

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Rapid Creek, Pennington County
02-0062-00
1996

Table 1. Population and Biomass Estimates for Rapid Creek

Site Number: 1363	Date Sampled: 10/04/1996	Conductivity (umhos/cm): 375
Site Midpoint (Latitude, Longitude): 44.07961205, -103.20426495	Site Length (m): 100	pH: 8.5
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 11.3	Water Temperature (C): 14.0
Stream Classification: BR2	Number of Pass: 3	Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brown Trout	<200mm	55	66	82	55	585	17	660	237	15.59	1062	132.6	29.8
Brown Trout	>=200mm	26	29	36	26	257	37	290	104	32.76	467	238.1	142.7
Brown Trout	All	81	97	116	81	860	57	970	348	50.72	1561	166.5	66.1
Hatchery Brown Trout	>=200mm	5	5	6	5	44	5	50	18	4.32	80	221.8	109.2
Hatchery Brown Trout	All	5	5	6	5	44	5	50	18	4.32	80	221.8	109.2
Largemouth Bass	All	2	2	2	2	18	0	20	7	0.05	32	69.0	3.0
Longnose Dace	All	14	13	17	14	115	0	130	47	0.27	209	50.9	2.6
Mountain Sucker	All	11	11	12	11	98	7	110	39	5.86	177	170.4	67.3
Rock Bass	All	3	5	24	3	44	1	50	18	0.67	80	97.7	17.0
White Sucker	All	35	40	50	35	355	137	400	144	122.38	644	295.6	386.5

Site Number: 1393	Date Sampled: 10/10/1996	Conductivity (umhos/cm): 352
Site Midpoint (Latitude, Longitude): 44.08551436, -103.23872222	Site Length (m): 100	pH: 8.6
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 8.0	Water Temperature (C): 11.0
Stream Classification: BR1	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	179	199	216	182	2500	82	1990	1013	72.83	3202	135.2	32.6
Brown Trout	>=200mm	91	92	95	91	1156	182	920	468	162.78	1480	246.4	157.7
Brown Trout	All	270	287	300	274	3606	270	2870	1460	240.78	4618	172.7	74.8
Green Sunfish	All	1	1	1	1	13	1	10	5	1.10	16	173.0	98.0
Longnose Dace	All	5	4	8	5	50	0	40	20	0.09	64	42.0	2.0
Mountain Sucker	All	2	2	3	2	25	4	20	10	3.70	32	229.0	165.0
Rock Bass	All	1	1	1	1	13	0	10	5	0.13	16	81.0	12.0
White Sucker	All	64	70	79	64	879	352	700	356	314.30	1126	299.8	400.3

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: 09/26/1996

Site Length (m): 114

Mean Width (m): 8.6

Number of Pass: 3

Conductivity (umhos/cm): 295

pH: 8.4

Water Temperature (C): 9.0

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	152	151	172	152	1752	66	1325	709	58.93	2131	142.8	37.7
Brown Trout	>=200mm	90	120	155	90	1392	215	1053	564	192.36	1694	246.2	154.8
Brown Trout	All	242	241	262	242	2796	228	2114	1132	203.20	3401	181.3	81.4
Longnose Dace	All	1	1	2	1	12	0	9	5	0.11	14	105.0	11.0
Rock Bass	All	2	2	2	2	23	3	18	9	2.93	28	179.5	141.5
White Sucker	All	70	85	104	70	986	413	746	399	369.07	1200	322.4	419.2

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: 08/23/1996

Site Length (m): 100

Mean Width (m): 9.1

Number of Pass: 3

Conductivity (umhos/cm): 451

pH: 8.9

Water Temperature (C): 18.0

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	41	45	53	41	497	16	450	201	13.98	724	130.6	31.5
Brown Trout	>=200mm	122	133	145	122	1468	244	1330	595	217.48	2140	255.7	165.9
Brown Trout	All	163	179	193	165	1976	261	1790	800	233.06	2880	224.3	132.1
Hatchery Rainbow Trout	>=200mm	1	1	5	1	11	3	10	4	2.46	16	312.0	250.0
Hatchery Rainbow Trout	All	1	1	5	1	11	3	10	4	2.46	16	312.0	250.0
Longnose Dace	All	9	9	11	9	99	1	90	40	1.24	145	114.0	14.0
White Sucker	All	22	22	23	22	243	96	220	98	85.76	354	325.7	395.5

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: 08/23/1996

Site Length (m): 113

Mean Width (m): 7.3

Number of Pass: 3

Conductivity (umhos/cm): 451

pH: 8.9

Water Temperature (C): 18.0

Voltage: 350

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	34	42	57	34	575	30	372	233	26.67	598	162.6	51.9
Brown Trout	>=200mm	77	91	108	77	1247	208	805	505	185.89	1296	255.0	167.0
Brown Trout	All	111	136	162	111	1863	245	1204	755	219.17	1936	226.7	131.8
Longnose Dace	All	2	2	3	2	27	0	18	11	0.35	28	114.0	14.5
White Sucker	All	31	32	36	31	438	193	283	178	172.50	456	337.8	440.7

Site Number: 1656
Site Midpoint (Latitude, Longitude): 44.05452135, -103.40589571
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BR1

Date Sampled: 10/02/1996 **Conductivity (umhos/cm):** 203
Site Length (m): 100 **pH:** 8.7
Mean Width (m): 9.0 **Water Temperature (C):** 6.0
Number of Pass: 3 **Voltage:** 350

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	192	222	245	199	2478	45	2220	1003	39.74	3572	110.7	18.0
Brown Trout	>=200mm	68	79	94	68	882	124	790	357	110.63	1271	241.3	140.5
Brown Trout	All	260	303	332	274	3382	168	3030	1370	149.97	4875	144.9	49.7

Site Number: 1817
Site Midpoint (Latitude, Longitude): 44.07529329, -103.46727265
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK0, BR2

Date Sampled: 09/30/1996 **Conductivity (umhos/cm):** 205
Site Length (m): 100 **pH:** 8.5
Mean Width (m): 9.7 **Water Temperature (C):** 11.0
Number of Pass: 4 **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	2	2	2	2	21	0	20	8	0.08	32	77.5	4.5
Brook Trout	All	2	2	2	2	21	0	20	8	0.08	32	77.5	4.5
Brown Trout	<200mm	484	588	637	539	6049	41	5880	2450	36.29	9461	76.8	6.7
Brown Trout	>=200mm	31	33	38	31	340	74	330	138	66.16	531	271.4	218.3
Brown Trout	All	515	620	668	572	6379	128	6200	2583	114.33	9976	88.5	20.1

Site Number: 1820
Site Midpoint (Latitude, Longitude): 44.07783791, -103.46747074
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BR1

Date Sampled: 09/30/1996 **Conductivity (umhos/cm):** 220
Site Length (m): 107 **pH:** 8.3
Mean Width (m): 10.0 **Water Temperature (C):** 11.0
Number of Pass: 3 **Voltage:** 400

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	359	414	445	383	4148	38	3869	1680	34.21	6225	84.2	9.2
Brown Trout	>=200mm	54	58	65	54	581	104	542	235	93.09	872	259.4	179.4
Brown Trout	All	413	473	505	441	4739	151	4421	1919	134.85	7113	107.1	31.9

Site Number: 1833
Site Midpoint (Latitude, Longitude): 44.07611720, -103.47551527
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK0, BR2

Date Sampled: 10/16/1996
Site Length (m): 100
Mean Width (m): 9.9
Number of Pass: 3
Conductivity (umhos/cm): 296
pH: 8.4
Water Temperature (C): 9.0
Voltage: 200

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	4	2	20	0	20	8	0.07	32	82.0	4.0
Brook Trout	All	2	2	4	2	20	0	20	8	0.07	32	82.0	4.0
Brown Trout	<200mm	267	293	311	275	2960	28	2930	1199	25.31	4714	88.1	9.6
Brown Trout	>=200mm	30	30	31	30	303	96	300	123	86.00	483	293.5	317.9
Brown Trout	All	297	322	339	305	3253	132	3220	1317	118.25	5181	108.9	40.7

Site Number: 1843
Site Midpoint (Latitude, Longitude): 44.07203156, -103.47488319
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK0, BR2, RB0

Date Sampled: 09/27/1996
Site Length (m): 100
Mean Width (m): 8.7
Number of Pass: 3
Conductivity (umhos/cm): 207
pH: 8.3
Water Temperature (C): 9.0
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)
Brook Trout	<200mm	12	14	21	12	161	2	140	65	2.16	225	100.3	15.0
Brook Trout	All	12	14	21	12	161	2	140	65	2.16	225	100.3	15.0

Brown Trout	<200mm	366	810	1189	431	9332	56	8100	3779	50.14	13033	74.5	6.0
Brown Trout	>=200mm	10	11	16	10	127	25	110	51	22.12	177	259.7	195.5
Brown Trout	All	376	813	1173	453	9366	107	8130	3793	95.47	13081	79.4	11.4
Rainbow Trout	<200mm	1	1	5	1	12	0	10	5	0.21	16	125.0	20.0
Rainbow Trout	All	1	1	5	1	12	0	10	5	0.21	16	125.0	20.0

Site Number: 1849
Site Midpoint (Latitude, Longitude): 44.07572600, -103.47938063
Survey Completed by: South Dakota Game, Fish and Parks
Stream Classification: BK0, BR2, RB2

Date Sampled: 10/01/1996
Site Length (m): 140
Mean Width (m): 8.3
Number of Pass: 5
Conductivity (umhos/cm): 198
pH: 8.3
Water Temperature (C): 12.0
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)
Brook Trout	<200mm	24	26	32	24	314	8	186	127	7.09	299	125.6	25.3
Brook Trout	All	24	26	32	24	314	8	186	127	7.09	299	125.6	25.3
Brown Trout	<200mm	487	623	687	559	7524	59	4450	3047	52.91	7160	79.3	7.9
Brown Trout	>=200mm	23	30	46	23	362	150	214	147	133.93	345	330.8	414.0
Brown Trout	All	510	656	723	589	7923	209	4686	3209	186.81	7539	90.6	26.4
Rainbow Trout	<200mm	1	1	4	1	12	1	7	5	0.51	11	159.0	47.0
Rainbow Trout	>=200mm	1	1	1	1	12	8	7	5	6.99	11	383.0	648.0
Rainbow Trout	All	2	2	4	2	24	8	14	10	7.49	23	271.0	347.5

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

Date Sampled: 10/02/1996
Site Length (m): 100
Mean Width (m): 10.4
Number of Pass: 3
Conductivity (umhos/cm): 155
pH: 8.1
Water Temperature (C): 9.0
Voltage: 350

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	156	186	126	1500	23	1560	608	20.82	2510	97.3	15.5
Brown Trout	>=200mm	17	17	19	17	163	110	170	66	97.84	274	357.3	670.4
Brown Trout	All	142	172	199	145	1654	155	1720	670	138.71	2767	128.4	93.9
Rainbow Trout	<200mm	28	28	29	28	269	14	280	109	12.38	451	160.7	51.5
Rainbow Trout	>=200mm	3	5	24	3	48	39	50	19	35.23	80	388.0	820.7
Rainbow Trout	All	31	31	33	31	298	38	310	121	33.52	499	182.7	125.9

Site Number: 1930

Site Midpoint (Latitude, Longitude): 44.08581700, -103.55549131

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK3, BR2

Date Sampled: 09/27/1996

Site Length (m): 110

Mean Width (m): 7.7

Number of Pass: 3

Conductivity (umhos/cm): 230

pH: 8.6

Water Temperature (C): 5.0

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)
Brook Trout	>=200mm	1	1	1	1	13	2	9	5	1.41	15	235.0	122.0
Brook Trout	All	1	1	1	1	13	2	9	5	1.41	15	235.0	122.0
Brown Trout	<200mm	20	20	22	20	258	4	182	105	3.93	293	111.5	17.1
Brown Trout	>=200mm	8	8	10	8	103	14	73	42	12.75	117	240.5	138.1
Brown Trout	All	28	29	33	28	375	19	264	152	17.28	424	148.4	51.6
Hatchery Rainbow Trout	>=200mm	6	6	7	6	78	12	55	31	10.69	88	251.7	154.5
Hatchery Rainbow Trout	All	6	6	7	6	78	12	55	31	10.69	88	251.7	154.5
Rock Bass	All	3	3	3	3	39	1	27	16	0.60	44	95.0	17.3

Site Number: 2007

Site Midpoint (Latitude, Longitude): 44.08387011, -103.60810831

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BR2, RB0

Date Sampled: 09/25/1996

Site Length (m): 100

Mean Width (m): 10.8

Number of Pass: 3

Conductivity (umhos/cm): 235

pH: 8.6

Water Temperature (C): 5.0

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	68	75	85	68	693	12	750	281	10.34	1207	105.9	16.7
Brown Trout	>=200mm	28	28	29	28	259	30	280	105	27.04	451	232.5	117.0
Brown Trout	All	96	101	108	96	933	43	1010	378	38.31	1625	142.8	46.0
Hatchery Rainbow Trout	<200mm	1	1	1	1	9	1	10	4	0.63	16	192.0	76.0
Hatchery Rainbow Trout	>=200mm	10	10	12	10	92	12	100	37	10.32	161	245.5	125.1
Hatchery Rainbow Trout	All	11	11	13	11	102	12	110	41	10.95	177	240.6	120.6
Rainbow Trout	<200mm	1	1	1	1	9	0	10	4	0.35	16	155.0	43.0
Rainbow Trout	All	1	1	1	1	9	0	10	4	0.35	16	155.0	43.0
White Sucker	All	2	2	3	2	18	4	20	7	3.34	32	270.0	202.5

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, 1986-1996

Site 1363

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 04, 1990	15	14-19	
	Sep 28, 1993	28	19-53	
	Oct 04, 1996	66	55-82	
Brown Trout >=200mm	Oct 04, 1990	14	14-15	BR3
	Sep 28, 1993	22	20-28	BR2
	Oct 04, 1996	29	26-36	BR2
Green Sunfish	Oct 04, 1990	7	6-14	

Green Sunfish	Sep 28, 1993	3	3-4
Hatchery Brown Trout >=200mm	Oct 04, 1990	11	11-13
	Sep 28, 1993	51	17-235
	Oct 04, 1996	5	5-6
Hatchery Rainbow Trout >=200mm	Sep 28, 1993	1	1-1
	Oct 04, 1990	1	1-1
Largemouth Bass	Oct 04, 1990	2	2-2
	Oct 04, 1996	2	2-2
Longnose Dace	Oct 04, 1990	7	8-12
	Sep 28, 1993	139	132-147
	Oct 04, 1996	13	14-17
Mountain Sucker	Oct 04, 1990	20	20-22
	Sep 28, 1993	44	44-46
	Oct 04, 1996	11	11-12
Rock Bass	Oct 04, 1990	6	6-7
	Sep 28, 1993	2	2-2
	Oct 04, 1996	5	3-24

White Sucker	Oct 04, 1990	40	29-66
	Sep 28, 1993	147	140-155
	Oct 04, 1996	40	35-50

Site 1393

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 06, 1988	97	92-105	
	Oct 10, 1990	38	35-45	
	Oct 10, 1996	199	182-216	
Brown Trout >=200mm	Oct 06, 1988	180	175-187	BR3
	Oct 10, 1990	136	134-140	BR3
	Oct 10, 1996	92	91-95	BR1
Green Sunfish	Oct 10, 1996	1	1-1	
Hatchery Brown Trout >=200mm	Oct 06, 1988	3	3-3	
	Oct 10, 1990	3	3-3	
Longnose Dace	Oct 10, 1996	4	5-8	
Mountain Sucker	Oct 06, 1988	49	32-89	

Mountain Sucker	Oct 10, 1996	2	2-3
Rainbow Trout <200mm	Oct 06, 1988	1	1-1
Rock Bass	Oct 10, 1990	1	1-1
	Oct 10, 1996	1	1-1
White Sucker	Oct 06, 1988	34	34-35
	Oct 10, 1996	70	64-79

Site 1412

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 06, 1988	195	172-218	
	Oct 10, 1990	87	76-102	
	Oct 22, 1991	176	74-403	
	Oct 05, 1992	163	127-199	
	Sep 28, 1993	142	116-168	
	Sep 29, 1994	314	245-383	
	Oct 03, 1995	215	171-259	
	Sep 26, 1996	151	152-172	

