

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
Whitewood Creek, Lawrence County
09-0056-00
1999

Table 1. Population and Biomass Estimates for Whitewood Creek

Site Number: 295
Site Midpoint (Latitude, Longitude): 44.51740810, -103.60458517
Survey Completed by: Chadwick Ecological Services
Stream Classification: BR3

Date Sampled: 11/04/1999
Site Length (m):
Mean Width (m): 0.0
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C):
Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brown Trout	<200mm	24	27	34	24	0	0	0	0	0.00	0	142.1	33.3
Brown Trout	>=200mm	10	10	12	10	0	0	0	0	0.00	0	327.6	386.4
Brown Trout	All	34	38	46	34	0	0	0	0	0.00	0	196.7	137.1
Longnose Dace	All	358	357	390	358	0	0	0	0	0.00	0	64.7	107.8
White Sucker	All	1	1	1	1	0	0	0	0	0.00	0	374.0	670.0

Site Number: 558
Site Midpoint (Latitude, Longitude): 44.38550441, -103.71870274
Survey Completed by: KNK Aquatic Ecology
Stream Classification: BK3, BR2

Date Sampled: 06/22/1999
Site Length (m): 100
Mean Width (m): 8.7
Number of Pass: 4
Conductivity (umhos/cm):
pH:
Water Temperature (C): 17.8
Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	>=200mm	2	2	2	2	23	3	20	9	2.66	32	223.0	130.0
Brook Trout	All	2	2	2	2	23	3	20	9	2.66	32	223.0	130.0
Brown Trout	<200mm	28	28	30	28	321	16	280	130	13.84	451	83.8	48.3

Brown Trout	>=200mm	30	31	35	30	356	68	310	144	60.71	499	254.0	191.3
Brown Trout	All	58	61	67	58	700	107	610	283	95.50	981	171.8	152.9
Mountain Sucker	All	13	28	95	13	321	11	280	130	9.92	451	138.5	34.6

Site Number: 558

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

Survey Completed by: KNK Aquatic Ecology

Stream Classification: BR1

Date Sampled: 09/16/1999

Site Length (m): 100

Mean Width (m): 7.6

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 14.0

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)
Brown Trout	<200mm	110	122	135	110	1614	23	1220	654	20.59	1963	104.6	14.3
Brown Trout	>=200mm	41	41	42	41	542	94	410	220	84.00	660	246.4	173.5
Brown Trout	All	151	160	169	151	2116	122	1600	857	108.68	2574	143.1	57.5
Mountain Sucker	All	15	16	20	15	212	10	160	86	8.92	257	150.3	47.2

Site Number: 588

Site Midpoint (Latitude, Longitude): 44.36654564, -103.73424434

Survey Completed by: KNK Aquatic Ecology

Stream Classification: BK2, BR2

Date Sampled: 06/22/1999

Site Length (m): 100

Mean Width (m): 5.8

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 13.9

Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	>=200mm	12	12	13	12	205	31	120	83	27.87	193	227.9	151.9
Brook Trout	All	12	12	13	12	205	31	120	83	27.87	193	227.9	151.9
Brown Trout	<200mm	2	2	2	2	34	3	20	14	2.51	32	185.0	82.0
Brown Trout	>=200mm	6	6	9	6	103	13	60	42	11.18	97	209.3	121.8

Brown Trout All 8 8 10 8 137 15 80 55 13.68 129 203.3 111.9

Site Number: 588
Site Midpoint (Latitude, Longitude): 44.36654564, -103.73424434
Survey Completed by: KNK Aquatic Ecology
Stream Classification: BK3, BR1

Date Sampled: 09/18/1999
Site Length (m): 100
Mean Width (m): 4.5
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C): 13.0
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	3	3	4	3	66	2	30	27	2.10	48	127.7	35.7
Brook Trout	>=200mm	2	2	3	2	44	8	20	18	6.80	32	248.0	173.0
Brook Trout	All	5	5	7	5	110	10	50	45	8.91	80	175.8	90.6
Brown Trout	<200mm	14	20	40	14	441	7	200	178	5.93	322	110.9	15.1
Brown Trout	>=200mm	20	20	21	20	441	77	200	178	68.52	322	242.3	174.2
Brown Trout	All	34	35	39	34	771	84	350	312	74.81	563	188.1	108.7
Longnose Dace	All	4	4	5	4	88	0	40	36	0.31	64	56.3	4.0
Mountain Sucker	All	5	5	6	5	110	7	50	45	6.45	80	167.4	65.6

Site Number: 599
Site Midpoint (Latitude, Longitude): 44.36363265, -103.73830179
Survey Completed by: KNK Aquatic Ecology
Stream Classification: BK2, BR2

Date Sampled: 06/21/1999
Site Length (m): 100
Mean Width (m): 7.3
Number of Pass: 4
Conductivity (umhos/cm):
pH:
Water Temperature (C): 16.1
Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	5	5	6	5	68	4	50	28	3.47	80	167.0	56.8
Brook Trout	>=200mm	12	12	13	12	164	21	120	67	18.31	193	220.6	124.8

Brook Trout	All	17	17	19	17	233	24	170	94	21.78	274	204.8	104.8
Brown Trout	<200mm	14	17	26	14	233	15	170	94	13.71	274	173.5	65.9
Brown Trout	>=200mm	12	14	21	12	192	35	140	78	31.11	225	242.8	181.7
Brown Trout	All	26	34	51	26	466	56	340	189	49.63	547	205.5	119.3
Mountain Sucker	All	1	1	1	1	14	1	10	6	0.71	16	167.0	58.0

Site Number: 599
Site Midpoint (Latitude, Longitude): 44.36363265, -103.73830179
Survey Completed by: KNK Aquatic Ecology
Stream Classification: BK2, BR1

Date Sampled: 09/17/1999
Site Length (m): 100
Mean Width (m): 5.4
Number of Pass: 4
Conductivity (umhos/cm):
pH:
Water Temperature (C): 13.0
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	11	13	21	11	242	8	130	98	7.30	209	131.7	33.8
Brook Trout	>=200mm	9	9	11	9	167	22	90	68	20.03	145	229.1	134.1
Brook Trout	All	20	22	28	20	409	32	220	166	28.83	354	175.6	79.0
Brown Trout	<200mm	40	41	44	40	762	14	410	309	12.23	660	111.5	18.0
Brown Trout	>=200mm	38	47	63	38	874	133	470	354	118.85	756	231.7	152.4
Brown Trout	All	78	86	97	78	1599	133	860	647	119.10	1384	170.1	83.4
Longnose Dace	All	5	5	7	5	93	1	50	38	0.93	80	104.4	11.2
Mountain Sucker	All	16	16	18	16	297	19	160	120	16.96	257	165.1	63.9

Site Number: 612
Site Midpoint (Latitude, Longitude): 44.35478049, -103.73811696
Survey Completed by: KNK Aquatic Ecology
Stream Classification: BK2, BR2

Date Sampled: 06/21/1999
Site Length (m): 100
Mean Width (m): 7.2
Number of Pass: 3
Conductivity (umhos/cm):
pH:
Water Temperature (C): 10.6
Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	4	4	4	4	56	4	40	23	3.53	64	186.5	71.0
Brook Trout	>=200mm	8	8	9	8	111	12	80	45	10.69	129	218.1	107.5
Brook Trout	All	12	12	13	12	167	16	120	68	14.23	193	207.6	95.3
Brown Trout	<200mm	27	44	86	27	613	28	440	248	24.72	708	110.0	45.2
Brown Trout	>=200mm	25	25	27	25	348	52	250	141	46.70	402	233.2	150.2
Brown Trout	All	52	60	72	52	836	90	600	338	80.35	965	169.3	107.7
Longnose Dace	All	2	2	6	2	28	0	20	11	0.16	32	82.5	6.5

Site Number: 612

Site Midpoint (Latitude, Longitude): 44.35478049, -103.73811696

Survey Completed by: KNK Aquatic Ecology

Stream Classification: BK2, BR1

Date Sampled: 09/17/1999

Site Length (m): 100

Mean Width (m): 5.0

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 14.0

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	17	17	18	17	339	5	170	137	4.80	274	104.5	15.9
Brook Trout	>=200mm	5	5	5	5	100	11	50	40	9.82	80	215.0	110.4
Brook Trout	All	22	22	23	22	438	16	220	177	14.62	354	129.6	37.4
Brown Trout	<200mm	209	221	232	210	4402	57	2210	1783	50.48	3556	100.0	12.8
Brown Trout	>=200mm	31	31	32	31	618	98	310	250	87.33	499	239.3	158.4
Brown Trout	All	240	252	262	242	5020	159	2520	2033	141.82	4055	118.0	31.6
Longnose Dace	All	10	20	70	10	398	3	200	161	2.42	322	91.1	6.8

Site Number: 679

Site Midpoint (Latitude, Longitude): 44.32613292, -103.76630646

Survey Completed by: KNK Aquatic Ecology

Stream Classification: BK2, BR2

Date Sampled: 09/19/1999

Site Length (m): 80

Mean Width (m): 4.8

Number of Pass: 3

Conductivity (umhos/cm):

pH:

Water Temperature (C): 8.0

Voltage:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	263	283	298	268	5896	113	3538	2388	101.04	5692	108.0	19.2
Brook Trout	>=200mm	11	11	12	11	229	23	138	93	20.89	221	207.3	102.1
Brook Trout	All	274	293	307	279	6104	137	3663	2472	122.75	5893	112.0	22.5
Brown Trout	<200mm	78	81	86	78	1688	30	1013	683	26.44	1629	103.5	17.6
Brown Trout	>=200mm	13	13	13	13	271	65	163	110	57.96	261	269.1	239.7
Brown Trout	All	91	94	99	91	1958	97	1175	793	86.18	1891	127.2	49.3
Longnose Dace	All	1	1	1	1	21	0	13	8	0.19	20	96.0	10.0

Site Number: 690

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

Survey Completed by: KNK Aquatic Ecology

Stream Classification: BK2, BR1

Date Sampled: 09/18/1999

Site Length (m): 100

Mean Width (m): 3.4

Number of Pass: 3

Conductivity (umhos/cm):

pH:

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	122	125	130	122	3655	121	1250	1480	107.96	2011	137.5	33.1
Brook Trout	>=200mm	6	6	6	6	175	17	60	71	15.48	97	208.2	98.8
Brook Trout	All	128	131	136	128	3830	139	1310	1551	123.68	2108	140.8	36.2
Brown Trout	<200mm	261	275	286	264	8041	119	2750	3257	105.82	4425	96.6	14.7
Brown Trout	>=200mm	53	53	54	53	1550	282	530	628	251.65	853	252.4	181.9

Brown Trout	All	314	326	336	316	9532	409	3260	3861	365.54	5245	122.9	42.9
Longnose Dace	All	2	2	4	2	58	1	20	24	1.02	32	122.5	19.5

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 Whitewood Creek, 1989-1999

Site 43

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 11, 1996	1	1-1	
Brown Trout >=200mm	Oct 11, 1996	2	2-2	BR3
Longnose Dace	Oct 11, 1996	3	3-3	
White Sucker	Oct 11, 1996	3	3-3	

Site 44

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Longnose Dace	Oct 09, 1996	3	3-3	
White Sucker	Oct 09, 1996	1	1-2	

Site 131

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 10, 1996	1	1-1	
Longnose Dace	Oct 10, 1996	3	3-3	
White Sucker	Oct 10, 1996	22	21-26	

Site 295

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Oct 11, 1996	5	5-6	
	Nov 04, 1999	27	24-34	
Brown Trout >=200mm	Nov 04, 1999	10	10-12	BR3
Longnose Dace	Oct 11, 1996	2	3-4	
	Nov 04, 1999	357	358-390	
Mountain Sucker	Oct 11, 1996	8	8-9	
White Sucker	Oct 11, 1996	1	1-1	
	Nov 04, 1999	1	1-1	

Site 558

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 27, 1994	1	1-2	
	Sep 23, 1996	1	1-2	
	Oct 10, 1997	1	1-1	
	Jun 03, 1998	3	3-3	
	Sep 10, 1998	1	1-2	
Brook Trout >=200mm	Jun 03, 1998	3	3-3	BK3
	Sep 10, 1998	1	1-1	BK3
	Jun 22, 1999	2	2-2	BK3
Brown Trout <200mm	Oct 03, 1992	102	60-173	
	Sep 14, 1993	43	41-48	
	Sep 27, 1994	60	52-72	
	Sep 07, 1995	27	25-32	
	Sep 23, 1996	101	83-122	
	Oct 10, 1997	77	73-83	
	Jun 03, 1998	14	14-14	

Brown Trout <200mm	Sep 10, 1998	67	53-88	
	Jun 22, 1999	28	28-30	
	Sep 16, 1999	122	110-135	
Brown Trout >=200mm	Oct 03, 1992	24	24-25	BR1
	Sep 14, 1993	50	50-51	BR1
	Sep 27, 1994	44	44-46	BR1
	Sep 07, 1995	28	28-29	BR1
	Sep 23, 1996	38	38-39	BR1
	Oct 10, 1997	58	57-61	BR1
	Jun 03, 1998	39	37-44	BR1
	Sep 10, 1998	66	65-69	BR1
	Jun 22, 1999	31	30-35	BR2
	Sep 16, 1999	41	41-42	BR1
Longnose Dace	Oct 03, 1992	36	14-150	
	Sep 14, 1993	14	14-15	
	Sep 27, 1994	33	19-77	

Longnose Dace	Sep 07, 1995	8	7-14
	Sep 23, 1996	8	8-9
	Oct 10, 1997	10	11-13
	Jun 03, 1998	20	10-70
	Sep 10, 1998	61	37-112
Mountain Sucker	Oct 03, 1992	44	36-59
	Sep 14, 1993	15	14-19
	Sep 27, 1994	23	22-27
	Sep 07, 1995	20	17-29
	Sep 23, 1996	19	16-28
	Oct 10, 1997	20	14-40
	Jun 03, 1998	90	23-490
	Sep 10, 1998	51	47-59
	Jun 22, 1999	28	13-95
	Sep 16, 1999	16	15-20
White Sucker	Oct 03, 1992	1	1-1

White Sucker

Sep 27, 1994

1

1-2

Site 588

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Sep 27, 1994	2	2-3	
	Oct 10, 1997	24	7-190	
	Sep 10, 1998	2	2-5	
	Sep 18, 1999	3	3-4	
Brook Trout >=200mm	Sep 27, 1994	5	5-6	BK2
	Oct 10, 1997	4	4-4	BK2
	Jun 22, 1999	12	12-13	BK2
	Sep 18, 1999	2	2-3	BK3
Brown Trout <200mm	Feb 02, 1993	6	6-7	
	Sep 27, 1994	43	42-46	
	Sep 07, 1995	11	11-13	
	Sep 23, 1996	116	60-221	
	Oct 10, 1997	82	22-432	

Brown Trout <200mm	Sep 10, 1998	10	10-12	
	Jun 22, 1999	2	2-2	
	Sep 18, 1999	20	14-40	
Brown Trout >=200mm	Feb 02, 1993	9	9-11	BR2
	Sep 27, 1994	26	26-27	BR1
	Sep 07, 1995	6	6-9	BR2
	Sep 23, 1996	23	23-24	BR1
	Oct 10, 1997	64	57-75	BR1
	Sep 10, 1998	3	3-4	BR3
	Jun 22, 1999	6	6-9	BR2
	Sep 18, 1999	20	20-21	BR1
Longnose Dace	Feb 02, 1993	3	3-4	
	Sep 07, 1995	1	1-1	
	Sep 23, 1996	7	7-9	
	Sep 10, 1998	2	2-4	
	Sep 18, 1999	4	4-5	

