Oregon Department of State University Corvallis, Oregon 97331 (503) 754-4531 Fisheries and Wildlife Carl B. Schreck Dregon Goop. Fish. Res. Unit ragon State University Corvallis, OR 97331 Dear Bob, Enclosed are the data on Nevada trust received from Dale Lockard. I'm not sure the gene frequencies based on small sample sizes mean too much; those for MDH are okay. The thesis contains some interesting stock comparisons for steelhead and coho. We plan to submit the meristic-chapter to Copia (goive already seen there data. We would appreciate your critical comments on this section if you have time. We plan to submit it essendably "as is," Regards,

Carl



## UNITED STATES DEPARTMENT OF THE INTERIOR

## FISH AND WILDLIFE SERVICE

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OREGON COOPERATIVE FISHERY RESEARCH UNIT 104 Nash Hall, Oregon State University Corvallis OR 97331

18 May 1978

Mr. Dale V. Lockard Nevada Department of Fish and Game 1100 Valley Road P. O. Box 10678 Reno NV 89510

Dear Dale:

I think we've finally put together everything on the trout that you sent. It took us longer than we expected as it was rather a scramble finding all of the pieces.

Jack's technician, who did the electrophoresis, left about when Jack did and took the original data books, so we had to compile these data from disorganized copies. We never were able to locate the electrophoretic data for sample EL 6. Also missing were the vertebral counts for the second set of samples that you sent; we couldn't find the x-ray plates either. Since these are important characters, we ex-rayed the fish again and made new counts. I had a person trained last year in making meristic counts, but when she left, we found that she hadn't been as meticulous as we thought, so I'm not sure how accurate the gill raker or scale count data are. We went back over her specimens and recounted basibranchial teeth since these are important characters for cutthroat. By-the-way, we either never received or could not locate sample EL 5.

The one sample that really sticks out from the rest is EL 4; this is in electrophoretic patterns, higher vertebral numbers, and lack of basibranchial teeth. Scale counts and gill rakers also appear different; the latter appearing too low, however.

Bob Behnke thinks that trout from Chino Creek are redband, and our data support this contention. The other samples are all cutthroat trout. I've sent a copy of the data to Bob, and he may be able to classify the cutthroats as to race.

The fish from sample WP-1 are distinct in having more basibranchials, different gene frequency for liver MDH, and slightly more vertebrae. Bob believes these to be Utah cutthroat.

Regards,

Carl B. Schreck, Leader Oregon Cooperative Fishery Research Unit

jj cc: R. Behnke

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						I 5074					7 -23 -44				146
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B' B''' B' B''' ww-WDH	obs. 31 8	8.75	freq. 0,775 0,200 0.025	LW- MDH AA(3) A"A	0 bs.	17.11	freq. 0.222 0.778 0.0
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Tierney Cr.

LOH	obs.	exp.	freg.
BB	38	36.1	0,95
BB,	0	3.8	0.0
B'B'	2	0.1	0.05

B= 0.95 N=40 B'= 0.05 X2 = 40.0

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6			15t arch ail	Char larch gill rakers (lawer)	acter  -	Inalysis.			P	30
Sample	Std. Leng. (cm)	Vertebrae	rakers (up)	rakers (läwer)	rakers (total)	Yelvic Fin rays	lateral line ?	Lat. series scales (2 rows above leteral line	Pyloric caeca	Basibranchials Call on midling accept where noted
	X: 11.54	61.57	8.28	11.43	19,71	9.14	30,57	144.43	40,28	5.0
EL-1	R- 84-14.2	61-62	7-9	9-13	16-22	9-10	27-34	132-160	30-47	2-8
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	x 15.83	61.6	8.33	10.00	18.33	9.33	27.67	144.00	37.67	4.5
EL-3	R: 15.6 - 16.1	61-62	6-10		16-20	9-10	25-32	128-154	35-42	2-8
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8-3 13-3					1 3 3 6			1 27 3 A	1 10 0 1 10	
	<b>ス</b> =	60.83						1 2 2 2		5.14
EL-7	R=	60-61								3-8
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E1-8	R=	61-62				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				0-20
	N=	7								7
WP-1	X= 14,3 R= 13.5-14.8 N= 3	62.5	7.67	12.33	20.00	9.33	33.67	142.33	36.33	23.6-
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Shoshone Cr.	X: R=	61.71			1.39				one wy (2 right	5.71
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