

Capshell Study  
Glacier National Park  
Brook Trout Collection  
August 21-22, 2002

Metadata

Collectors: Leo Marnell, Bill Michels (Glacier National Park)

Set date/time: Nets fished overnight 8/21-6:00 PM to 8/22-7:30AM

Equipment: (1) 50-ft nylon gill net, 2-panels 3/8-in + 1/2-in  
(1) 75-ft nylon gill net, 3-panels 3/8 + 1/2 + 3/4-in

Procedure: Gill nets were set at two locations along eastern shoreline approximately 250-ft and 325-ft north of outlet marsh located at SE end of lake. Nets were set from a float tube. Larger mesh panels placed at offshore end in water estimated to be less than 15-ft deep; smaller mesh panels set approximately 30-ft from shore and secured to trees on shoreline via tether cords. Nets were set near the bottom at offshore end via anchors and angled toward the surface at inshore ends.

Field Processing: Captured brook trout were placed in a chest filled with crushed ice on-site at the lake. The sample was transported to West Glacier where each fish was measured (total length/mm) and weighed (gm). Fifty-two whole specimens and three without heads were transferred to Zip-Lock freezer bags and placed in a freezer.

Observations: Weather was mild and cool with light rain when nets were set. Overcast conditions and a moderate breeze prevailed when the nets were retrieved in the morning. Numerous small brook trout were observed at the lake surface throughout most parts of the lake in the evening and the next morning. Several of the captured brook trout were approaching spawning condition as evidenced by bright coloration and pronounced white fin margins. No evidence of external parasites was found.

Data Analyses: The fish will be thawed and the stomach contents will be examined for evidence of brook trout predation on capshells in Lost Lake. This work will be done during the winter of 2002-2003. Presence/absence and number of capshells per stomach will be tabulated according to fish lengths. Condition factor will be calculated for the brook trout based on the length/weight data.

# Lost Lake

Aug.

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	<u>Length</u>	<u>Total</u>	<u>Wt</u>
1	206 mm	72 GRAMS	
2	204	72 "	
3	238	122 "	
4	240	109	
5	224	88	
6	216	92	
7	226	104	
8	226	120	
9	218	90	
10	223	90	
11	204	75	
12	220	90	
13	226	90	
14	210	78	
15	248	134	
16	212	80	
17	206	74	
18	221	88	
19	214	83	
20	192	65	

# LOST LAKE

Aug 21-22

2002

	<u>Length</u>	<u>Total</u>	<u>Weight</u>
21	22	189 mm	56 GRAMS
22	23	190 mm	64 "
23	24	186	60
24	25	209	83
25	26	142	40
26	27	170	39
27	28	170	48
28	29	177	51
29	30	209	82
30	31	210	68
31	32	211	78
32	33	202	74
33	34	174	54
34	35	200	65
35	36	225	100
36	37	160	40
37	38	205	78
38	39	200	63
39	40	220	80
40	40	206	68

# Lost Lake

Aug 21-22

2002

LENGTH TOTAL

WEIGHT

41	198 mm	59 grams
42	175 mm	48 "
43	195	65
44	173	51
45	194	<del>64</del> 64
46	212	76
47	175	54
48	194	63
49	185	65
50	180	60
51	176	52
52	155	43

+ 3 headless