Brown Trout >=200mm	Oct 06, 1988	140	136-146	BR3
	Oct 10, 1990	176	175-179	BR3
	Oct 22, 1991	123	108-140	BR3
	Oct 05, 1992	116	111-123	BR1
	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
Green Sunfish	Oct 10, 1990	1	1-1	
	Oct 05, 1992	1	1-5	
	Sep 28, 1993	2	2-2	
	Sep 29, 1994	1	1-2	
Largemouth Bass	Oct 10, 1990	1	1-1	
Longnose Dace	Oct 22, 1991	5	6-8	
	Oct 05, 1992	2	2-3	
	Sep 28, 1993	2	2-4	

Longnose Dace	Sep 29, 1994	12	9-25
	Oct 03, 1995	2	2-3
	Sep 26, 1996	1	1-2
Mountain Sucker	Oct 06, 1988	19	18-23
	Oct 22, 1991	6	6-8
	Oct 05, 1992	6	6-9
	Sep 28, 1993	1	1-2
	Sep 29, 1994	4	4-6
	Oct 03, 1995	3	3-3
Rainbow Trout <200mm	Oct 06, 1988	2	2-4
Rock Bass	Oct 10, 1990	3	3-3
	Sep 29, 1994	1	1-1
	Oct 03, 1995	2	2-4
	Sep 26, 1996	2	2-2
White Sucker	Oct 06, 1988	36	36-37
	Oct 22, 1991	73	61-91

White Sucker	Oct 05, 1992	87	85-91
	Sep 28, 1993	56	56-58
	Sep 29, 1994	76	75-79
	Oct 03, 1995	70	70-71
	Sep 26, 1996	85	70-104

Site 1444

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Aug 23, 1996	45	41-53	
Brown Trout >=200mm	Aug 23, 1996	133	122-145	BR1
Hatchery Rainbow Trout >=200mm	Aug 23, 1996	1	1-5	
Longnose Dace	Aug 23, 1996	9	9-11	
White Sucker	Aug 23, 1996	22	22-23	

Site 1449

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Aug 23, 1996	42	34-57	
Brown Trout >=200mm	Aug 23, 1996	91	77-108	BR1
Longnose Dace	Aug 23, 1996	2	2-3	

White Sucker

Aug 23, 1996

32

31-36

Site 1656

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 10, 1990	367	343-391	
	Mar 25, 1991	264	239-289	
	Oct 17, 1991	237	201-273	
	Oct 13, 1992	269	235-303	
	Sep 30, 1993	229	172-286	
	Sep 29, 1994	361	317-405	
	Oct 03, 1995	213	203-223	
	Oct 02, 1996	222	199-245	
Brown Trout >=200mm	Sep 10, 1990	74	73-77	BR3
	Mar 25, 1991	70	68-74	BR3
	Oct 17, 1991	89	85-96	BR3
	Oct 13, 1992	75	74-78	BR1
	Sep 30, 1993	99	93-107	BR1

Brown Trout >=200mm	Sep 29, 1994	101	99-105	BR1
	Oct 03, 1995	109	108-112	BR1
	Oct 02, 1996	79	68-94	BR1

Site 1817

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 30, 1996	2	2-2	
Brown Trout <200mm	Sep 30, 1996	588	539-637	
Brown Trout >=200mm	Sep 30, 1996	33	31-38	BR2

Site 1820

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Sep 30, 1996	414	383-445	
Brown Trout >=200mm	Sep 30, 1996	58	54-65	BR1

Site 1833

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 07, 1988	8	7-14	
	Nov 13, 1992	10	10-12	
	Sep 30, 1993	20	14-40	

Brook Trout <200mm	Oct 16, 1996	2	2-4	
Brown Trout <200mm	Oct 07, 1988	116	86-155	
	Aug 03, 1990	90	85-98	
	Oct 17, 1991	174	98-286	
	Nov 13, 1992	281	232-330	
	Sep 30, 1993	474	201-808	
	Oct 16, 1996	293	275-311	
Brown Trout >=200mm	Oct 07, 1988	59	56-65	BR3
	Aug 03, 1990	40	39-43	BR3
	Oct 17, 1991	43	41-48	BR3
	Nov 13, 1992	50	50-51	BR1
	Sep 30, 1993	34	32-39	BR2
	Oct 16, 1996	30	30-31	BR2
Hatchery Brown Trout >=200mm	Oct 07, 1988	2	2-2	
Rainbow Trout <200mm	Nov 13, 1992	1	1-2	

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 07, 1988	12	12-12	
	Aug 03, 1990	20	14-41	
	Oct 06, 1992	55	47-68	
	Sep 29, 1993	228	63-776	
	Sep 28, 1994	38	36-43	
	Oct 04, 1995	40	39-43	
	Sep 27, 1996	14	12-21	
Brook Trout >=200mm	Oct 07, 1988	9	9-9	BK3
	Aug 03, 1990	2	2-2	BK3
	Oct 06, 1992	11	11-11	BK2
	Sep 29, 1993	6	6-8	BK2
	Sep 28, 1994	7	7-7	BK2
	Oct 04, 1995	7	7-7	BK2
Brown Trout <200mm	Oct 07, 1988	28	28-28	
	Aug 03, 1990	23	22-27	

Brown Trout <200mm	Sep 30, 1991	141	114-171	
	Oct 06, 1992	153	101-214	
	Sep 29, 1993	395	290-500	
	Sep 28, 1994	130	121-140	
	Oct 04, 1995	125	83-180	
	Sep 27, 1996	810	431-1189	
Brown Trout >=200mm	Oct 07, 1988	28	28-28	BR3
	Aug 03, 1990	24	17-46	BR3
	Sep 30, 1991	27	27-28	BR3
	Oct 06, 1992	54	53-57	BR1
	Sep 29, 1993	85	80-93	BR1
	Sep 28, 1994	48	47-51	BR1
	Oct 04, 1995	28	28-28	BR1
	Sep 27, 1996	11	10-16	BR2
Hatchery Brown Trout >=200mm	Oct 07, 1988	19	19-19	
Rainbow Trout <200mm	Oct 06, 1992	1	1-1	

Rainbow Trout <200mm	Sep 27, 1996	1	1-5
Rock Bass	Sep 28, 1994	1	1-2

Site 1849

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 01, 1996	26	24-32	
Brown Trout <200mm	Oct 01, 1996	623	559-687	
Brown Trout >=200mm	Oct 01, 1996	30	23-46	BR2
Rainbow Trout <200mm	Oct 01, 1996	1	1-4	
Rainbow Trout >=200mm	Oct 01, 1996	1	1-1	RB2

Site 1853

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 06, 1992	47	33-75	
	Sep 29, 1993	70	65-78	
	Sep 28, 1994	165	141-189	
	Oct 04, 1995	56	53-62	
	Oct 02, 1996	156	126-186	
Brown Trout >=200mm	Oct 06, 1992	73	72-76	BR1

Brown Trout >=200mm	Sep 29, 1993	64	58-73	BR1
	Sep 28, 1994	57	55-62	BR1
	Oct 04, 1995	27	27-28	BR2
	Oct 02, 1996	17	17-19	BR2
Rainbow Trout <200mm	Oct 06, 1992	19	15-31	
	Sep 28, 1994	2	2-3	
	Oct 04, 1995	25	24-29	
	Oct 02, 1996	28	28-29	
Rainbow Trout >=200mm	Oct 06, 1992	1	1-1	RB2
	Sep 29, 1993	7	7-8	RB1
	Sep 28, 1994	13	5-87	RB1
	Oct 04, 1995	1	1-2	RB2
	Oct 02, 1996	5	3-24	RB2

Site 1930

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout >=200mm	Sep 27, 1996	1	1-1	BK3

Brown Trout <200mm	Sep 24, 1992	81	74-91	
	Sep 22, 1993	84	72-100	
	Sep 26, 1994	255	91-599	
	Oct 02, 1995	32	30-37	
	Sep 27, 1996	20	20-22	
Brown Trout >=200mm	Sep 24, 1992	26	26-27	BR1
	Sep 22, 1993	14	14-16	BR2
	Sep 26, 1994	25	25-27	BR1
	Oct 02, 1995	18	18-19	BR2
	Sep 27, 1996	8	8-10	BR2
Hatchery Rainbow Trout <200mm	Sep 22, 1993	1	1-1	
	Sep 26, 1994	2	2-2	
Hatchery Rainbow Trout >=200mm	Sep 22, 1993	1	1-1	
	Sep 26, 1994	3	3-6	
	Oct 02, 1995	2	2-3	
	Sep 27, 1996	6	6-7	

Rainbow Trout <200mm	Sep 24, 1992	48	35-73	
	Oct 02, 1995	1	1-2	
Rainbow Trout >=200mm	Sep 24, 1992	2	2-3	RB2
	Oct 02, 1995	1	1-1	RB2
Rock Bass	Sep 22, 1993	3	3-3	
	Oct 02, 1995	19	18-23	
	Sep 27, 1996	3	3-3	

Site 2007

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout >=200mm	Sep 26, 1994	1	1-1	BK3
Brown Trout <200mm	Aug 02, 1990	180	150-210	
	Oct 11, 1991	164	119-214	
	Sep 25, 1992	194	177-211	
	Sep 27, 1993	232	217-247	
	Sep 26, 1994	144	124-164	
	Oct 02, 1995	107	104-112	

Brown Trout <200mm	Sep 25, 1996	75	68-85	
Brown Trout >=200mm	Aug 02, 1990	37	37-39	BR3
	Oct 11, 1991	60	48-81	BR3
	Sep 25, 1992	78	77-81	BR1
	Sep 27, 1993	37	37-39	BR1
	Sep 26, 1994	69	66-75	BR1
	Oct 02, 1995	38	35-44	BR1
	Sep 25, 1996	28	28-29	BR2
Hatchery Brown Trout >=200mm	Oct 02, 1995	2	2-2	
Hatchery Rainbow Trout <200mm	Sep 27, 1993	1	1-1	
	Sep 25, 1996	1	1-1	
Hatchery Rainbow Trout >=200mm	Sep 27, 1993	2	2-2	
	Sep 26, 1994	1	1-1	
	Oct 02, 1995	5	5-5	
	Sep 25, 1996	10	10-12	
Rainbow Trout <200mm	Sep 26, 1994	5	5-5	

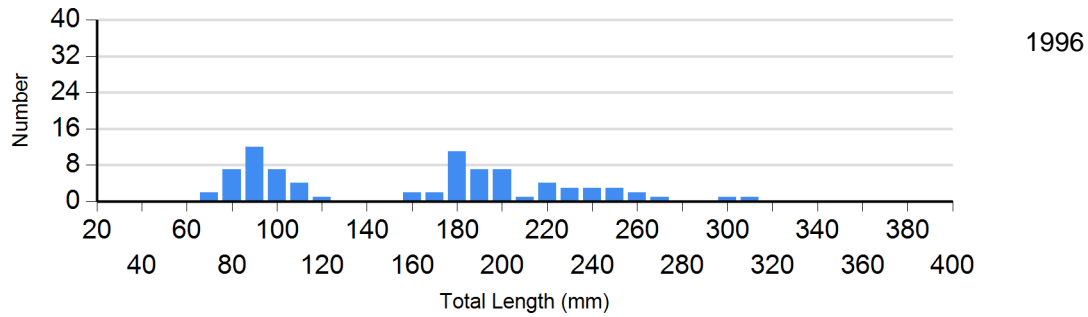
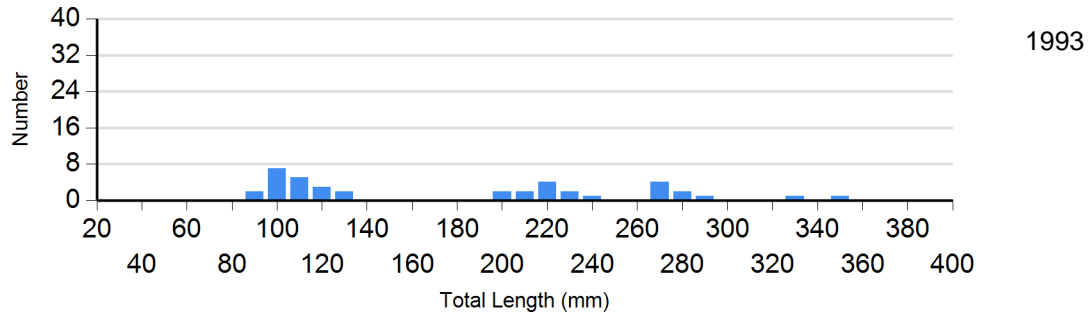
Rainbow Trout <200mm	Oct 02, 1995	3	3-4	
	Sep 25, 1996	1	1-1	
Rainbow Trout >=200mm	Oct 02, 1995	3	3-3	RB2
Rock Bass	Sep 26, 1994	4	4-6	
	Oct 02, 1995	7	7-8	
White Sucker	Sep 27, 1993	1	1-1	
	Sep 26, 1994	3	3-3	
	Sep 25, 1996	2	2-3	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

