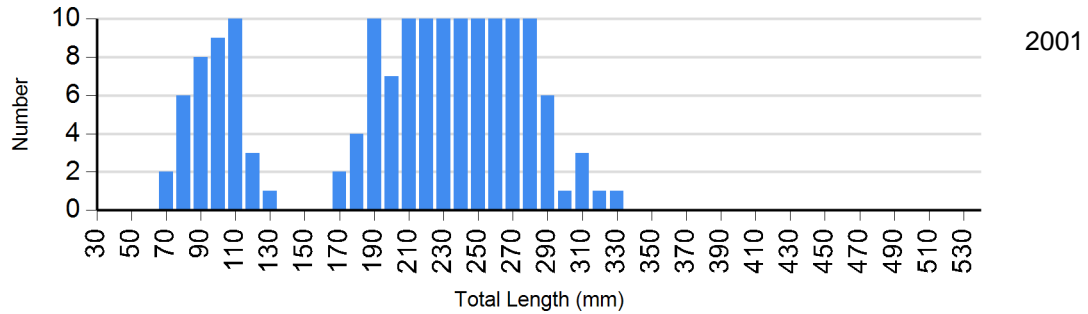
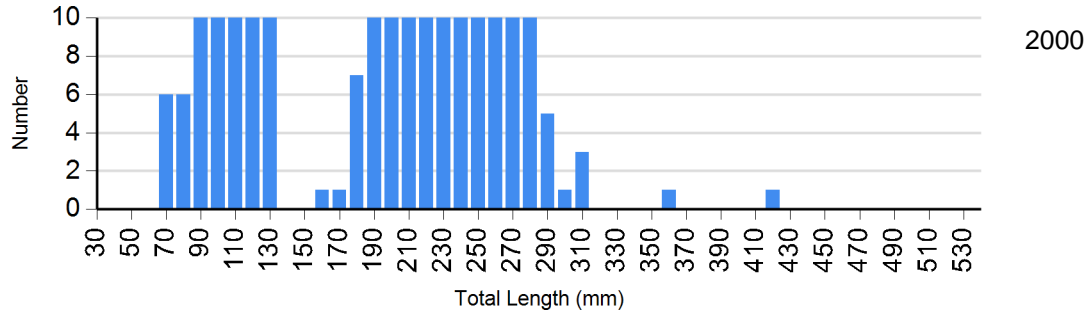


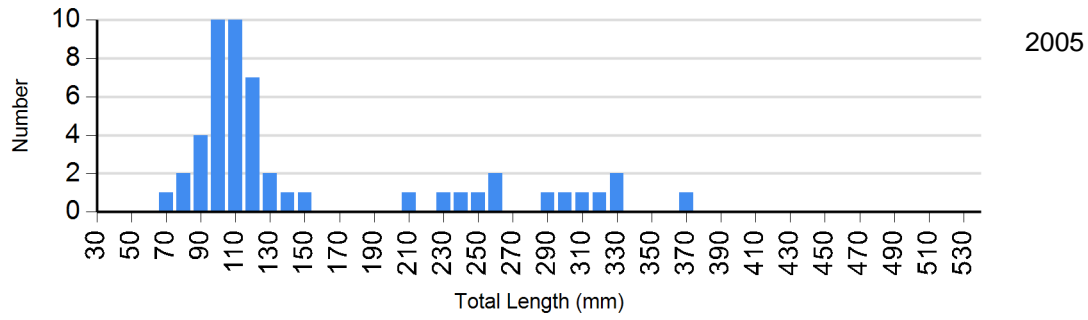
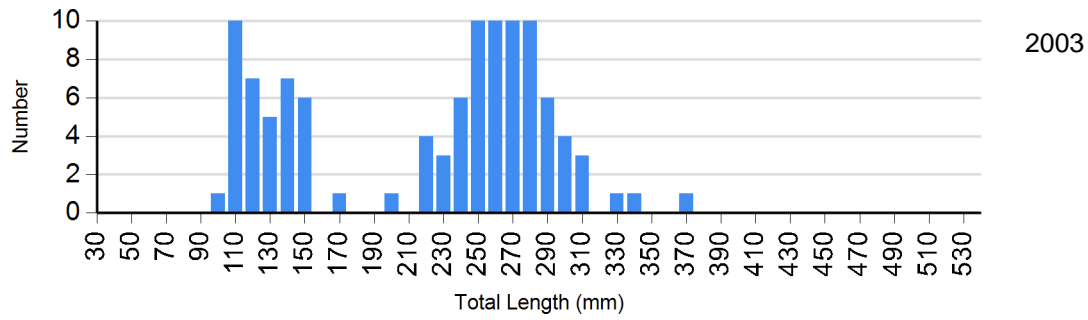
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Species: White Sucker



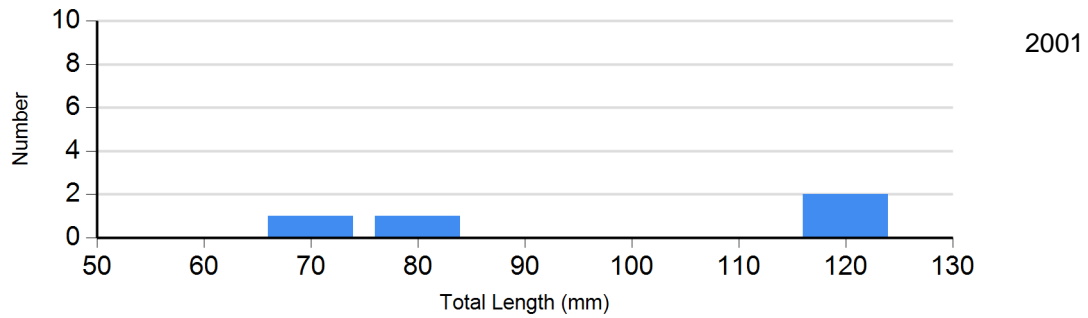
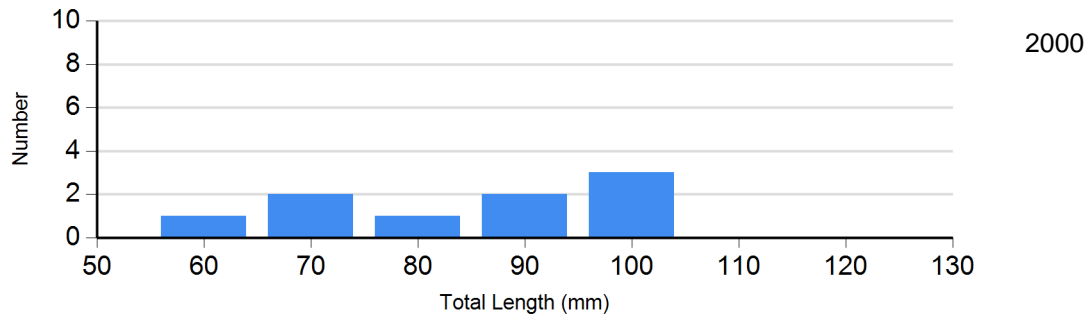


Site: 1383
Species: Brown Trout

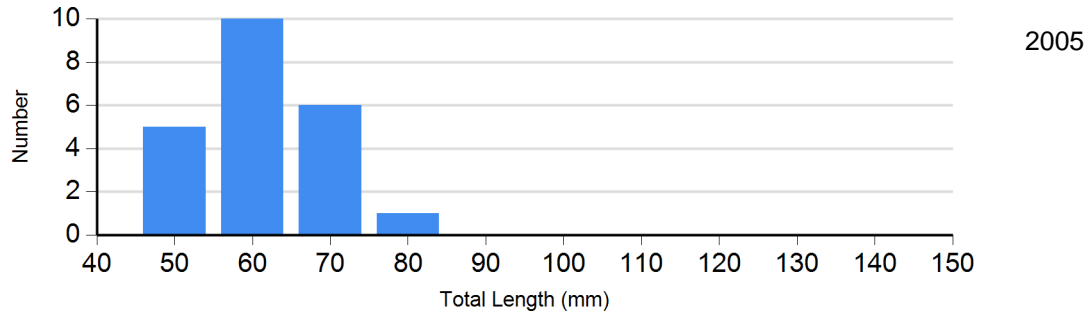
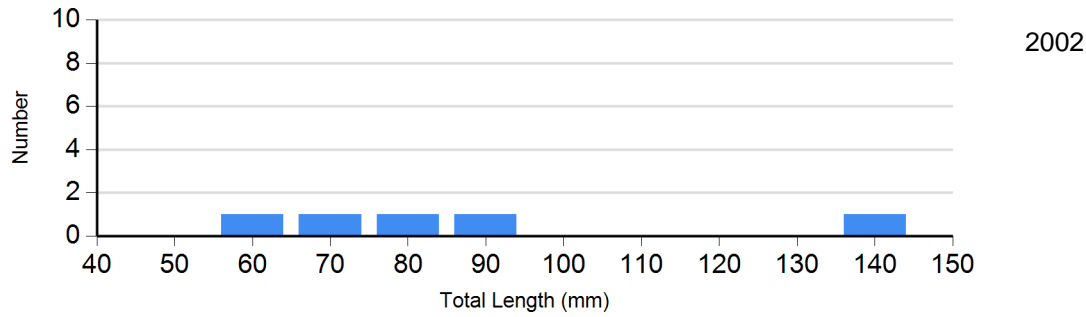
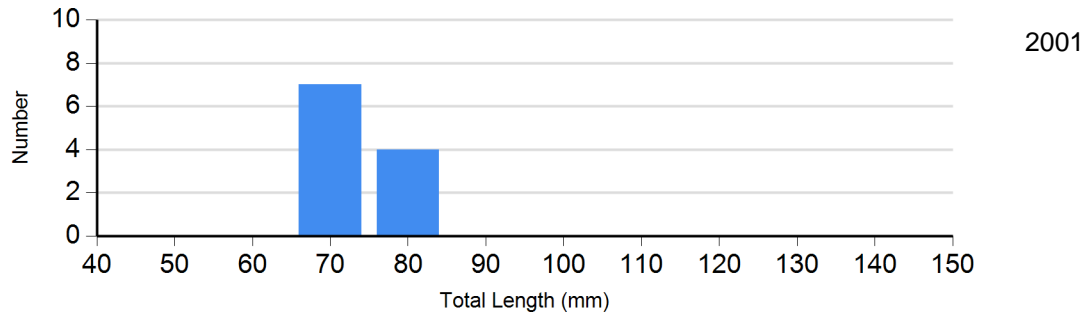




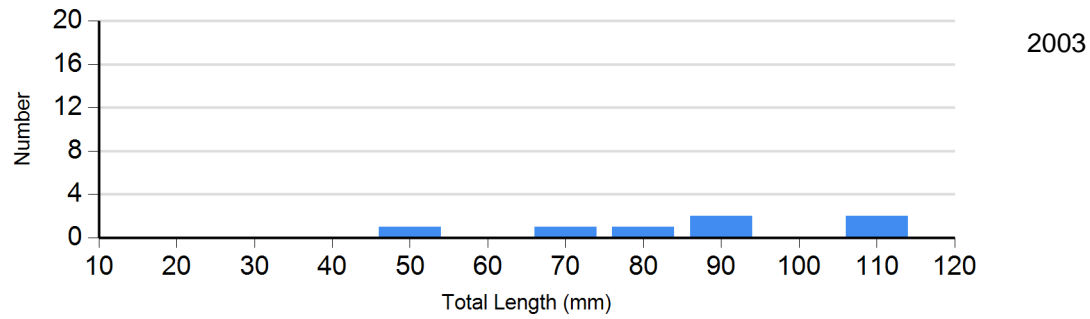
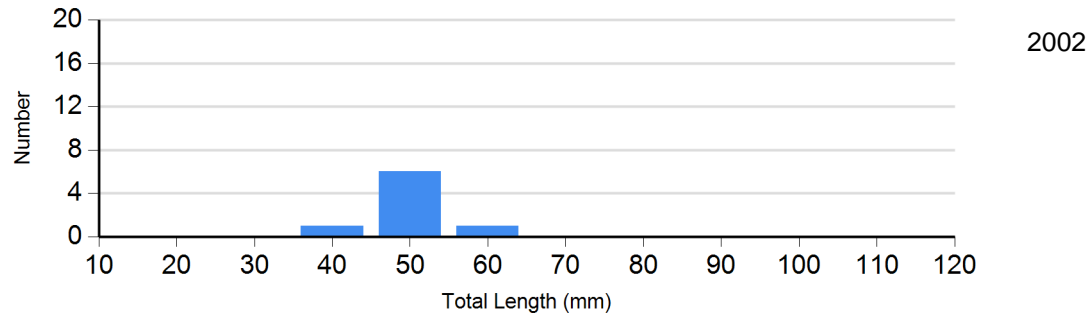
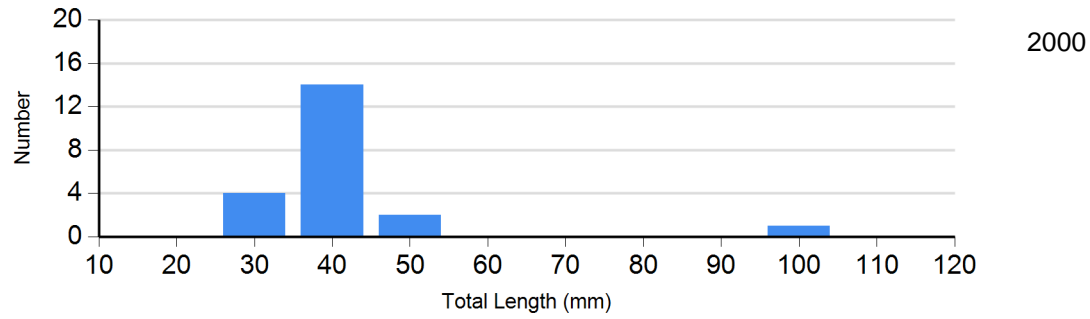
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Species: Green Sunfish



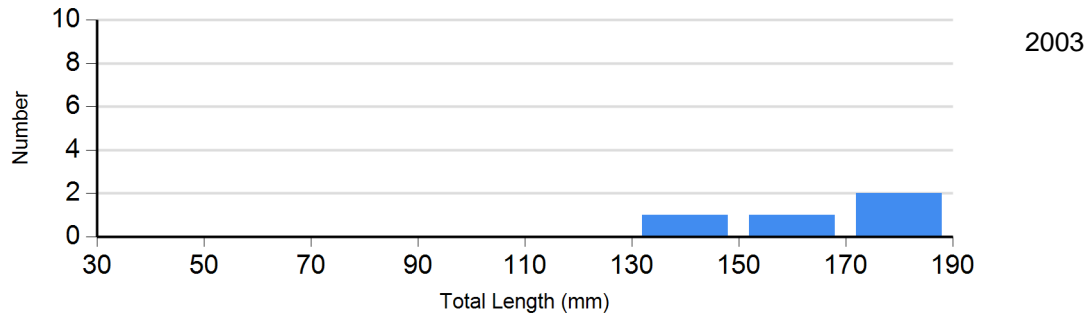
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Species: Largemouth Bass