Mountain Sucker	Feb 02, 1993	1	1-1
	Sep 27, 1994	4	4-4
	Sep 07, 1995	2	2-3
	Sep 23, 1996	3	3-4
	Sep 10, 1998	14	11-25
	Sep 18, 1999	5	5-6

Site 599

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 12, 1994	1	1-1	
	Sep 15, 1995	4	4-5	
	Sep 26, 1996	17	14-27	
	Sep 22, 1997	10	10-12	
	Dec 03, 1997	40	37-46	
	Sep 10, 1998	15	15-17	
	Jun 21, 1999	5	5-6	
	Sep 17, 1999	13	11-21	

Brook Trout >=200mm	Sep 15, 1995	2	2-2	BK3
	Sep 26, 1996	1	1-1	BK3
	Sep 22, 1997	1	1-2	BK3
	Dec 03, 1997	4	4-4	BK2
	Sep 10, 1998	1	1-1	BK3
	Jun 21, 1999	12	12-13	BK2
	Sep 17, 1999	9	9-11	BK2
Brown Trout <200mm	Oct 12, 1994	26	22-36	
	Sep 15, 1995	2	2-3	
	Sep 26, 1996	15	15-17	
	Sep 22, 1997	20	20-22	
	Dec 03, 1997	43	39-51	
	Sep 10, 1998	37	36-41	
	Jun 21, 1999	17	14-26	
	Sep 17, 1999	41	40-44	
Brown Trout >=200mm	Oct 12, 1994	37	37-38	BR1

Brown Trout >=200mm	Sep 15, 1995	18	18-20	BR1
	Sep 26, 1996	47	47-49	BR1
	Sep 22, 1997	54	54-56	BR1
	Dec 03, 1997	91	90-94	BR1
	Sep 10, 1998	4	4-7	BR2
	Jun 21, 1999	14	12-21	BR2
	Sep 17, 1999	47	38-63	BR1
Longnose Dace	Oct 12, 1994	1	1-2	
	Sep 26, 1996	2	2-4	
	Sep 22, 1997	4	4-6	
	Sep 10, 1998	5	5-7	
	Sep 17, 1999	5	5-7	
Mountain Sucker	Oct 12, 1994	4	4-5	
	Sep 15, 1995	1	1-3	
	Sep 22, 1997	4	4-4	
	Sep 10, 1998	22	22-23	

Mountain Sucker	Jun 21, 1999	1	1-1
	Sep 17, 1999	16	16-18
White Sucker	Sep 26, 1996	1	1-1

Site 612

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Oct 27, 1993	3	3-4	
	Oct 12, 1994	11	11-12	
	Sep 17, 1995	6	6-8	
	Sep 25, 1996	31	31-33	
	Sep 22, 1997	106	105-109	
	Jun 02, 1998	32	32-33	
	Sep 10, 1998	23	23-25	
	Jun 21, 1999	4	4-4	
	Sep 17, 1999	17	17-18	
Brook Trout >=200mm	Oct 12, 1994	2	2-2	BK3
	Sep 17, 1995	2	2-2	BK3

Brook Trout >=200mm	Jun 02, 1998	5	5-6	BK2
	Sep 10, 1998	4	4-4	BK2
	Jun 21, 1999	8	8-9	BK2
	Sep 17, 1999	5	5-5	BK2
Brown Trout <200mm	Oct 27, 1993	2	2-4	
	Oct 12, 1994	4	4-4	
	Sep 17, 1995	8	8-10	
	Sep 25, 1996	55	53-60	
	Sep 22, 1997	183	180-188	
	Jun 02, 1998	61	60-64	
	Sep 10, 1998	98	94-104	
	Jun 21, 1999	44	27-86	
	Sep 17, 1999	221	210-232	
Brown Trout >=200mm	Oct 27, 1993	30	30-31	BR3
	Oct 12, 1994	11	11-11	BR2
	Sep 17, 1995	14	14-16	BR2

Brown Trout >=200mm	Sep 25, 1996	5	5-5	BR2
	Sep 22, 1997	18	18-18	BR2
	Jun 02, 1998	22	22-22	BR1
	Sep 10, 1998	21	21-22	BR1
	Jun 21, 1999	25	25-27	BR2
	Sep 17, 1999	31	31-32	BR1
Longnose Dace	Oct 27, 1993	1	1-2	
	Oct 12, 1994	5	5-7	
	Sep 17, 1995	3	3-5	
	Sep 25, 1996	24	23-28	
	Sep 22, 1997	116	67-195	
	Jun 02, 1998	56	40-85	
	Sep 10, 1998	26	19-44	
	Jun 21, 1999	2	2-6	
	Sep 17, 1999	20	10-70	
Mountain Sucker	Oct 27, 1993	8	8-10	

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 07, 1995	33	33-33	
	Jun 19, 1995	90	67-121	
	Sep 27, 1996	275	265-285	
	Sep 23, 1997	425	402-448	
	Sep 19, 1999	283	268-298	
Brook Trout >=200mm	Jun 07, 1995	2	2-2	BK3
	Jun 19, 1995	6	6-7	BK2
	Sep 27, 1996	25	25-26	BK3
	Sep 23, 1997	23	23-25	BK1
	Sep 19, 1999	11	11-12	BK2
Brown Trout <200mm	Sep 27, 1996	7	7-9	
	Sep 23, 1997	24	24-25	
	Sep 19, 1999	81	78-86	
Brown Trout >=200mm	Sep 27, 1996	4	4-4	BR3

Brown Trout >=200mm	Sep 19, 1999	13	13-13	BR2
Longnose Dace	Jun 19, 1995	4	4-6	
	Sep 23, 1997	1	1-2	
	Sep 19, 1999	1	1-1	

Site 690

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 07, 1995	27	27-27	
	Jun 19, 1995	80	53-124	
	Sep 26, 1996	175	166-184	
	Sep 23, 1997	117	78-169	
	Sep 18, 1999	125	122-130	
Brook Trout >=200mm	Jun 07, 1995	3	3-3	BK2
	Jun 19, 1995	7	7-8	BK2
	Sep 26, 1996	16	16-17	BK3
	Sep 23, 1997	3	3-5	BK2
	Sep 18, 1999	6	6-6	BK2

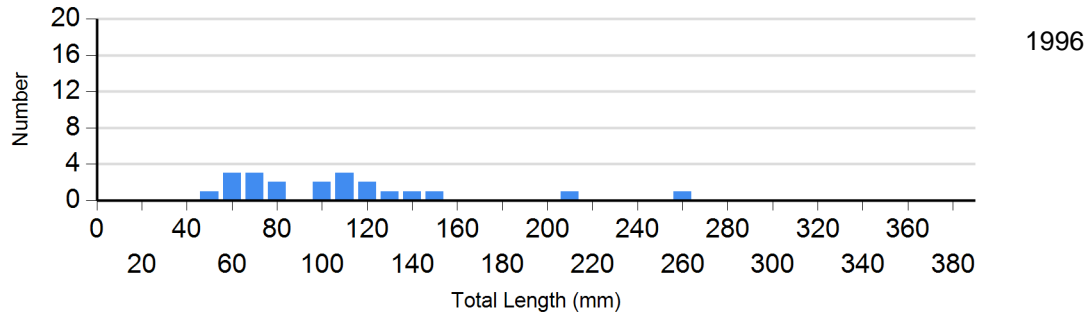
Brown Trout <200mm	Jun 07, 1995	2	2-2	
	Sep 26, 1996	27	27-29	
	Sep 23, 1997	13	13-14	
	Sep 18, 1999	275	264-286	
Brown Trout >=200mm	Jun 07, 1995	15	15-15	BR2
	Sep 26, 1996	42	42-43	BR3
	Sep 23, 1997	2	2-2	BR3
	Sep 18, 1999	53	53-54	BR1
Longnose Dace	Jun 07, 1995	2	2-2	
	Jun 19, 1995	22	13-56	
	Sep 26, 1996	1	2-2	
	Sep 23, 1997	1	1-5	
	Sep 18, 1999	2	2-4	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

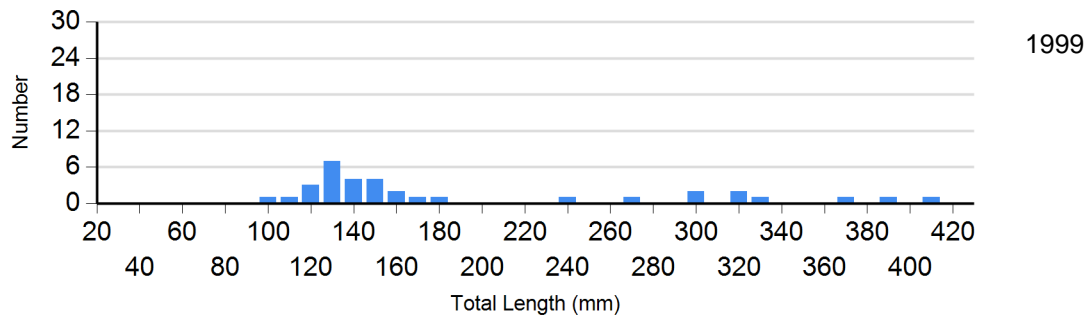
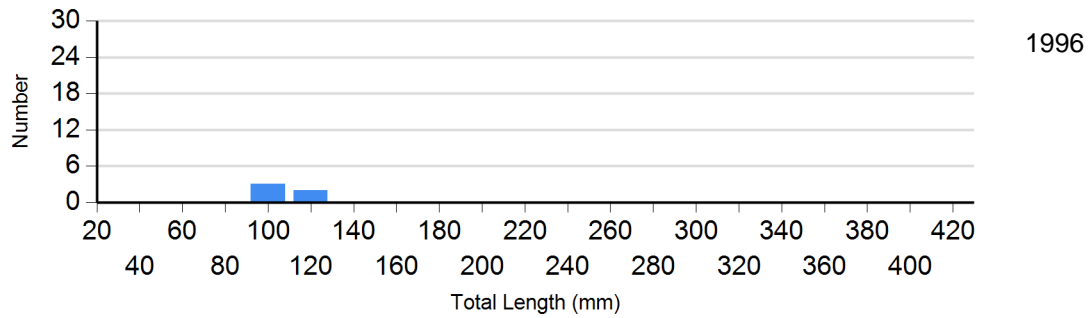
Site: 131

