

SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY
French Creek, Custer County
21-0017-00
1996

Table 1. Population and Biomass Estimates for French Creek

Site Number: 1130	Date Sampled: 07/12/1996	Conductivity (umhos/cm): 235
Site Midpoint (Latitude, Longitude): 43.71860787, -103.48972931	Site Length (m): 80	pH: 8.7
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 3.7	Water Temperature (C): 21.0
Stream Classification: BR3	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	10	11	16	10	297	1	138	120	0.61	221	63.8	2.3
Brown Trout	>=200mm	2	2	2	2	54	18	25	22	15.73	40	317.0	326.0
Brown Trout	All	12	12	14	12	324	10	150	131	9.18	241	106.0	31.7
Creek Chub	All	95	124	156	95	3351	33	1550	1357	29.20	2494	98.1	9.8
Hatchery Brown Trout	>=200mm	33	33	34	33	892	175	413	361	156.20	664	256.3	196.2
Hatchery Brown Trout	All	33	33	34	33	892	175	413	361	156.20	664	256.3	196.2
Longnose Dace	All	529	736	836	636	19892	111	9200	8056	99.35	14803	86.1	5.6
Mountain Sucker	All	46	46	47	46	1243	41	575	504	36.25	925	142.6	32.7
White Sucker	All	75	76	79	75	2054	179	950	832	159.53	1529	186.4	87.0

Site Number: 1389	Date Sampled: 07/12/1996	Conductivity (umhos/cm): 343
Site Midpoint (Latitude, Longitude): 43.75658000, -103.62897707	Site Length (m): 100	pH: 8.6
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.4	Water Temperature (C): 21.0
Stream Classification: None	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)
Creek Chub	All	355	356	359	355	26176	555	3560	10601	495.86	5728	91.2	21.2
Hatchery Rainbow Trout	>=200mm	7	7	8	7	515	101	70	208	90.14	113	287.7	196.1
Hatchery Rainbow Trout	All	7	7	8	7	515	101	70	208	90.14	113	287.7	196.1
White Sucker	All	8	8	9	8	588	52	80	238	46.61	129	165.6	88.8

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 French Creek, 1986-1996

Site 1130

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jul 21, 1993	1	1-1	
	Jul 12, 1996	11	10-16	
Brown Trout >=200mm	Jul 08, 1992	9	9-9	BR2
	Jul 21, 1993	2	2-2	BR3
	Jul 12, 1996	2	2-2	BR3
Creek Chub	Jul 08, 1992	74	71-79	
	Jul 21, 1993	20	17-29	

Creek Chub	Jul 18, 1994	70	60-84
	Jul 12, 1996	124	95-156
Hatchery Brown Trout <200mm	Jul 21, 1993	2	2-2
	Jul 18, 1994	1	1-1
Hatchery Brown Trout ≥200mm	Jul 21, 1993	24	24-24
	Jul 18, 1994	5	5-5
	Jul 12, 1996	33	33-34
Longnose Dace	Jul 08, 1992	292	118-583
	Jul 21, 1993	423	296-550
	Jul 18, 1994	2033	1916-2150
	Jul 12, 1996	736	636-836
Mountain Sucker	Jul 08, 1992	19	19-20
	Jul 21, 1993	9	9-10
	Jul 18, 1994	16	11-35
	Jul 12, 1996	46	46-47
White Sucker	Jul 08, 1992	124	124-125

White Sucker	Jul 21, 1993	90	88-94
	Jul 18, 1994	77	56-109
	Jul 12, 1996	76	75-79