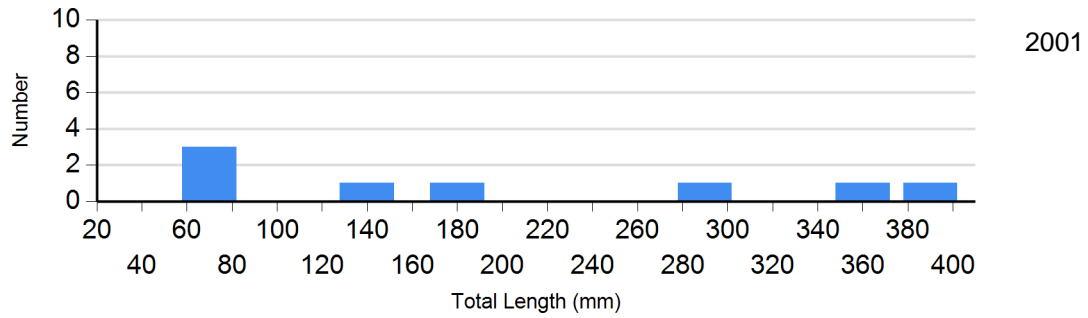
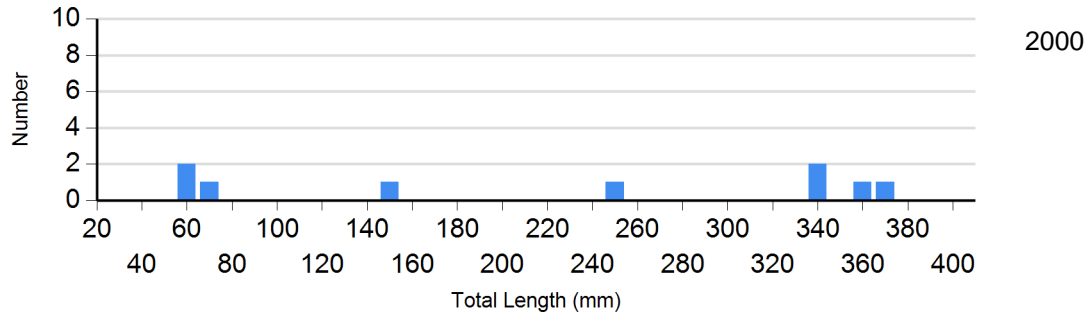
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Species: Longnose Dace

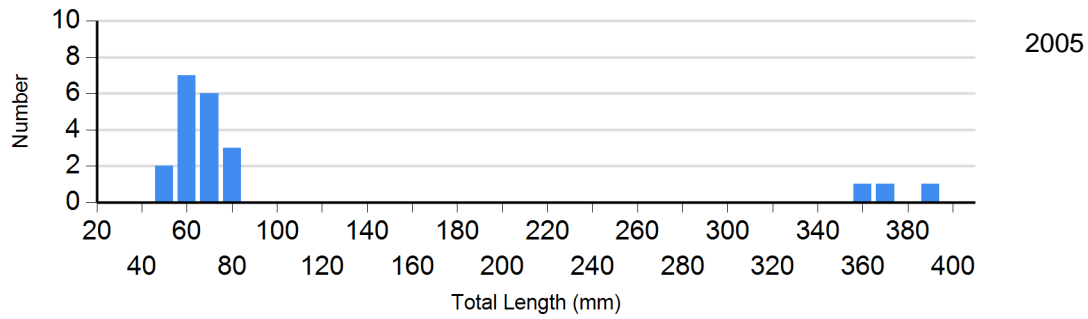
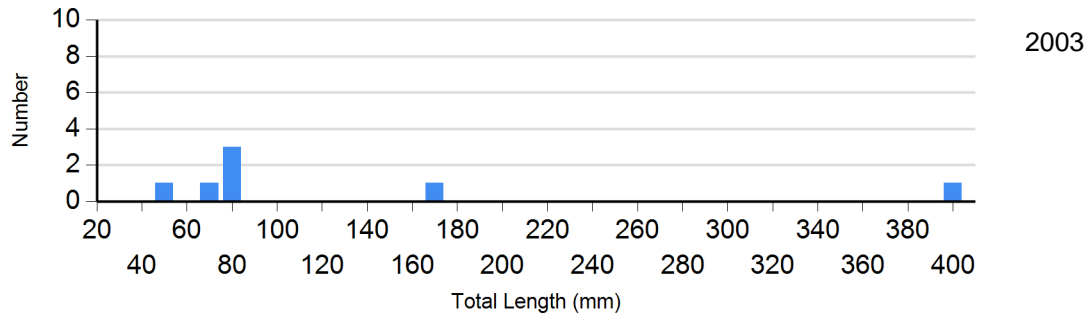
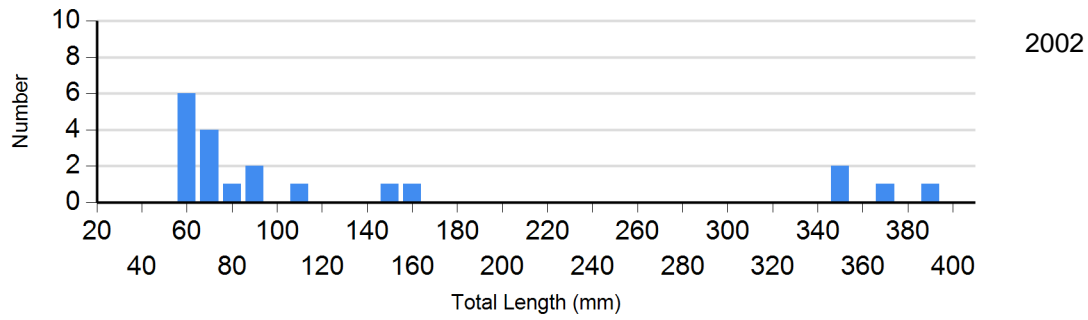


Site: 1383
Species: Rock Bass

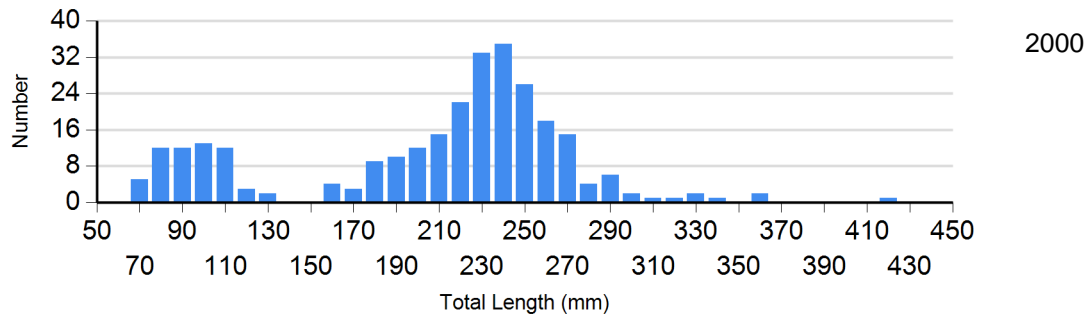


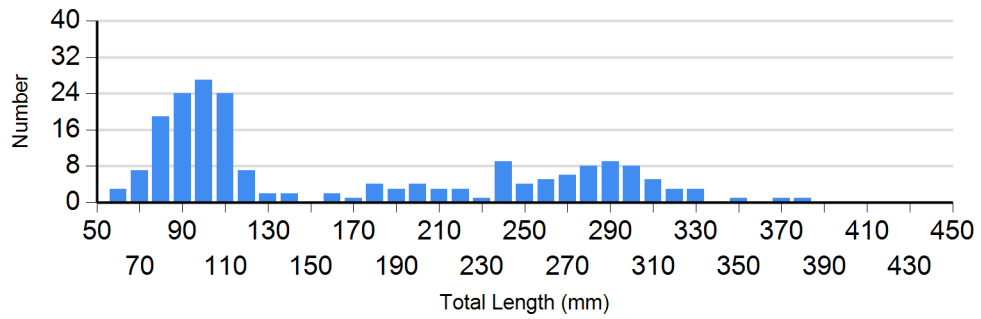
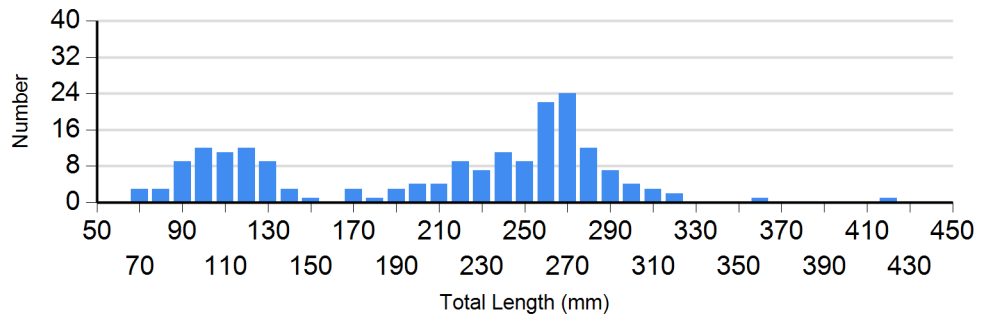
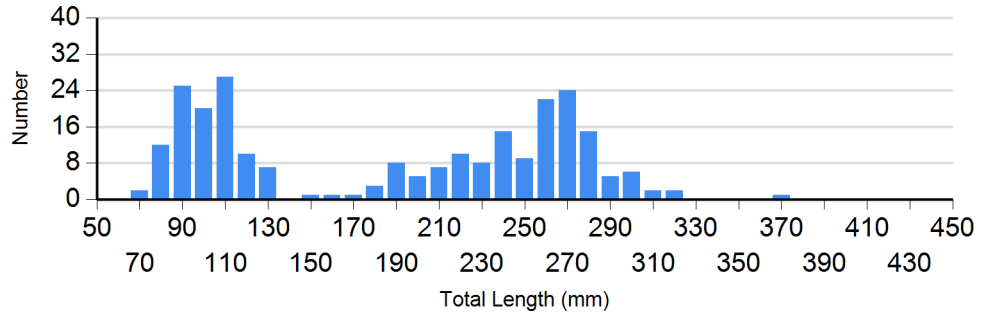
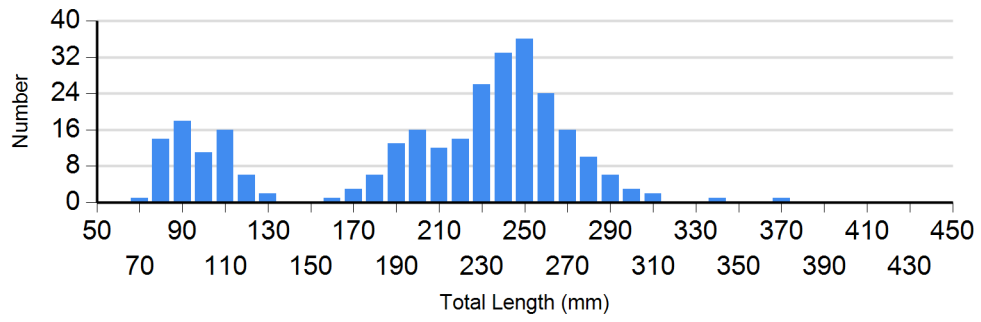
Site: 1383
Species: White Sucker



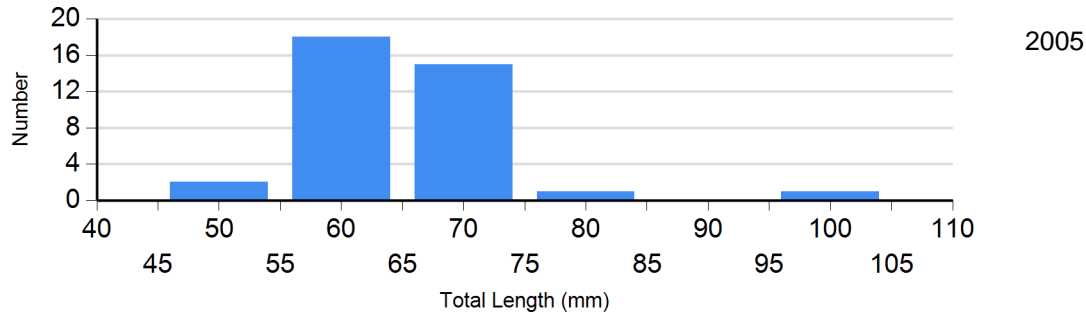


Site: 1393
Species: Brown Trout

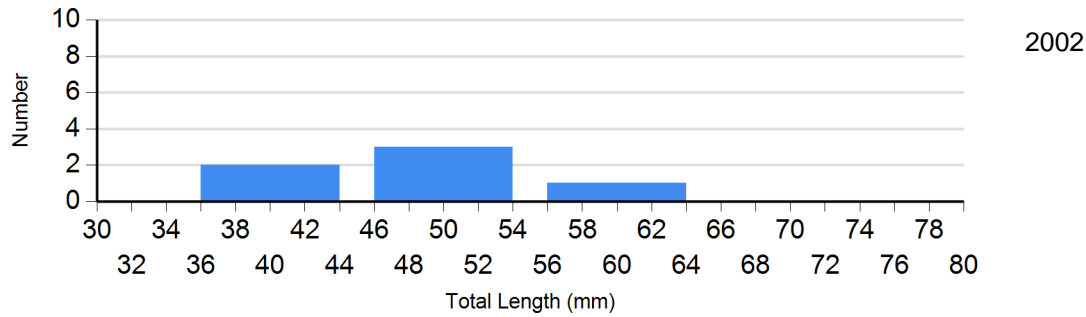
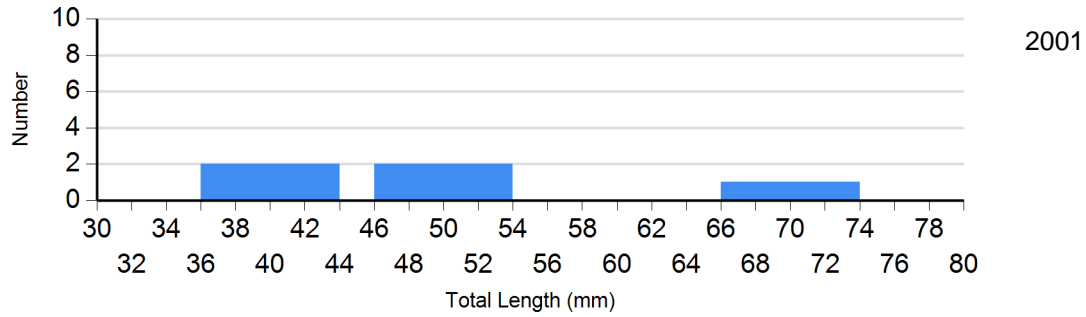