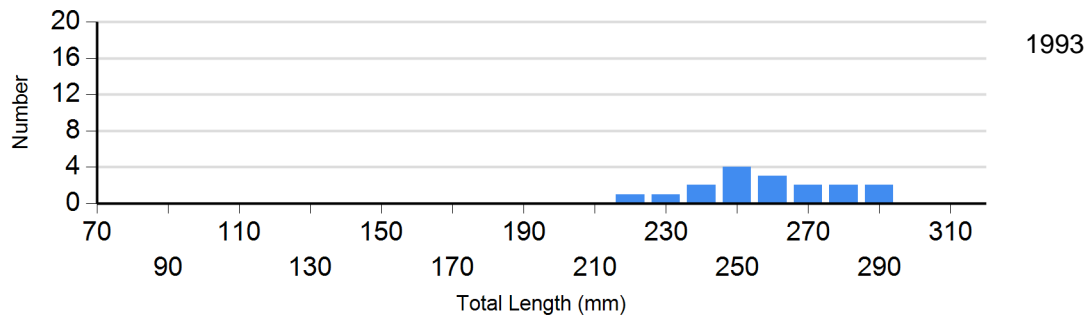
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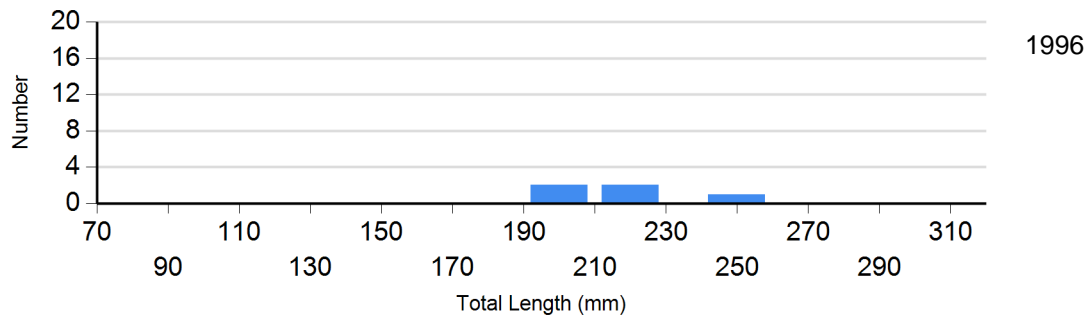
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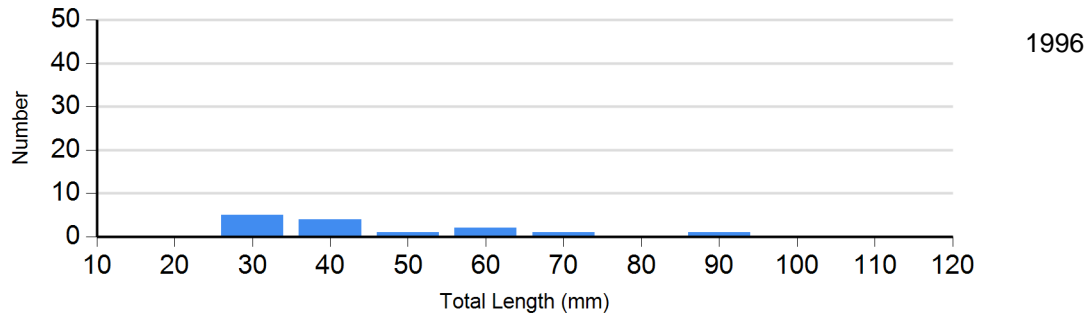
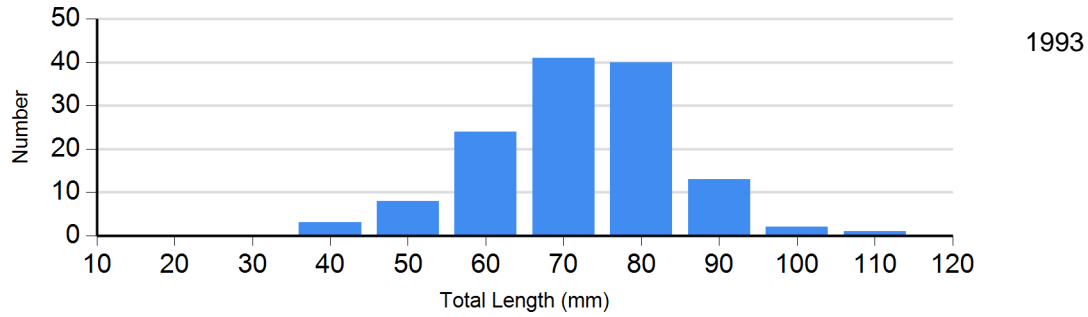
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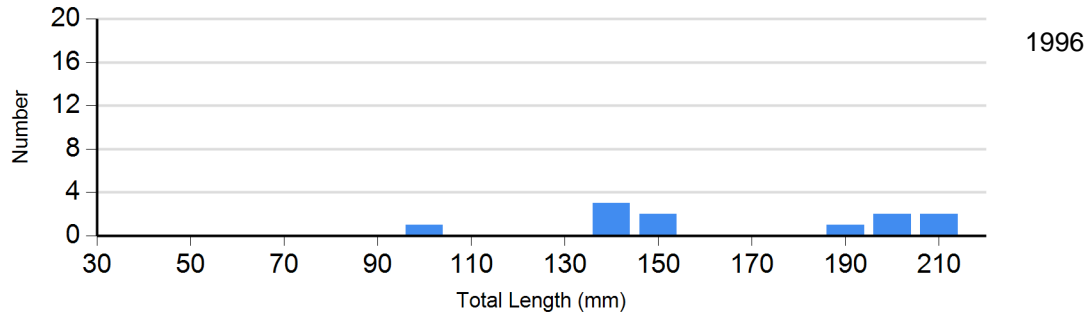
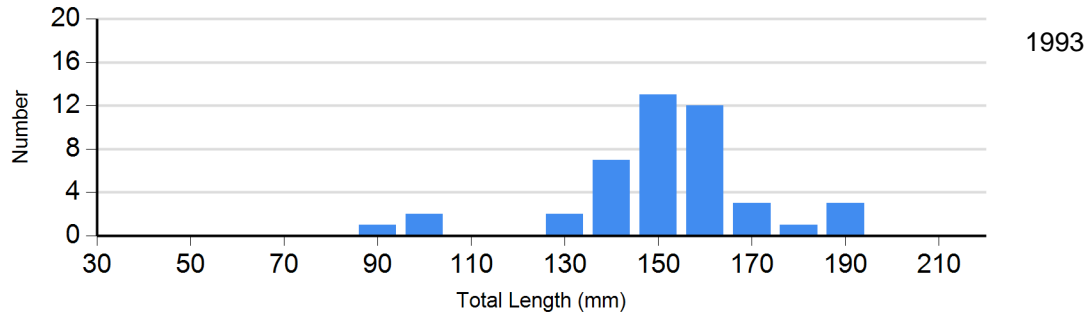




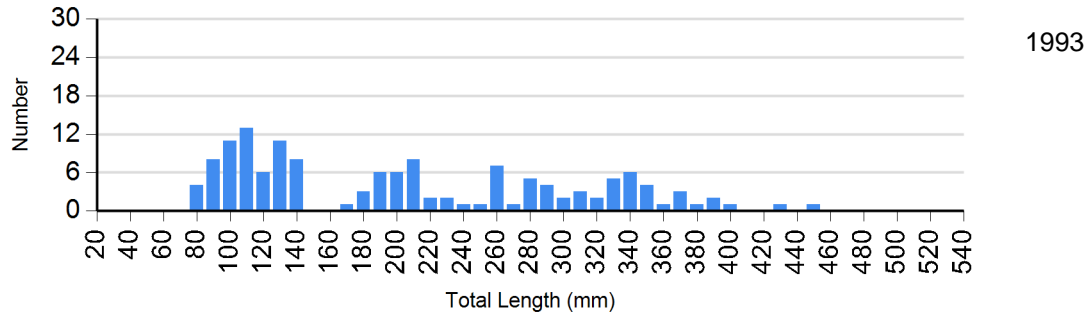
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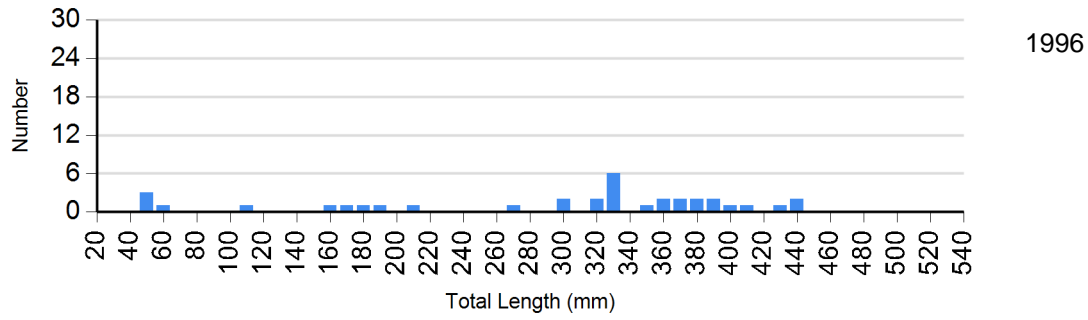


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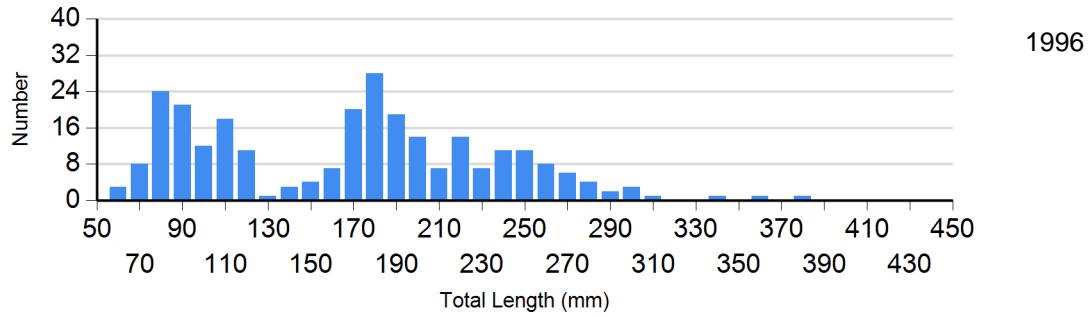


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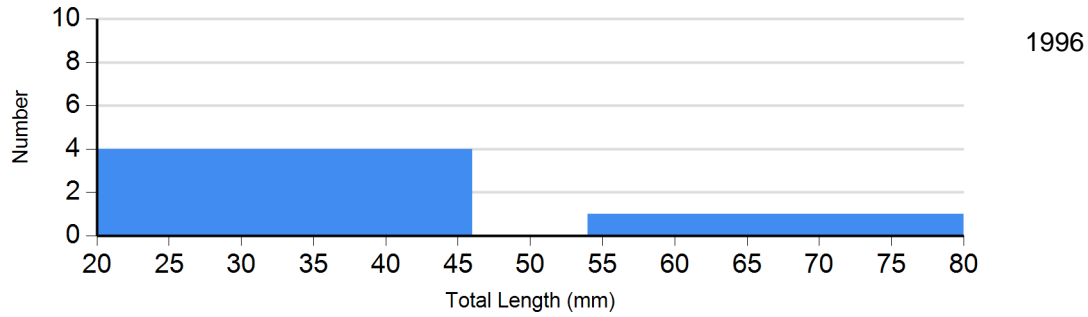




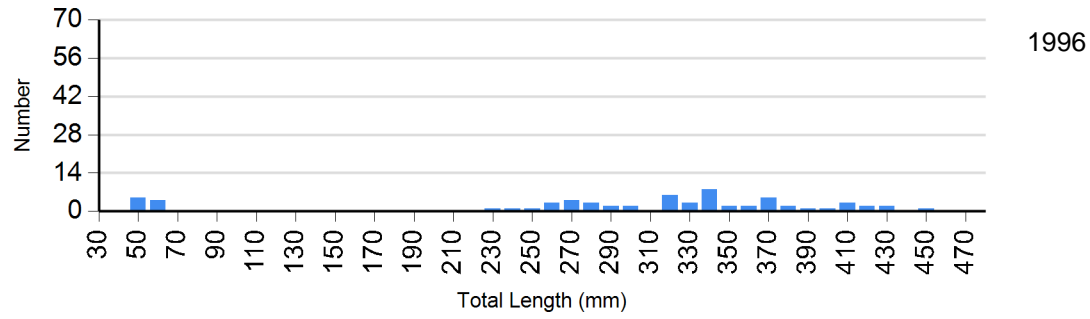
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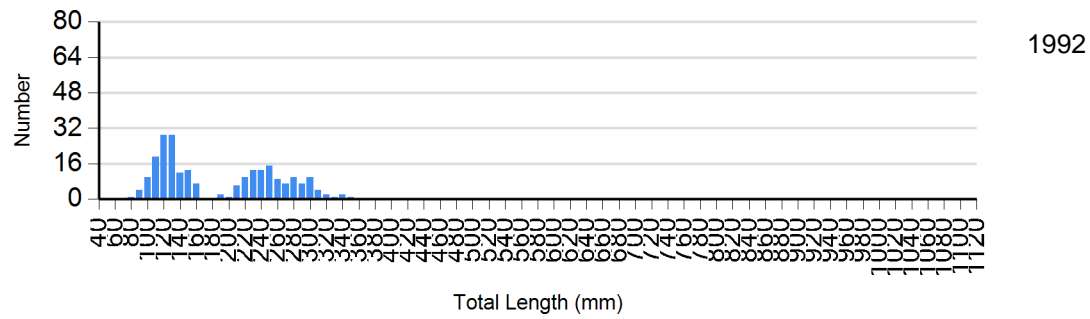
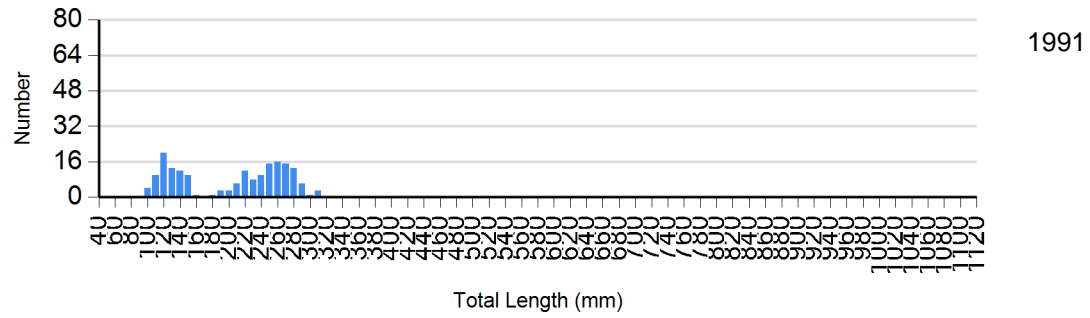
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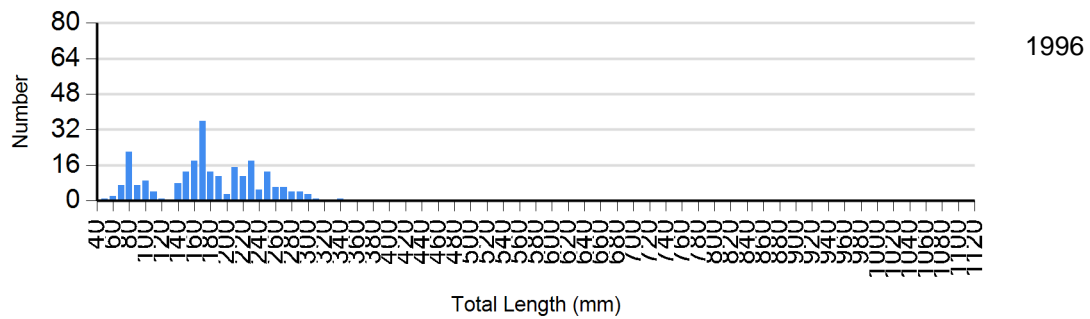
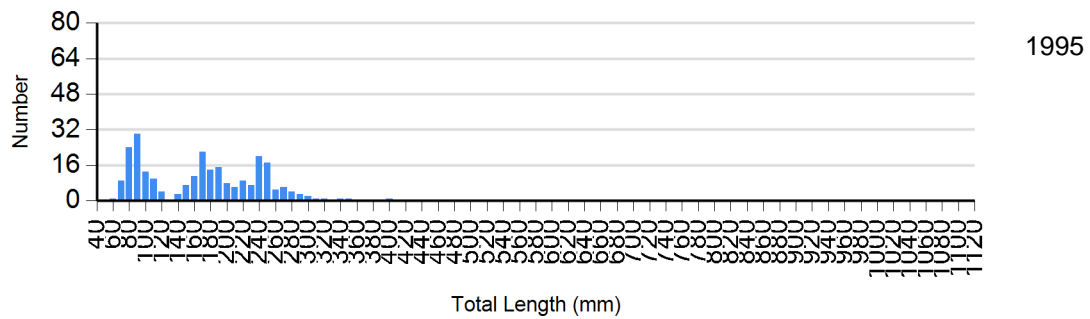
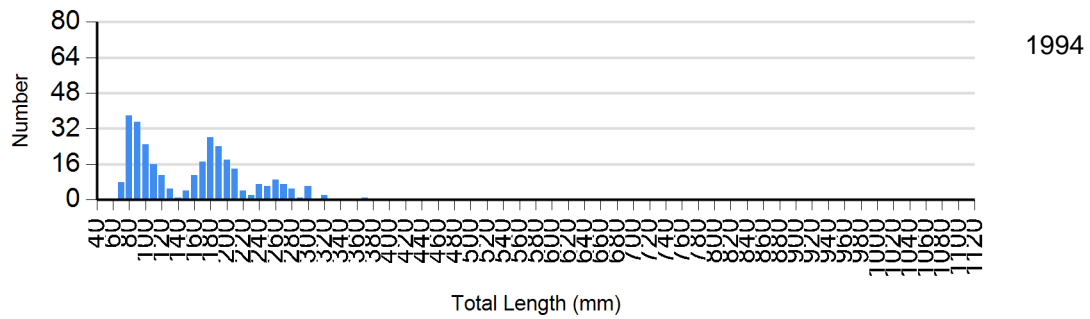
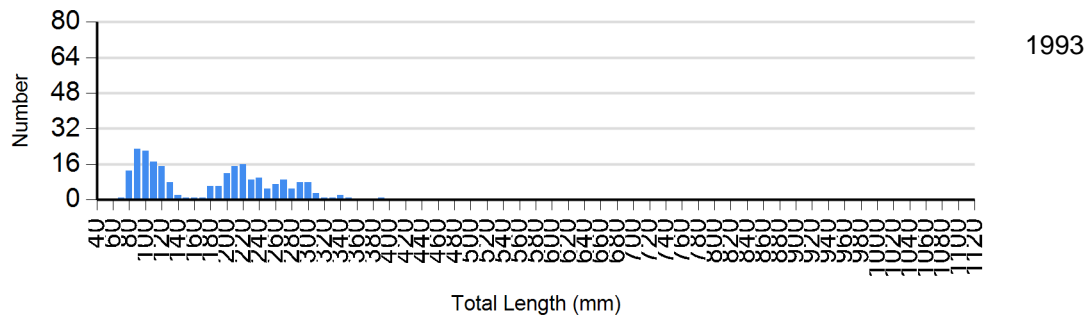