Species: White Sucker

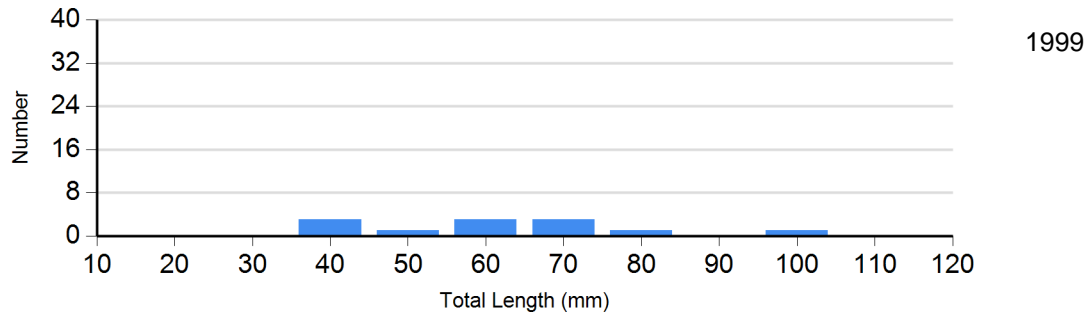


Site: 295

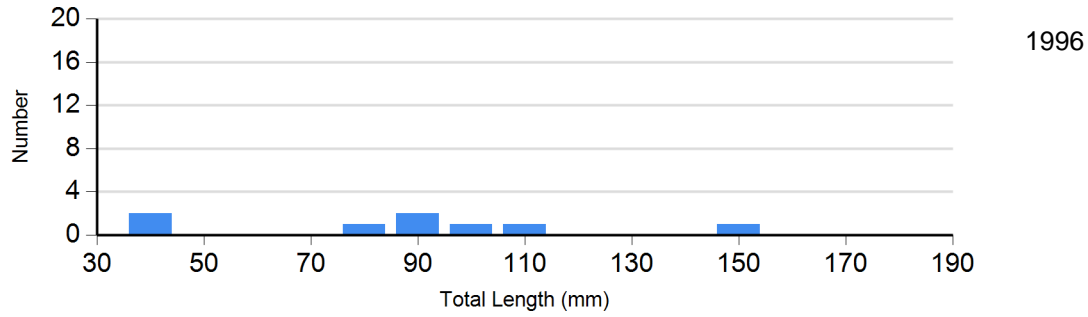
Species: Brown Trout



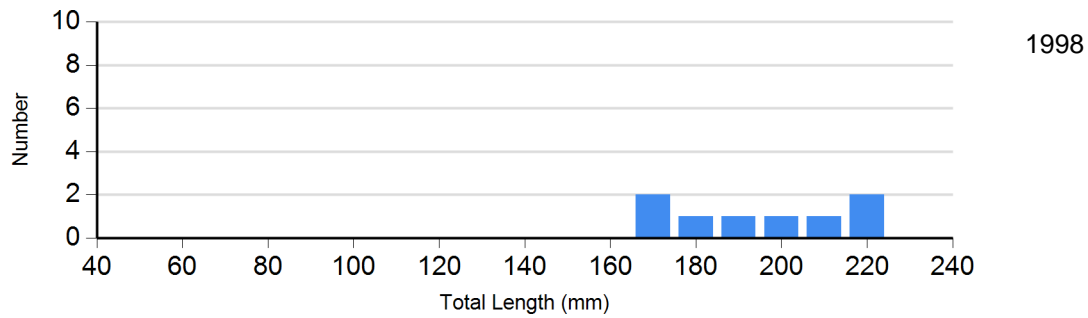
Site: 295
Species: Longnose Dace



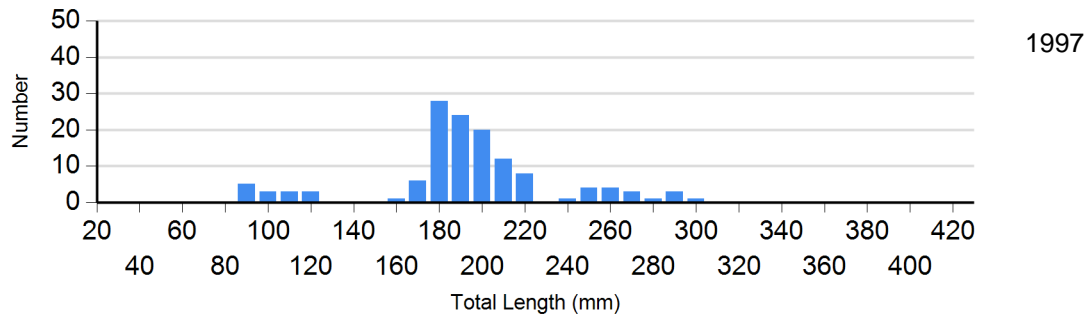
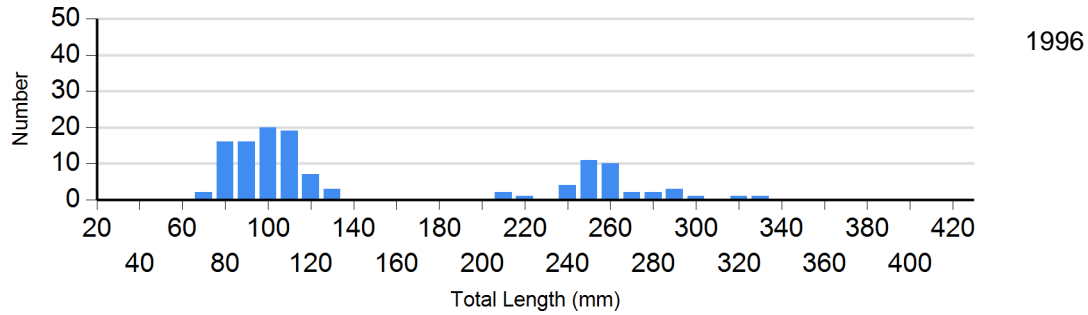
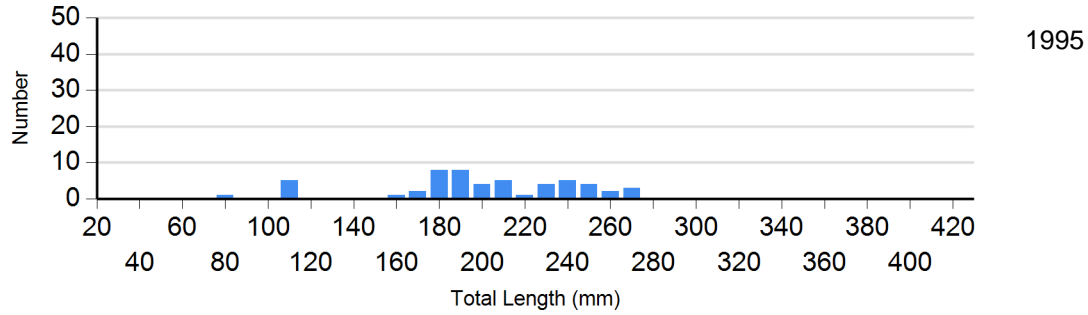
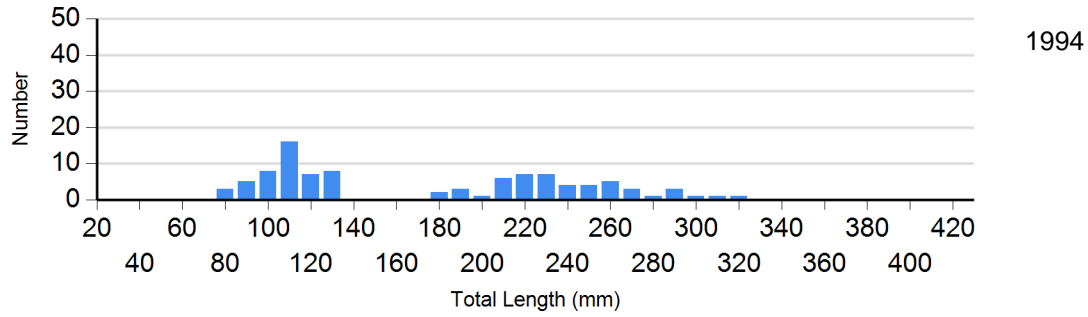
Site: 295
Species: Mountain Sucker

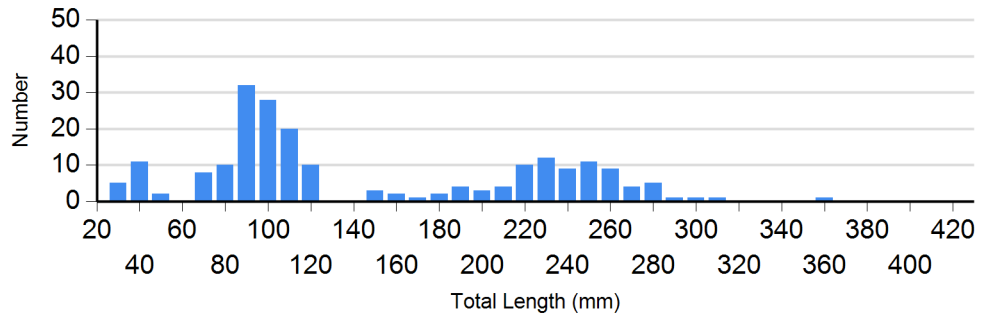
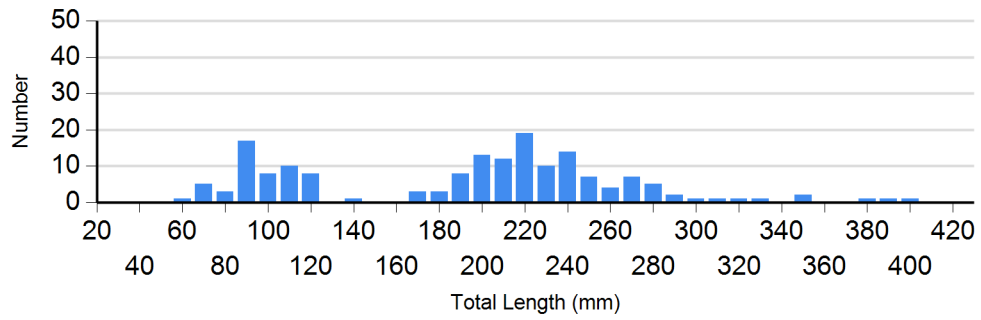


Site: 558
Species: Brook Trout

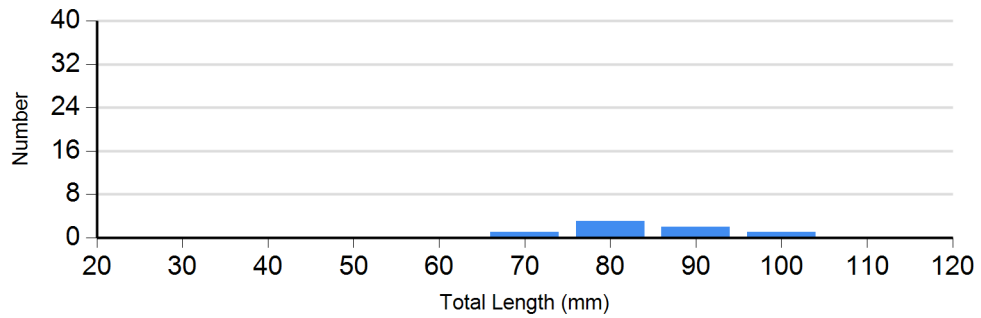
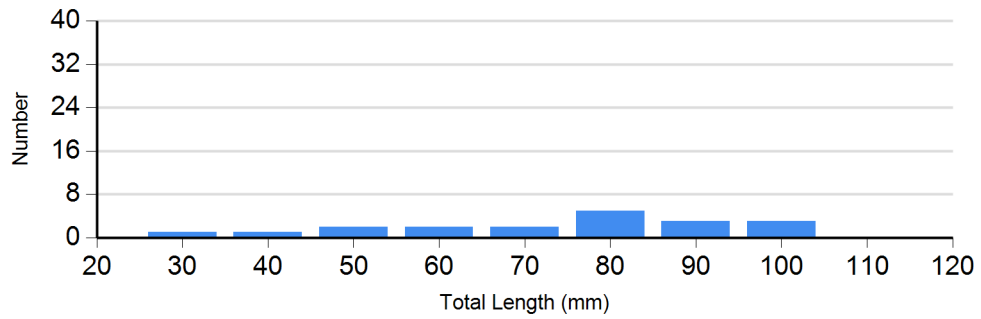


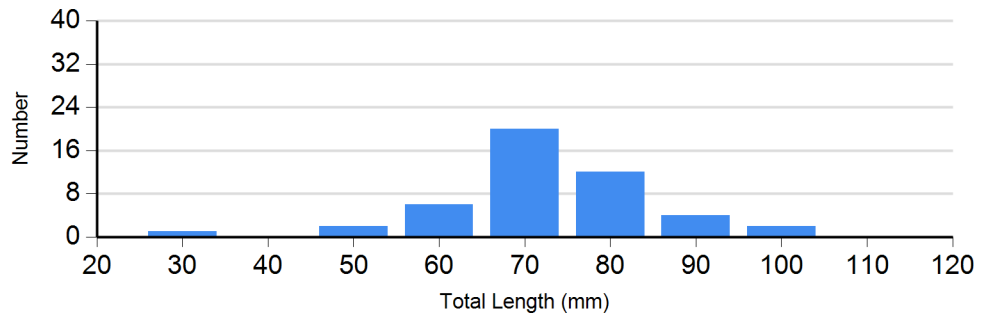
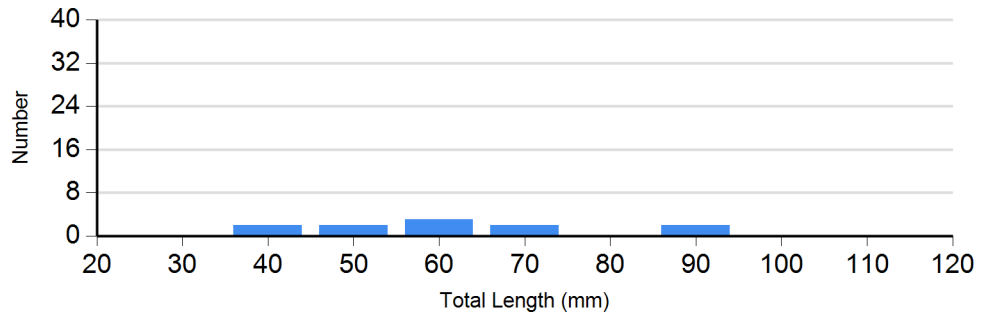
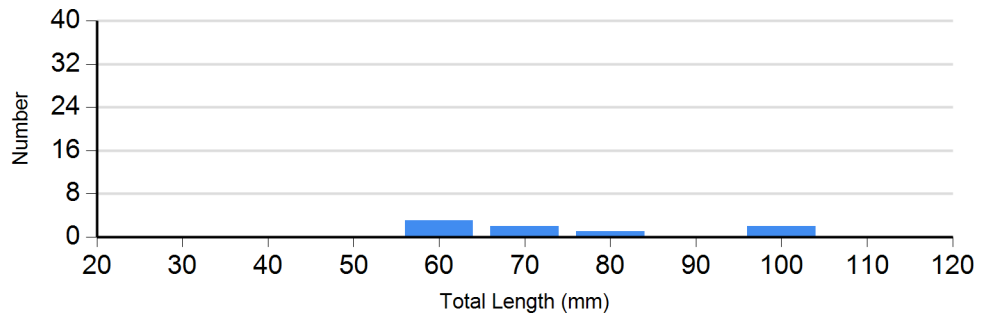
Site: 558
Species: Brown Trout



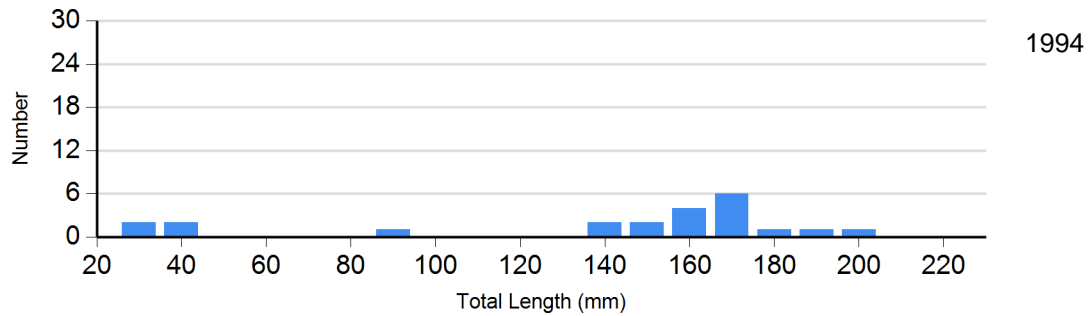


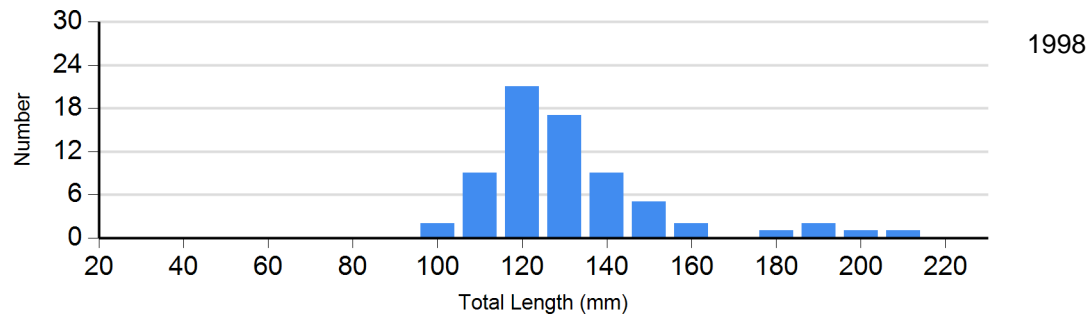
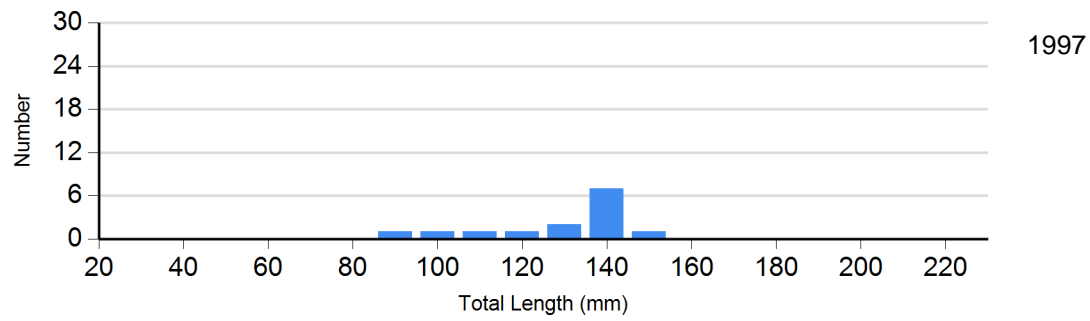
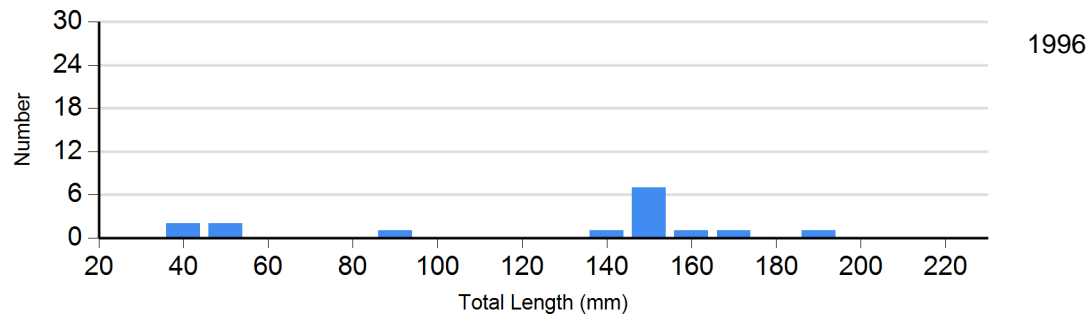
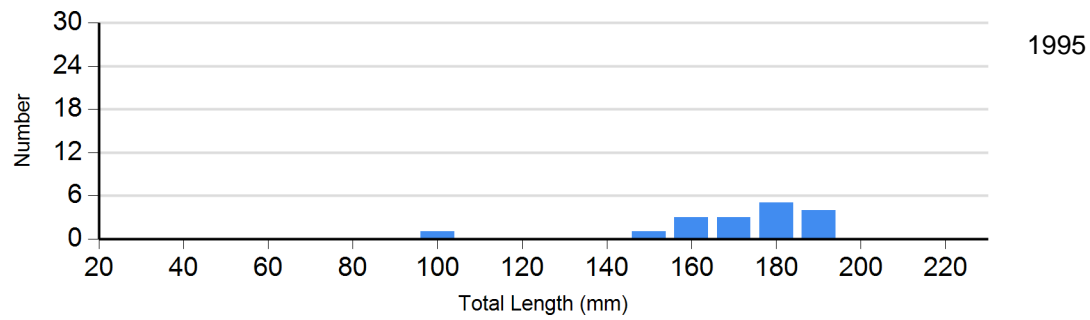
Site: 558
Species: Longnose Dace