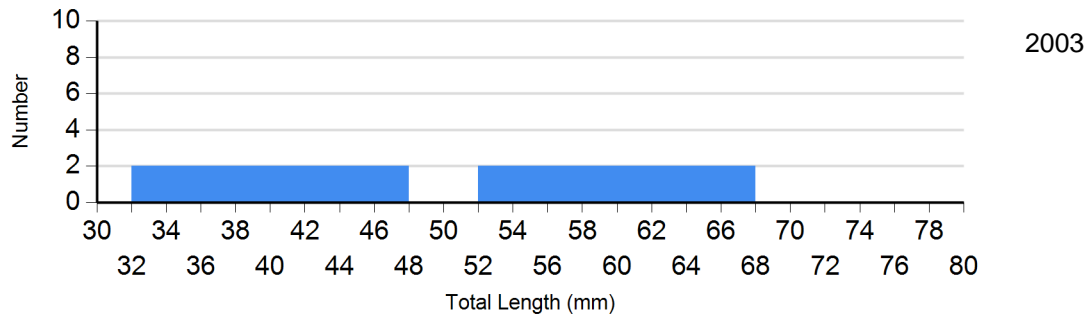


Site: 1393
Species: Largemouth Bass

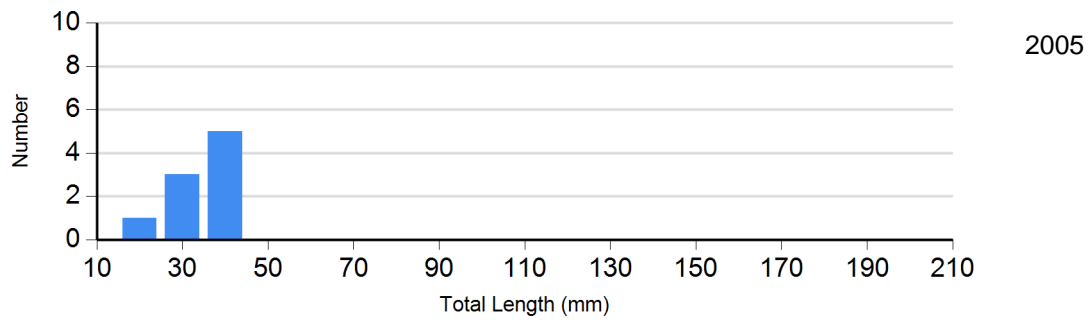
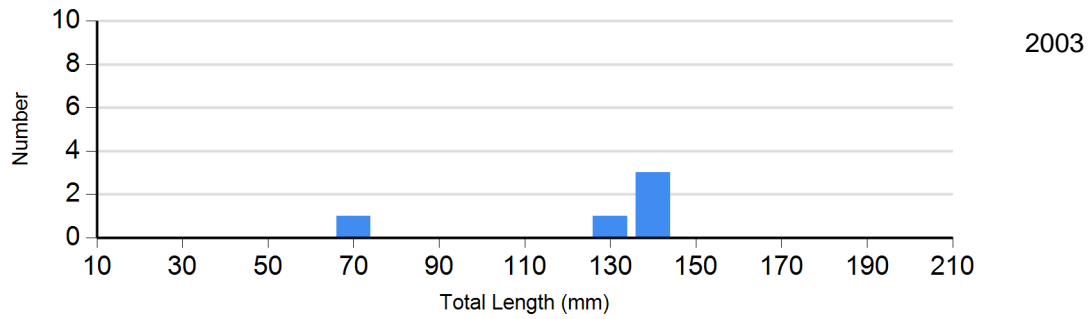
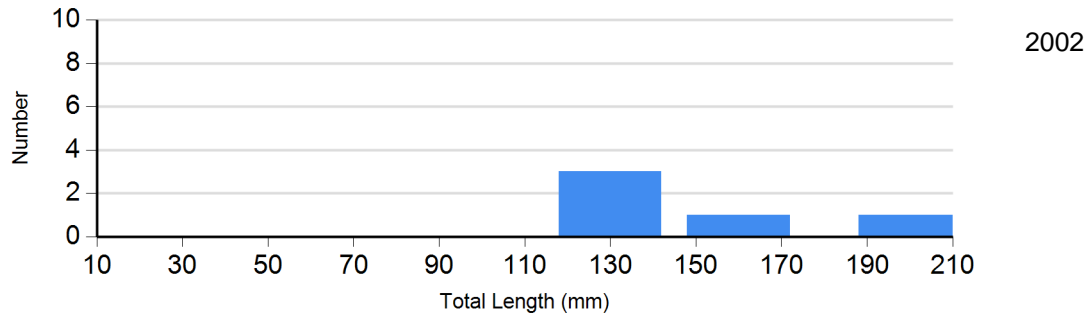


Site: 1393
Species: Longnose Dace

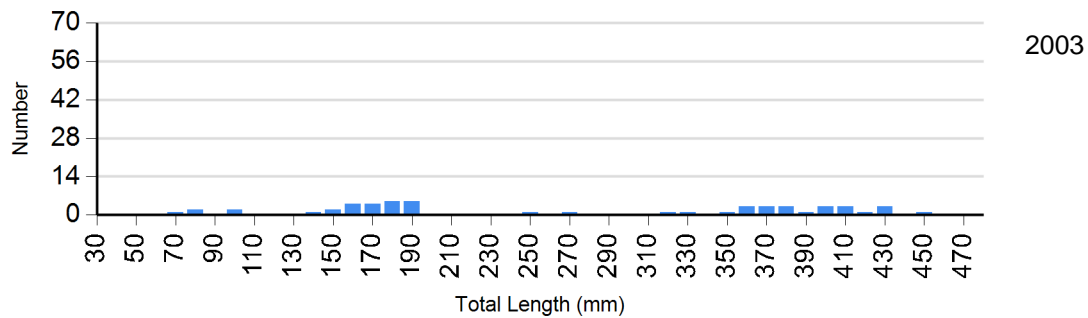
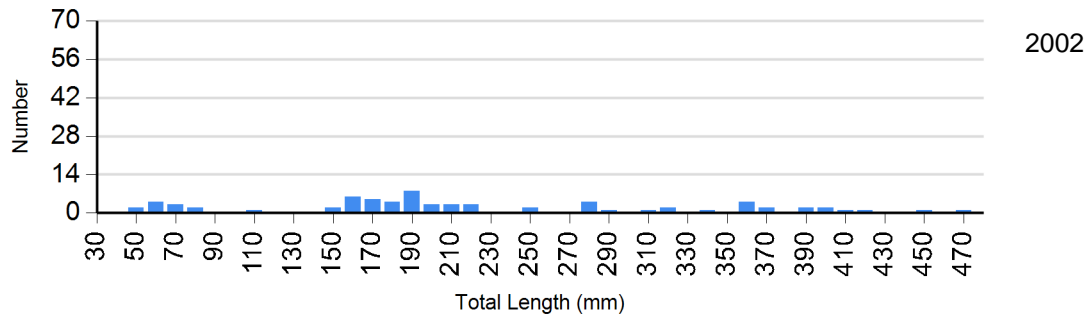
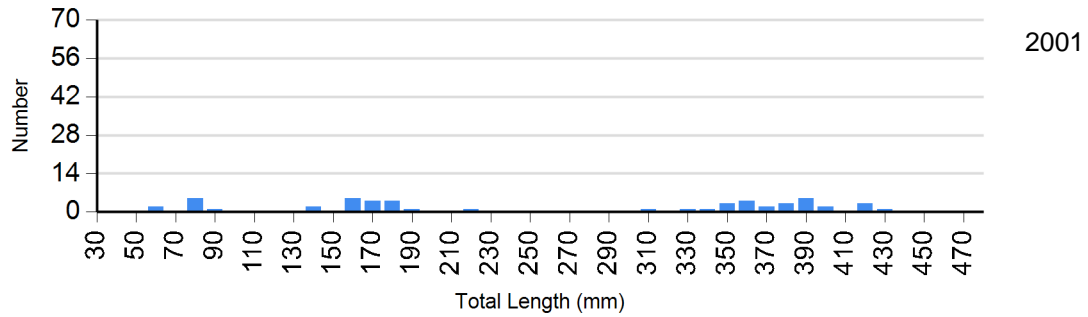
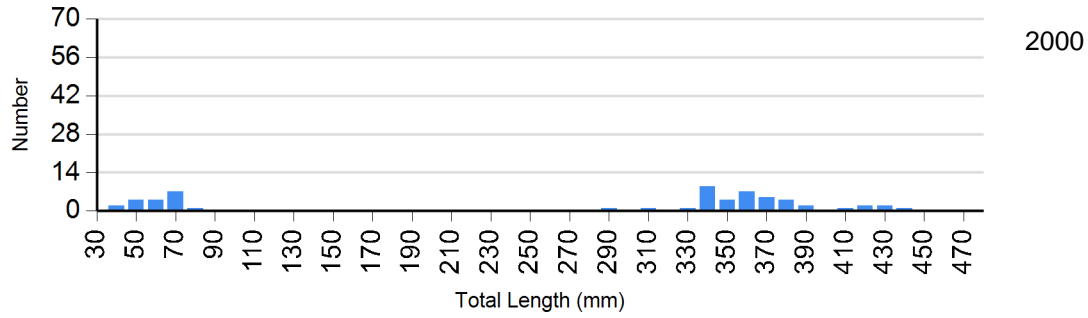


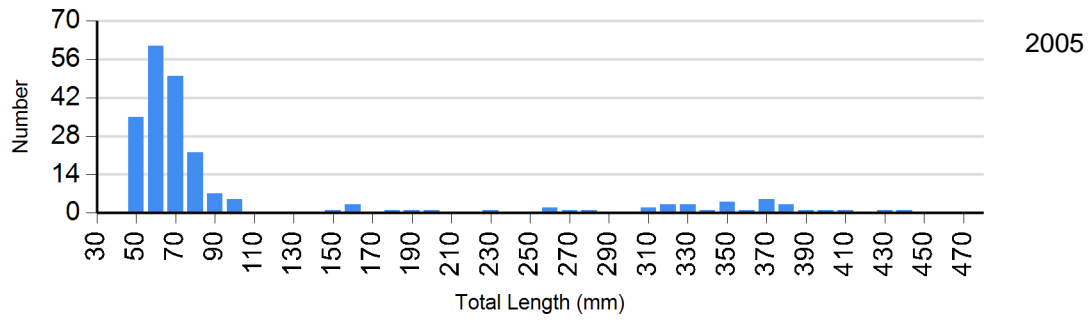


Site: 1393
Species: Rock Bass

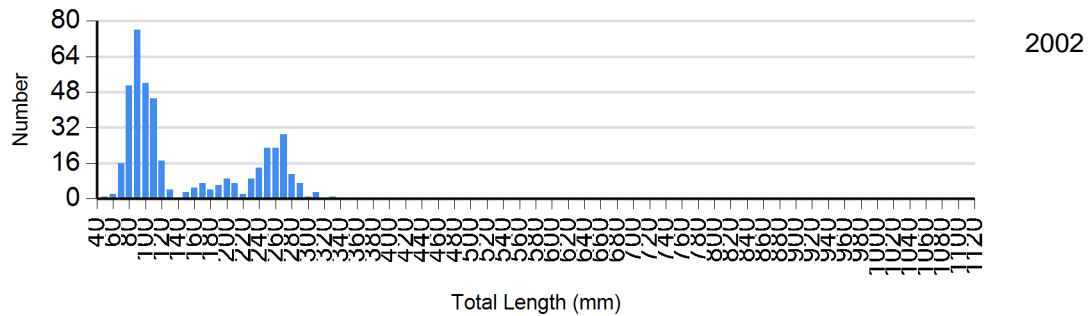
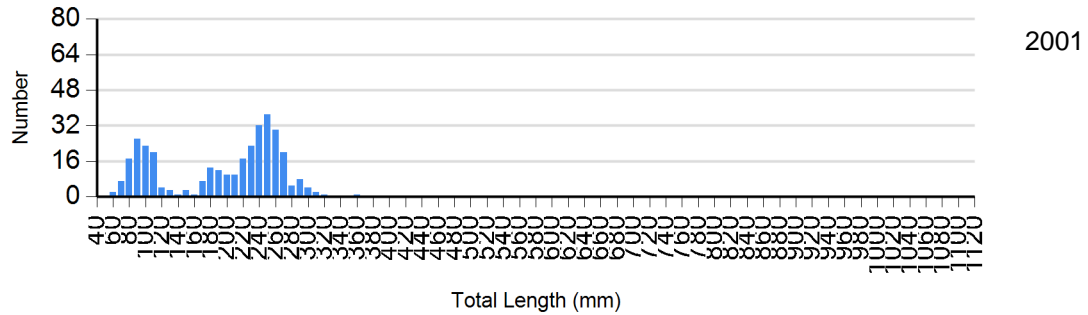
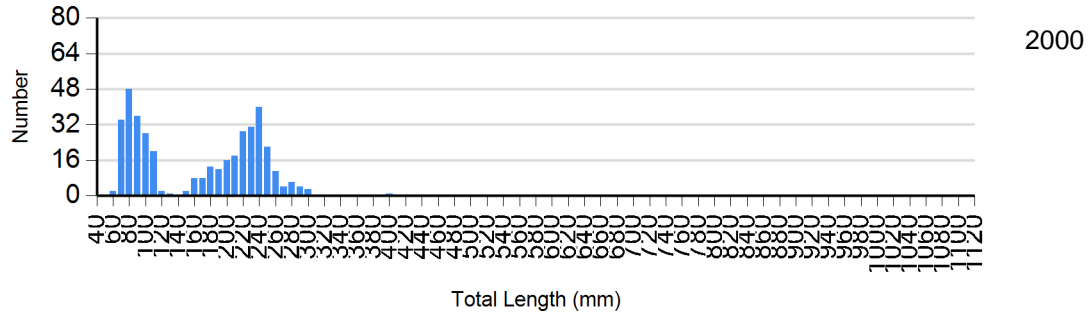