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Species: White Sucker

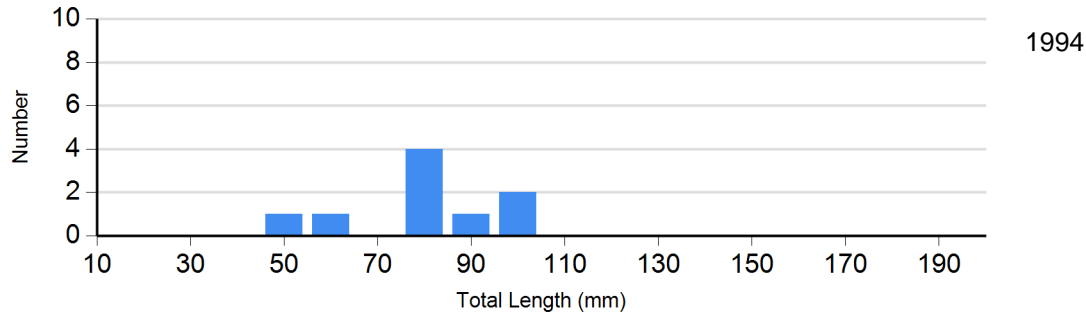
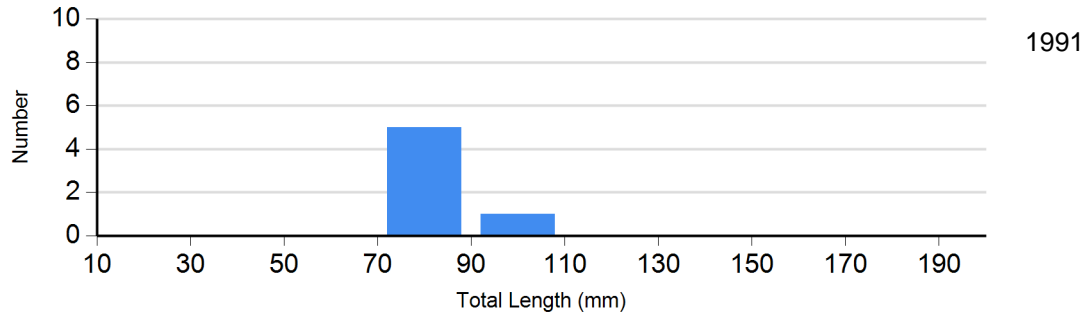


Site: 1412
Species: Brown Trout

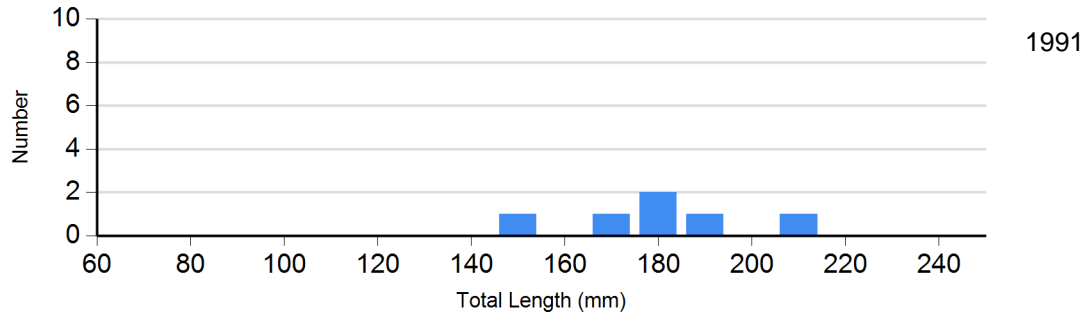


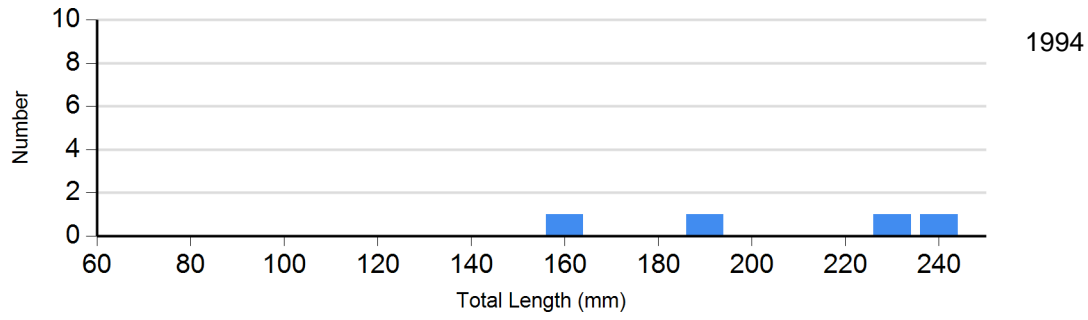
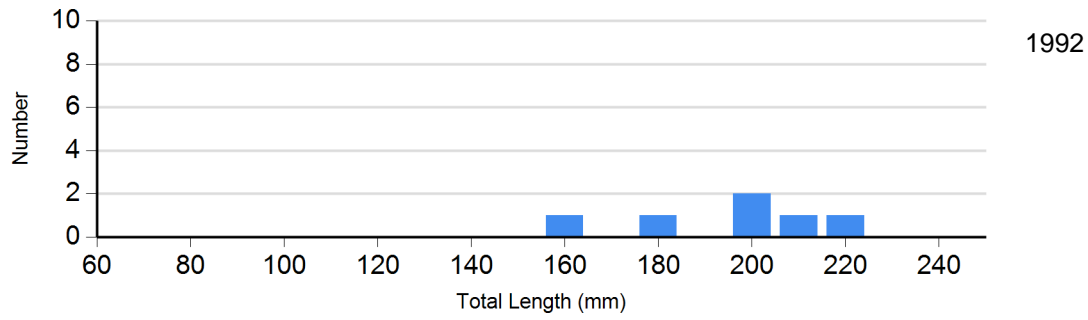


Site: 1412
Species: Longnose Dace

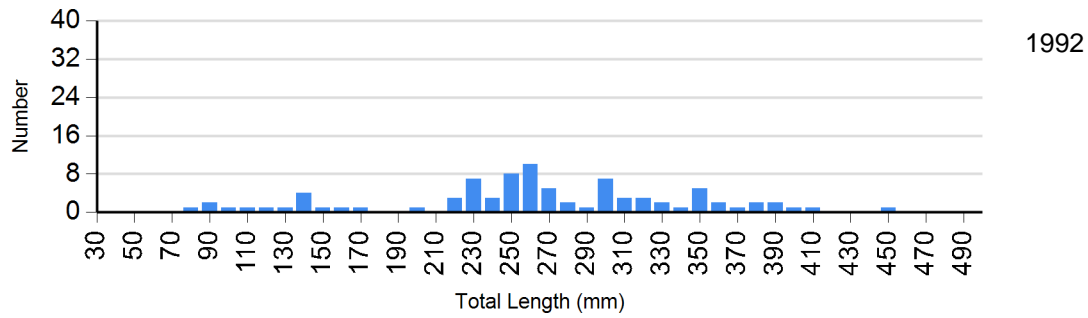
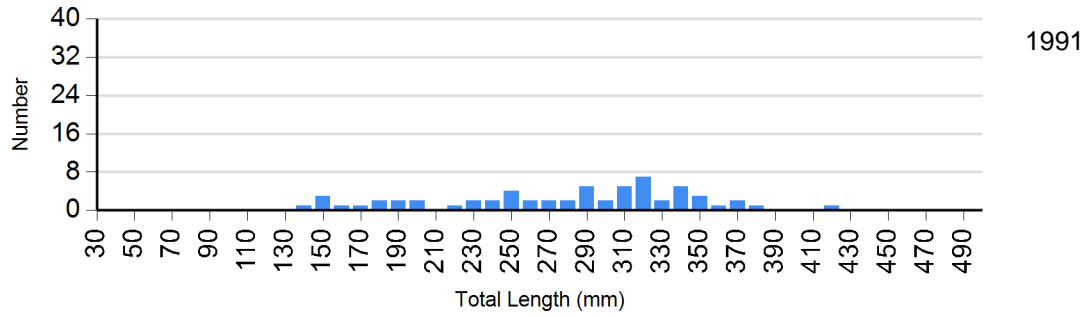


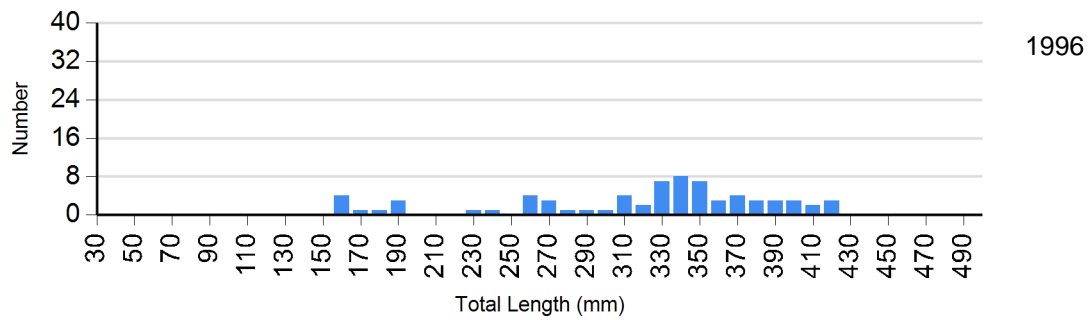
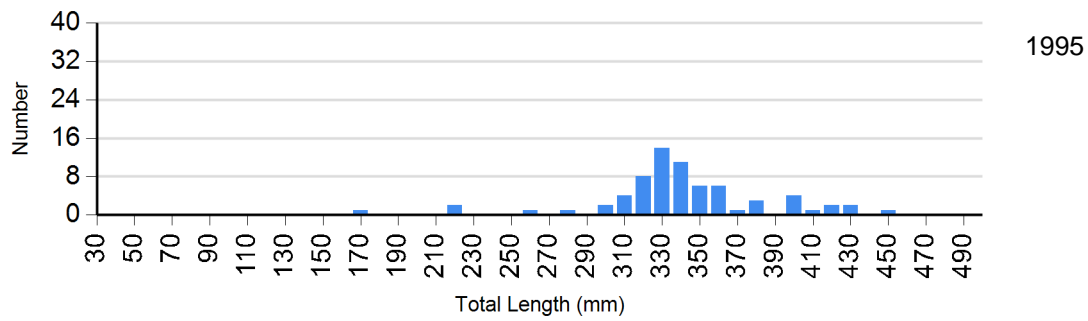
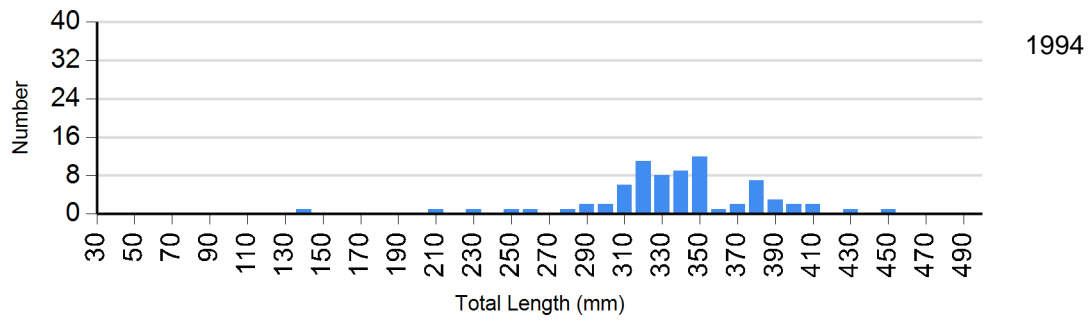
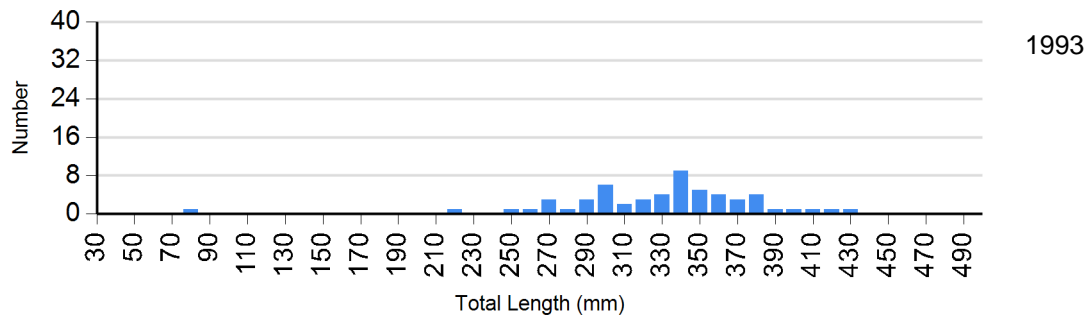
Site: 1412
Species: Mountain Sucker



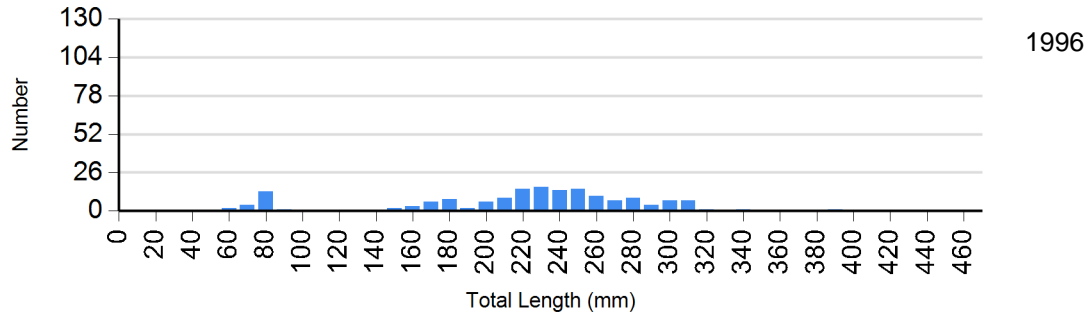


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Species: White Sucker

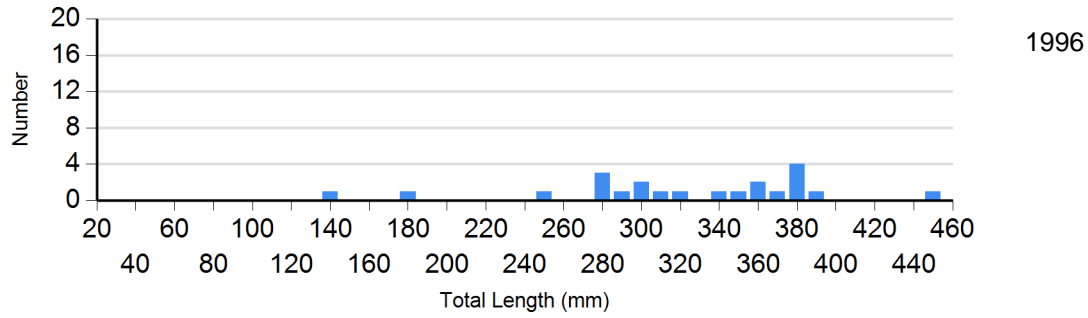




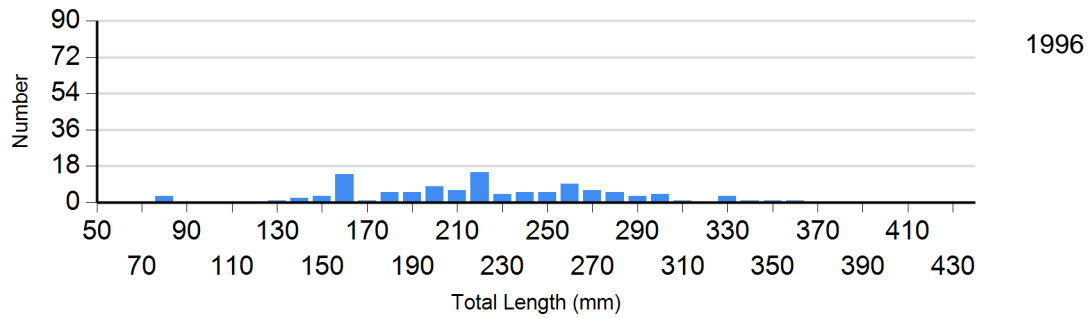
Site: 1444
Species: Brown Trout



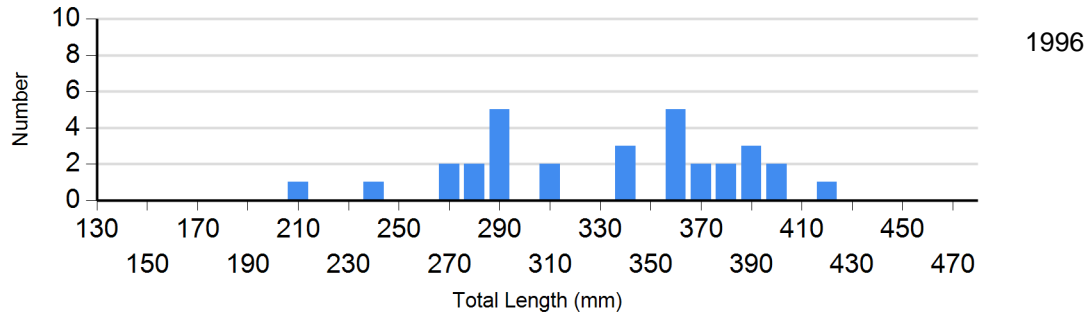
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Species: White Sucker