Site 1389

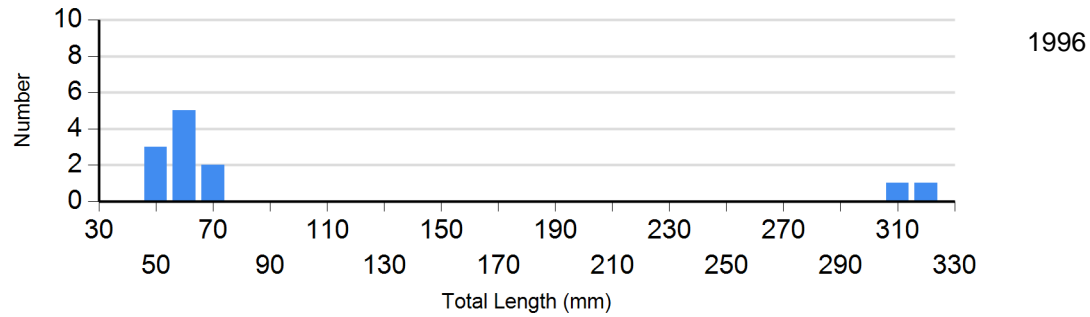
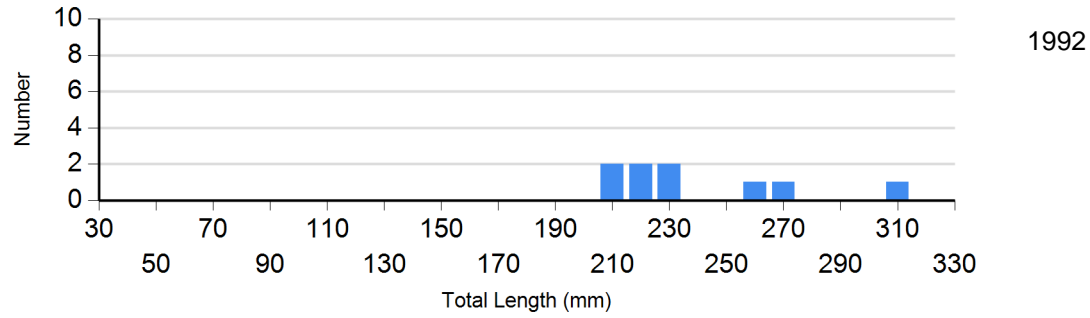
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Creek Chub	Jul 12, 1996	356	355-359	
Hatchery Rainbow Trout >=200mm	Jul 12, 1996	7	7-8	
White Sucker	Jul 12, 1996	8	8-9	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

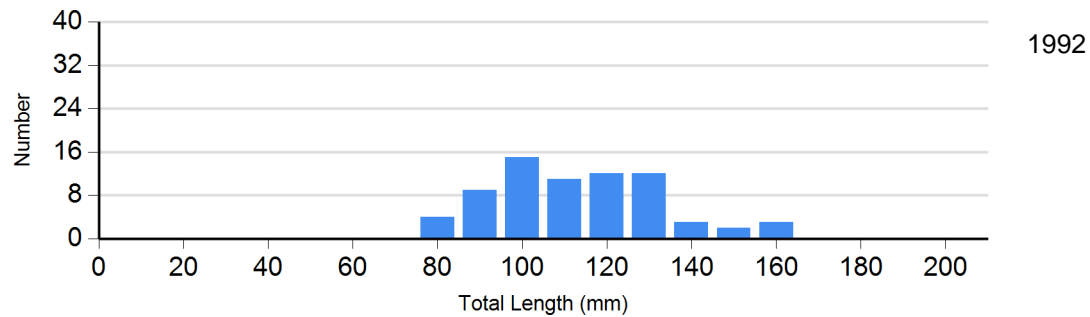
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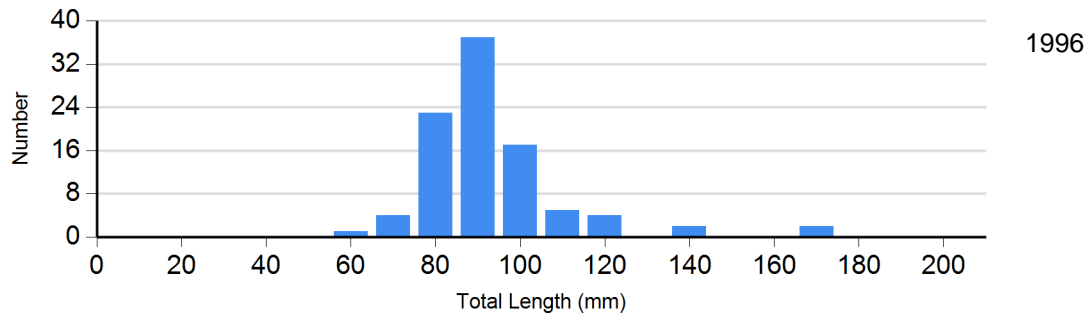
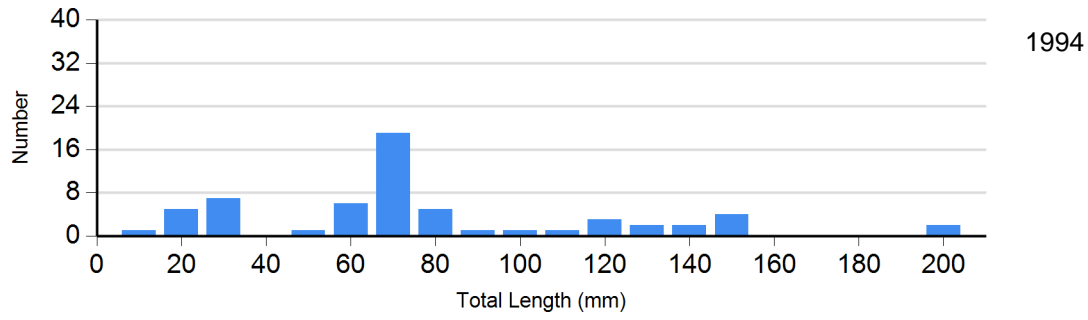
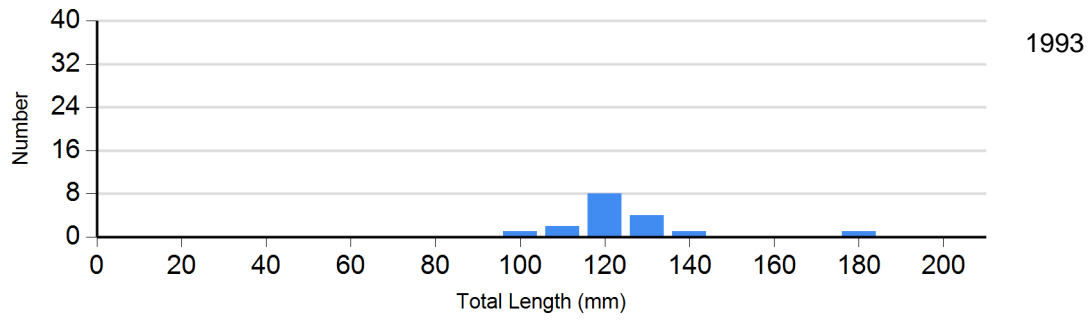
Species: Brown Trout