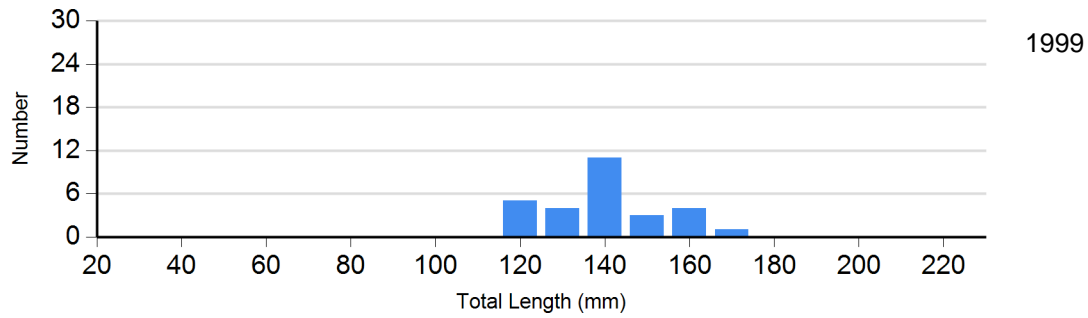




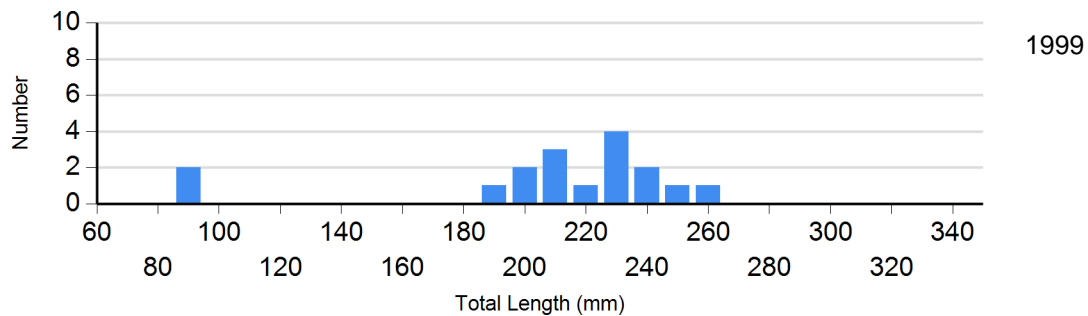
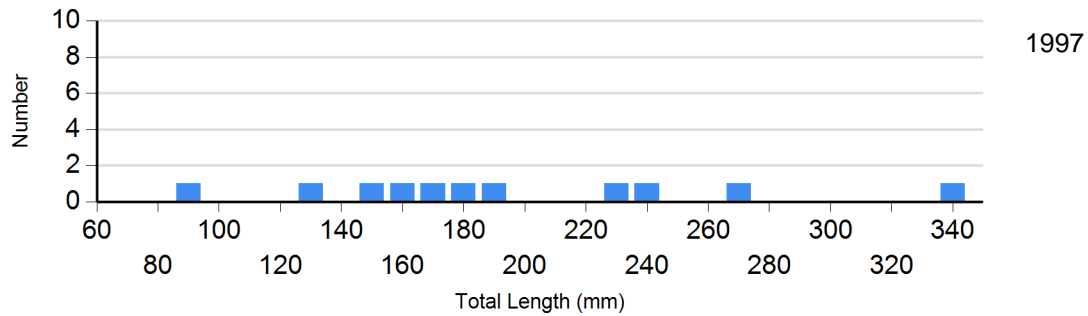
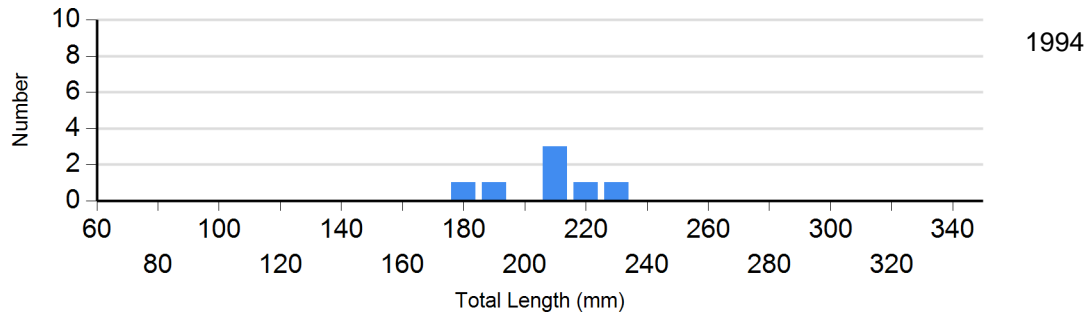
Site: 558
Species: Mountain Sucker



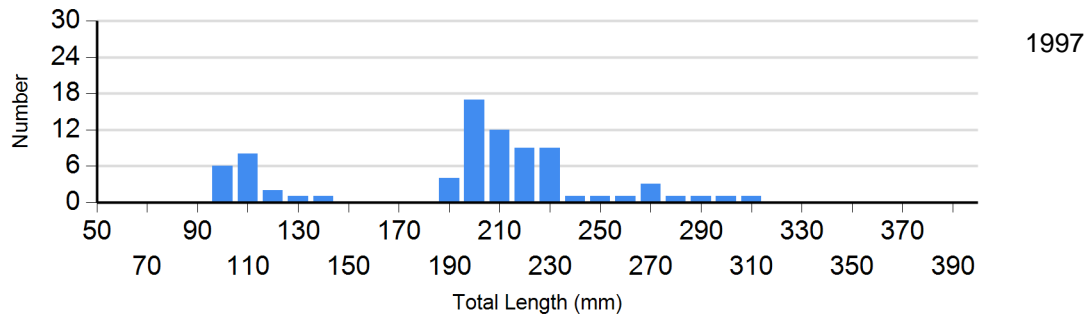
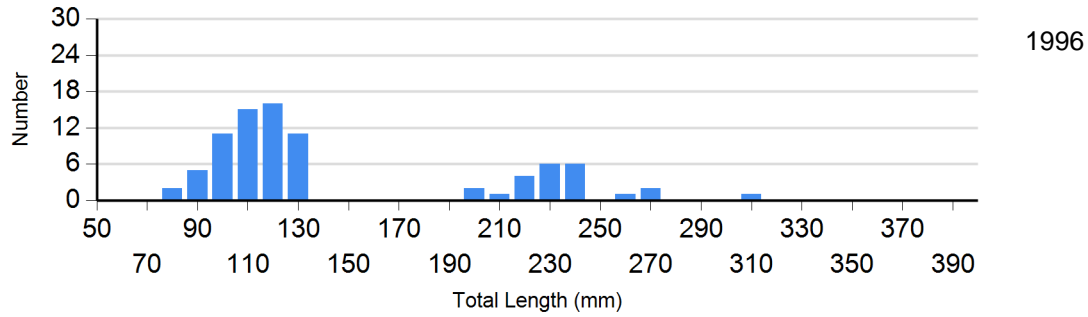
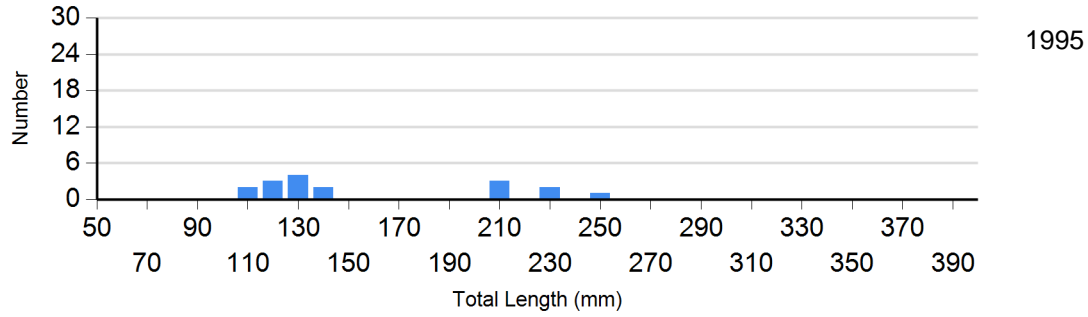
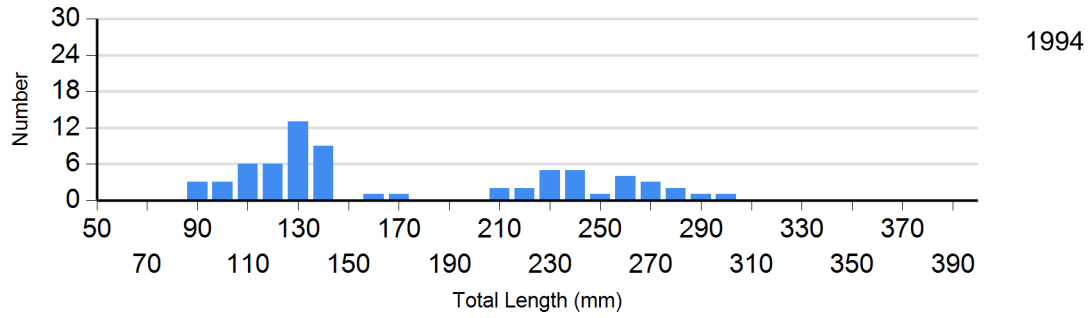


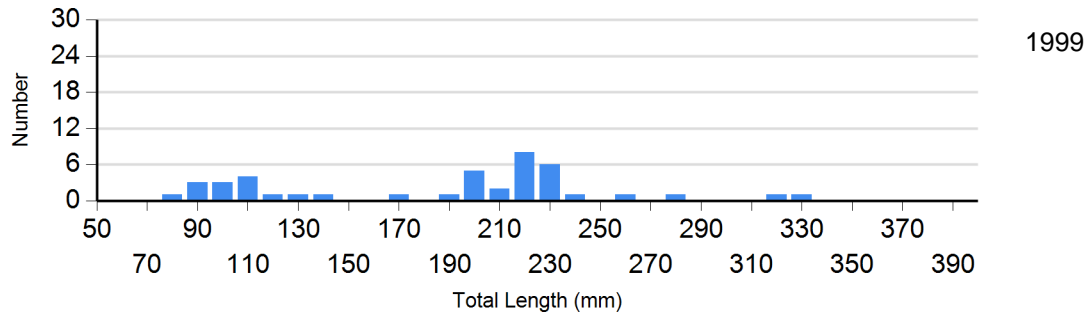
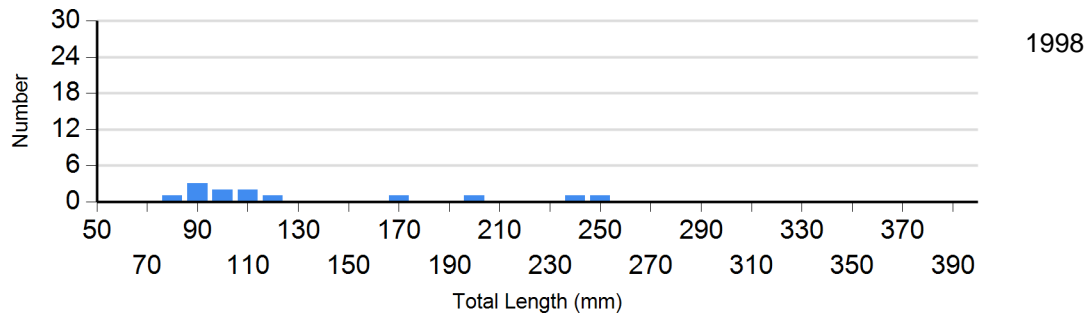


Site: 588
Species: Brook Trout

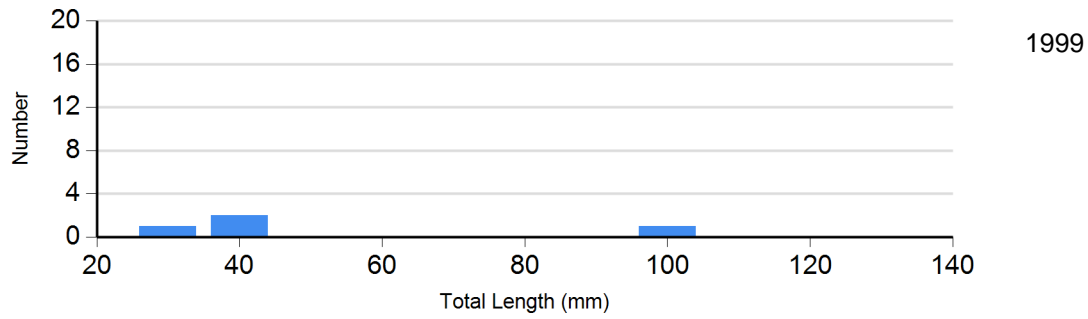
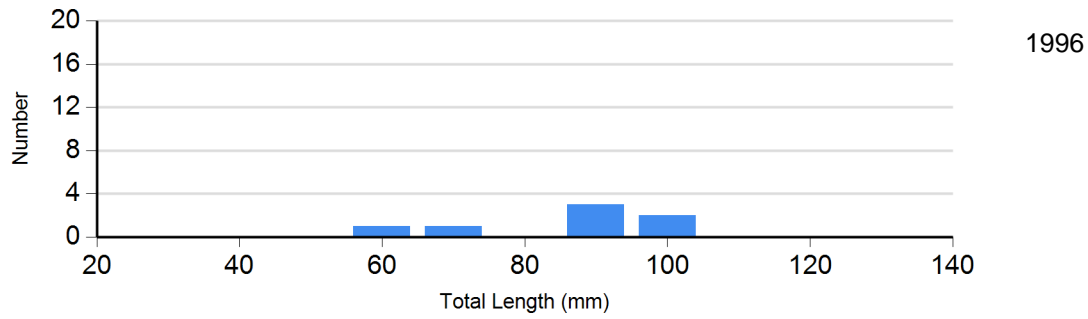