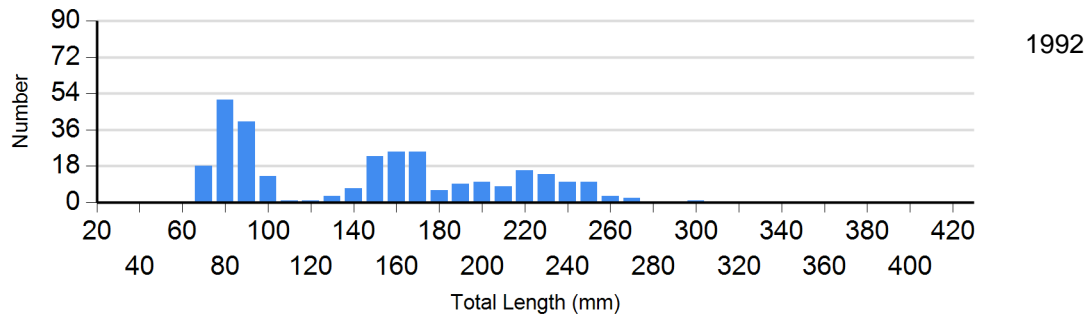
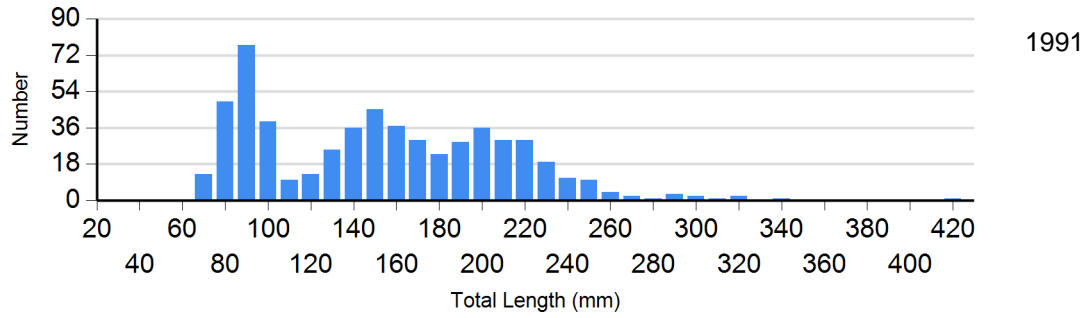
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Species: Brown Trout

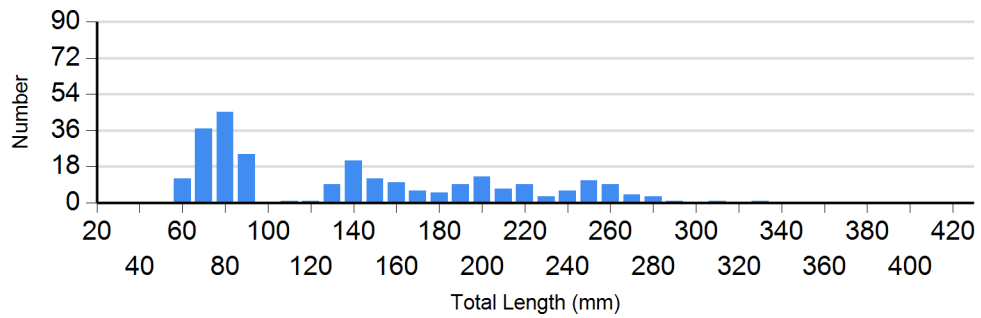
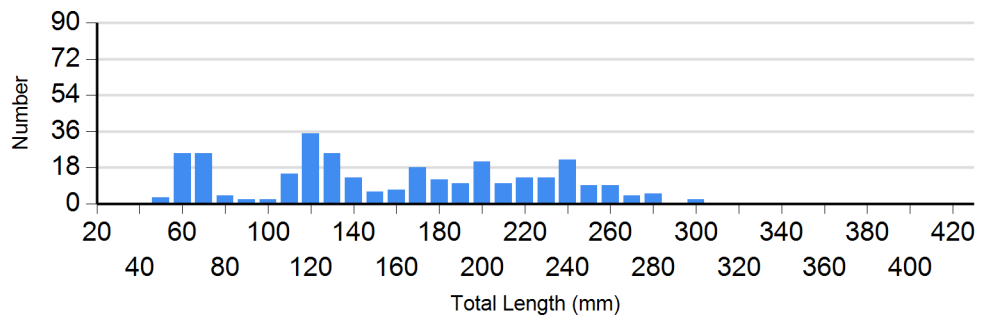
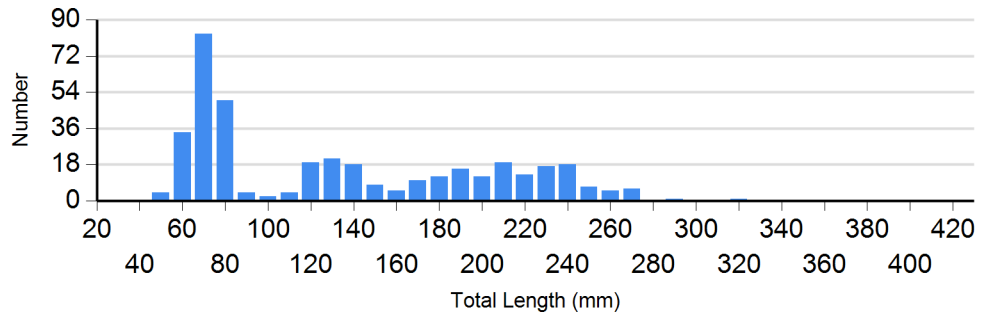
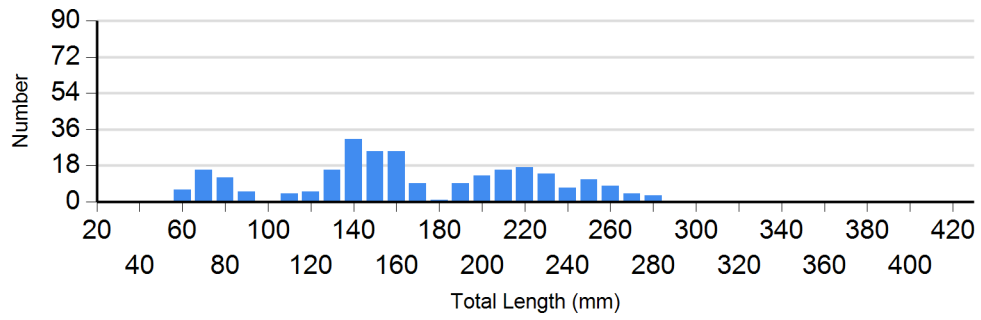


Site: 1449
Species: White Sucker

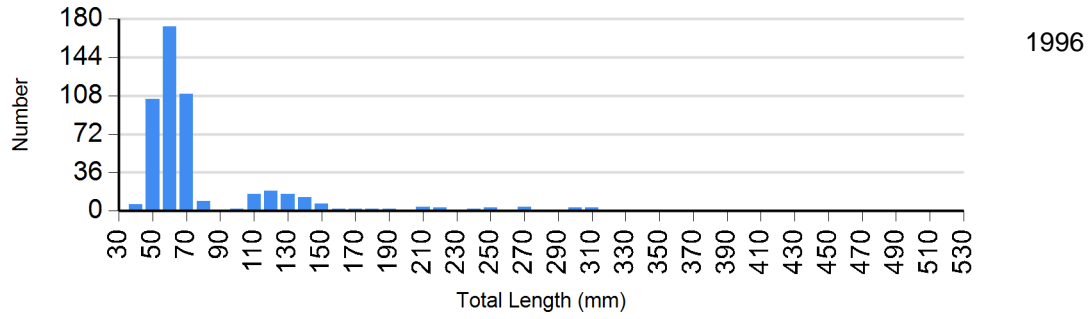


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Species: Brown Trout

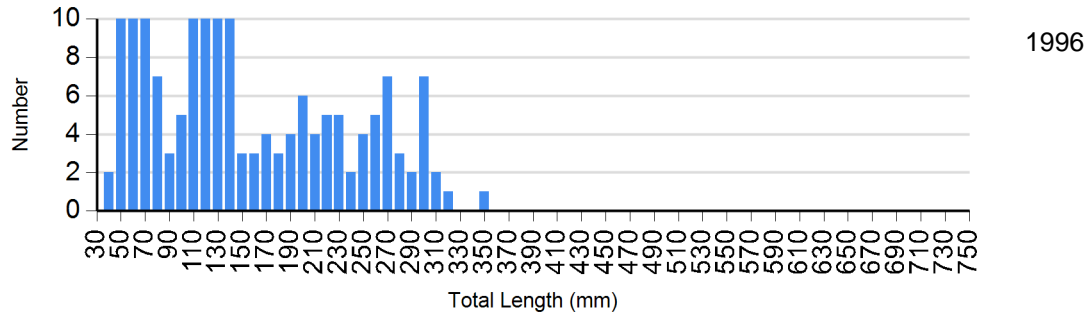




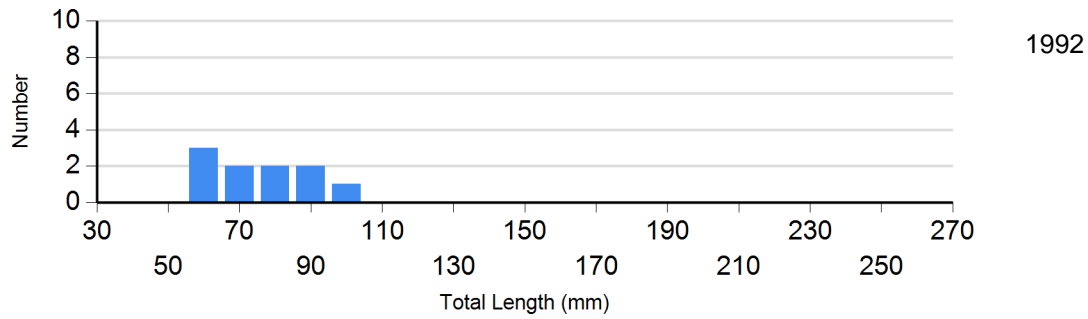
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Species: Brown Trout

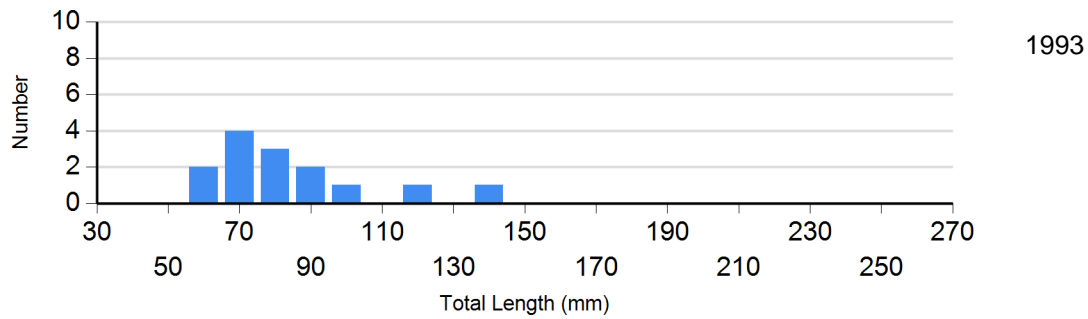


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Species: Brown Trout

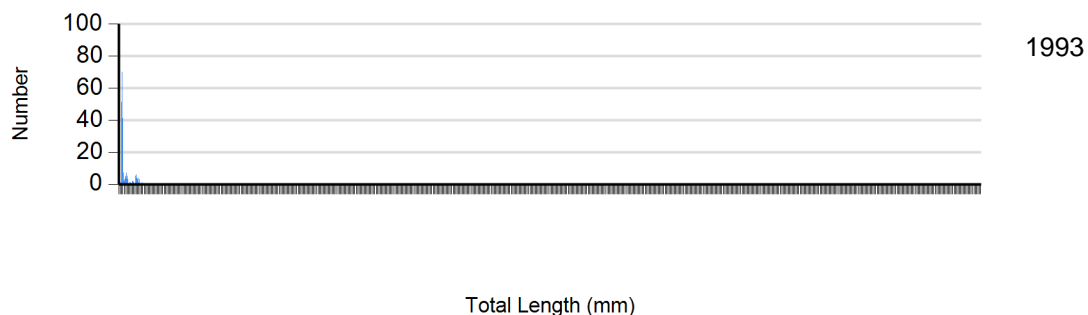
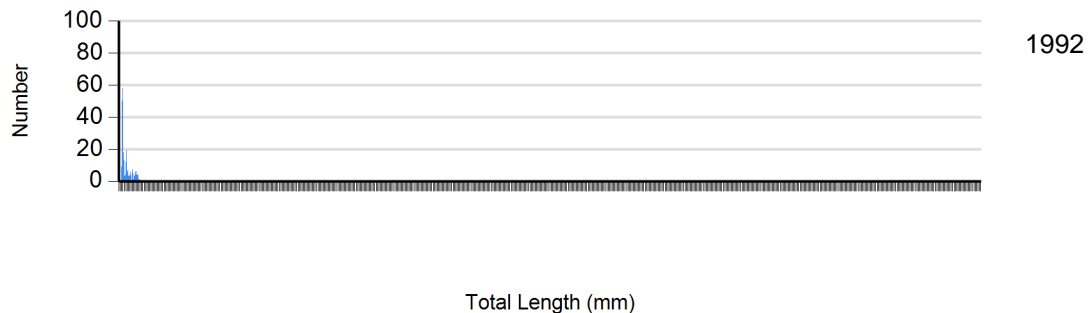
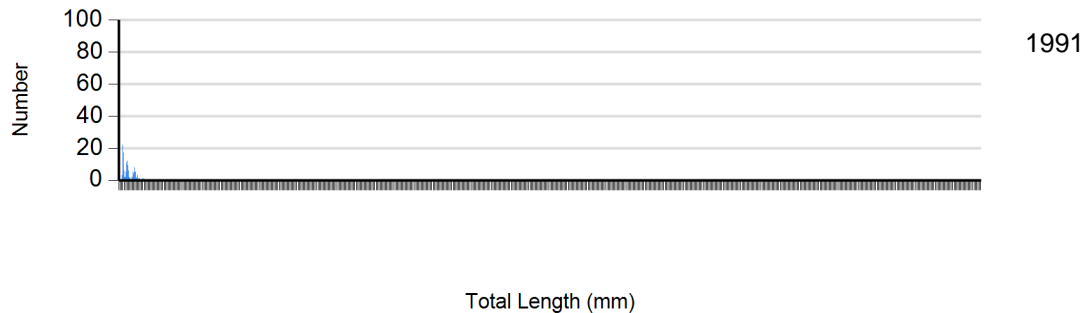


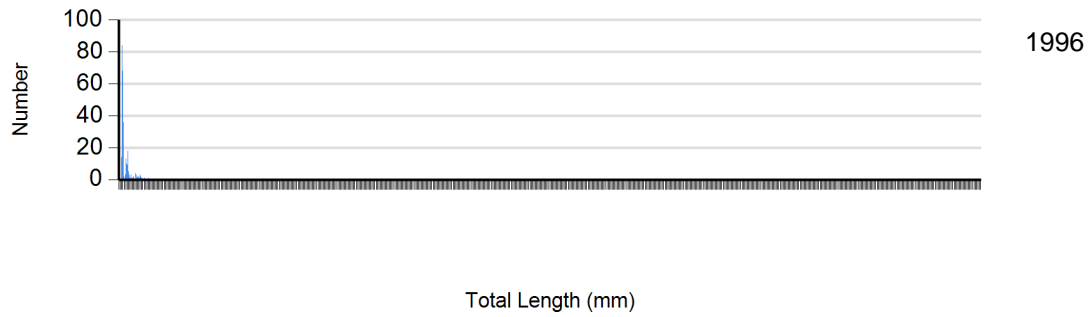
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Species: Brook Trout