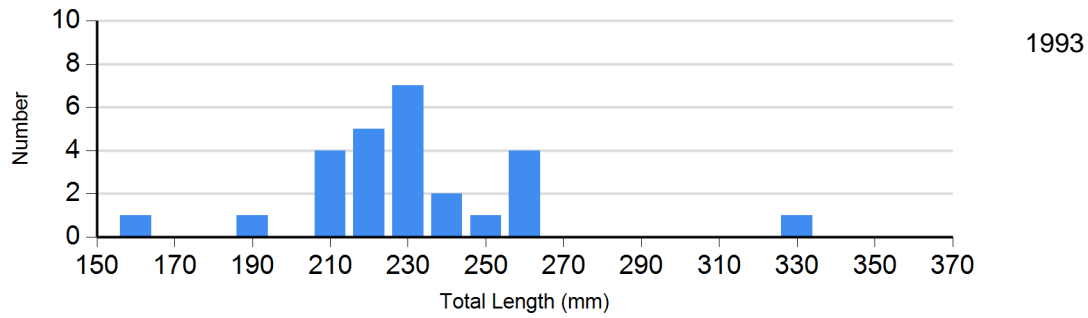
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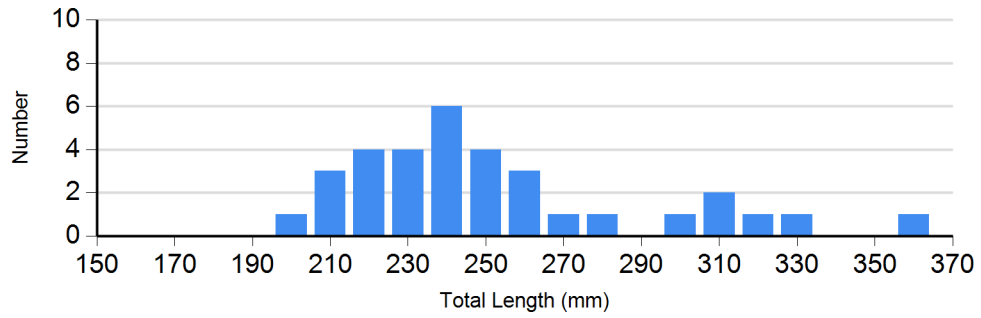
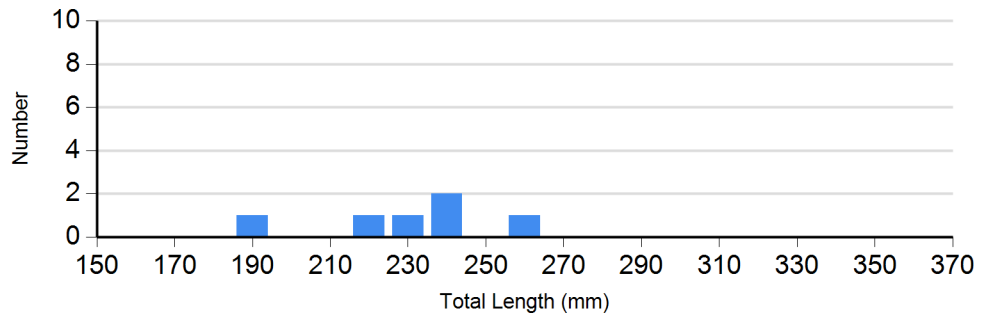
Species: Creek Chub