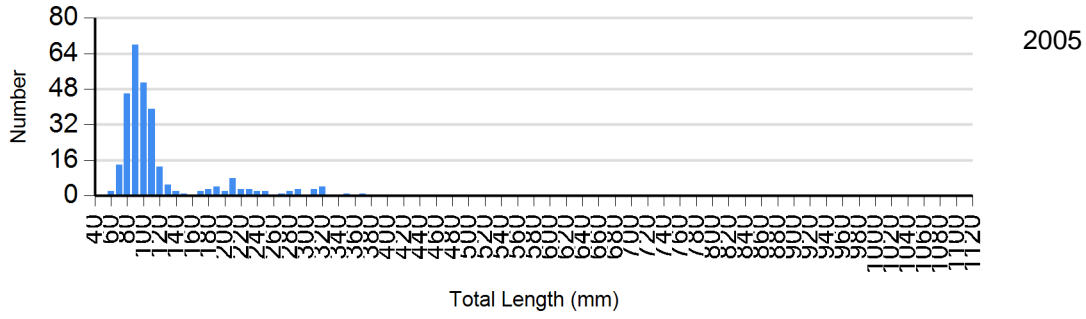
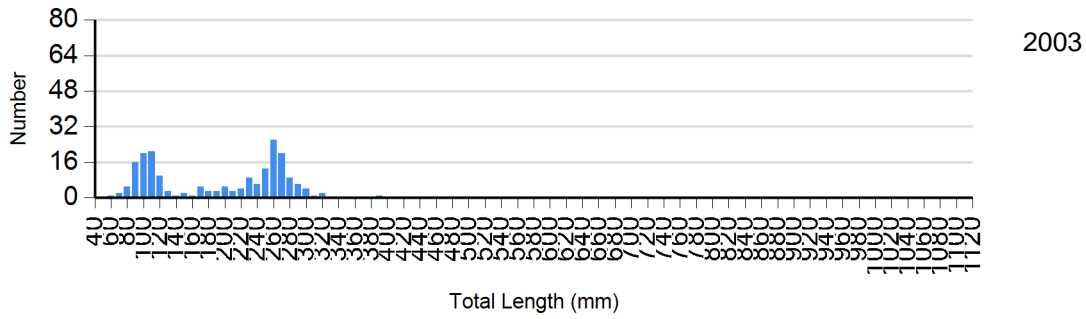
Site: 1393
Species: White Sucker



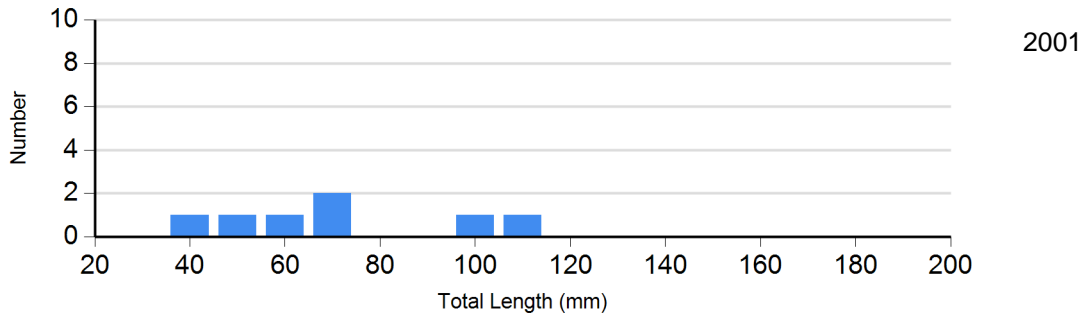
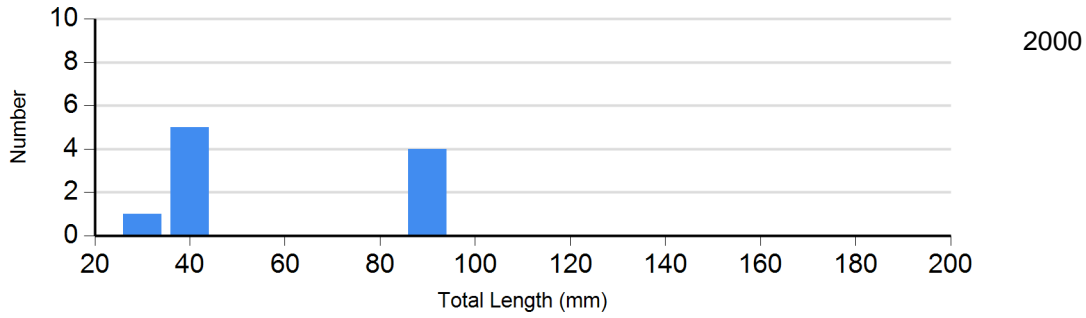


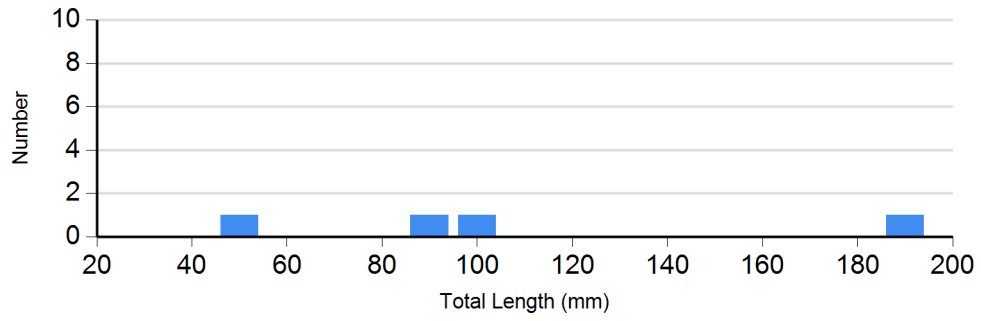
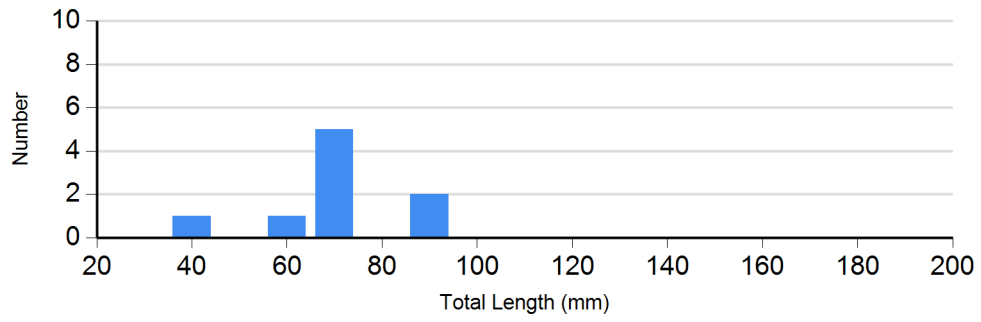
Site: 1412
Species: Brown Trout



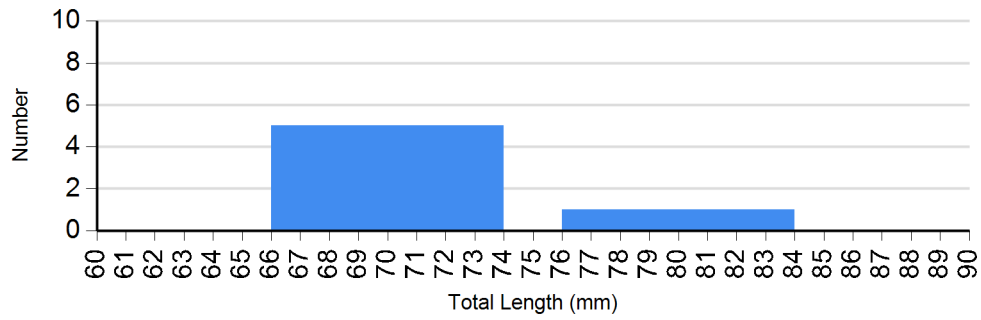


Site: 1412
Species: Longnose Dace

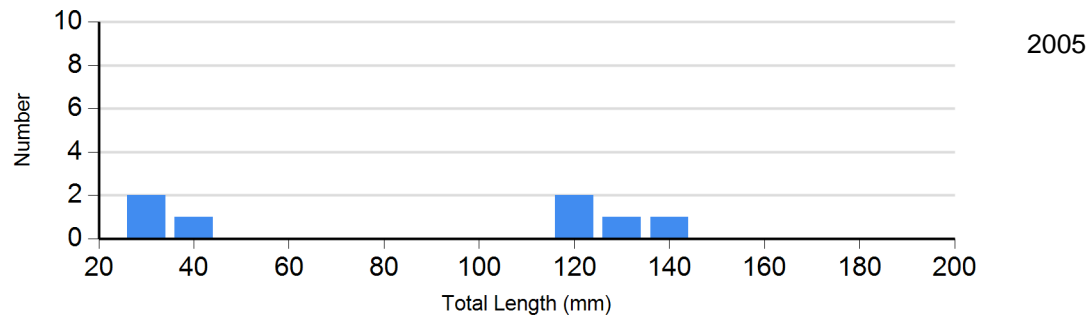
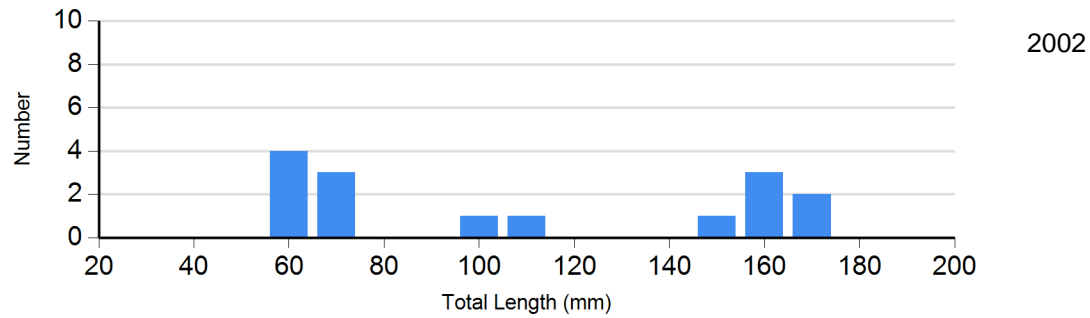
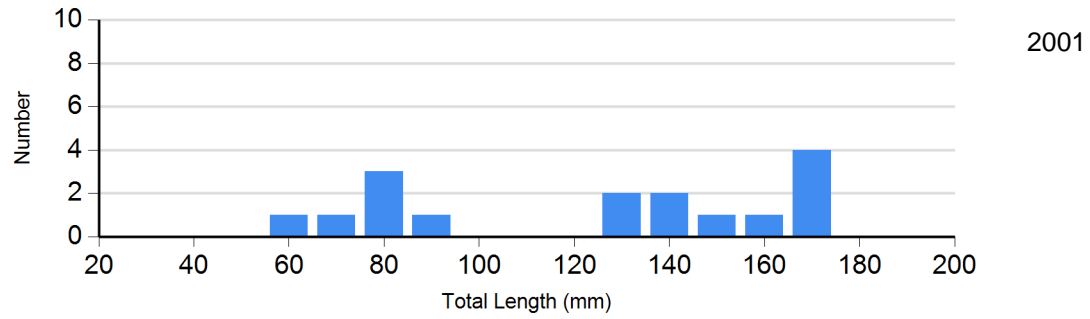




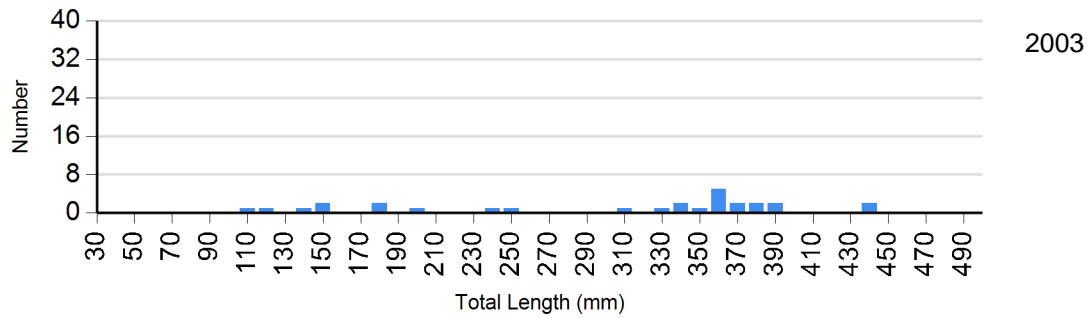
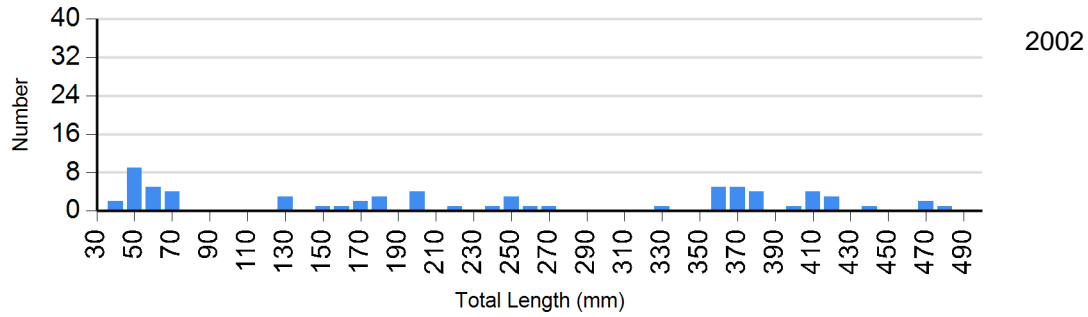
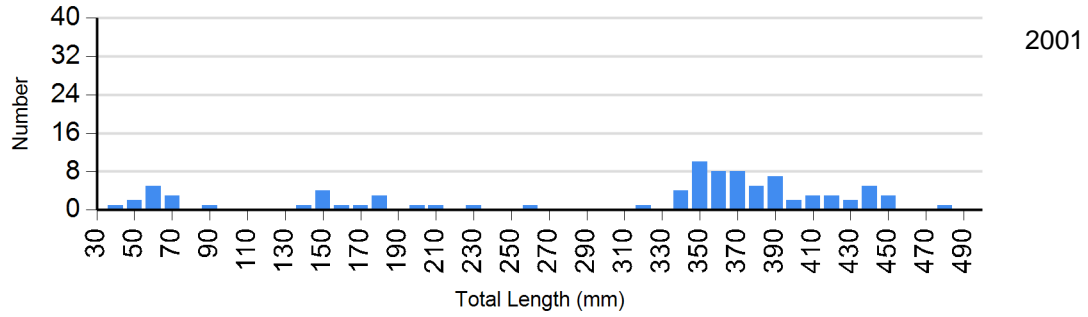
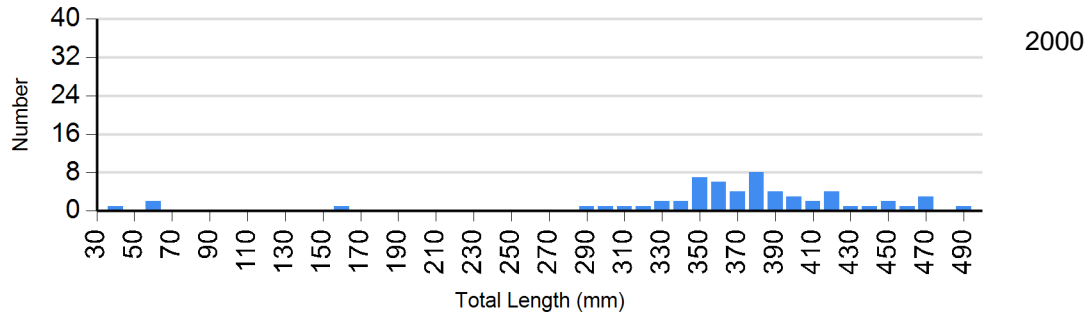
Site: 1412
Species: Mountain Sucker