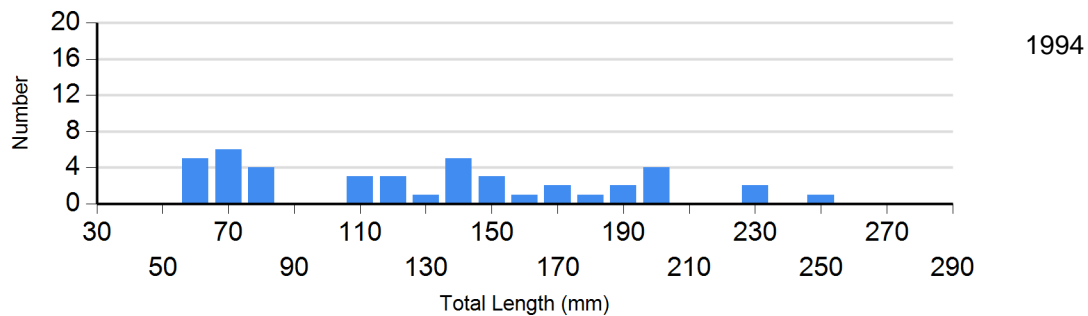
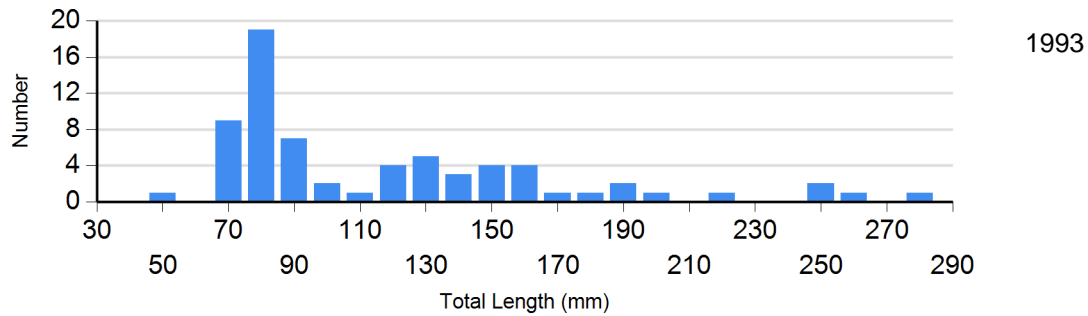
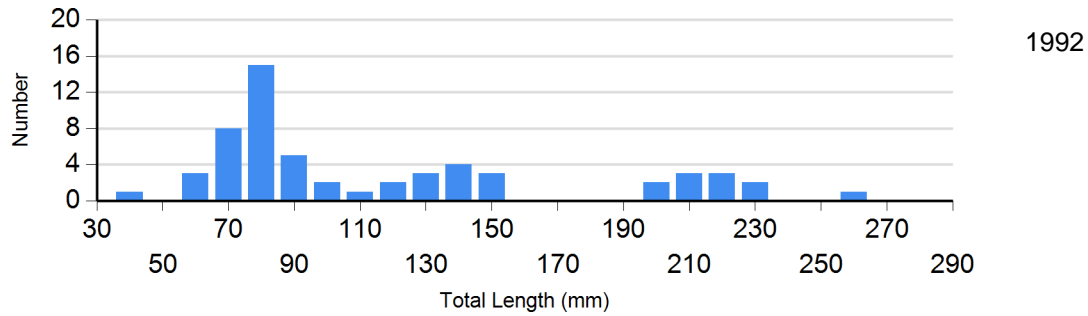


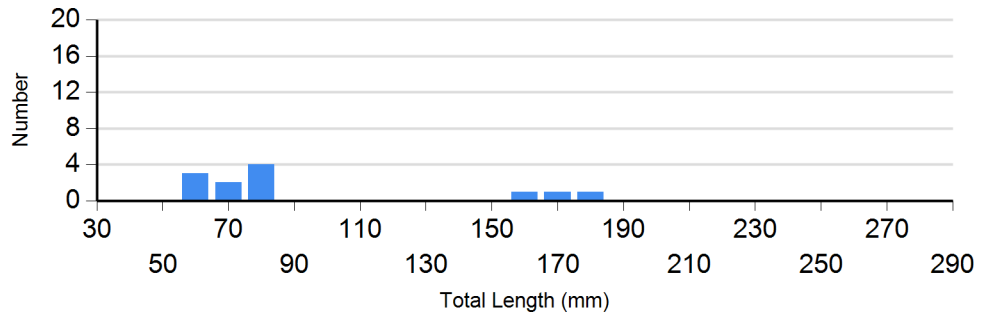
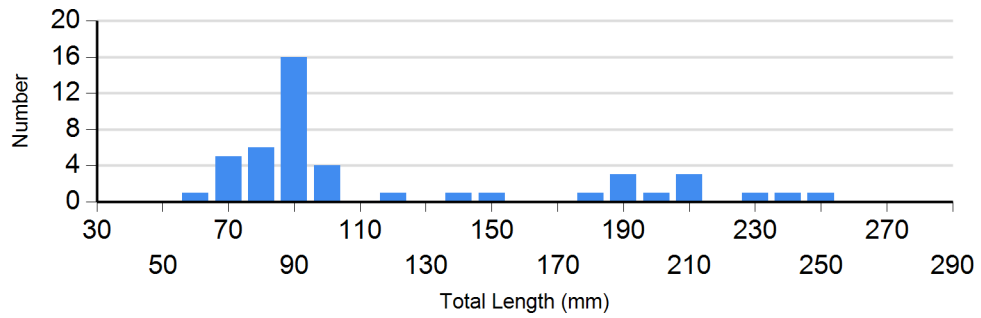
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Species: Brown Trout



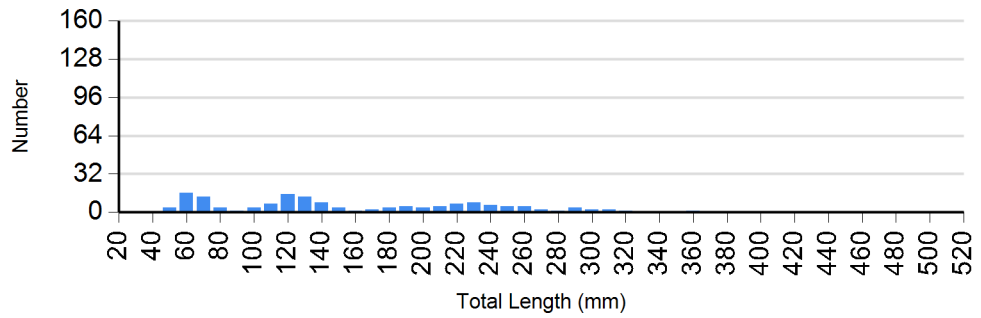
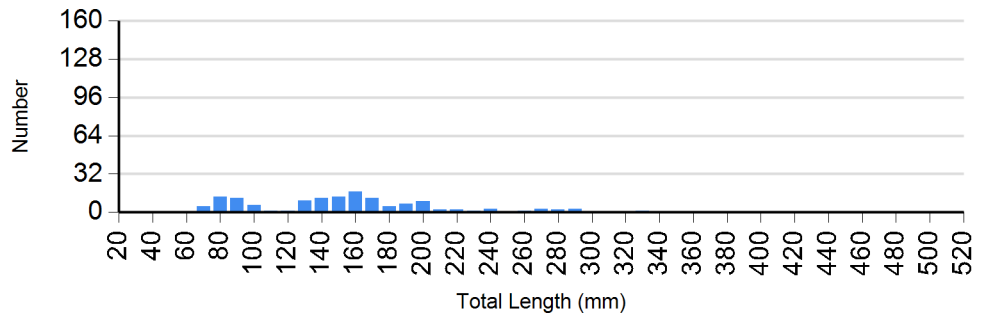


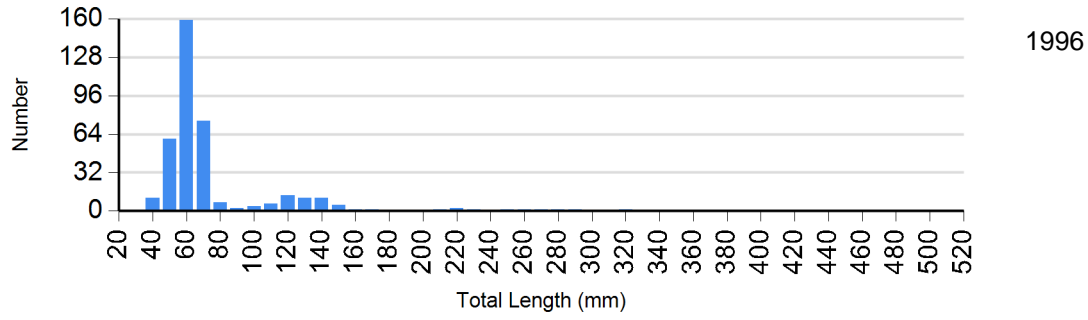
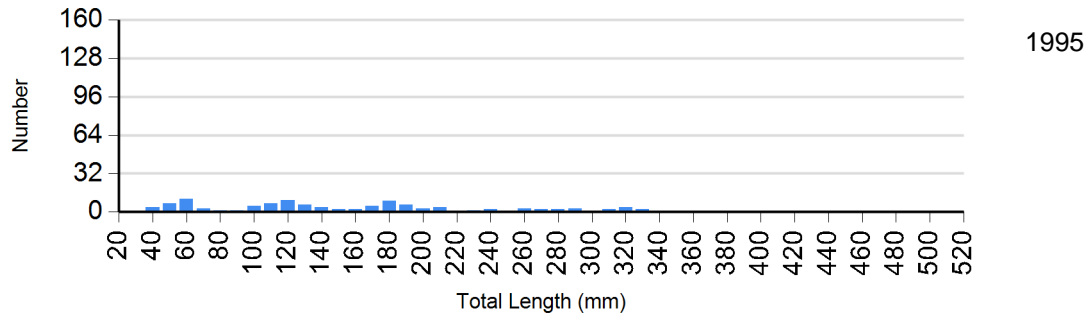
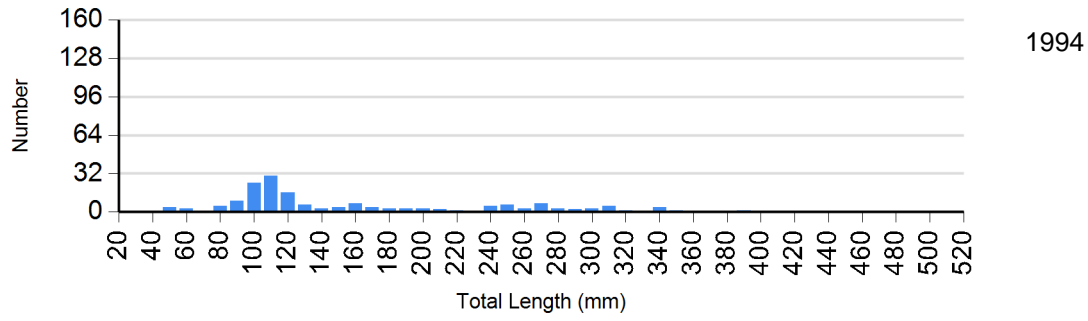
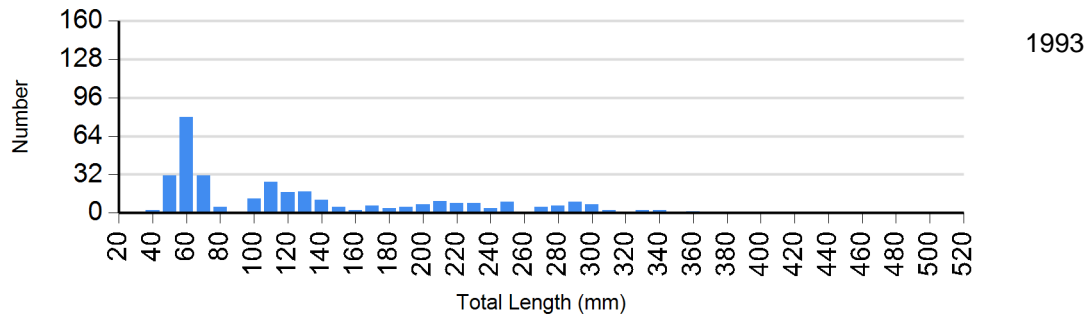
Site: 1843
Species: Brook Trout