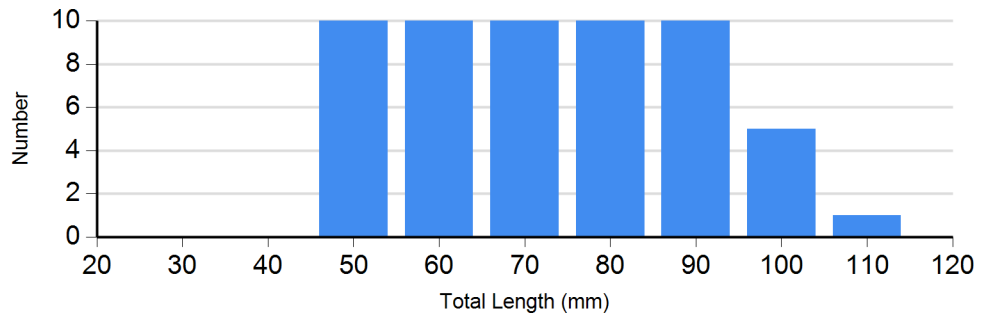
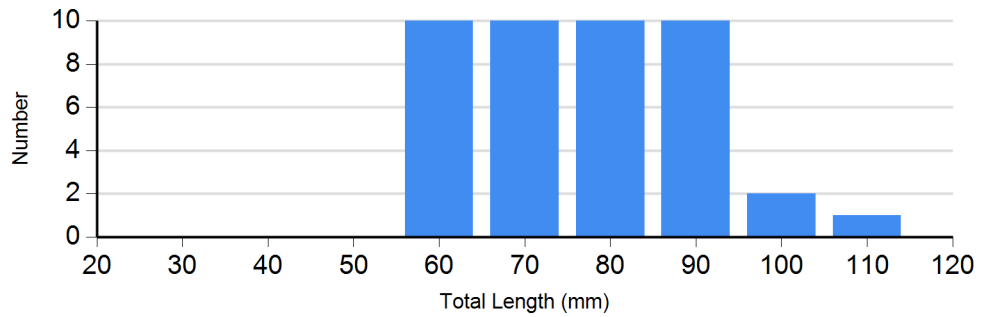