Site: 588
Species: Brown Trout

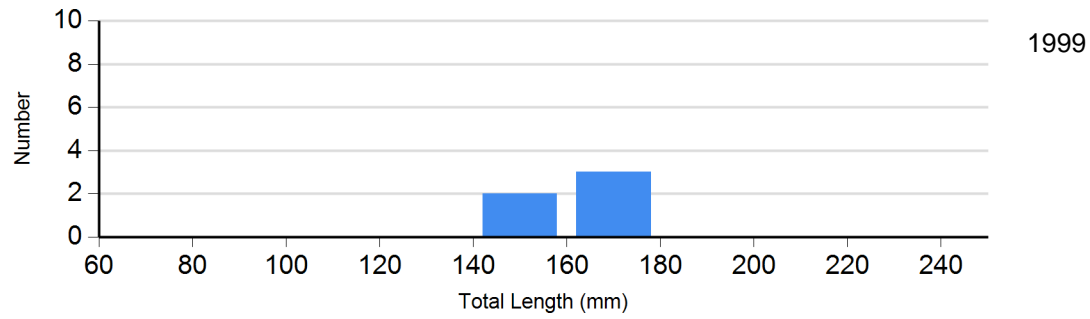
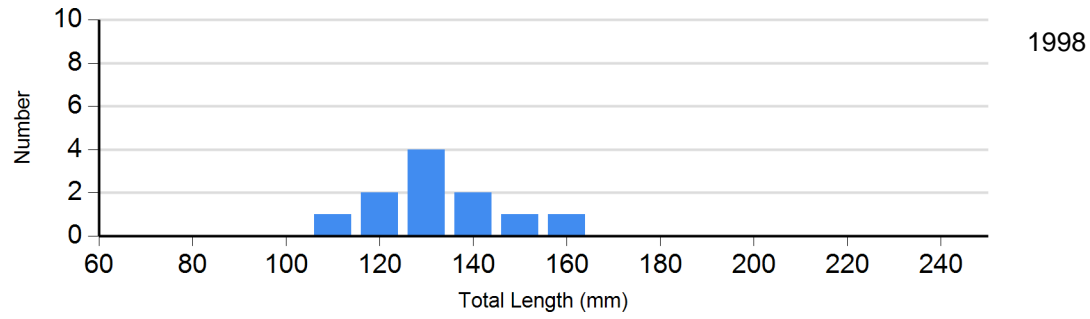
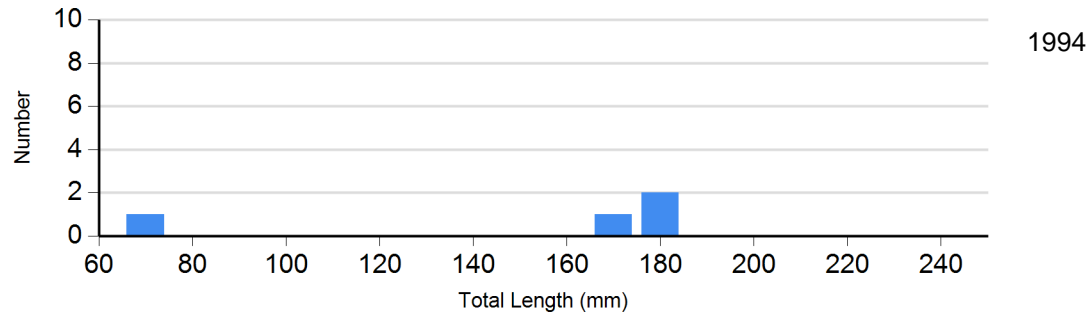




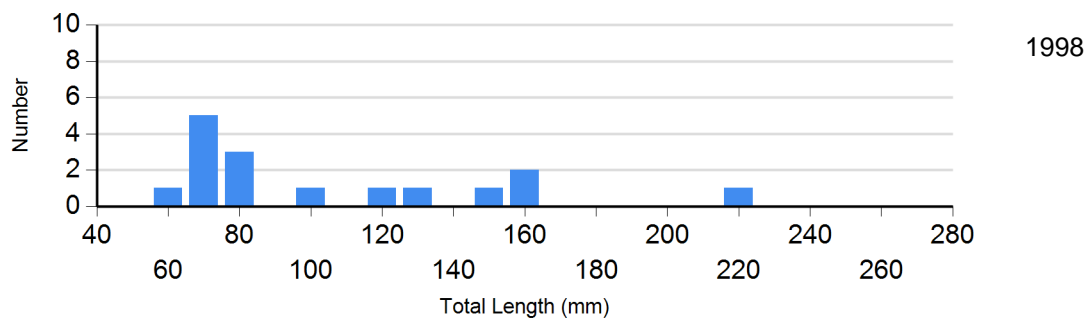
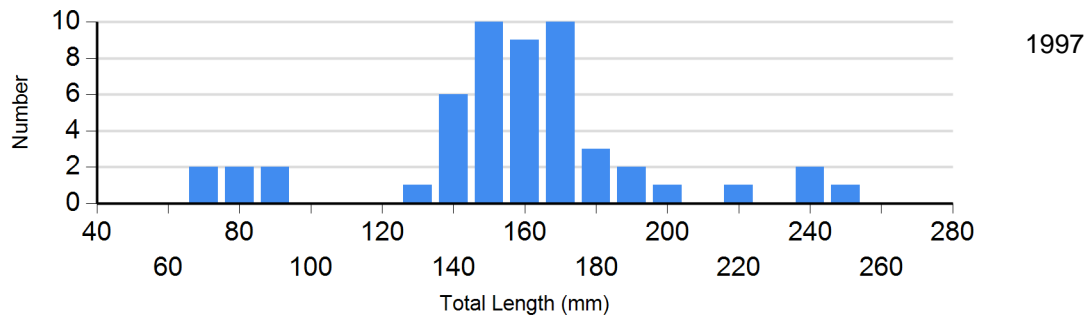
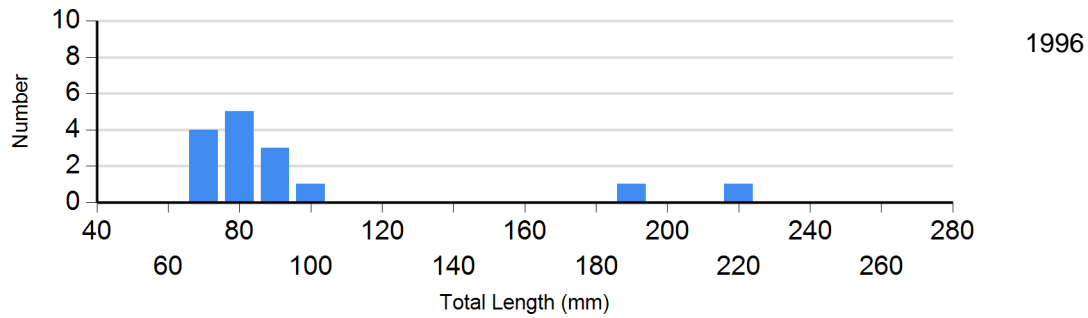
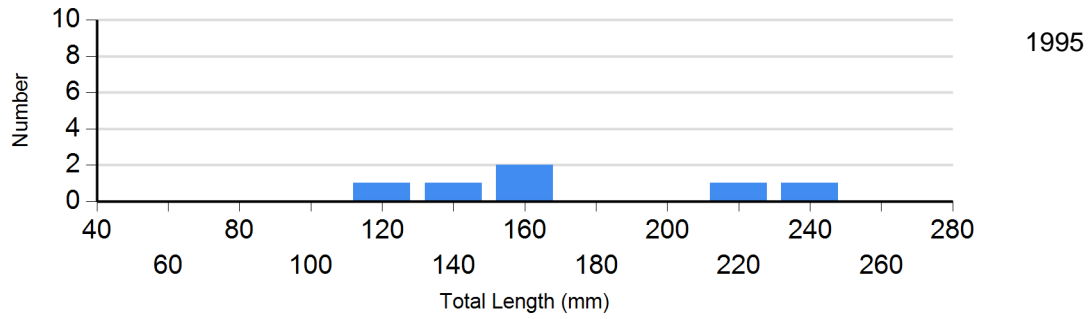
Site: 588
Species: Longnose Dace

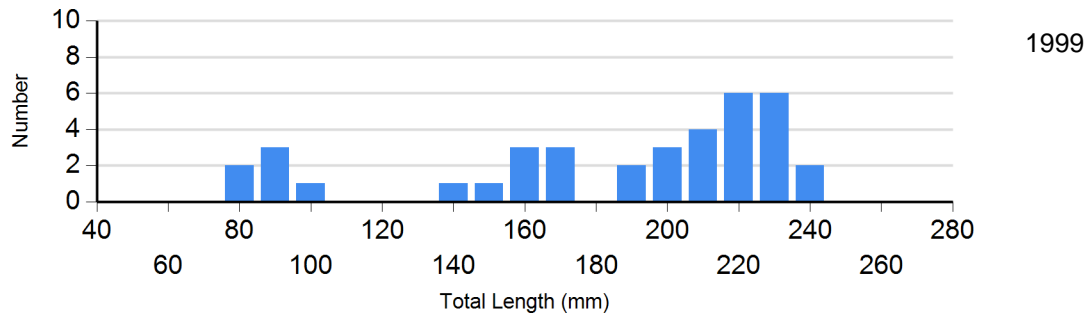


Site: 588
Species: Mountain Sucker

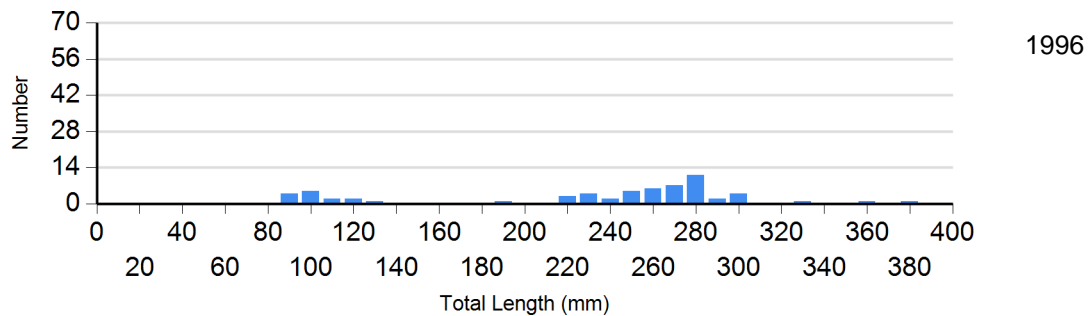
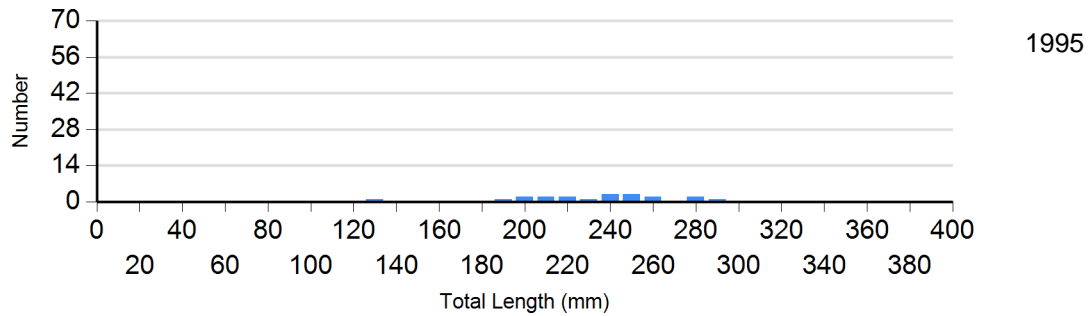
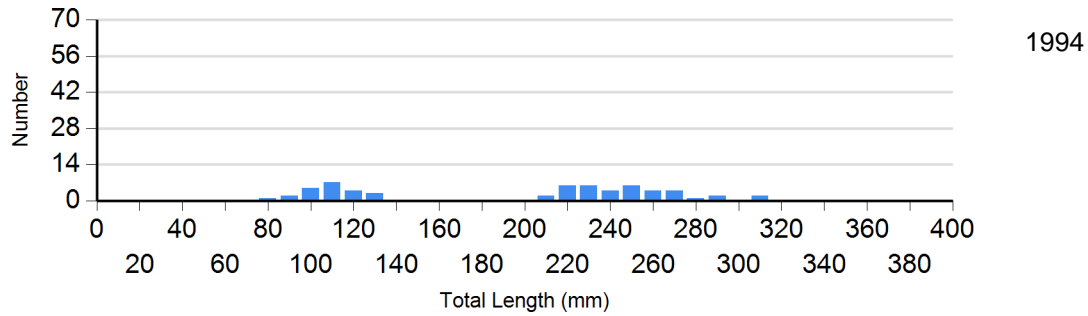


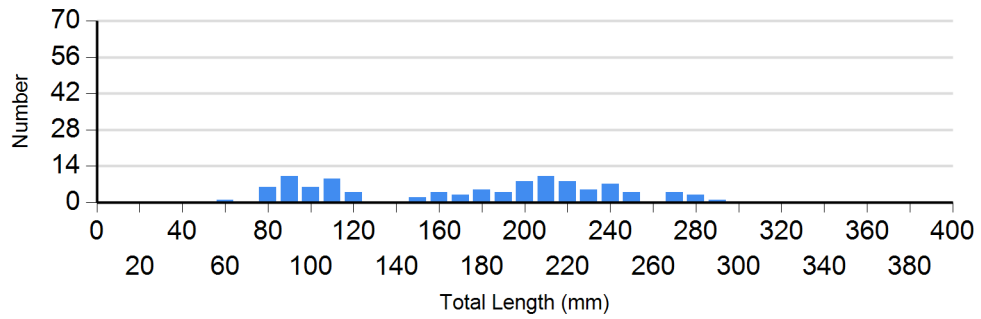
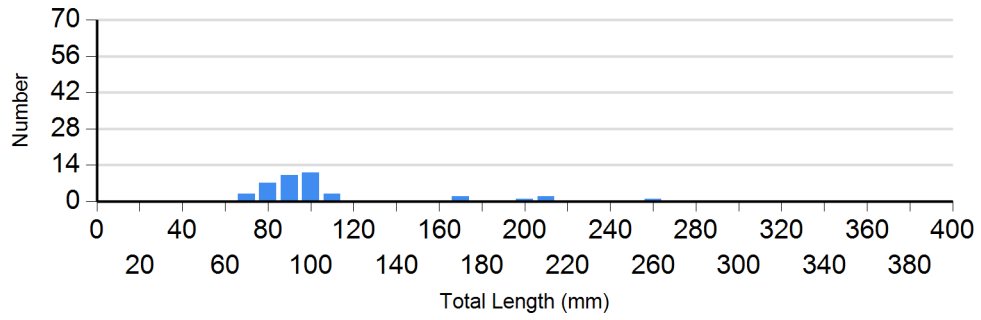
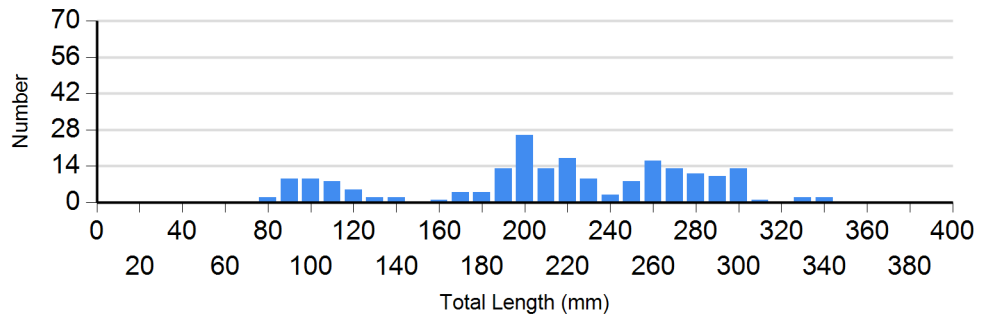
Site: 599
Species: Brook Trout