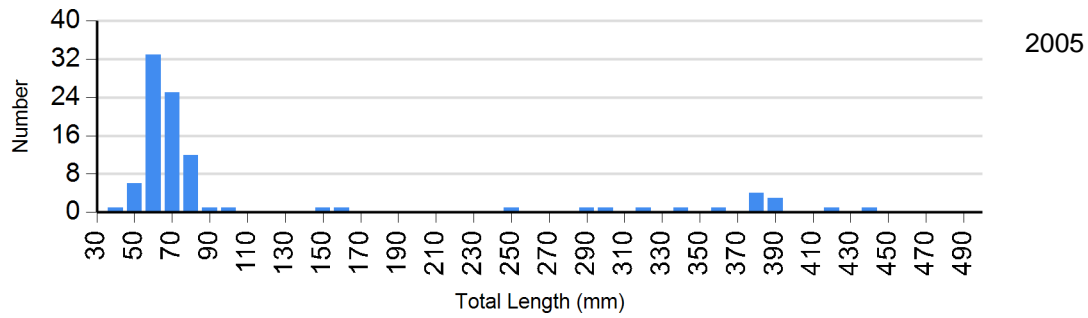


Site: 1412
Species: Rock Bass

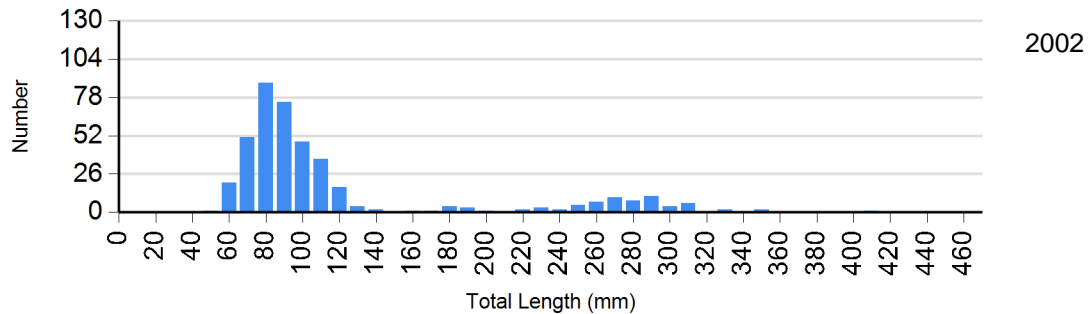
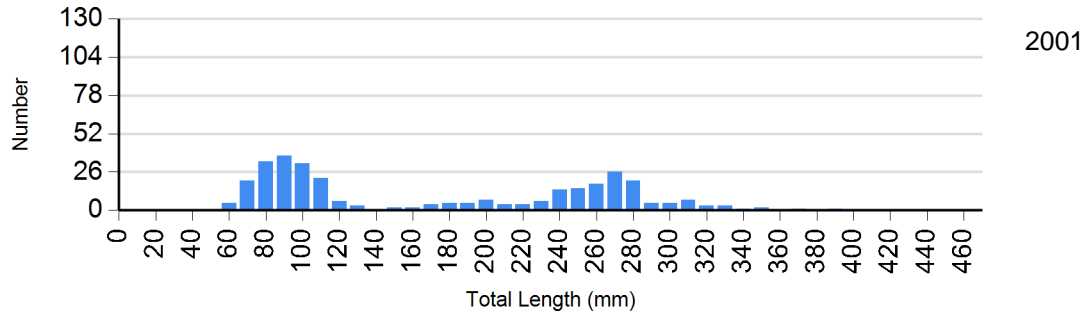
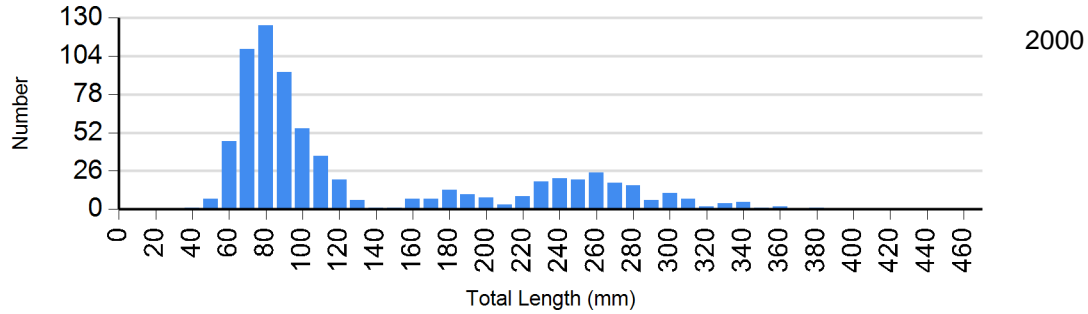


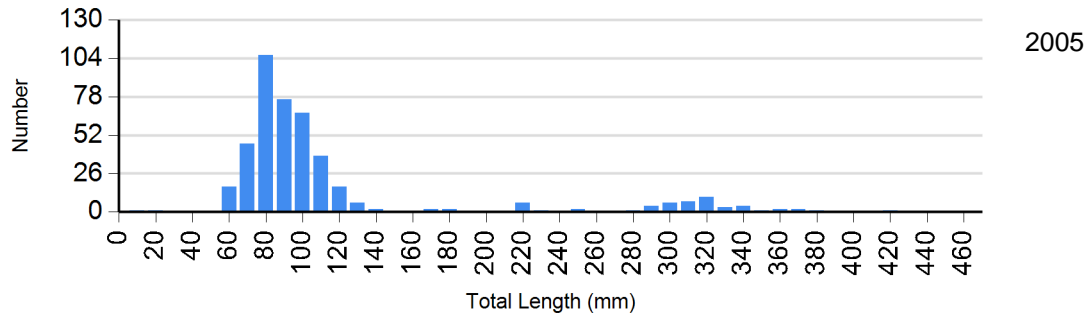
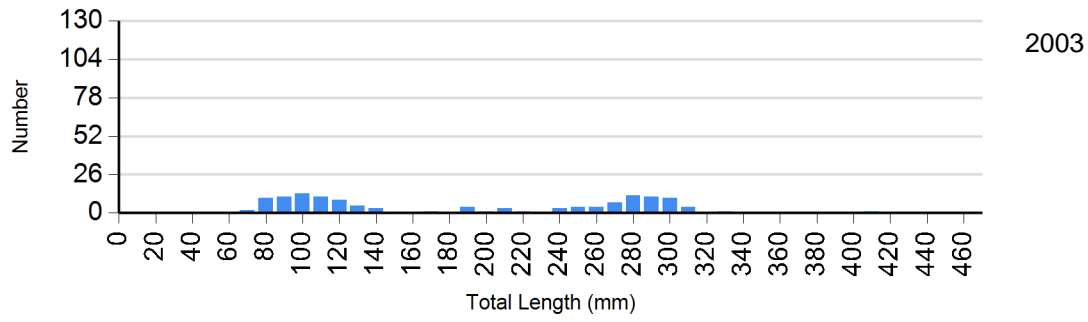
Site: 1412
Species: White Sucker



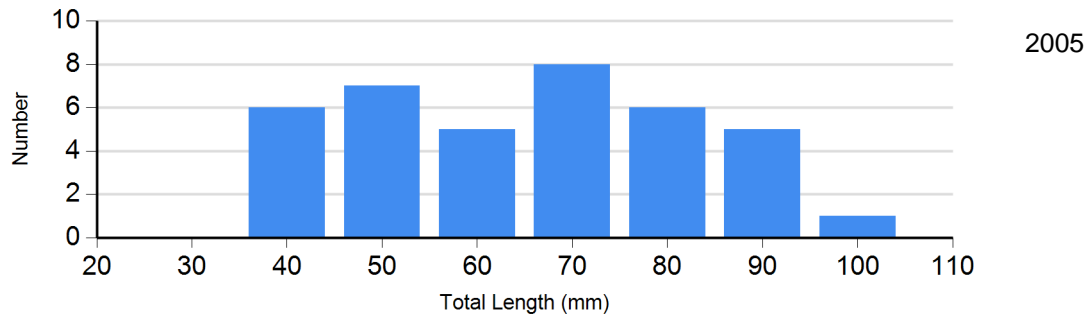
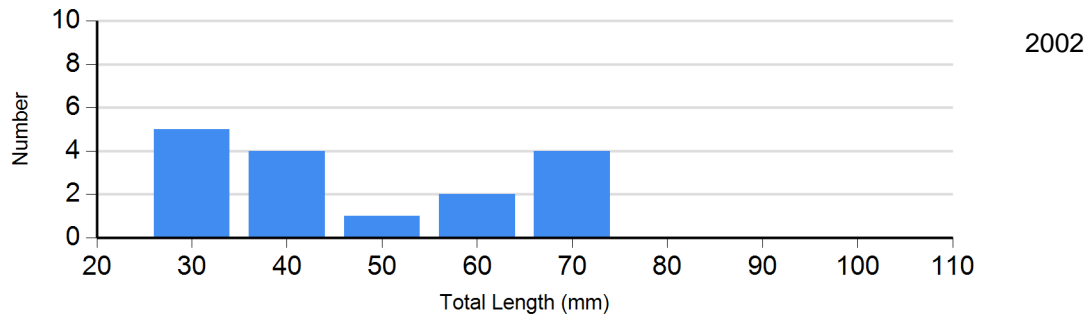


Site: 1444
Species: Brown Trout

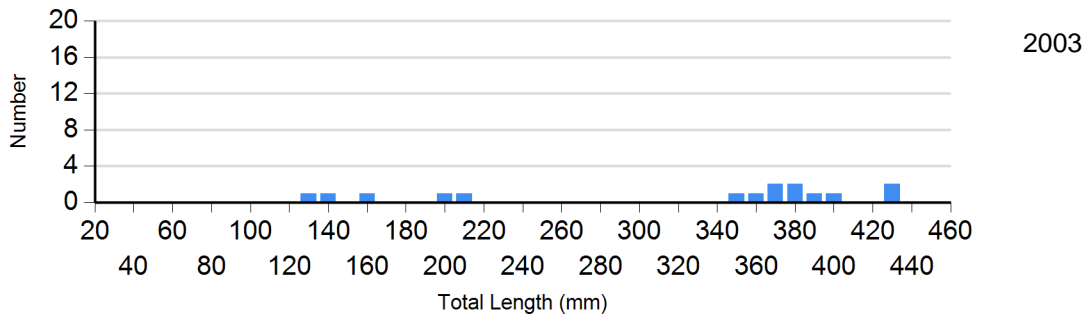
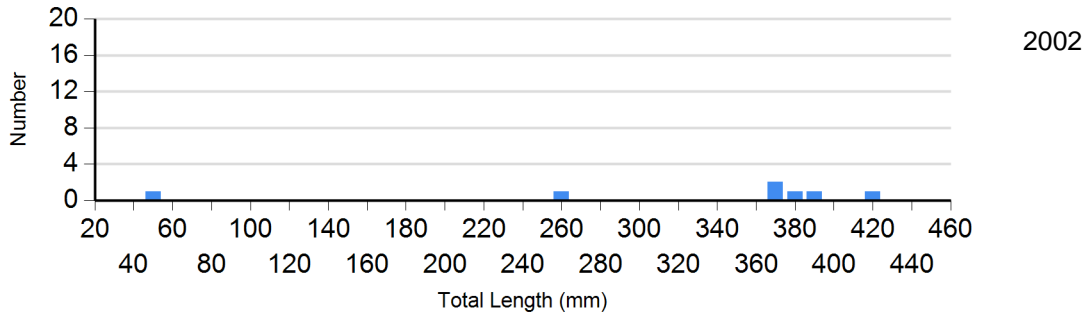
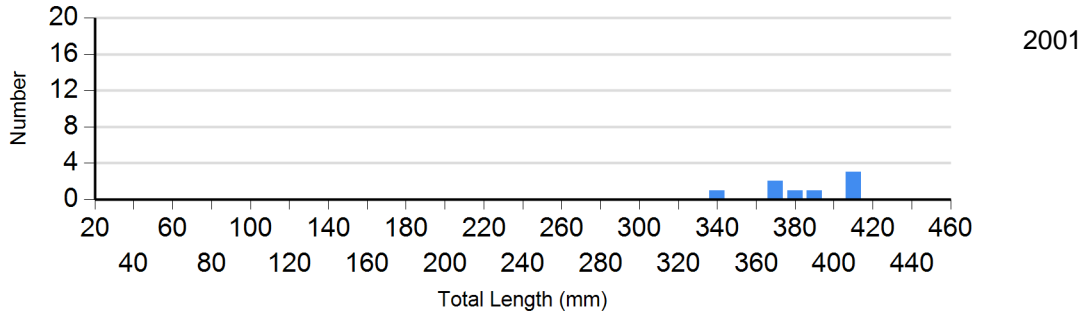
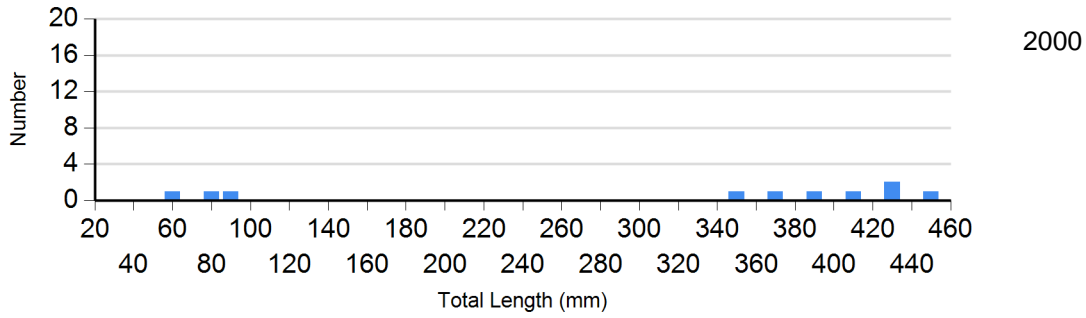