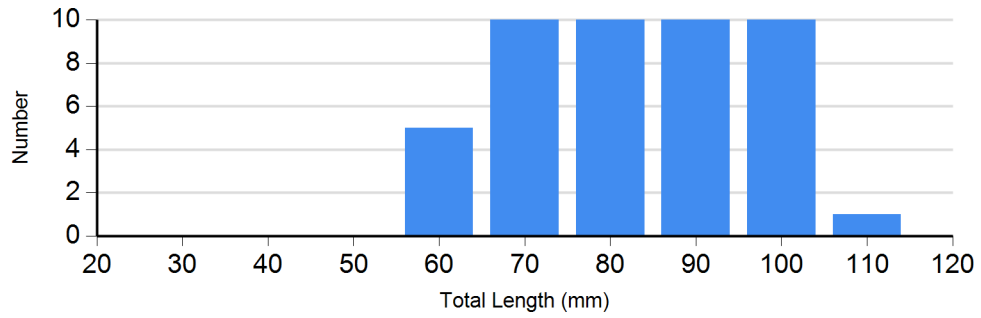
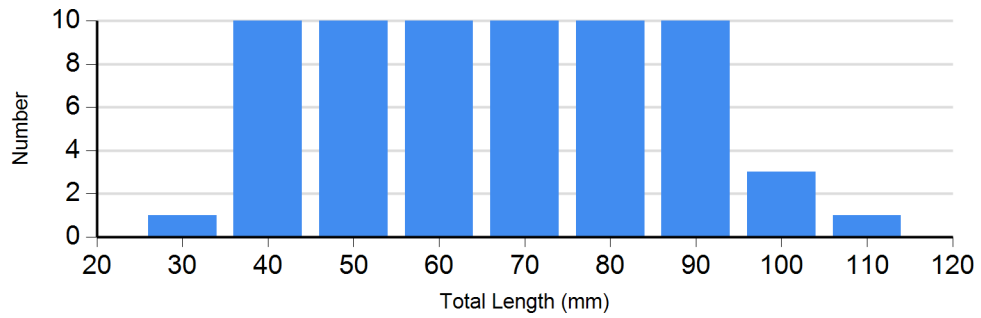
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Species: Hatchery Brown Trout



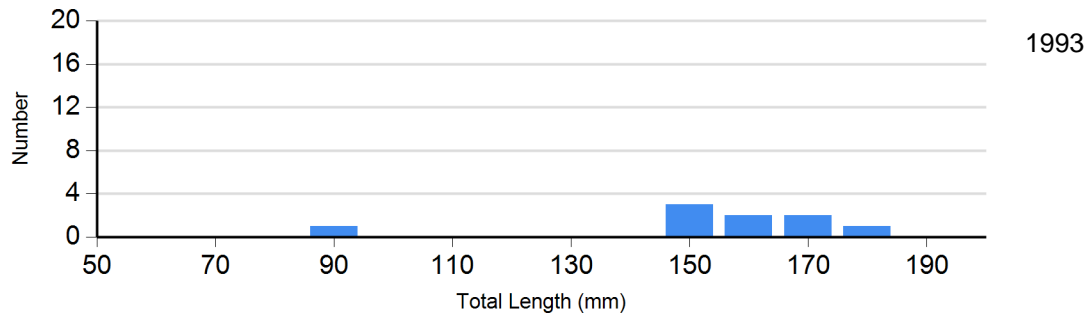
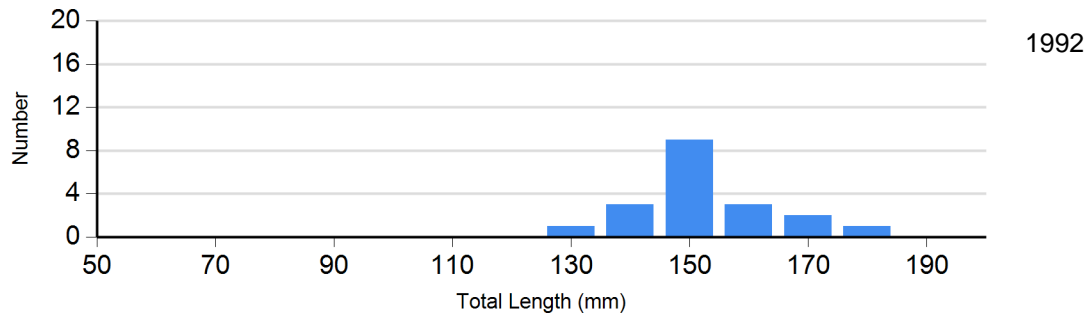