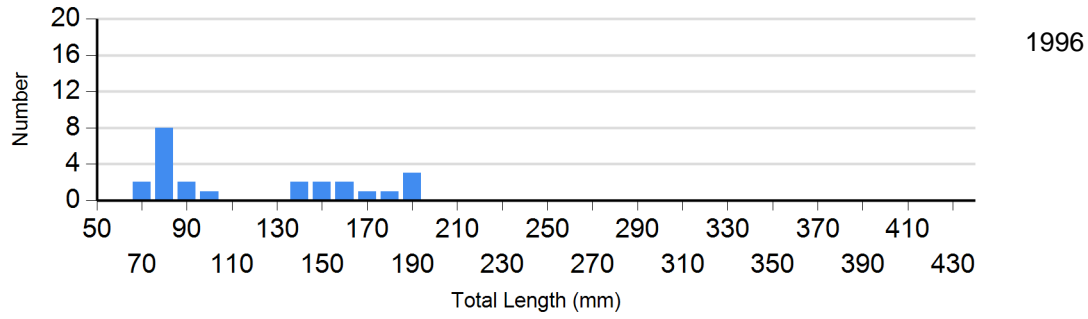


Site: 1843
Species: Brown Trout

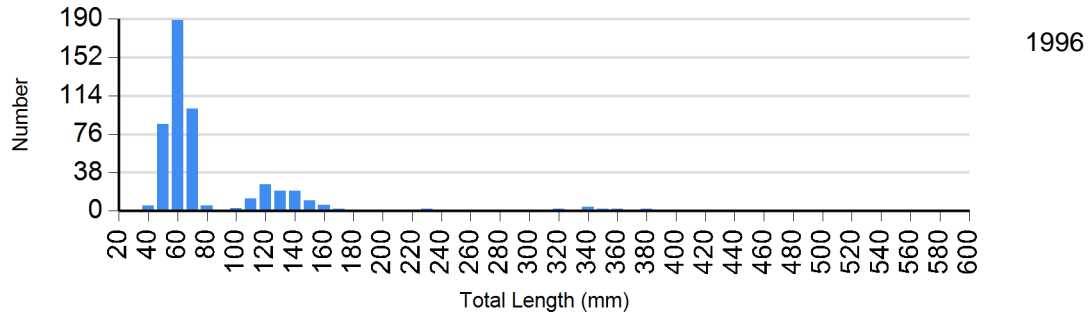




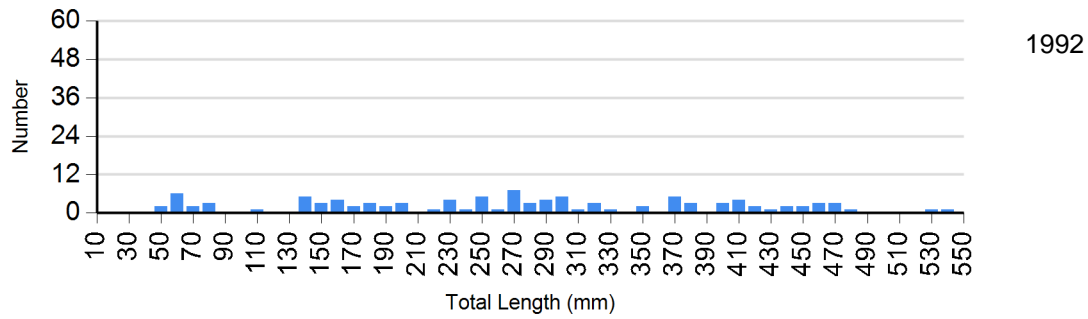
Site: 1849
Species: Brook Trout

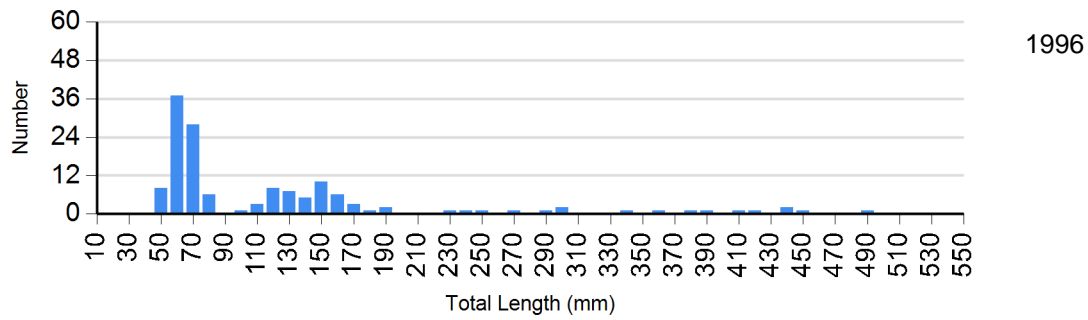
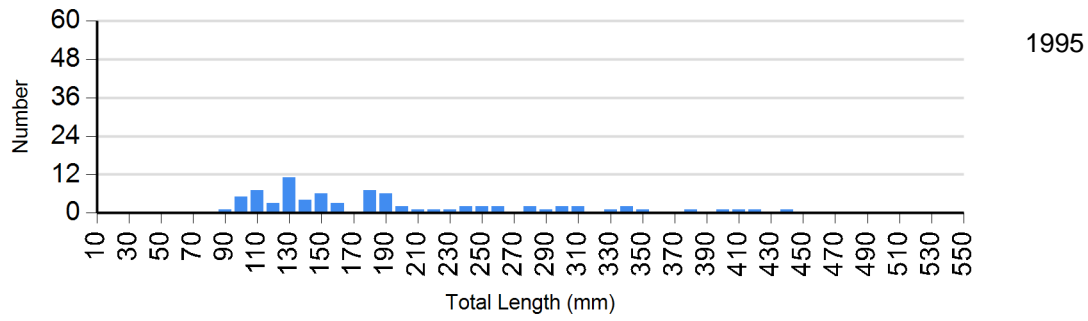
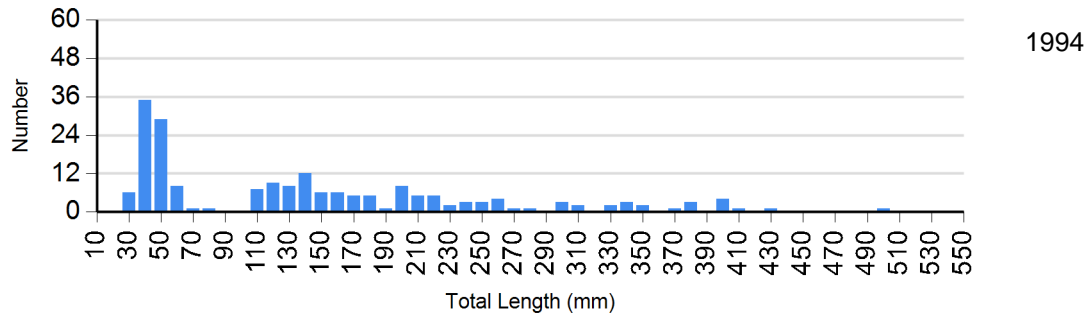
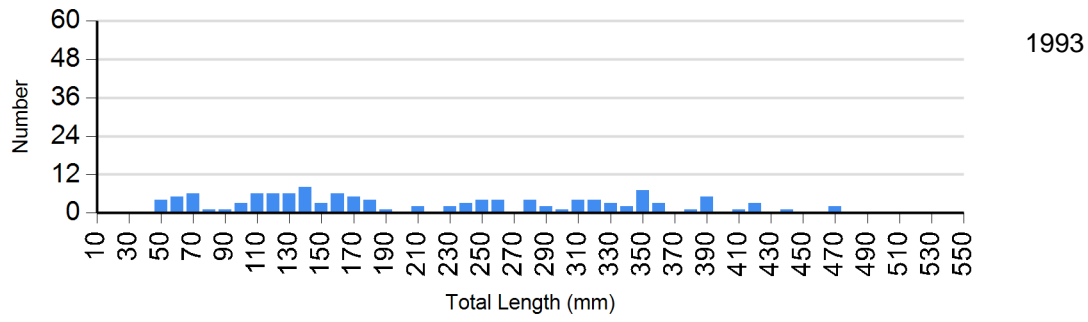


Site: 1849
Species: Brown Trout

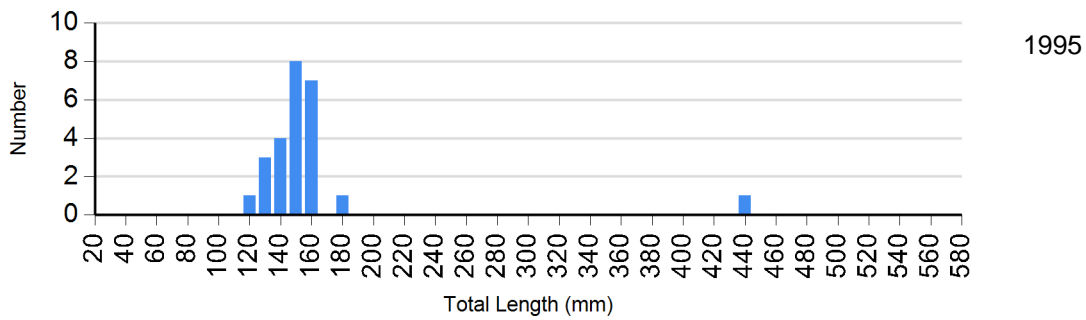
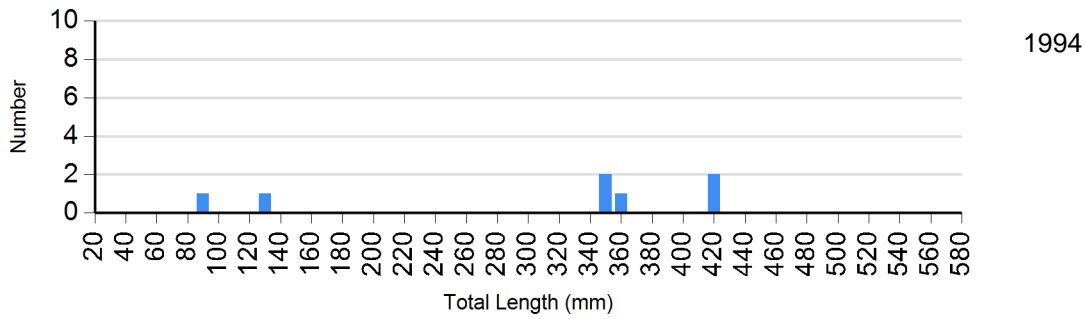
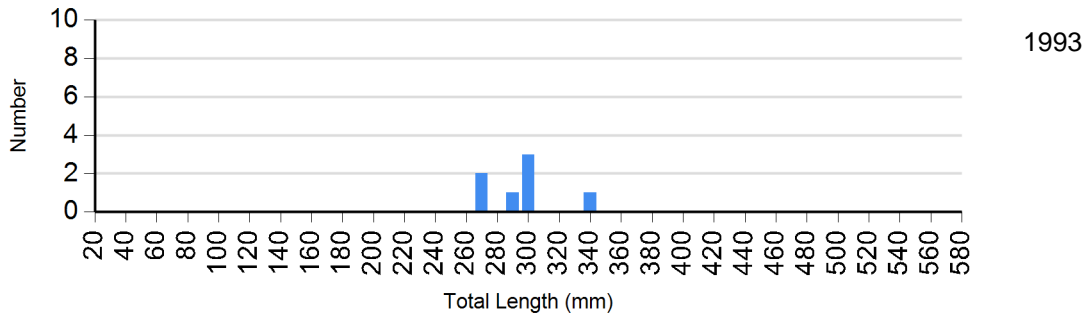
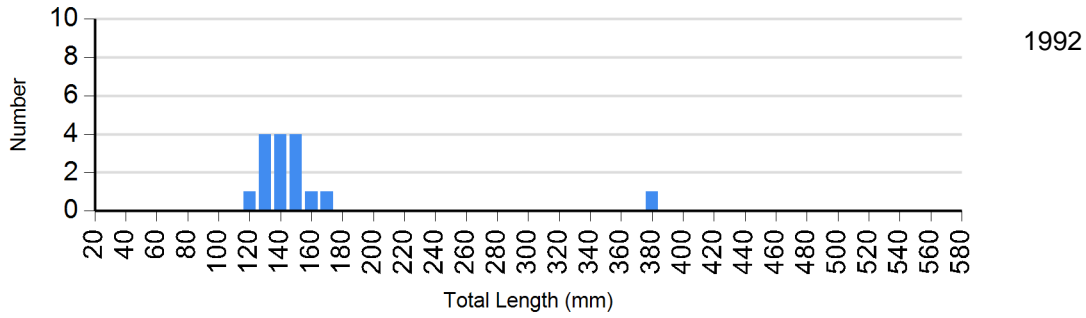


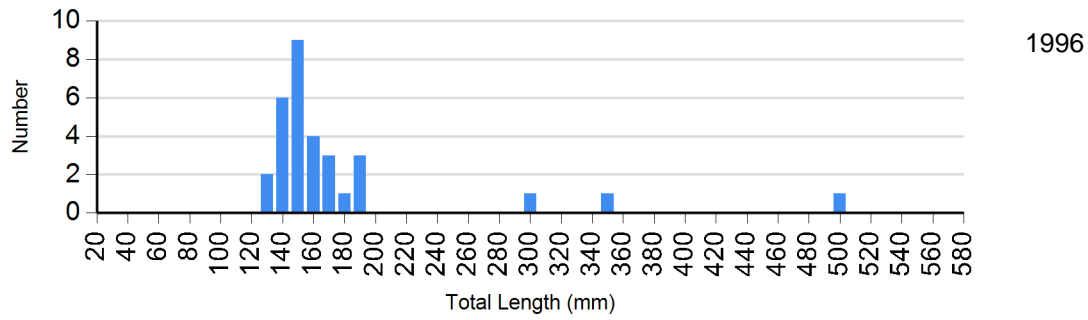
Site: 1853
Species: Brown Trout



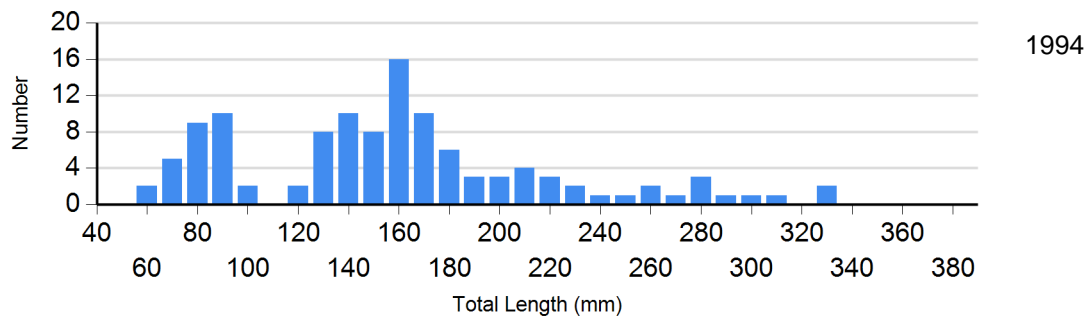
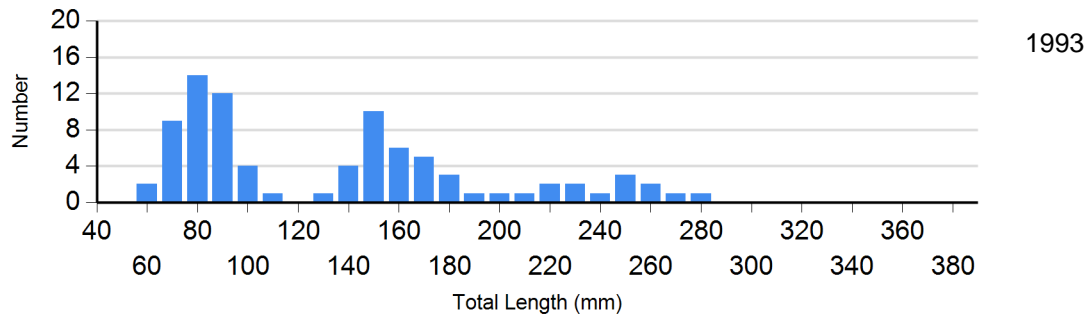
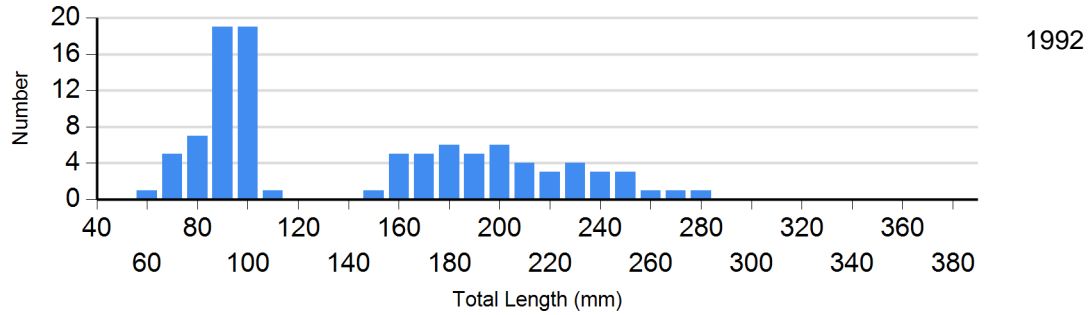


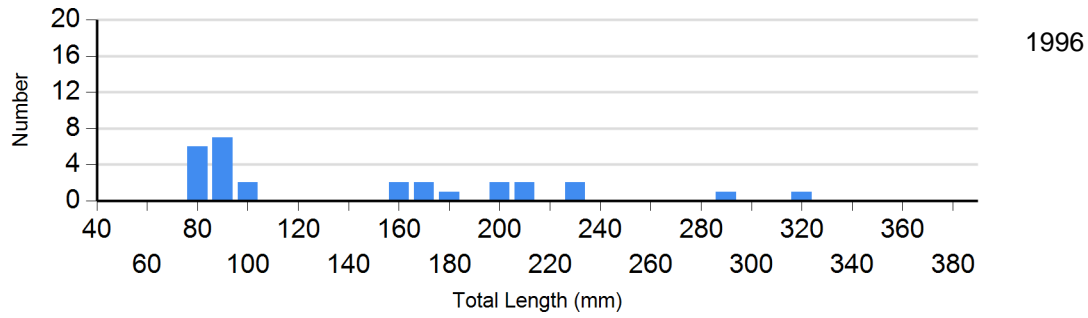
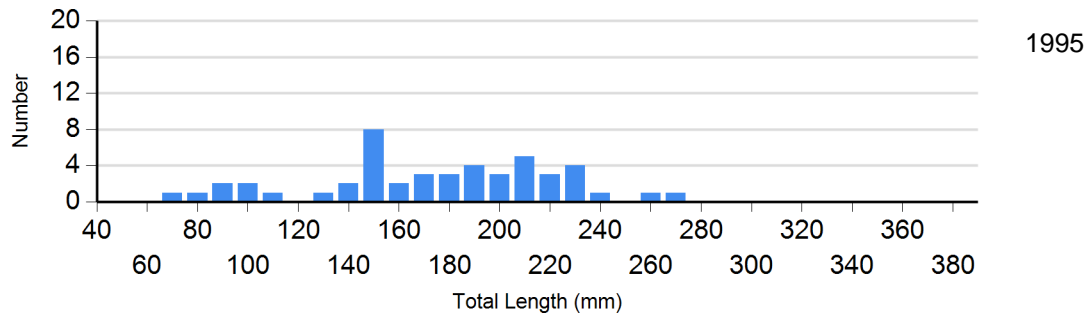
Site: 1853
Species: Rainbow Trout



