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1999 - 2000 Prairie Creek Downstream Migrant Fish Trapping Study
Humboldt State University Cooperative Fishery Research Unit

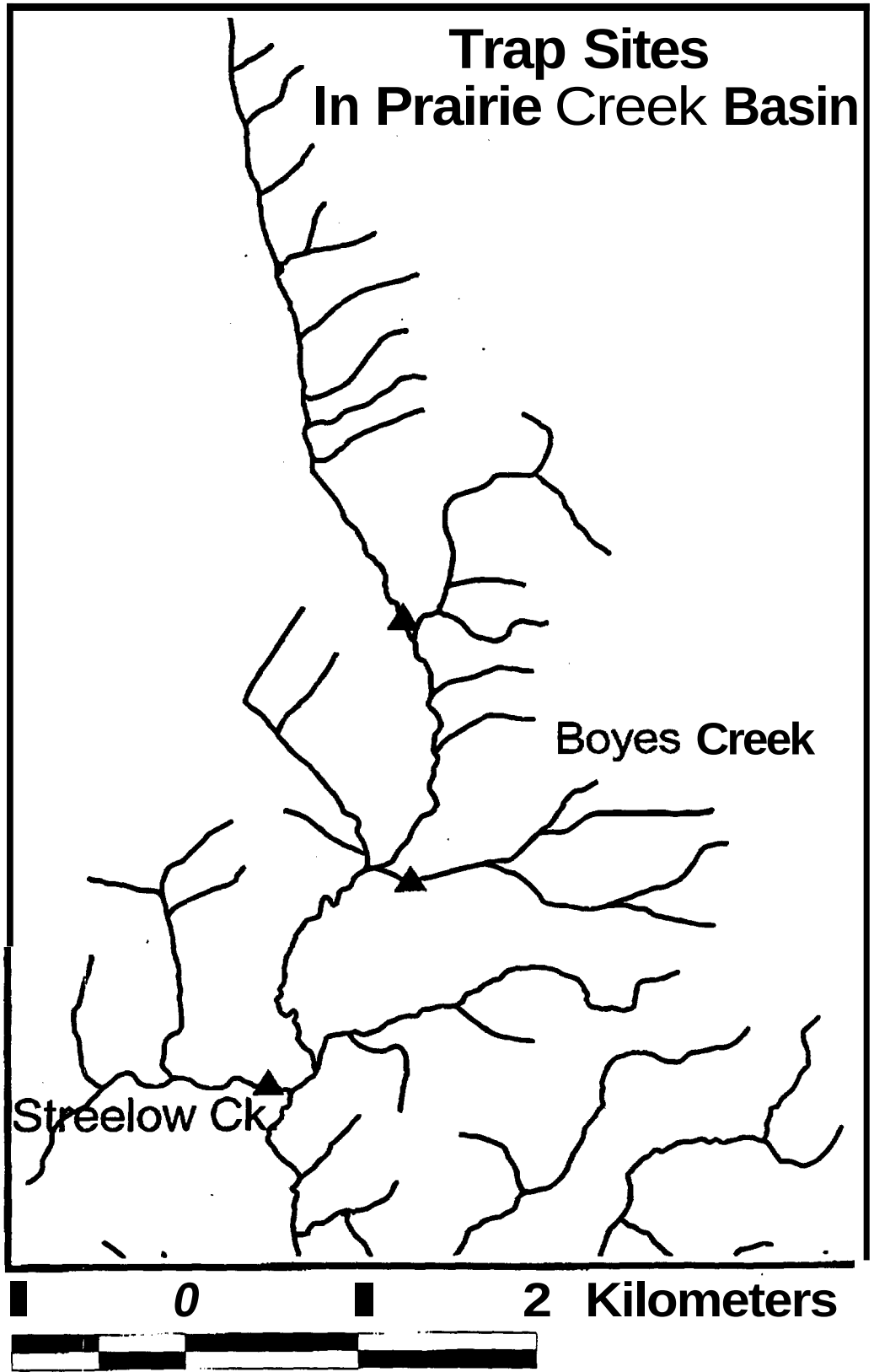
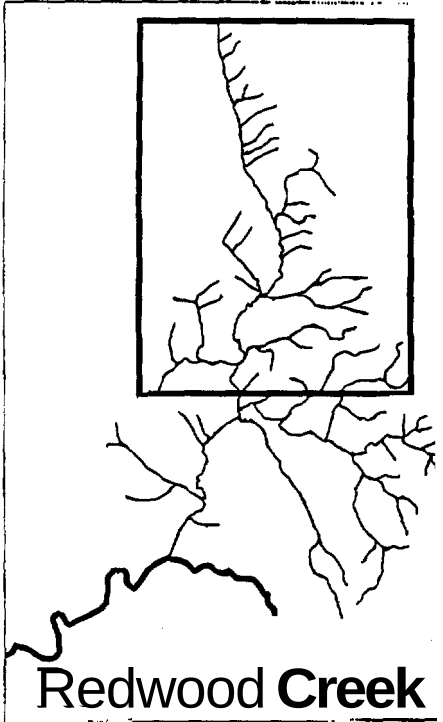
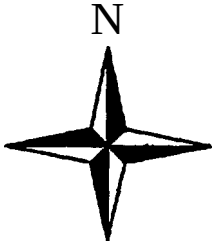
Catch Effort Summary: from Oct 12, 1999 through February 8, 2000,