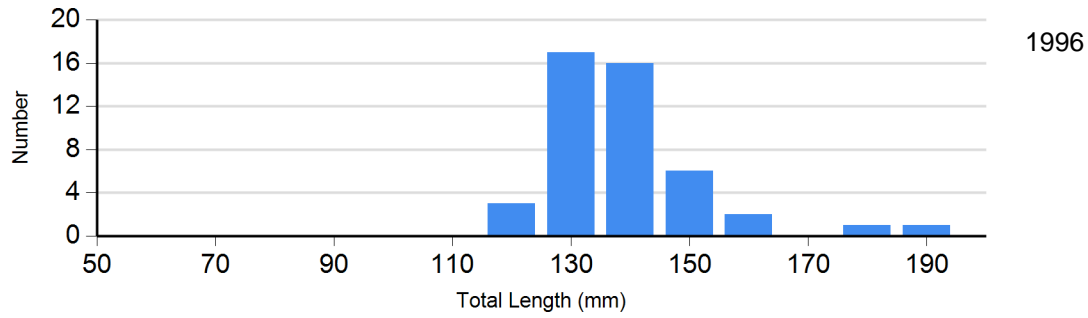
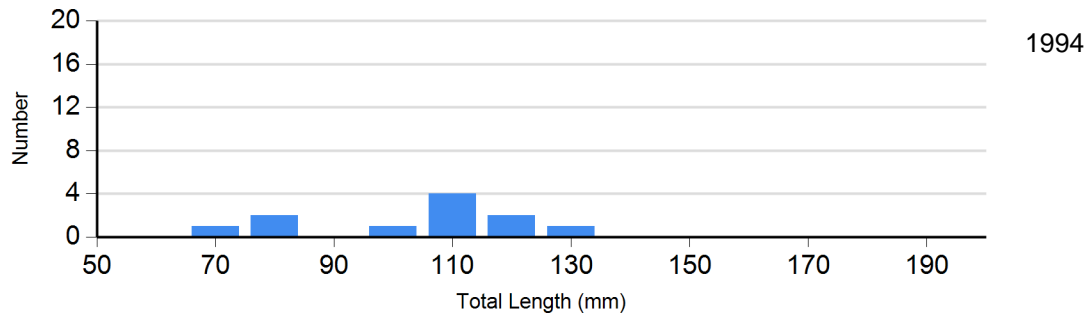
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Species: Longnose Dace



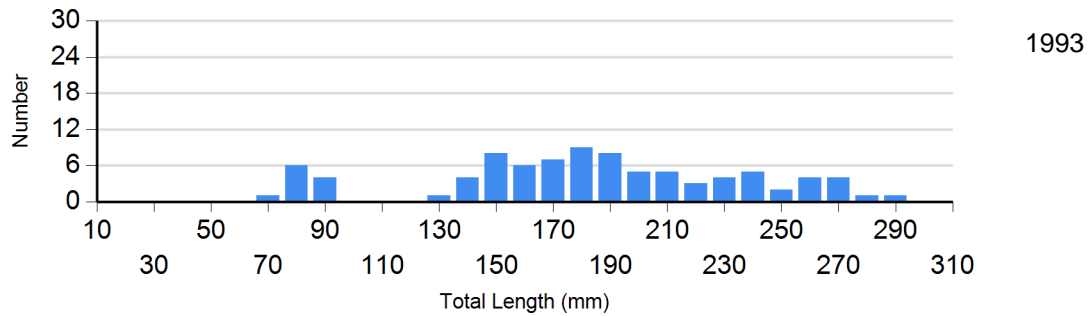
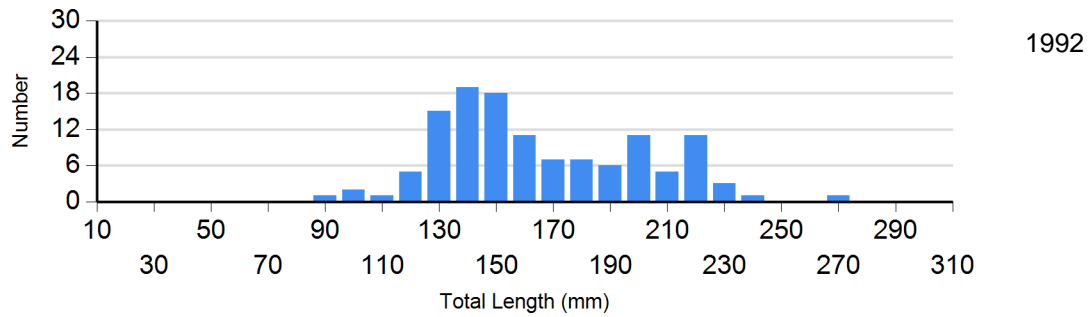