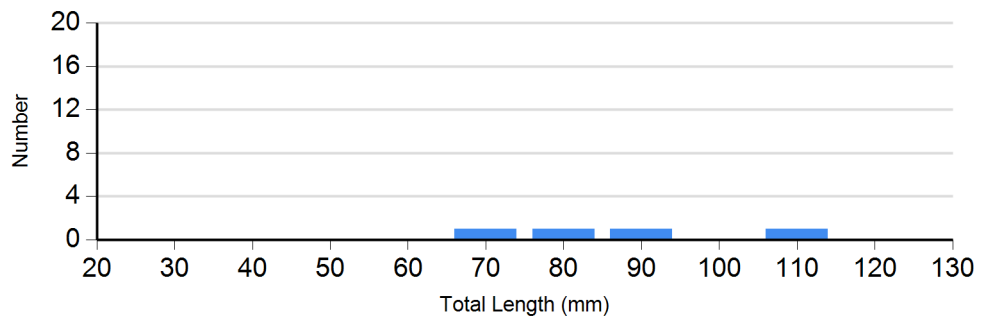


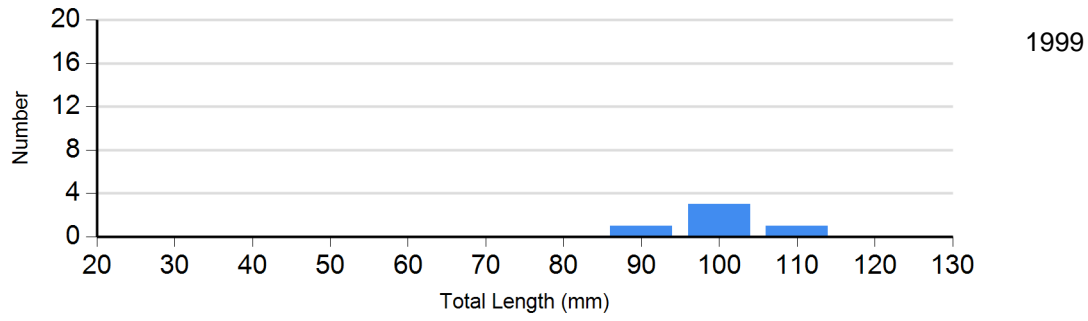
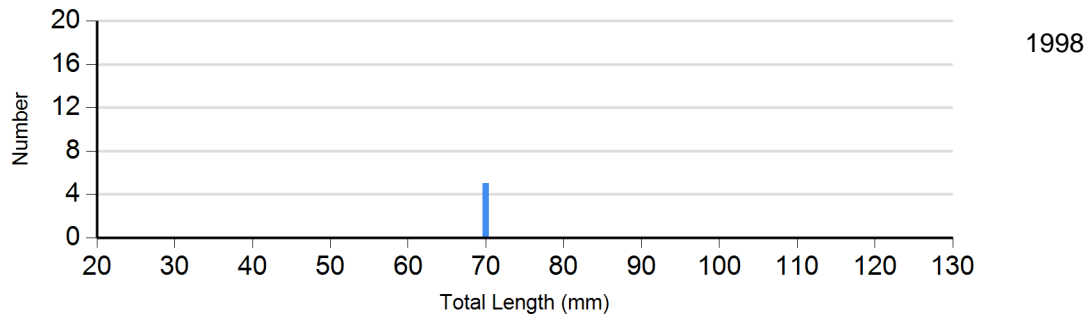
Site: 599
Species: Brown Trout



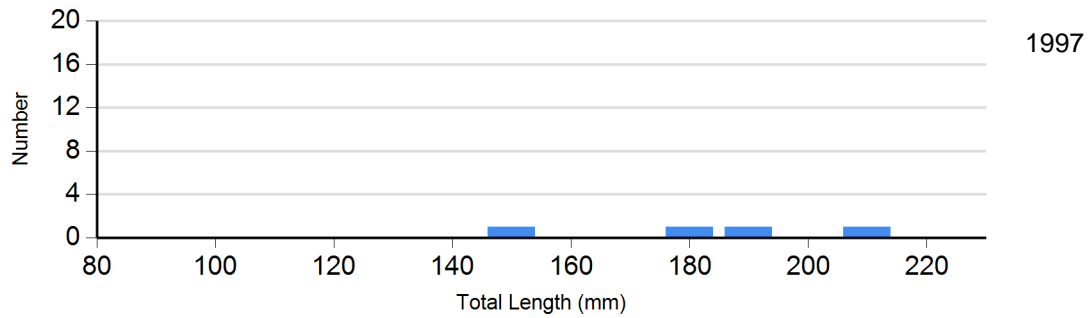
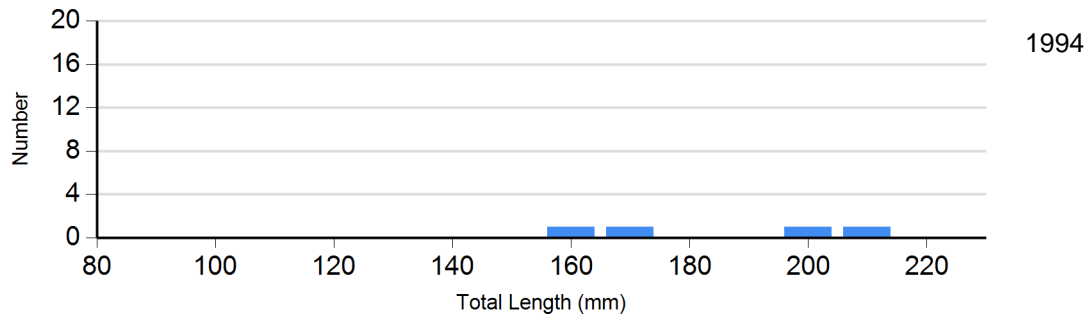


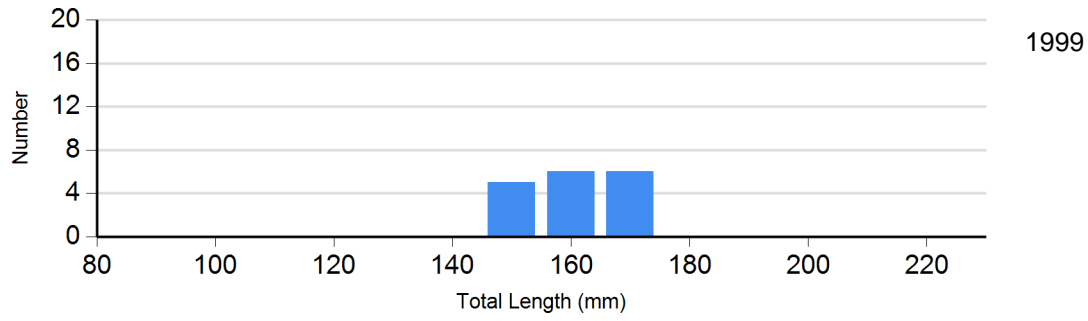
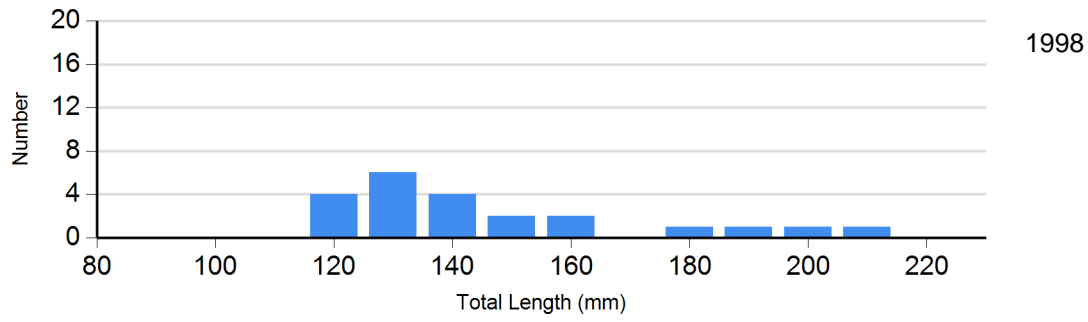
Site: 599
Species: Longnose Dace



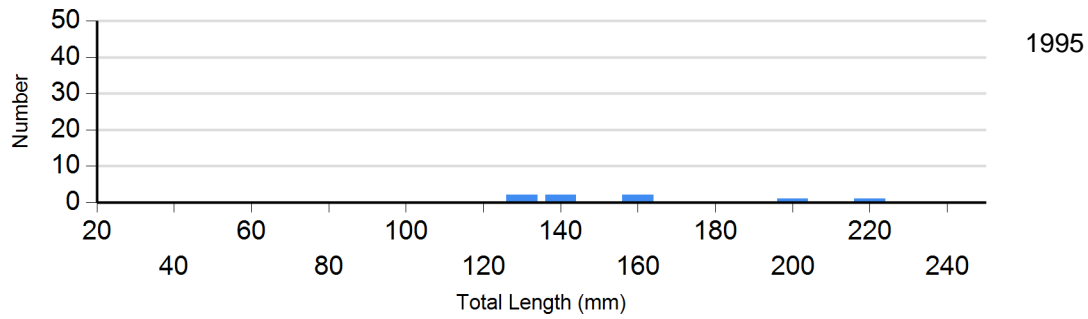
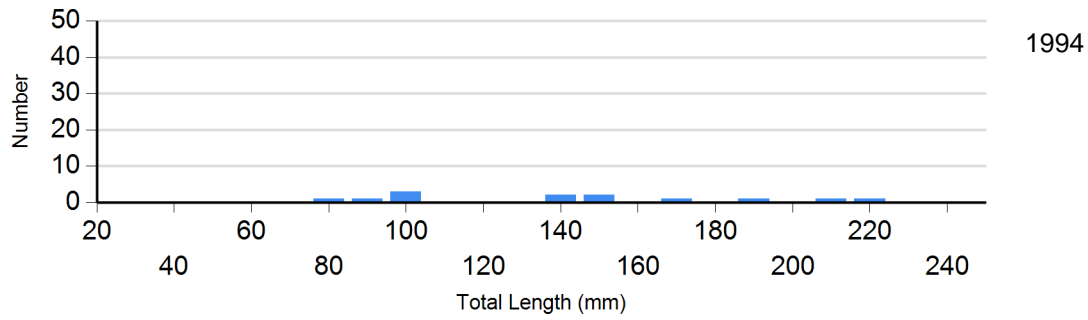


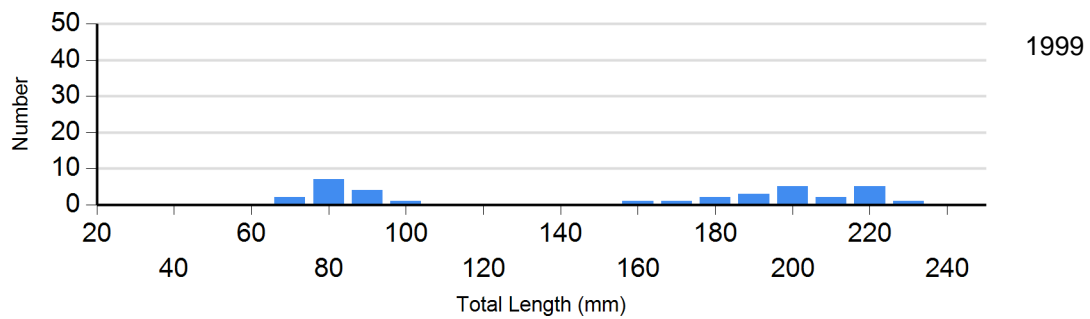
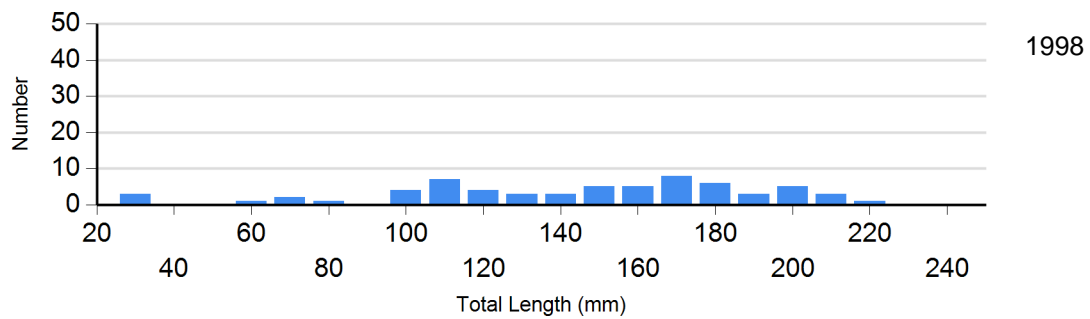
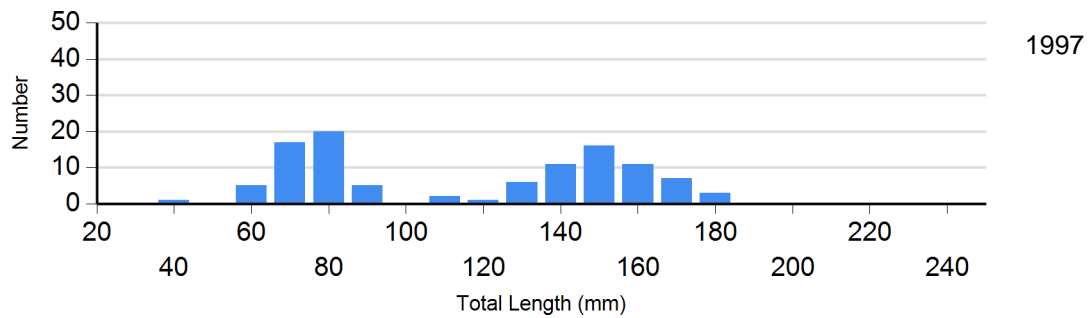
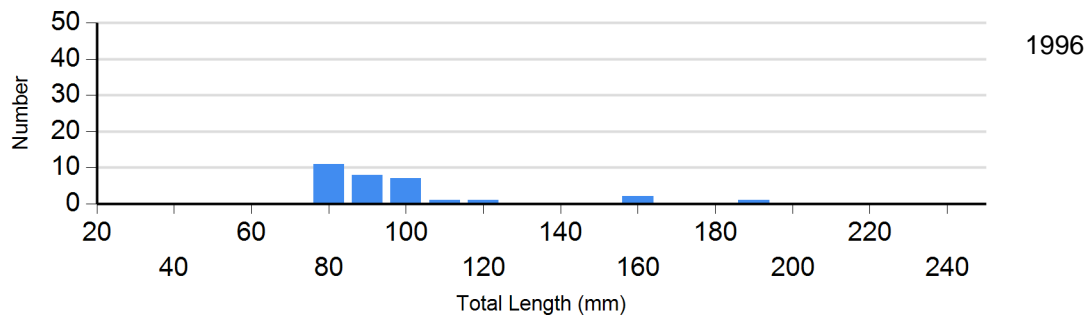
Site: 599
Species: Mountain Sucker