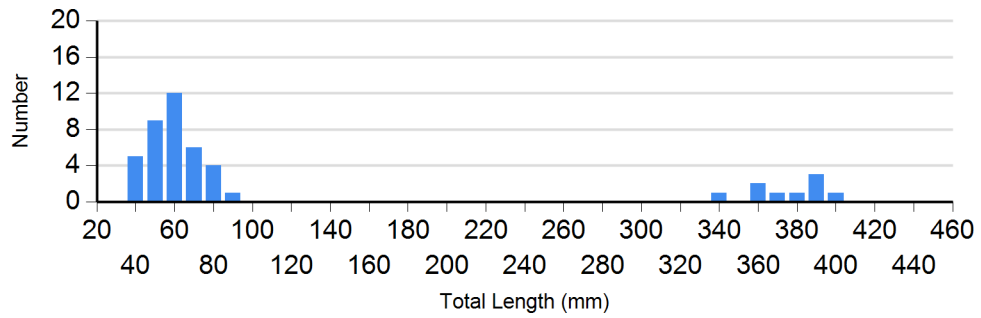


Site: 1444
Species: Longnose Dace

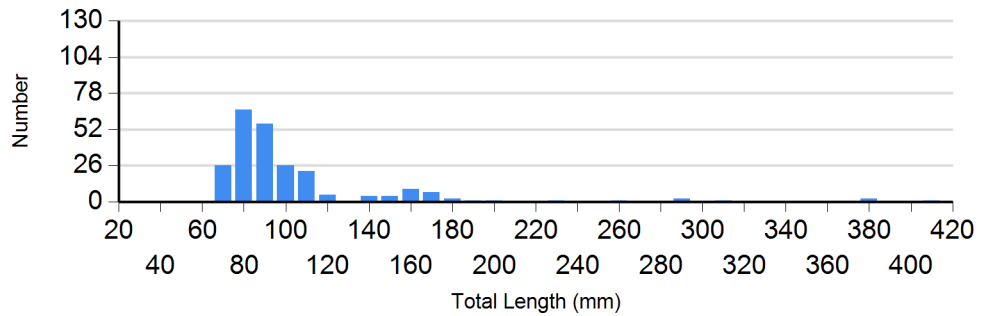
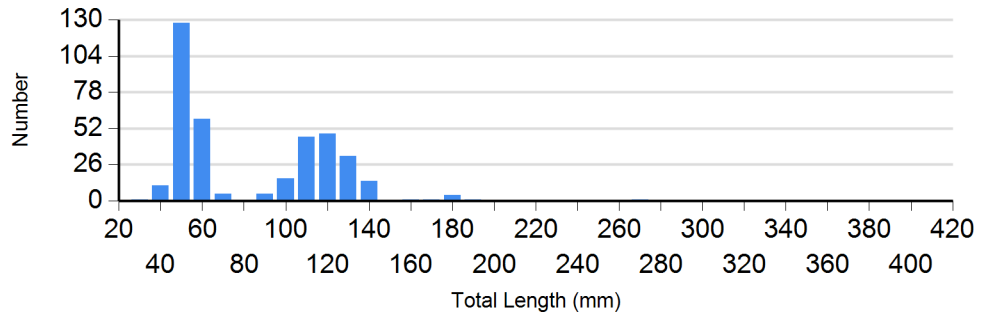


Site: 1444
Species: White Sucker

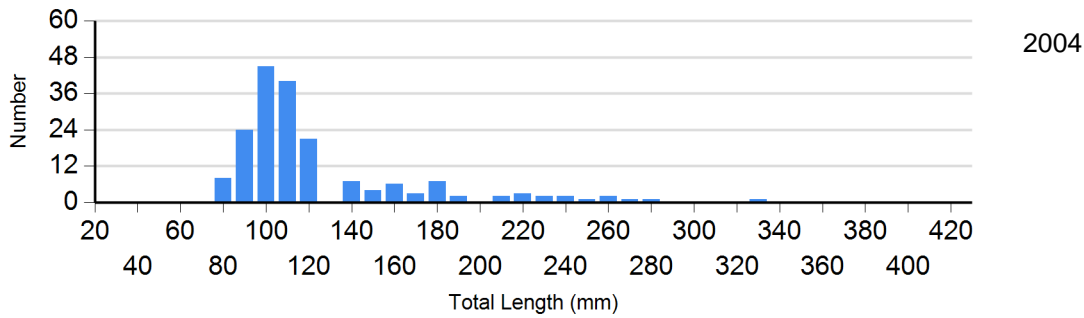
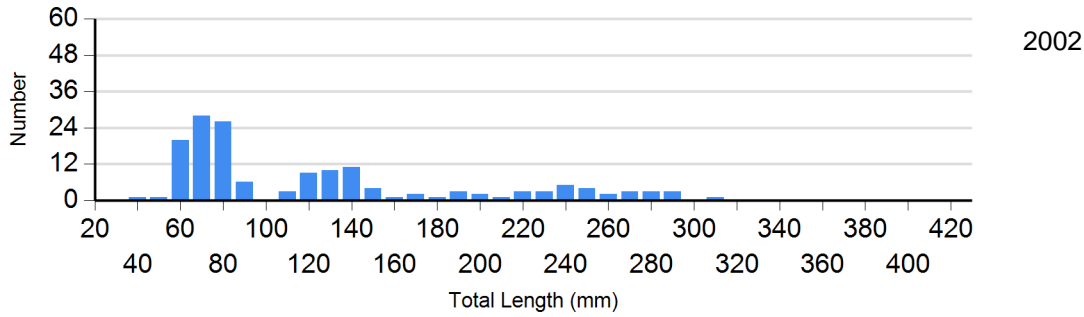
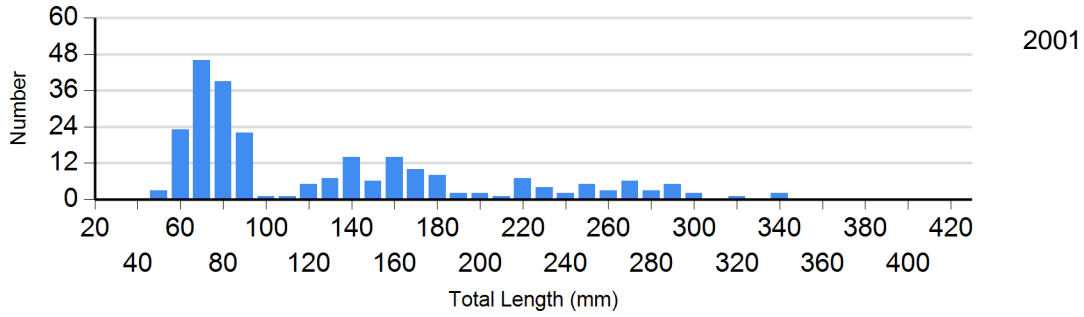
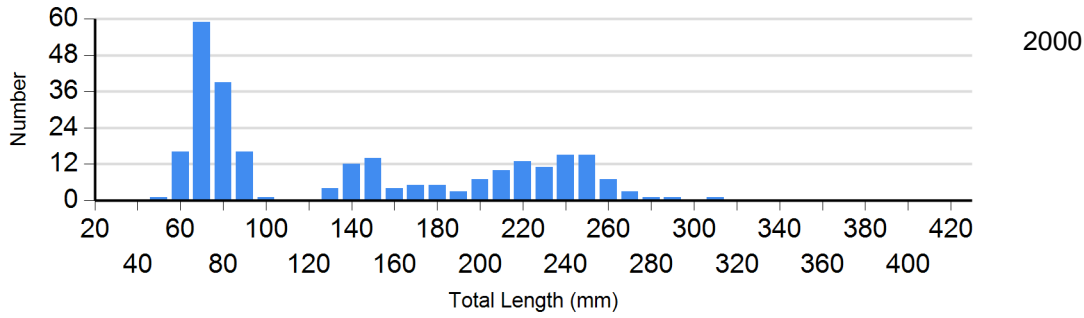


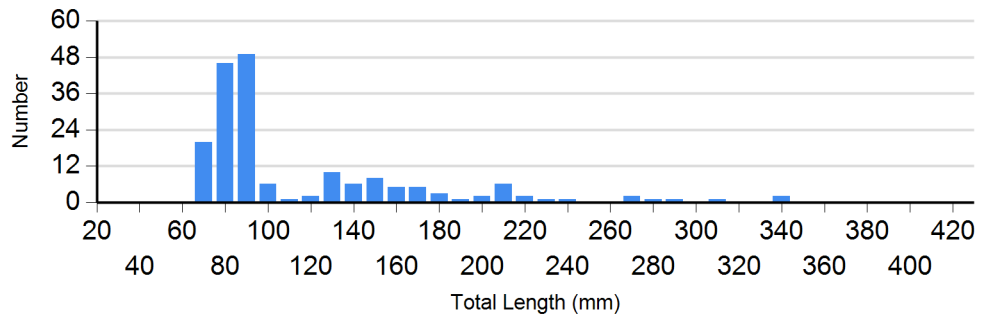


Site: 1606
Species: Brown Trout

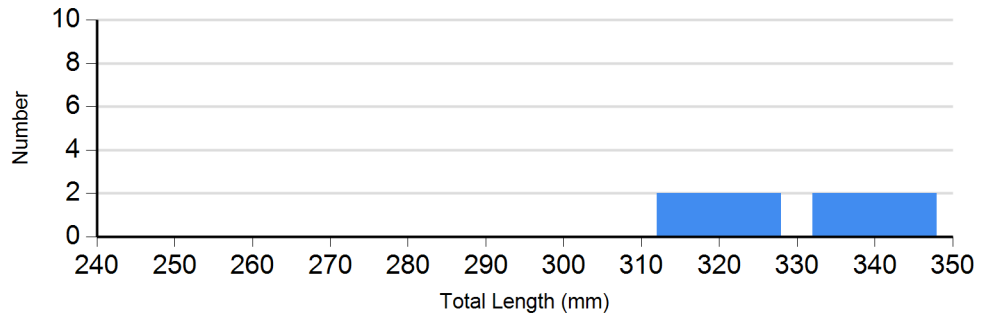


Site: 1656
Species: Brown Trout

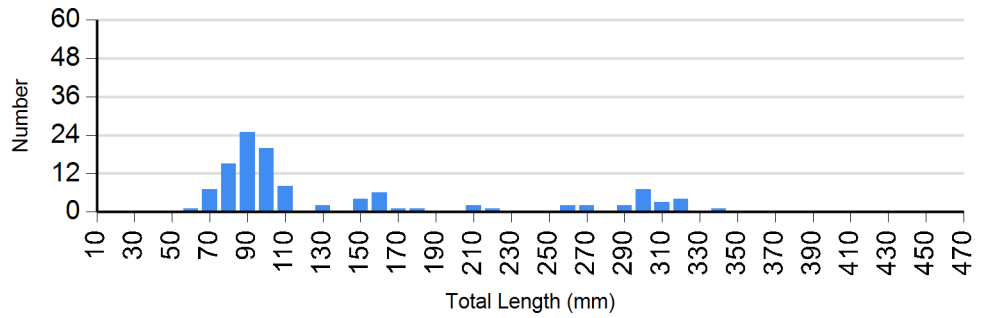


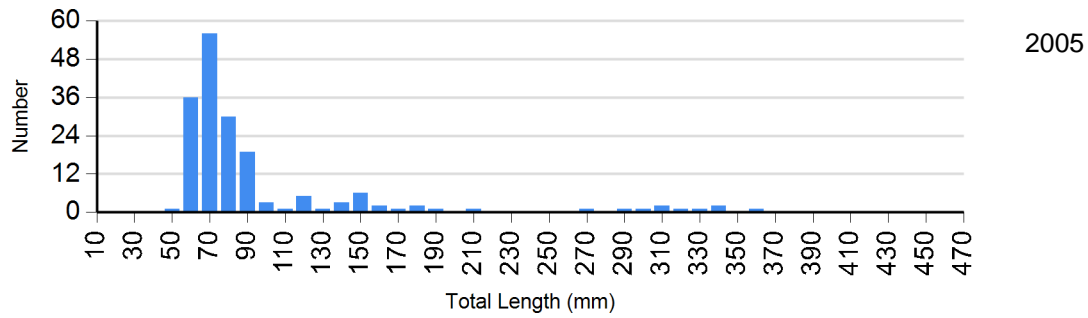


Site: 1656
Species: Hatchery Rainbow Trout

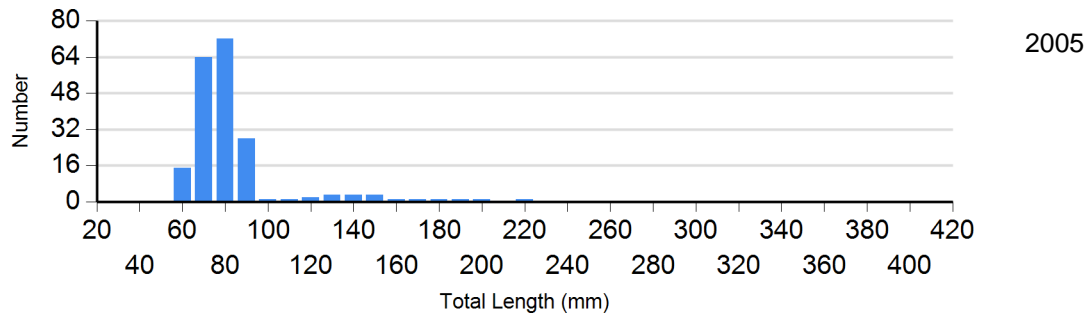
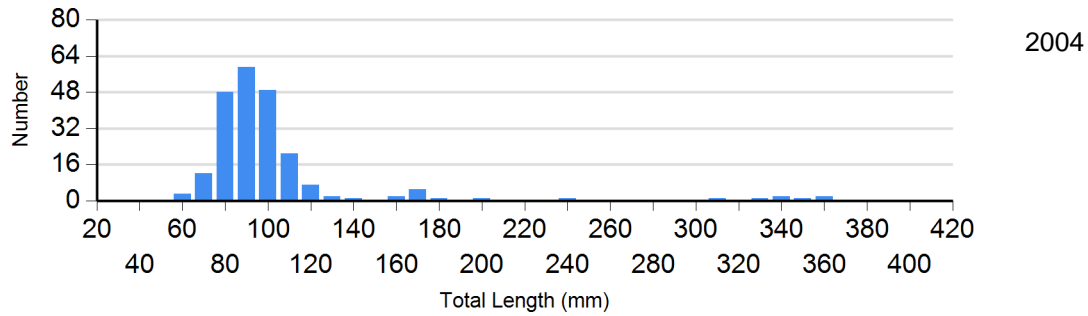


