SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Boxelder - North Fork, Lawrence County

09-0069-00

1993

8/12/2020 Page 1

Table 1 Population and Biomass Estimates for Boyalder - North Fork

All

All

Mountain

Sucker

White Sucker

18

24

20

28

26

38

18

24

1064

1489

Table 1. Popula													
Site Number: Site Midpoint		.ongitude):	44.223039	07103.69	113208		Date Sar Site Lon	-	05/25/1993		ductivity hos/cm):		250
Site Midpoint (Latitude, Longitude): 44.22303907, -103.69113208 Survey Completed by: South Dakota Game, Fish and Parks						Site Length (m): 100 Mean Width (m): 1.5			pH:		7.5		
Stream Classification: BK1						Number of Pass: 3		Water Temperature (C):		18.0			
							Number	UI Fass.	3	Volt	tage:		250
Species	Size Class	Total Number Captured	Est. # in site	Upper 95% Cl	Lower 95% Cl	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	42	46	53	42	3151	122	460	1276	108.91	740	147.0	38.7
Brook Trout	>=200mm	10	10	11	10	685	73	100	277	65.13	161	215.9	106.5
Brook Trout	All	52	56	63	52	3836	198	560	1553	177.23	901	160.3	51.8
Longnose Dace	All	28	47	94	28	3219	11	470	1304	9.55	756	59.6	3.3
		.ongitude):	44.223246	08, -103.69	991690		Date Sar Site Len	•	05/27/1993 100	(um	nductivity hos/cm):		255
Site Midpoint	(Latitude, L						Site Len	gth (m):	100	(um pH:	hos/cm):		8.0
Site Midpoint Survey Comp	(Latitude, L leted by: So	outh Dakota					Site Len Mean Wi	gth (m): idth (m):	100 1.9	(um pH: Wat	hos/cm): er Temper	ature (C):	8.0 15.0
Site Midpoint Survey Comp	(Latitude, L leted by: So	outh Dakota					Site Len	gth (m): idth (m):	100 1.9	(um pH: Wat	hos/cm):	ature (C):	8.0
Site Midpoint Survey Comp	(Latitude, L leted by: So	outh Dakota				# per Hectacre	Site Len Mean Wi	gth (m): idth (m):	100 1.9	(um pH: Wat	hos/cm): er Temper	ature (C): Mean Length (mm)	8.0 15.0 350 Mean Weight
Site Midpoint Survey Compl Stream Classi	(Latitude, L leted by: So ification: BM Size	Total Number	Game, Fis Est. # in	h and Parks Upper	S		Site Len Mean Wi Number Kg per	gth (m): idth (m): of Pass: # per	100 1.9 3 # per	(um pH: Wat Volt	hos/cm): er Temper age: # per	Mean Length	8.0 15.0 350 Mean Weight
Site Midpoint Survey Compl Stream Classi Species	(Latitude, L leted by: So ification: Bk Size Class <200mm	Total Number Captured	Game, Fis Est. # in site	h and Parks Upper 95% Cl	Lower 95% CI	Hectacre	Site Len Mean Wi Number Kg per Hectacre	gth (m): idth (m): of Pass: # per Km	100 1.9 3 # per Acre	(um pH: Wat Volt Ib. per Acre	hos/cm): er Temper tage: # per Mile	Mean Length (mm)	8.0 15.0 350 Mean Weight (grams)
Brook Trout	(Latitude, L leted by: So ification: Bk Size Class <200mm	Total Number Captured	Game, Fis Est. # in site 10	h and Parks Upper 95% Cl 10	Lower 95% CI	Hectacre 532	Site Len Mean Wi Number Kg per Hectacre	gth (m): idth (m): of Pass: # per Km 100	100 1.9 3 # per Acre 215	(um pH: Wat Volt Ib. per Acre	hos/cm): er Temper age: # per Mile	Mean Length (mm) 135.6	8.0 15.0 350 Mean Weight (grams) 27.8

200

280

431

603

9.50

26.65

322

451

88.3

105.5

10.0

20.0 _ _ _ _

11

30

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 BrookTrout 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 Boxelder - North Fork, 1983-1993

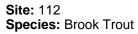
Site 112

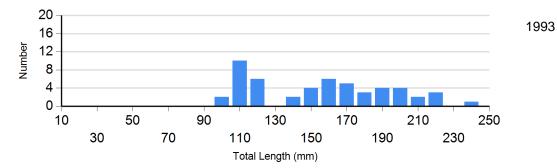
May 25, 1993	46	42-53		
May 25, 1993	10	10-11	BK1	
May 25, 1993	47	28-94		
Date	Pop Est.	(95% C.I.)	Stream Classification	
May 27, 1993	10	10-10		
May 27, 1993	2	2-2	BK2	
May 27, 1993	469	415-523		
	May 25, 1993 May 25, 1993 Date May 27, 1993 May 27, 1993	May 25, 1993 10 May 25, 1993 47 Date Pop Est. May 27, 1993 10 May 27, 1993 2	May 25, 1993 10 10-11 May 25, 1993 47 28-94 Date Pop Est. (95% C.l.) May 27, 1993 10 10-10 May 27, 1993 2 2-2	

Mountain Sucker	May 27, 1993	20	18-26
White Sucker	May 27, 1993	28	24-38

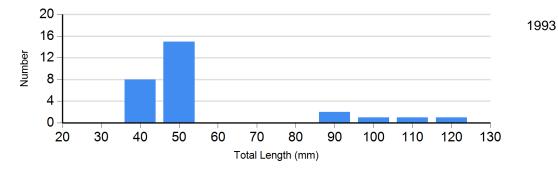
Length Frequency Distribution

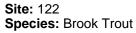
Length frequency histogram of species sampled by year.

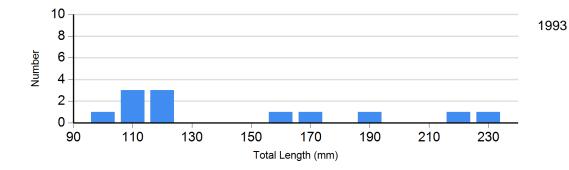


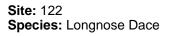


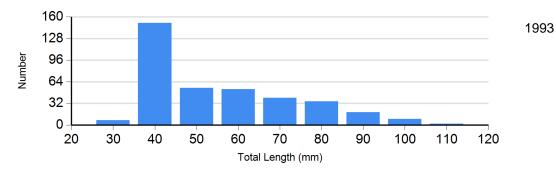
Site: 112 Species: Longnose Dace



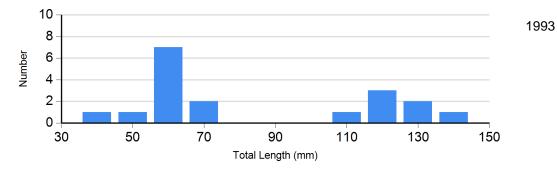








Site: 122 Species: Mountain Sucker



Site: 122 Species: White Sucker