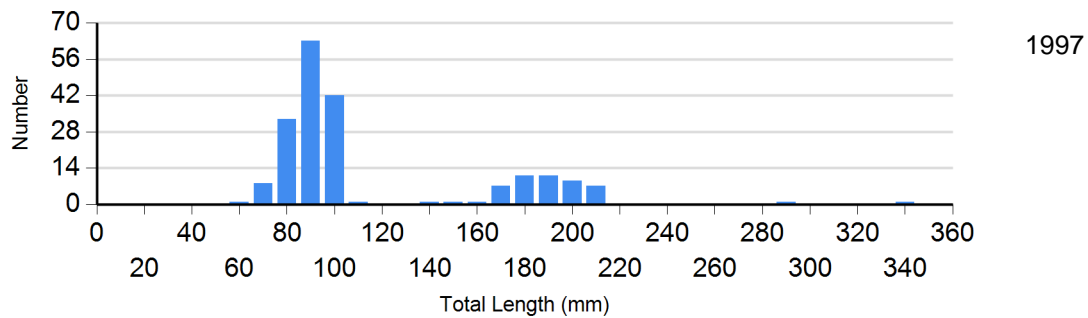
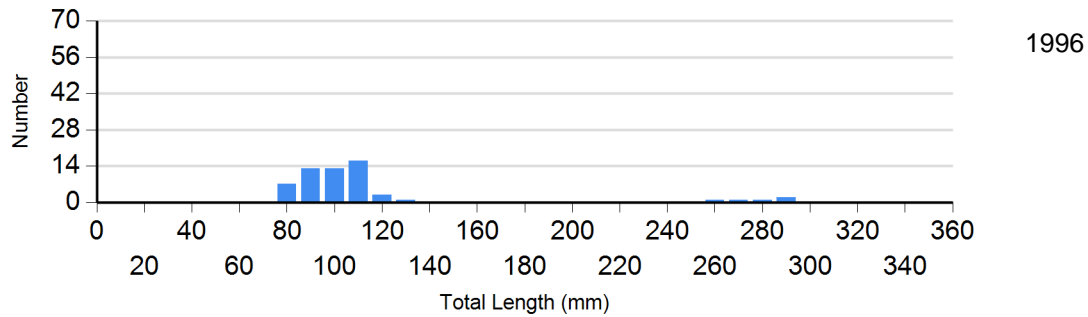
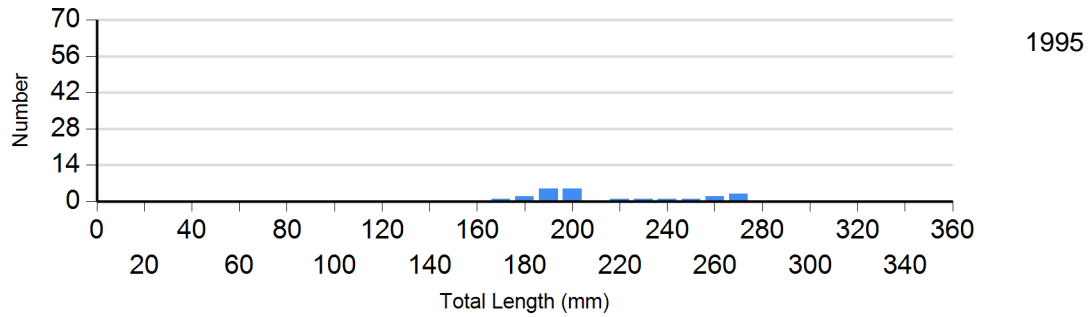
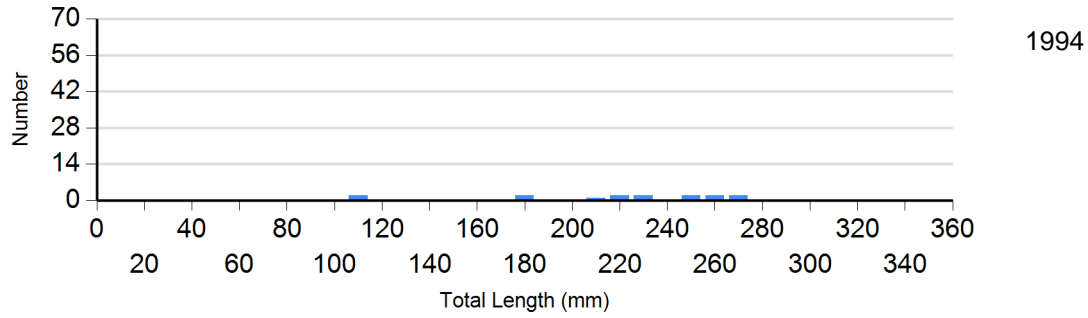


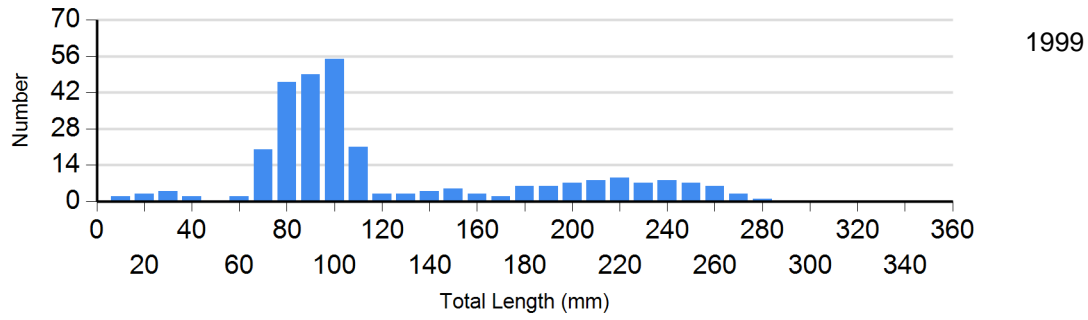
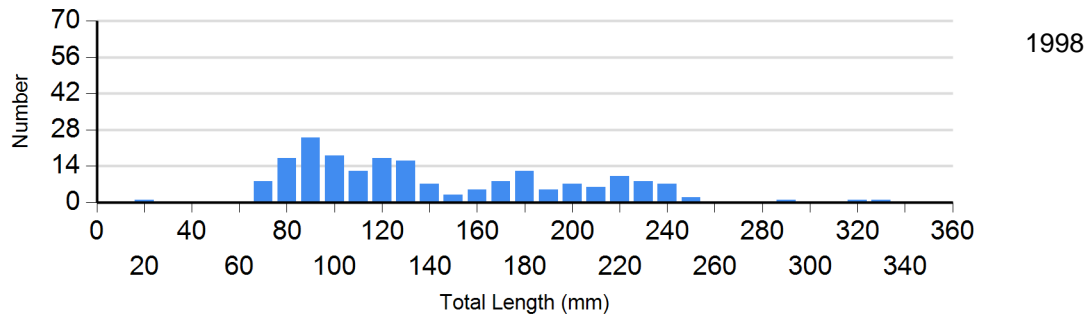
Site: 612
Species: Brook Trout



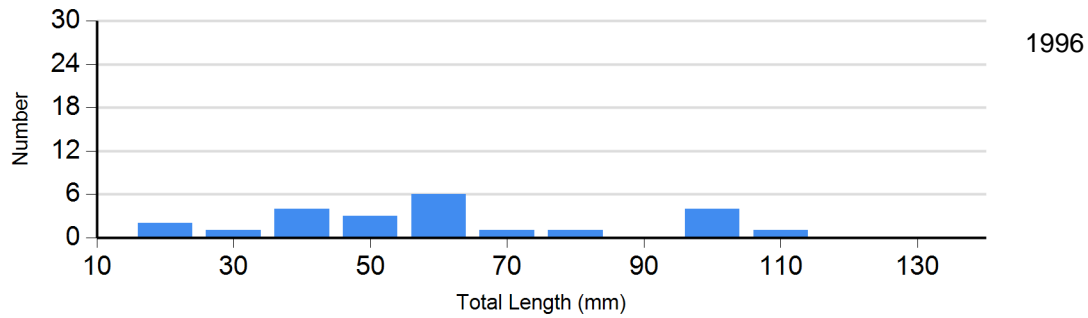
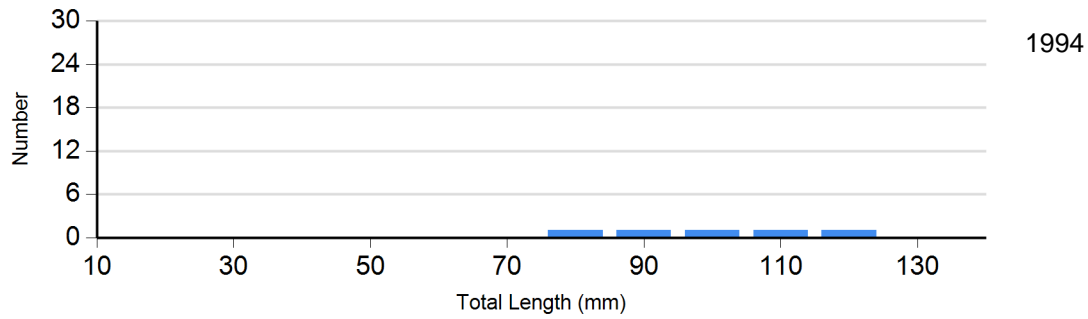


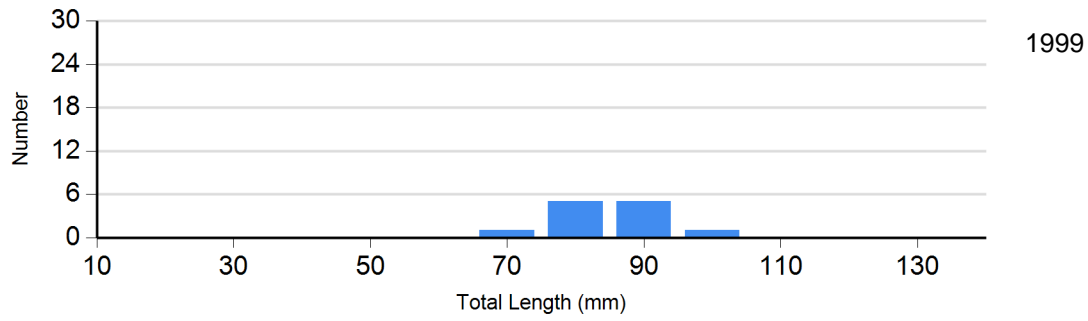
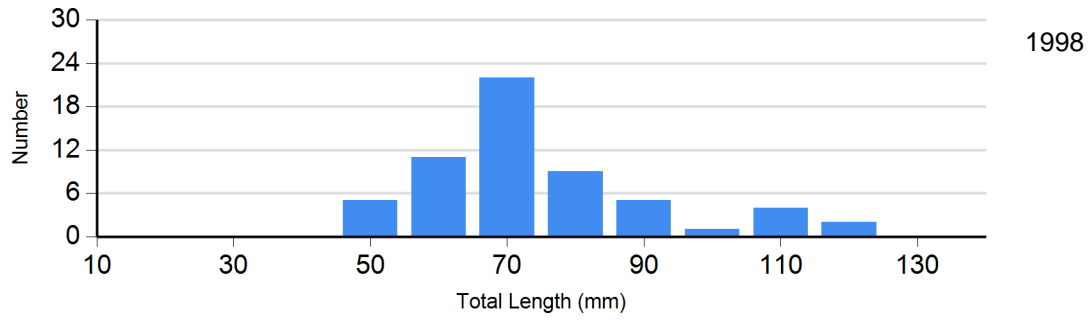
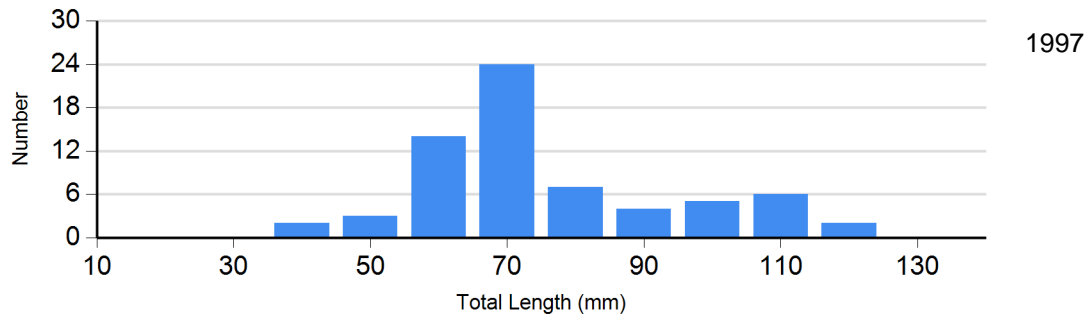
Site: 612
Species: Brown Trout



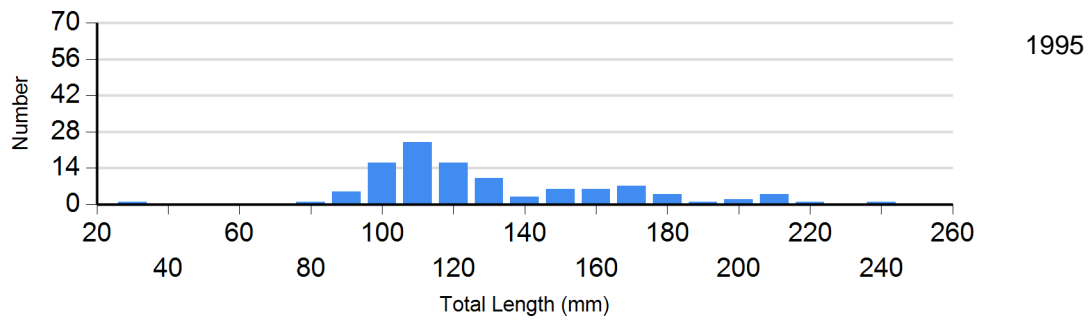


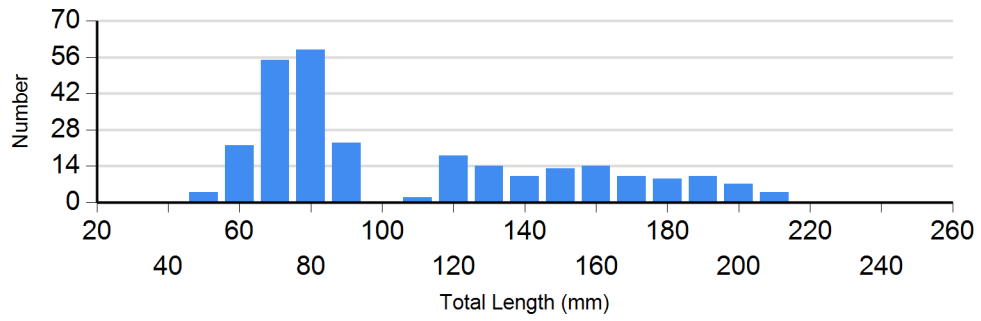
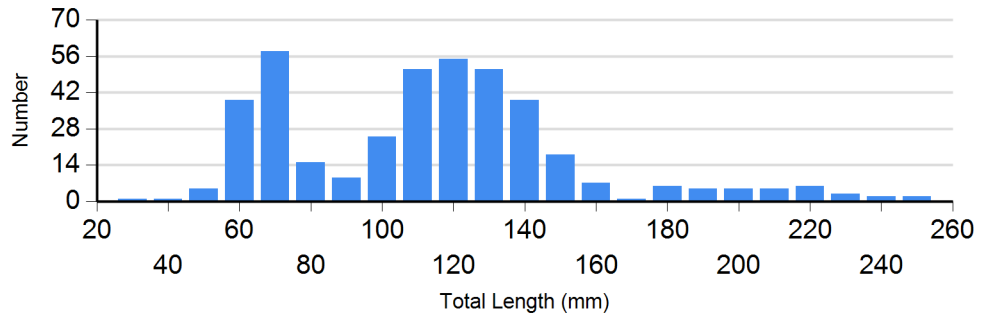
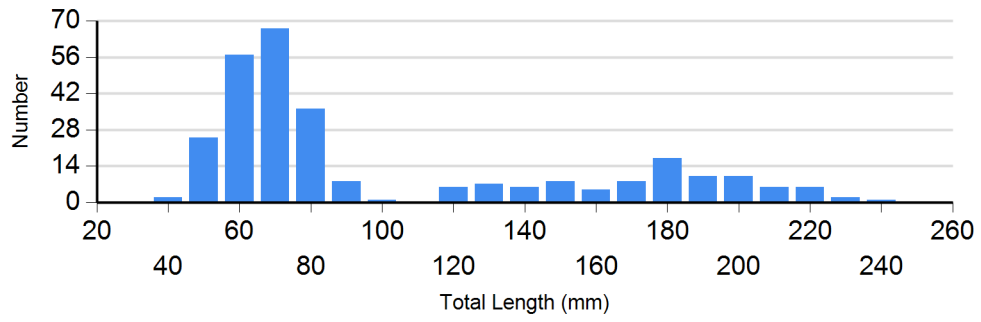
Site: 612
Species: Longnose Dace