Site: 1752
Species: Brown Trout

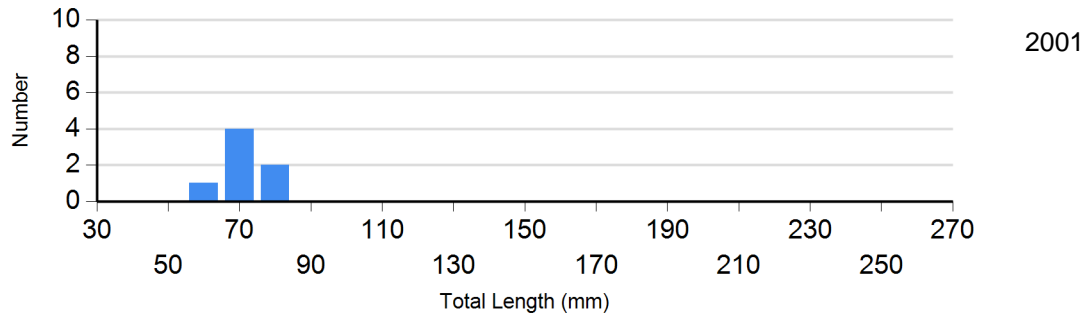




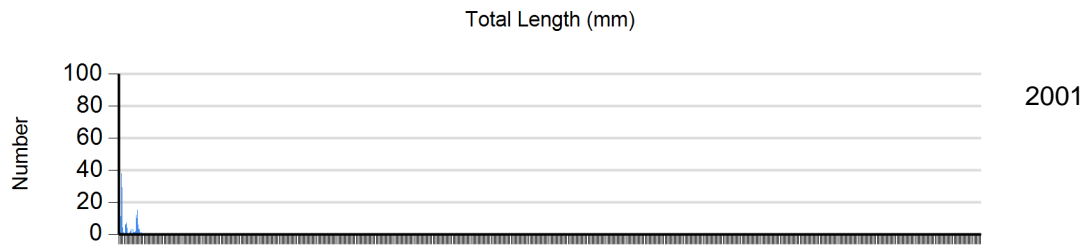
Site: 1812
Species: Brown Trout

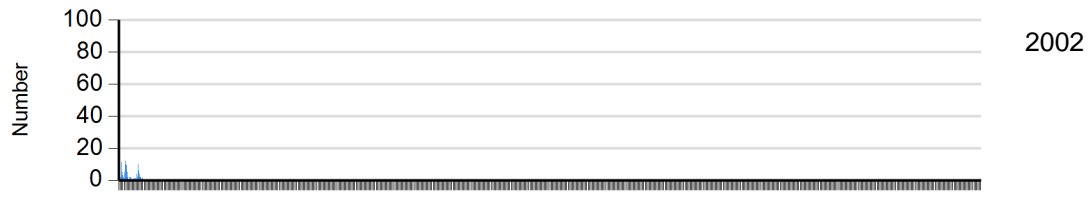


Site: 1833
Species: Brook Trout

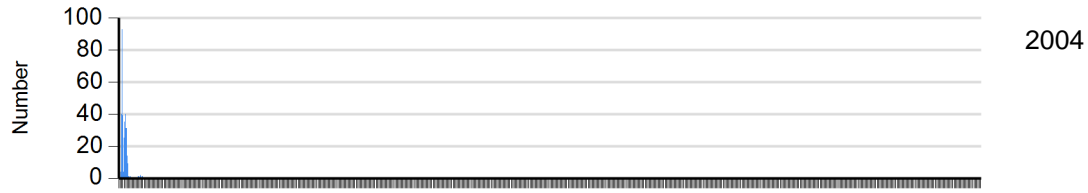


Site: 1833
Species: Brown Trout

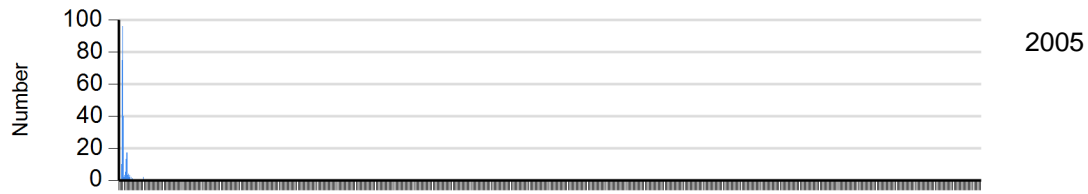




Total Length (mm)

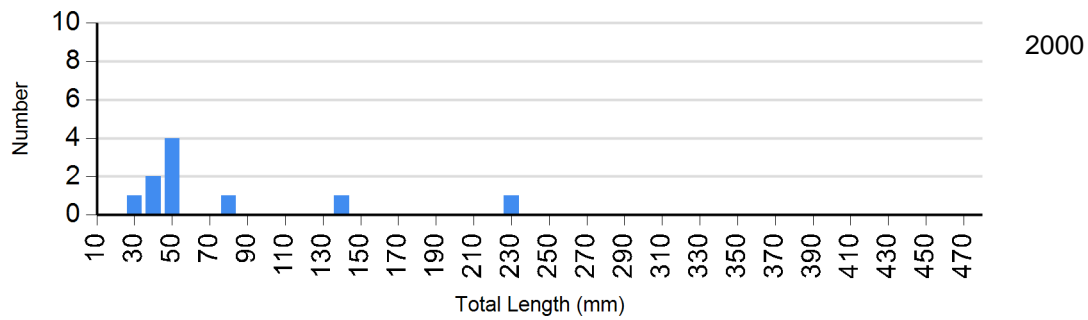


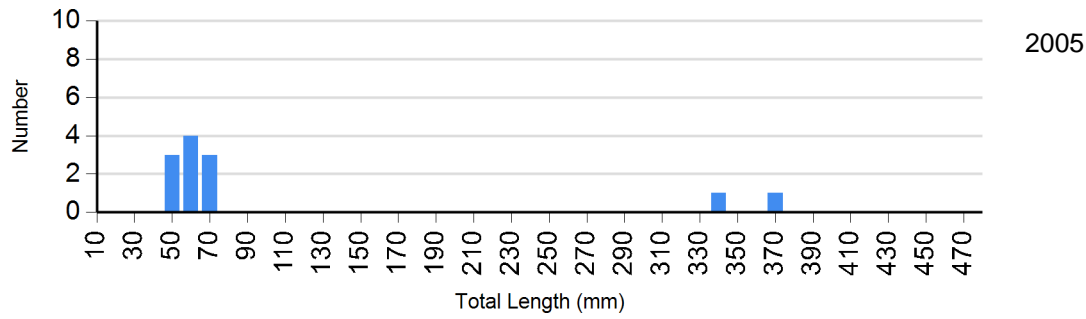
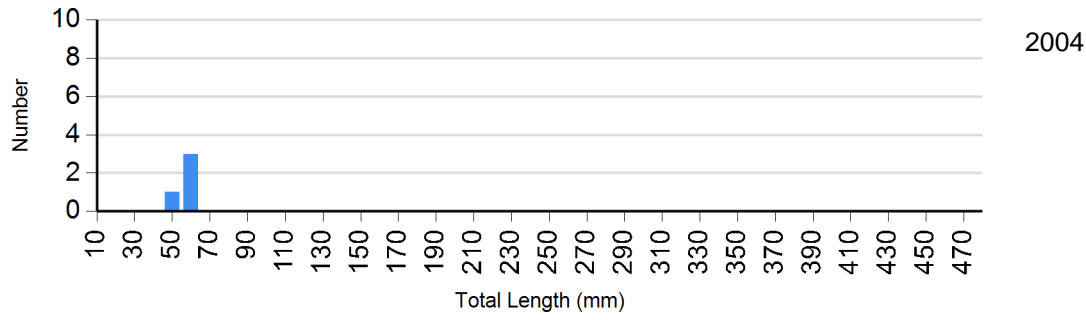
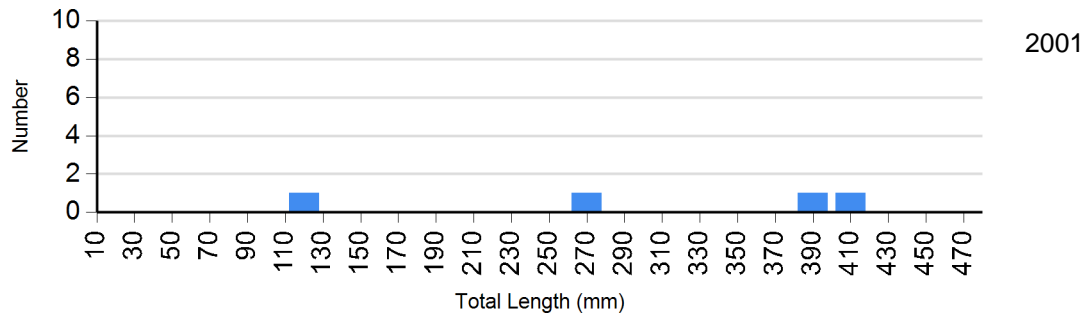
Total Length (mm)



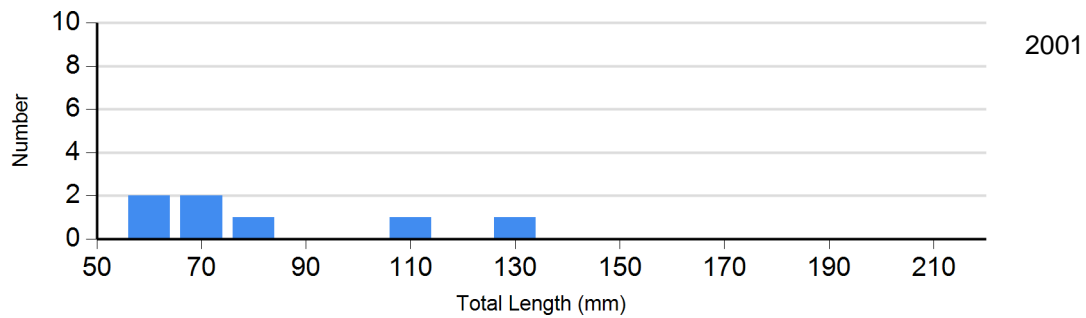
Total Length (mm)

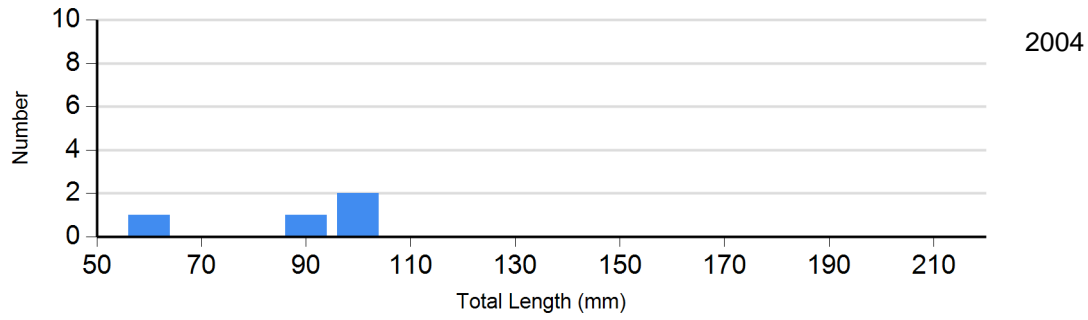
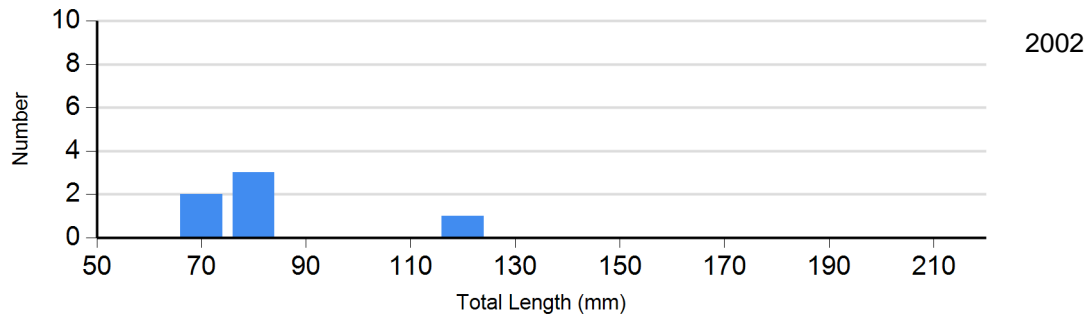
Site: 1833
Species: Rainbow Trout



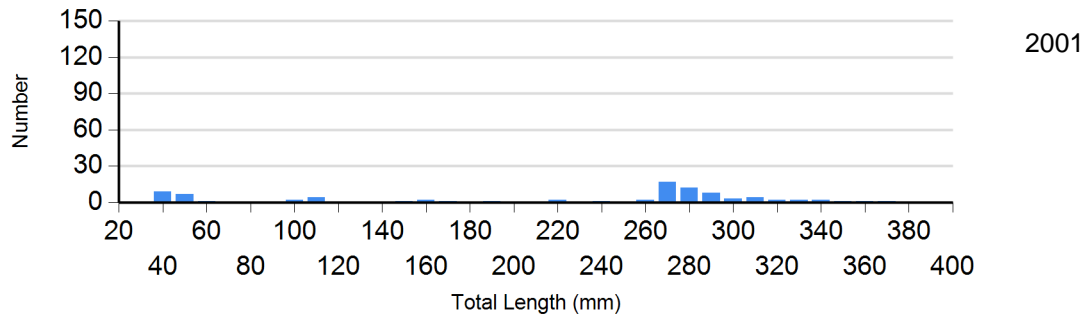
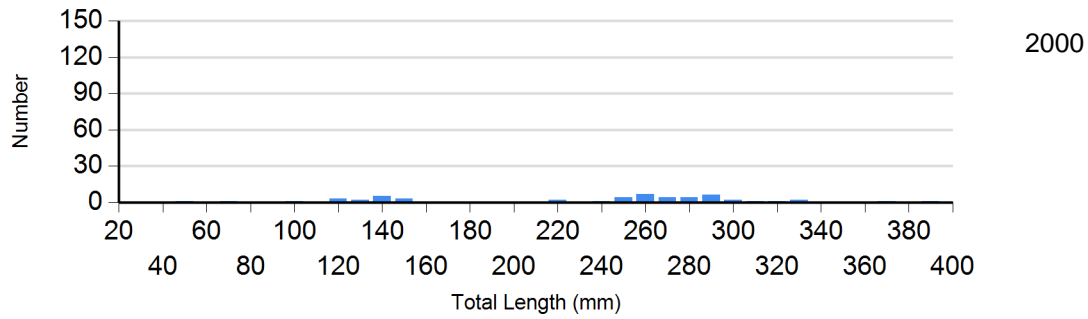