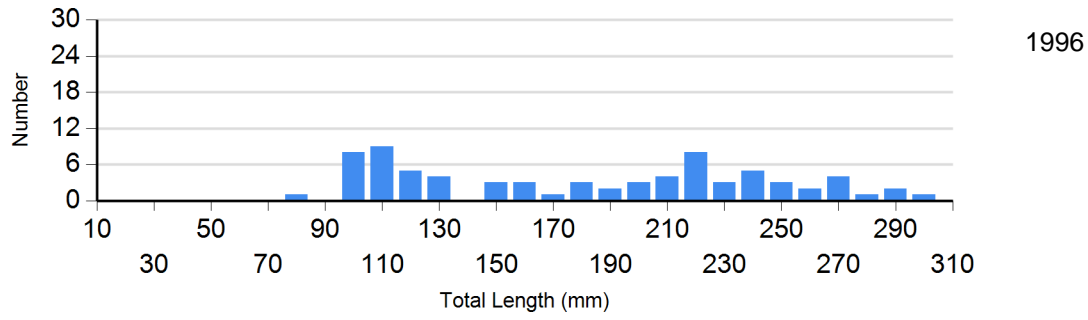
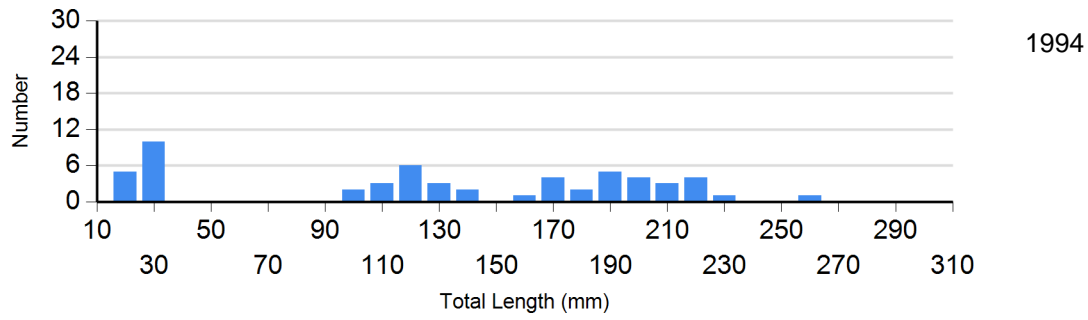
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Species: Mountain Sucker



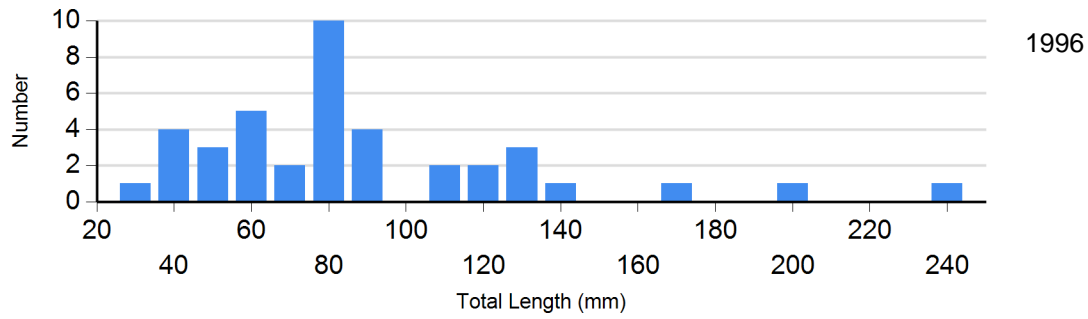


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Species: White Sucker

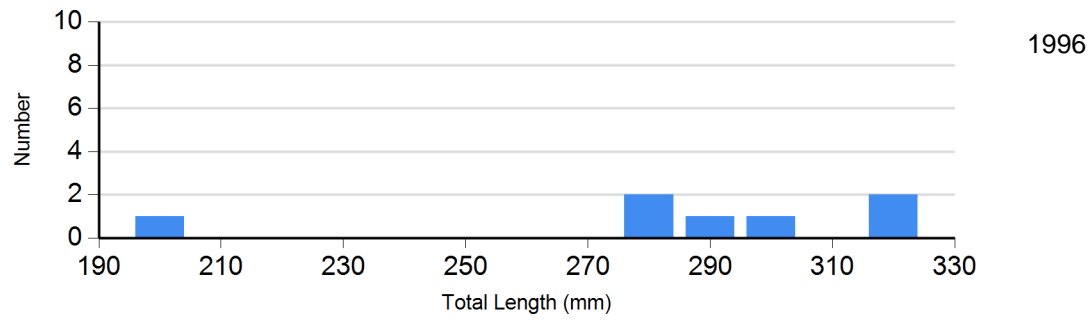




Site: 1389
Species: Creek Chub



Site: 1389
Species: Hatchery Rainbow Trout



Site: 1389
Species: White Sucker