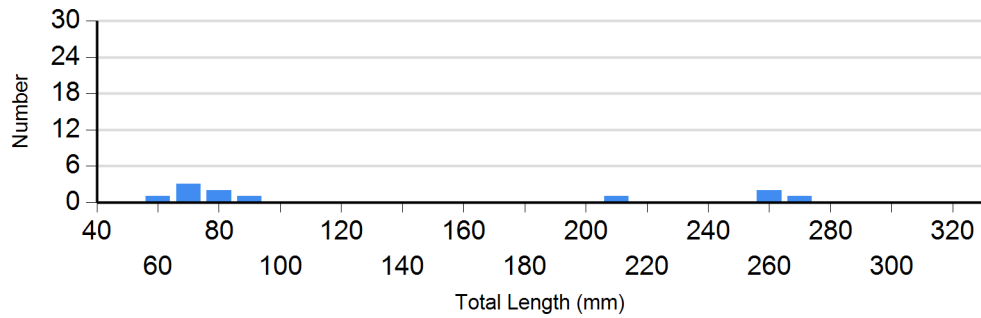


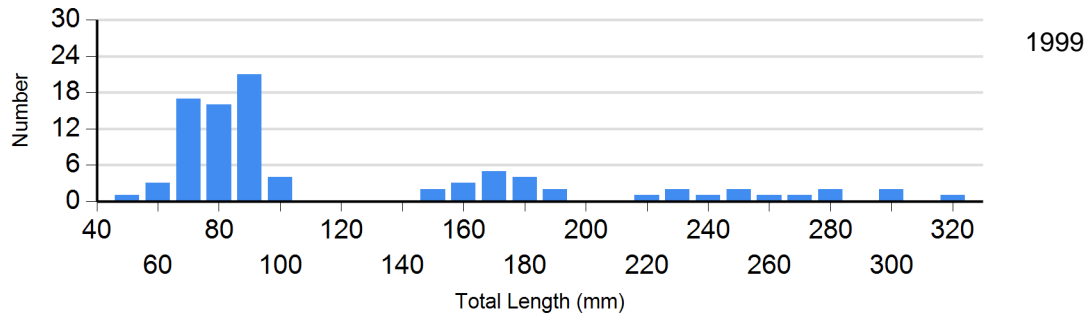
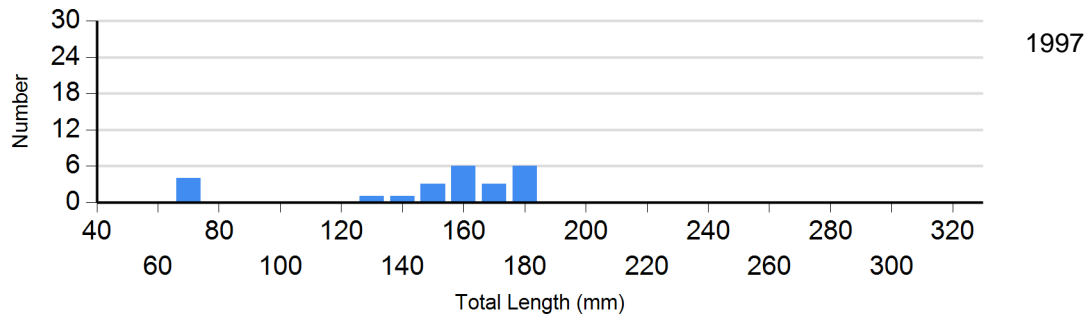
Site: 679
Species: Brook Trout



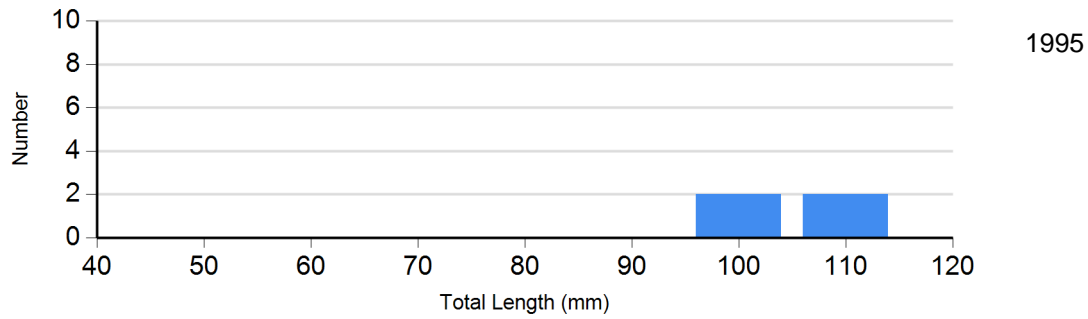


Site: 679
Species: Brown Trout

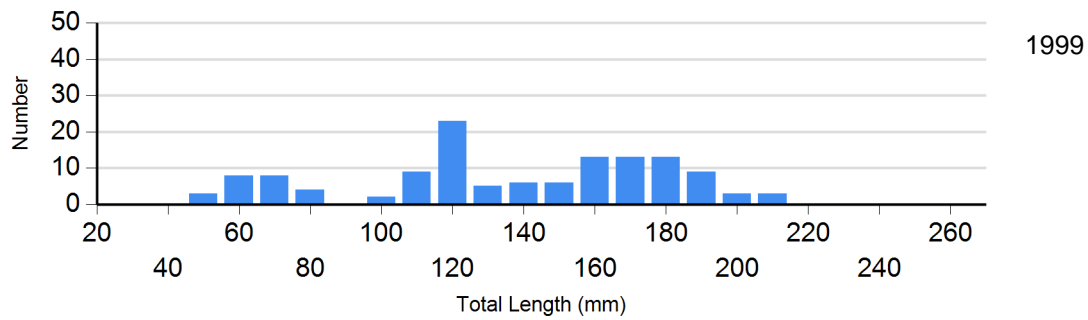
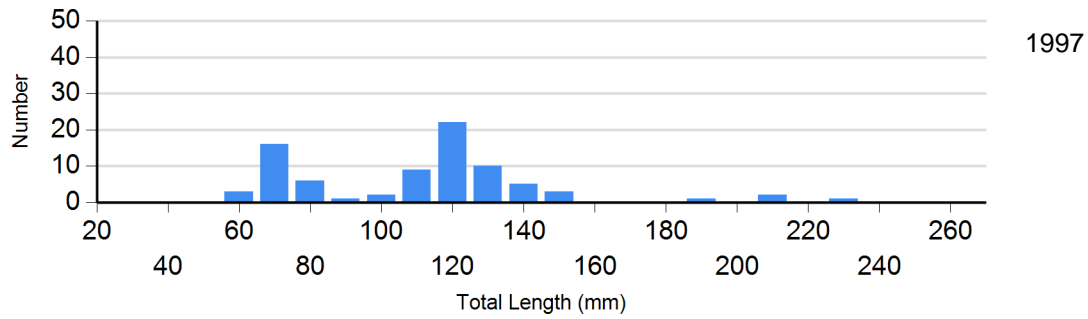
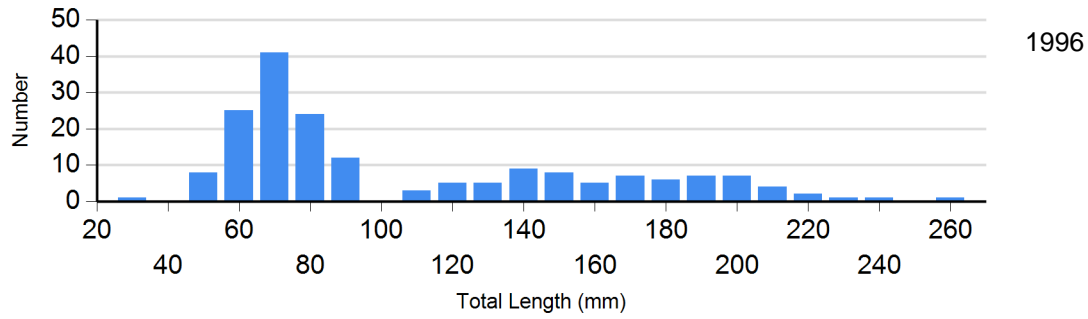
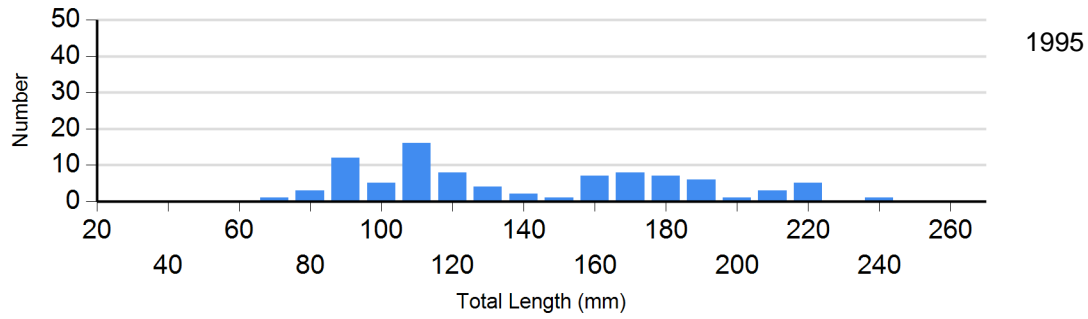




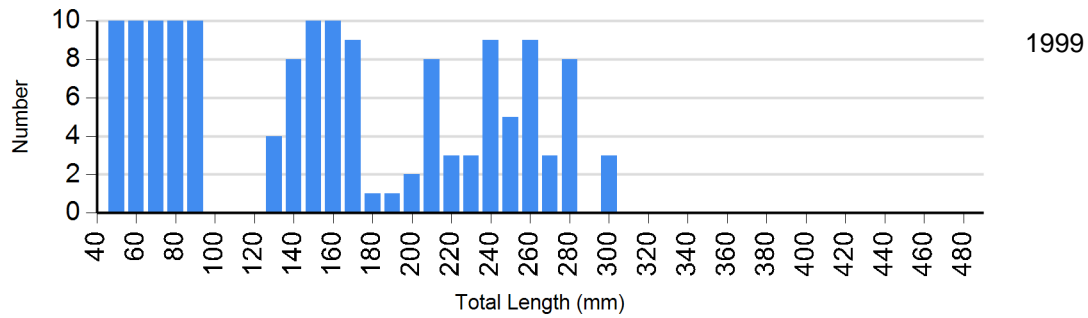
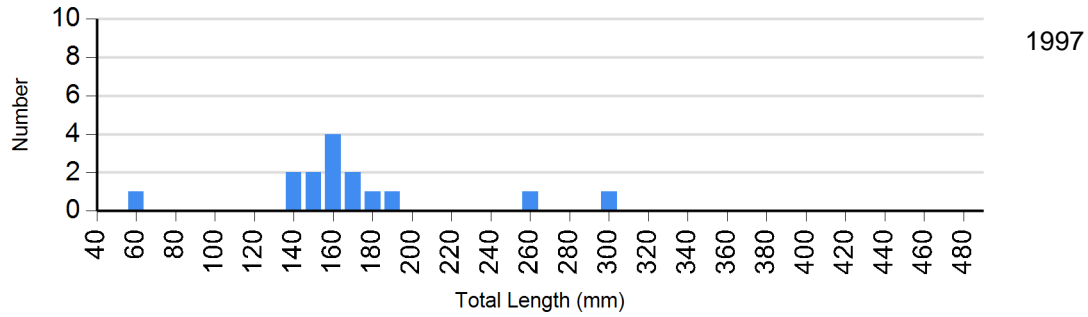
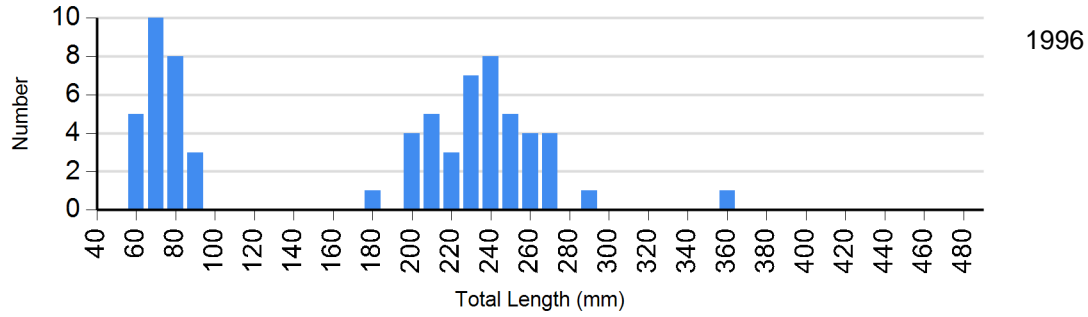
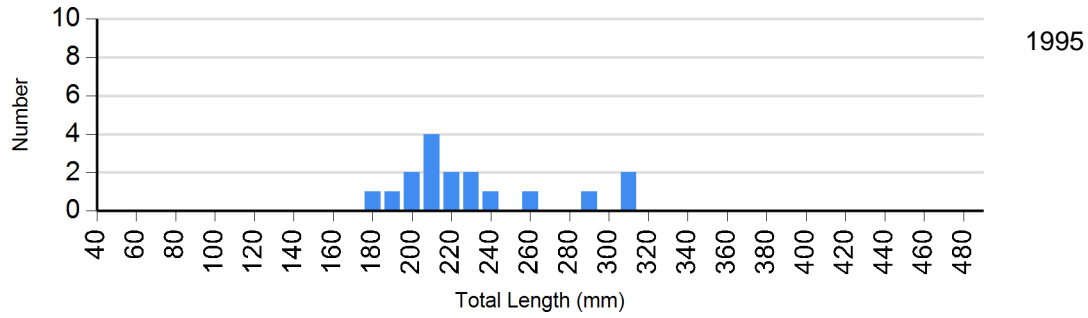
Site: 679
Species: Longnose Dace



Site: 690
Species: Brook Trout



Site: 690
Species: Brown Trout



Site: 690
Species: Longnose Dace