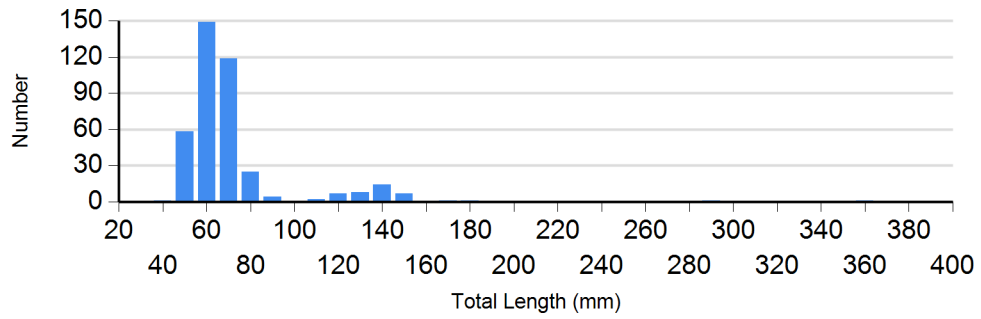
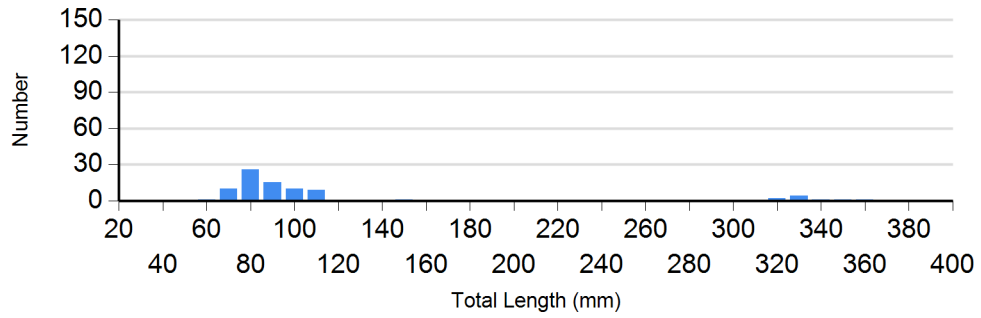
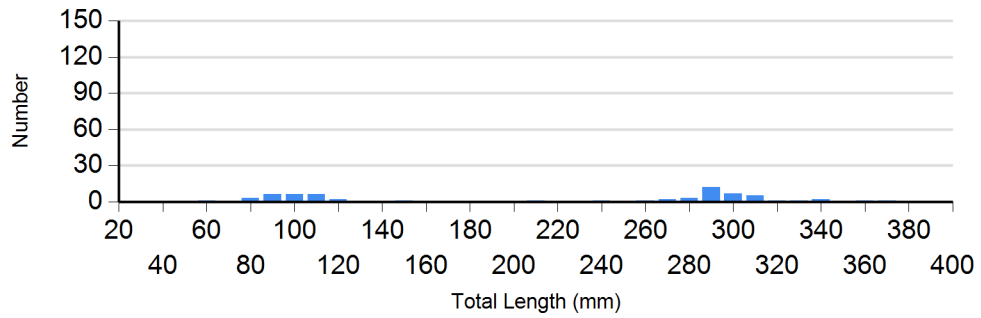
Site: 1843
Species: Brook Trout



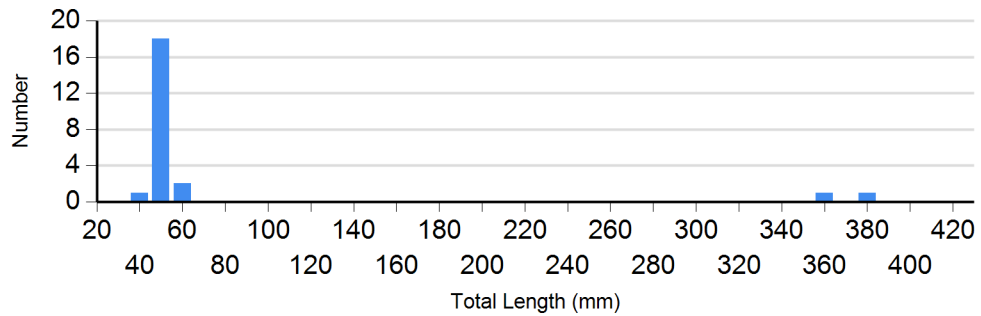


Site: 1843
Species: Brown Trout

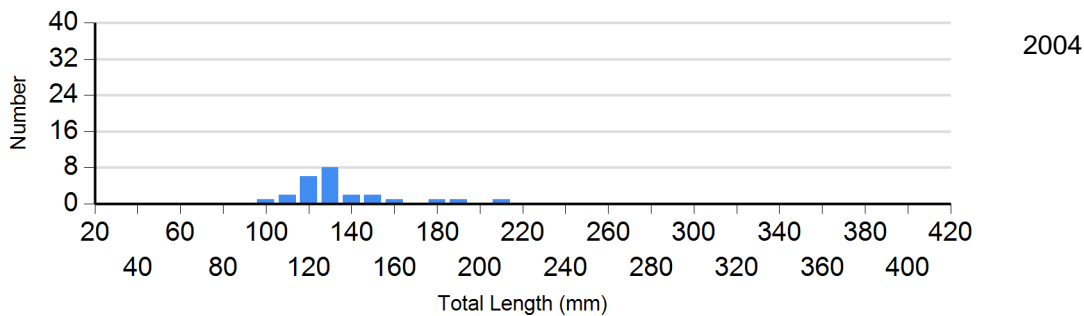
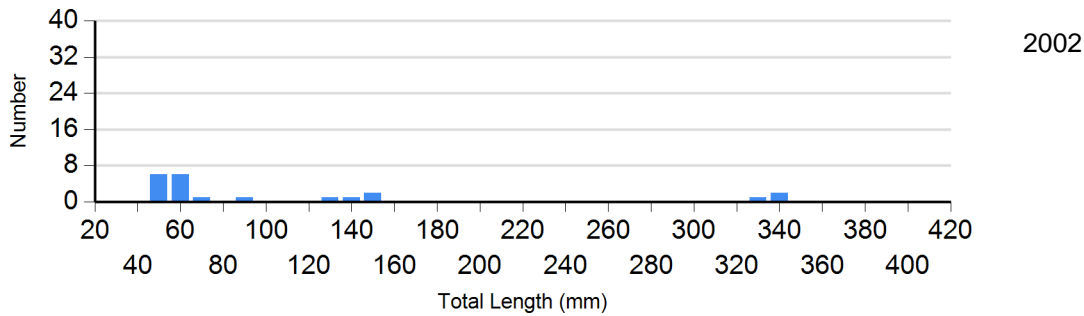
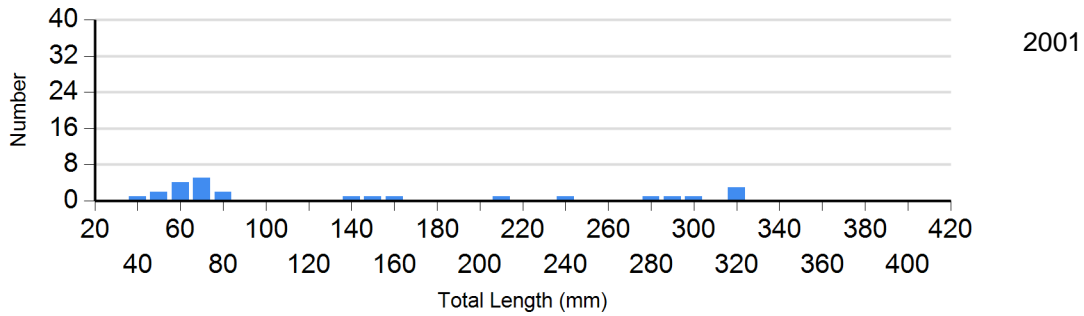
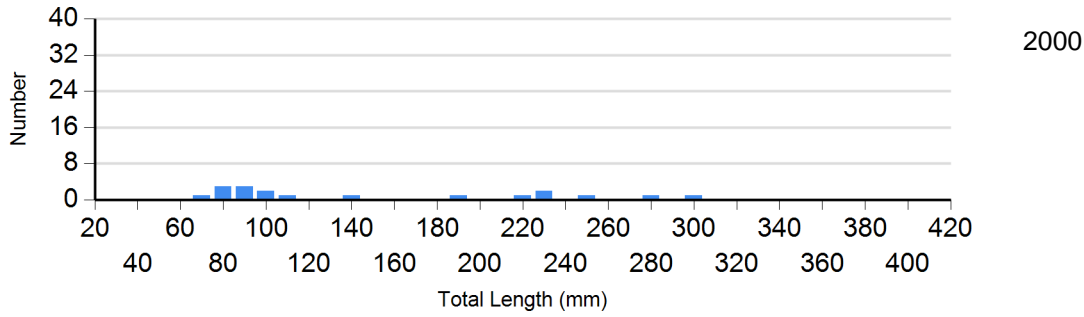


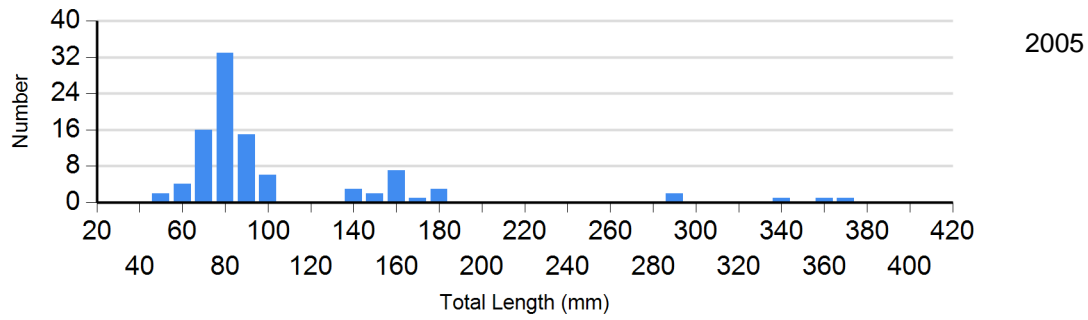


Site: 1843
Species: Rainbow Trout

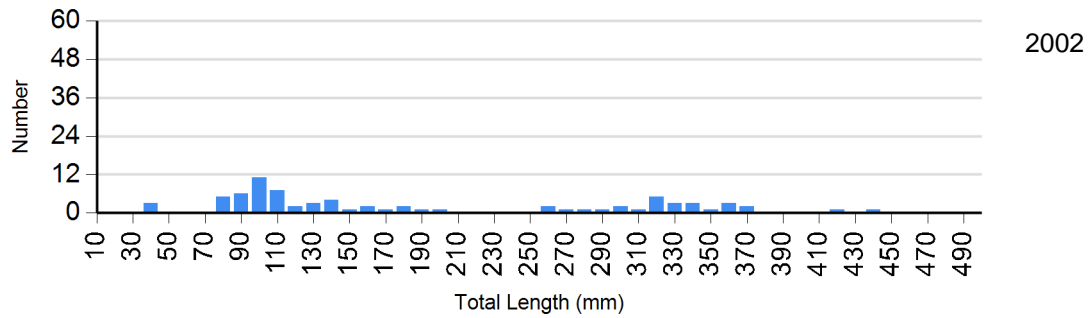
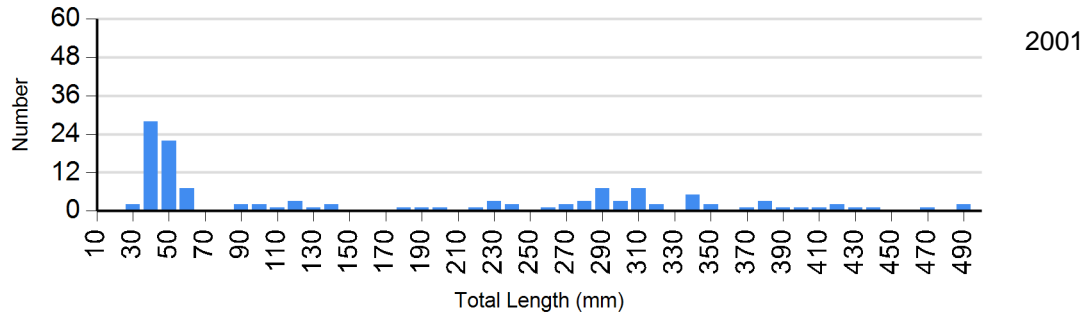
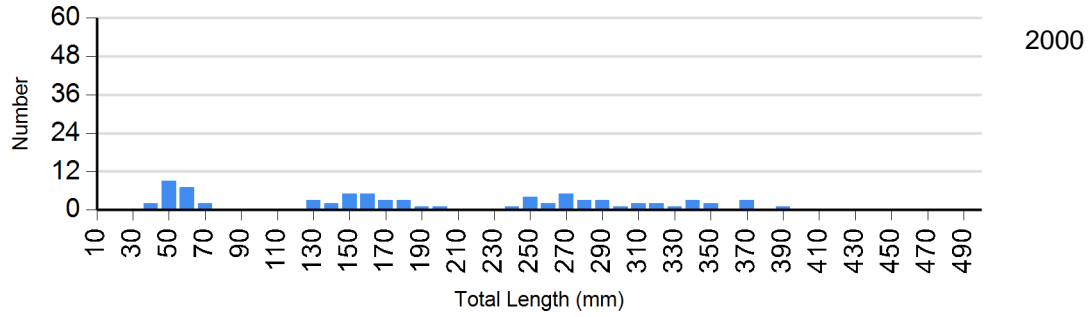


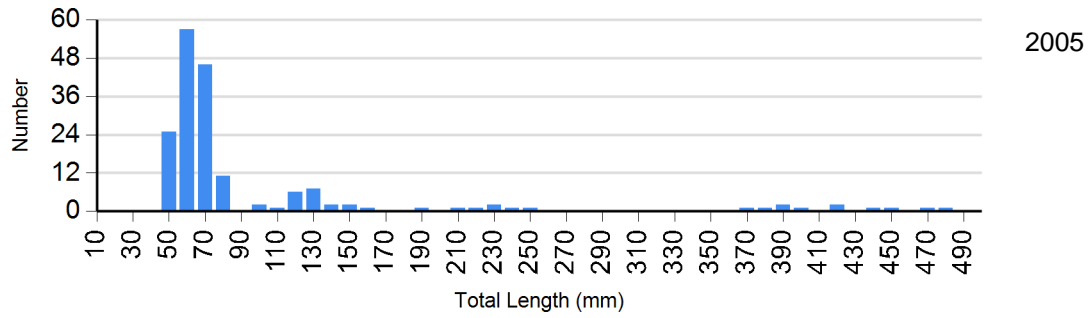
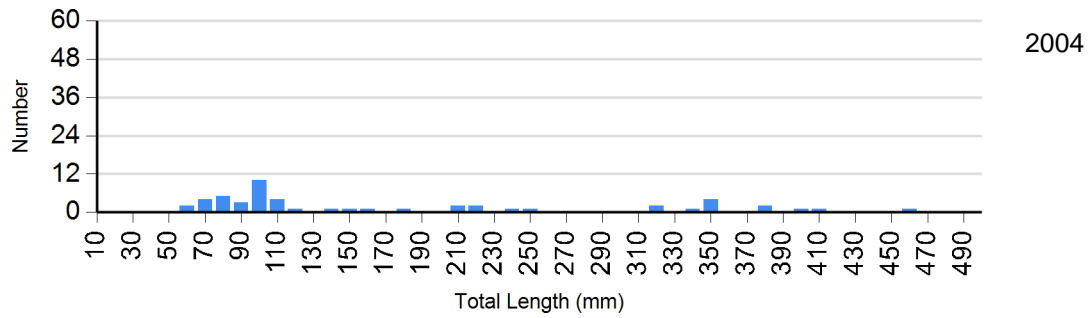
Site: 1853
Species: Brook Trout





Site: 1853
Species: Brown Trout





Site: 1853
Species: Rainbow Trout