Species	Upper Prairie Creek			Streelow Creek			Boyes Creek		
	num. caught	mort.	% mort	num. caught	mort	% mort	num caught.	mort.	% mort
1+ Coho	383	38	9.92	77	3	3.90	38	4	10.53
1+ Cutthroat	72	3	4.17	14	0	0.00	9	0	0.00
1+ Trout	32	2	6.25	7	0	0.00	16	0	0.00
Juv. Chinook	9	0	0.00	1	0	0.00	0	0	0.00
Brook Lamprey	54	0	0.00	1	0	0.00	0	0	0.00
Pacific Lamprey	3	0	0.00	1	0	0.00	0	0	0.00
Ammocetes	21	0	0.00	5	0	0.00	4	0	0.00
Prickly Sculpin	9	0	0.00	24	0	0.00	3	0	0.00
Coast Range Sculpin	5	0	0.00	0	0	0.00	0	0	0.00
PGS	30	2	6.67	0	0	0.00	6	0	0.00
Red-legged frog	26	0	0.00	11	0	0.00	28	0	0.00

SEE page 4 for 1997 + 1998 data

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Trap Sites In Prairie Creek Basin



Habitat units selected for sampling were blocked with nets at both ends prior to electrofishing. In most sampled units two backpack electroshockers were used. Multiple pass electrofishing techniques were used to obtain sufficient removal estimation of juvenile coho salmon densities. Affected species were gathered using dipnets, placed in buckets of water, enumerated by species and age class if possible, allowed to recover and then returned to that sampled habitat unit. Captured juvenile coho salmon, up to the first twenty, were anesthetized using tricaine-methansulfonate (MS-222) and measured to the nearest mm fork length. We obtained superior removal estimation during the fall sampling period due to the use of 18 in. anode rings rather than the standard 11 in. rings. I strongly recommend the larger anode ring for small stream electrofishing in waters with low conductivity.

ATTACHMENT A to Survival of coho salmon in northern California streams of varying habitat quality. Please refer to pages 10-19.

Scientific Collecting Permit Renewal Reporting Requirements
Applicant: Kyle E. Brakensiek

The following serves as an attachment to reporting requirements for the renewal of the Department of Fish and Game Scientific Collecting Permit. Summary figures Presented involve small stream backpack electrofishing conducted in Boyes, Strelow and Prairie Creeks located within Prairie Creek Redwoods National and State Park. Electrofishing surveys were conducted in early summer and again in late fall to estimate summer survival of juvenile coho salmon. Surveys were completed within a ten day sampling period for each creek. Population estimates have not been conducted for other catch species.

Attachment Table 1A. Total catch and mortality by species, creek and sampling period for electrofishing efforts in Prairie Creek basin, northern California, 1999.

Species	Prairie Creek				Strelow Creek				Boyes Creek			
	July		October		June		Sept.		June		Sept.	
	Catch (no.)	Mort. (no.)	Catch (no.)	Mort. (m.)	Catch (no.)	Mort. (no.)	Catch (m.)	Mort. (no.)	Catch (no.)	Mort. (no.)	Catch (no.)	Mort. (no.)
Juv. Coho	453	15	396	9	420	9	347	5	253	6	278	3
0+ Chinook	5	0	0	0	10	0	0	0	6	0	1	0
1+ Cutthroat	54	0	62	0	80	1	69	0	30	0	57	0
0+ Cutthroat	1	0	--	--	--	--	25	0	5	0	24	0
1+ Trout	39	0	130	1	17	0	13	0	7	0	9	0
0+ Trout	185	9			90	2	83	3	160	3	173	6
Ammocetes	101	0	29	0	33	0	48	0	9	0	25	0
B. Lamprey	25	0	0	0	98	0	1	0	51	0	0	0
P. Lamprey	0	0	0	0	0	0	1	0	0	0	0	0
PGS	471	0	178	0	192	0	140	0	187	1	103	0
T. Frog tadpoles	230	0	8	0	35	0	0	0	125	0	7	0
RL. Frog	1	0	0	0	0	0	0	0	0	0	0	0
P. Sculpin	5	0	6	0	4	0	3	0	0	0	0	0
C.R. Sculpin	2	0	1	0	0	0	1	0	0	0	0	0