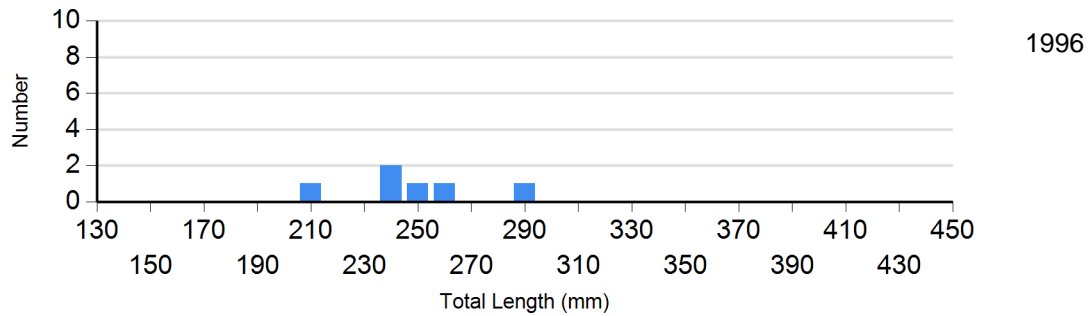
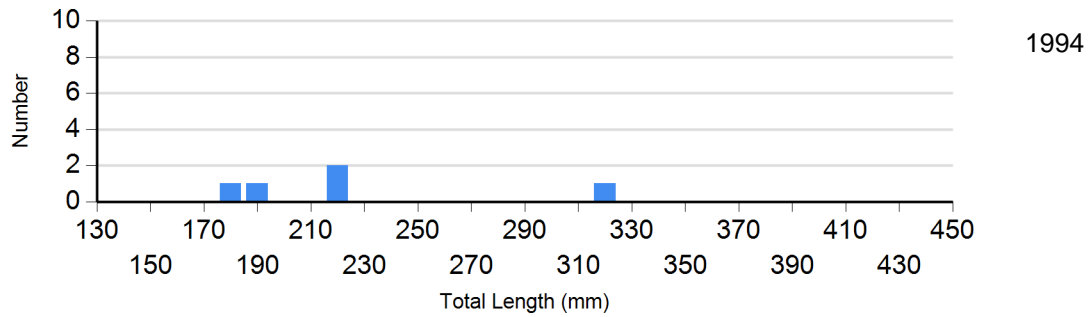


Site: 1930
Species: Brown Trout

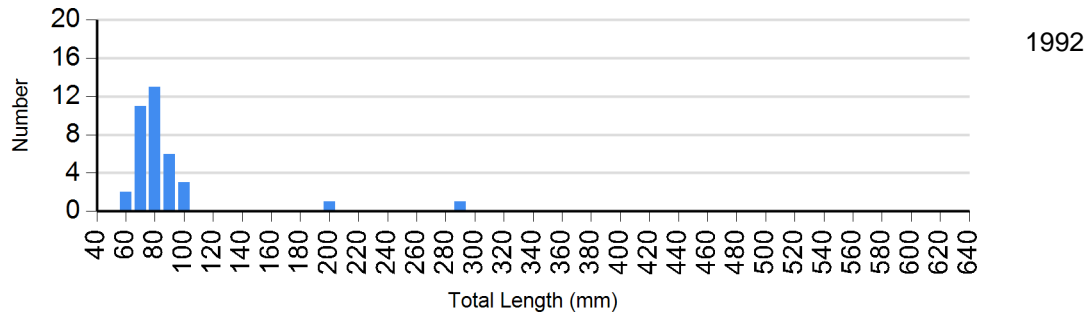




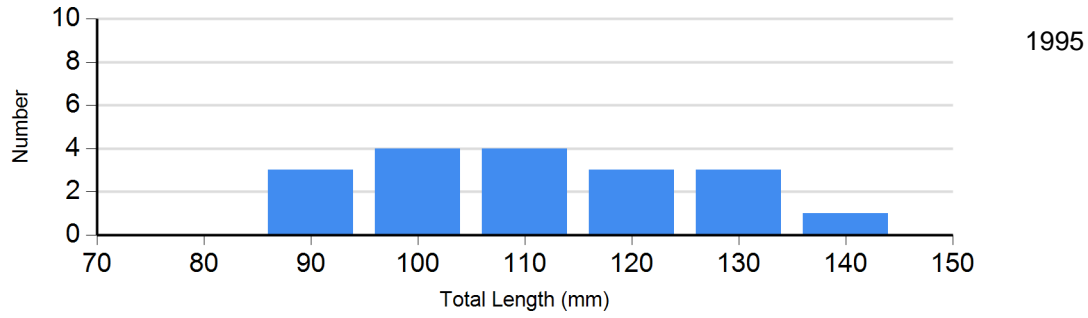
Site: 1930
Species: Hatchery Rainbow Trout



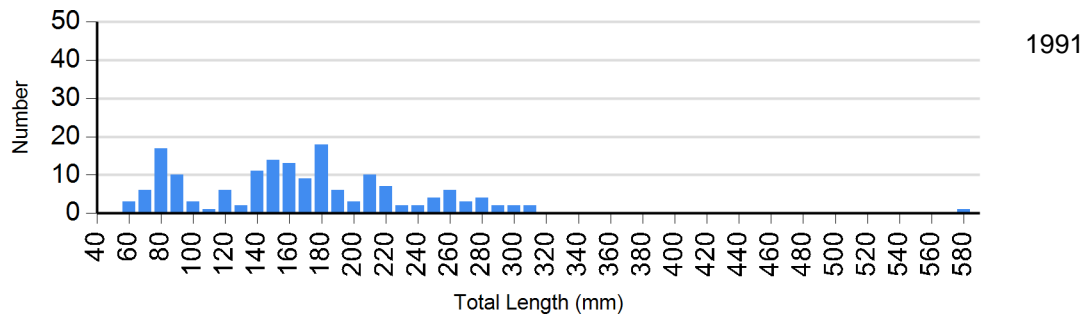
Site: 1930
Species: Rainbow Trout

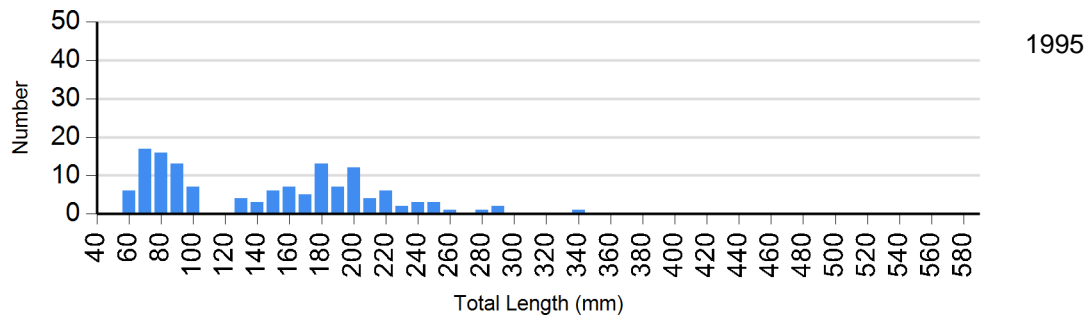
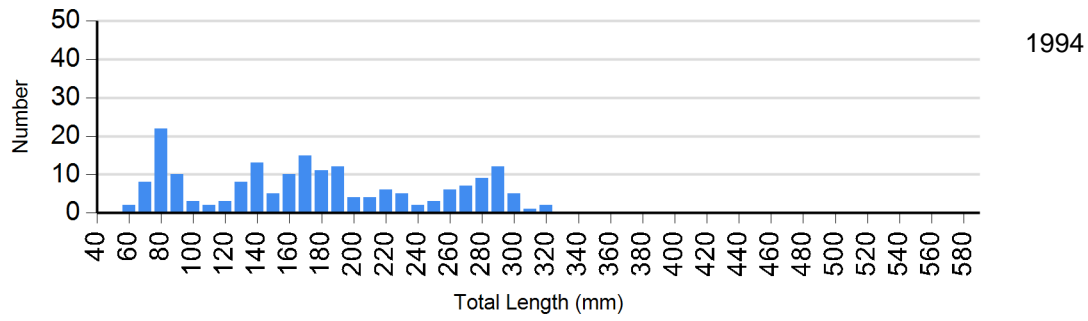
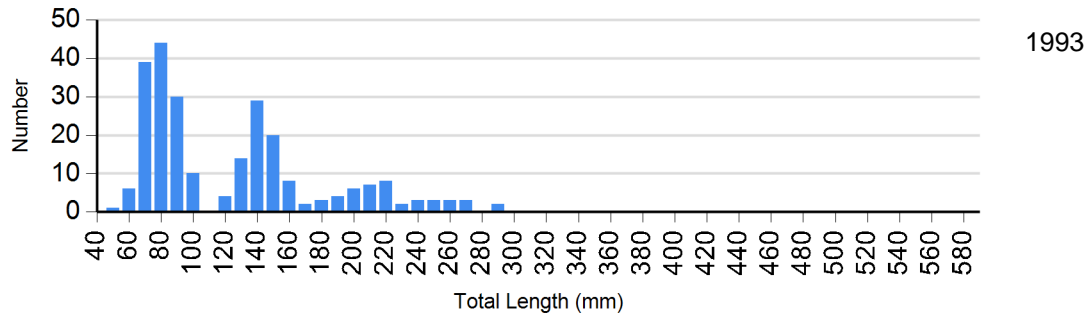
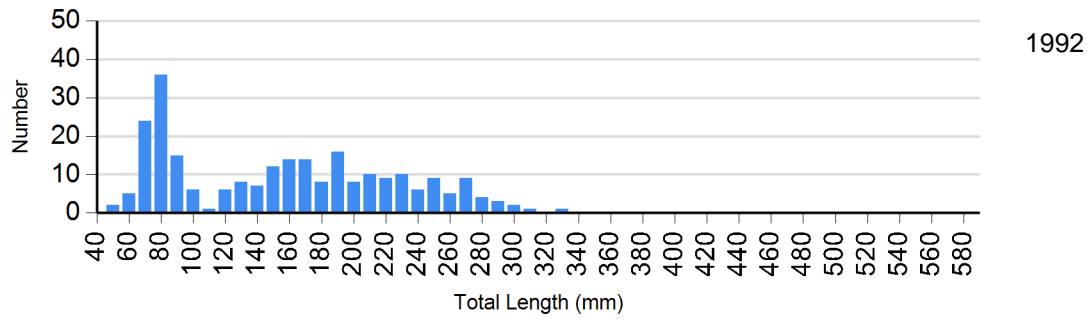


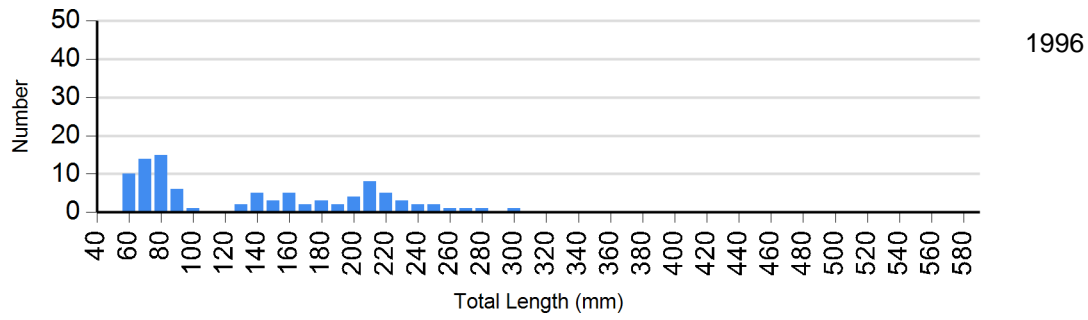
Site: 1930
Species: Rock Bass



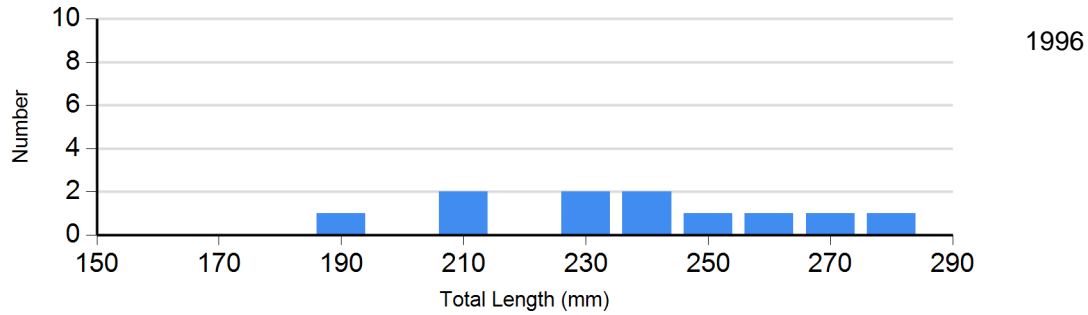
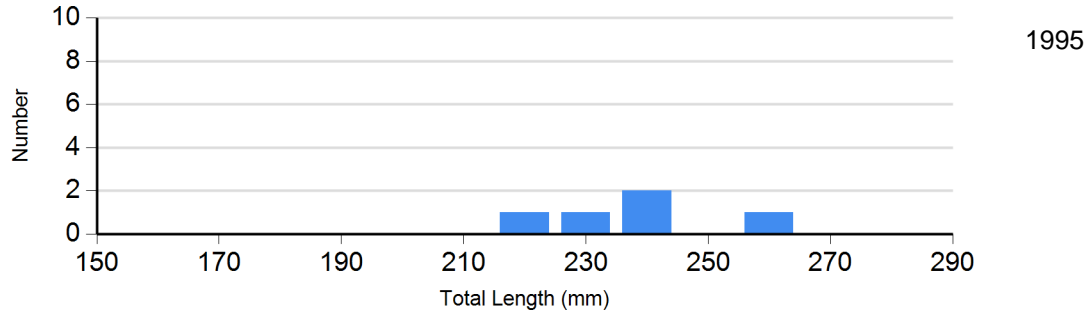
Site: 2007
Species: Brown Trout



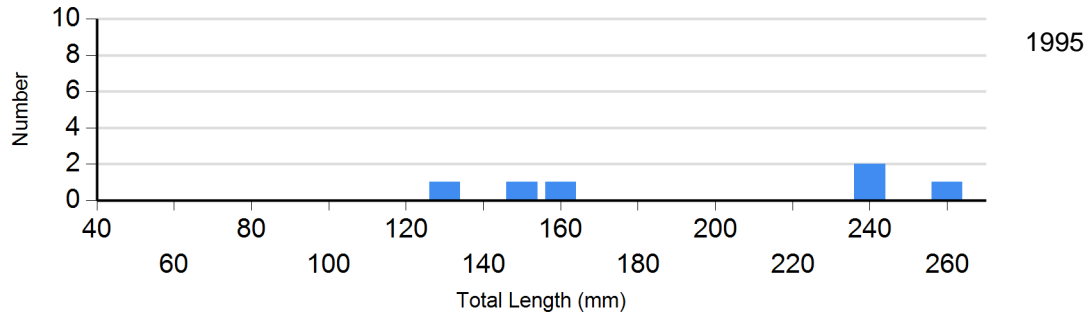
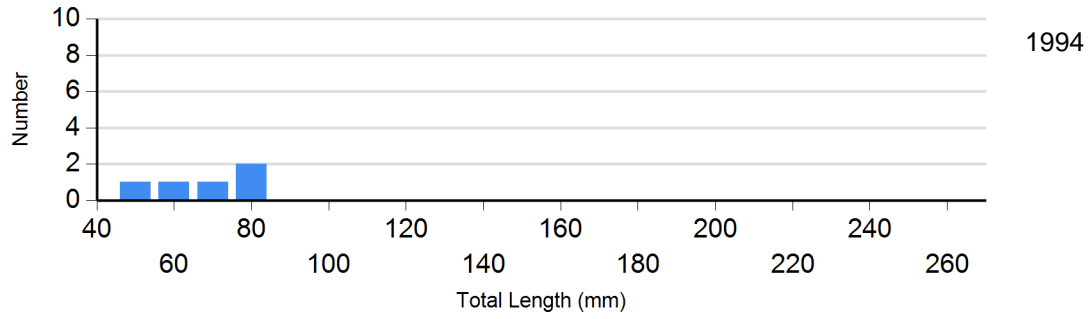




Site: 2007
Species: Hatchery Rainbow Trout



Site: 2007
Species: Rainbow Trout



Site: 2007
Species: Rock Bass

