

Memorandum

To : Fisheries Management
Region 3

Date: September 20, 1979

From : **Department of Fish and Game**, Fisheries Management, Menlo Park

Subject: Olema Creek, Marin County; Fish Population Sampling, August 16, 1979.

On August 16, 1979, Central Fishery District personnel and WCA Joe Baima used a Smith-Root Type V backpack electroshocker to sample fish populations at two sites on Olema Creek.

Sampling Results by Station

Station 1: An approximate 1,000-ft. reach due west of Olema (intersection of Sir Francis Drake Highway and State Highway 1) and upstream from Bear Valley Road bridge. Streammile 2.2. At 0930 hrs. water temperature was 59°F. Streamflow was visually estimated at 0.2 cfs. Pool and riffle reach with good riparian canopy. Shocking time: 2587 seconds.

<u>Species</u>	<u>Number</u>	<u>FL Range (inches)</u>	<u>FL (inches)</u>
SH	29	1.8 - 8.8	3.9
SCP	34	1.8 - 6.3	3.2
RCH	34	1.8 - 5.7	3.9
SKR	6	4.4 - 14.3	11.8
LP	1	(ammocoete)	5.0

Station 2: An approximate 800-ft. reach adjacent to Stewarts Morgan Horse Ranch. Streammile 5.2. At 1500 hrs. water temperature was 71°F. Streamflow was visually estimated at 0.1 cfs. Pool and riffle reach with considerable sun exposure. Shocking time: 2180 seconds.

<u>Species</u>	<u>Number</u>	<u>FL Range (inches)</u>	<u>FL (inches)</u>
SH	48	1.5 - 5.6	2.7
RCH*	109	0.7 - 5.7	2.9
STB*	20	0.6 - 2.0	1.3
SCP	11	1.3 - 5.0	3.0
SKR	6	10.8 - 12.8	11.5

* Small RCH and STB were abundant.

Length-frequency distribution tables for SH, RCH and SCP are attached. All fish appeared in good physical condition. Crayfish were observed at both sampling stations.

Examination of the combined SH length-frequency distribution reveals at least three apparent age classes (see attached length-frequency table):

Probable Age

<u>Class</u>	<u>Number</u>	<u>FL Range (inches)</u>	<u>FL (inches)</u>
0+	61	1.5 - 3.7	2.4
1+	12	4.1 - 6.5	5.3
older	4	7.0 - 8.8	7.7

Probable Age

	<u>Class</u>	<u>Number</u>	<u>FL Range (inches)</u>	<u>FL (inches)</u>
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1+	12	4.1 - 6.5	5.3	
older	4	7.0 - 8.8	7.7	

It is significant to note that no silver salmon were observed at the two sampling stations. Silver salmon are known to have spawned in Olema Creek at least as late as the mid-1970's, prior to the severe 1976-1977 drought.

Keith R. Anderson Associate Fishery
Biologist

Ivan L. Paulsen Assistant Fishery
Biologist Central Fishery District
Region 3

Attachments

cc: WCA Joe Baima
Warden Russ lid, Marin County

KRArgb

LENGTH FREQUENCY

Olema Creek,
Marin County

August 16,
1979

SPECIES	Steelhead Trout (SH)	LOCATION	FL, inches	Sta.1	Sta.2	Total	Sta.1	Sta.2	Total	DATE	NAME
0			1.0			6.0	1		1	0	
1			2			2				2	
2			3			3				3	
3			4			4				4	
4			5		1	1	5		1	5	
5			6		1	1	6			6	
6			7			7				7	
7			8		1	3	8			8	
8			9		1	4	9			9	
9			2.0		1	6	7.0		1	0	
0			1			2	1			1	
1			2		1	9	2		1	2	
2			3		1	6	3			3	
3			4		1	4	4			4	
4			5		1	6	5			5	
5			6		1	4	6		1	6	
6			7			1	7			7	
7			8			1	8			8	
8			9			1	9			9	
9			3.0		1	2	8.0			0	
0			1		1	4	1			1	
1			2		1	2	2			2	
2			3		1	2	3			3	
3			4			1	4			4	
4			5			1	5			5	
5			6			1	6			6	
6			7		1	1	7			7	
7			8			1	8		1	8	
8			9			1	9			9	
9			4.0			2	9.0			0	
0			1		1	1	1			1	
1			2			1	2			2	
2			3		1	1	3			3	
3			4		1	1	4			4	
4			5			1	5			5	
5			6			1	6			6	
6			7			1	7			7	
7			8			1	8			8	
8			9			1	9			9	
9			5.0		1	2	10.0			0	
0			1			1	1			1	
1			2			1	2			2	
2			3			1	3			3	
3			4			1	4			4	
4			5			1	5			5	
5			6		1	1	6			6	
6			7			1	7			7	
7			8			1	8			8	
8			9			1	9			9	

LENGTH FREQUENCY

Olema Creek,
Marin County

August 16,
1979

SPECIES Roach (RCH)

LOCATION

DATE

NAME

	FL, inches	LOCATION			DATE			NAME	
		Sta.1	Sta.2	Total	Sta.1	Sta.2	Total		
0		0	0		5	0	1	2	0
1		1			1			2	1
2		2			2				2
3		3			3	1		2	3
4		4			4				4
5		5			5			1	5
6		6			6			1	6
7		7		3	7	1		2	7
8		8		4	8				8
9		9		1	9				9
0		10		2	10				10
1		11		3	11				11
2		12		3	12				12
3		13		3	13				13
4		14		3	14				14
5		15		4	15				15
6		16			16				16
7		17		4	17				17
8		18		4	18				18
9		19		7	19				19
0		20		7	20				20
1		21		6	21				21
2		22		3	22				22
3		23		7	23				23
4		24		3	24				24
5		25		4	25				25
6		26			26				26
7		27		1	27				27
8		28		2	28				28
9		29		2	29				29
0		30		4	30				30
1		31		4	31				31
2		32		6	32				32
3		33		6	33				33
4		34		5	34				34
5		35		6	35				35
6		36		6	36				36
7		37		6	37				37
8		38		6	38				38
9		39		9	39				39
0		40		6	40				40
1		41		2	41				41
2		42		2	42				42
3		43		2	43				43
4		44		3	44				44
5		45		4	45				45
6		46		4	46				46
7		47		2	47				47
8		48		1	48				48
9		49		1	49				49

LENGTH FREQUENCY

Olema Creek,

August 16,

Marin County

1979

SPECIES Sculpin (SCP)

LOCATION

DATE

NAME

FL, inches	LOCATION			DATE			NAME
	Sta.1	Sta.2	Total	Sta.1	Sta.2	Total	
0		1	0			6	0
1		1				1	1
2		2				2	2
3		3	1			3	3
4		4				4	4
5		5	1			5	5
6		6	1			6	6
7		7				7	7
8		8	1			8	8
9		9	4			9	9
0	2	0	3			0	0
1	1	1	3			1	1
2	2	2	5			2	2
3	3	3	4			3	3
4	4	4	1			4	4
5	5	5				5	5
6	6	6				6	6
7	7	7				7	7
8	8	8				8	8
9	9	9				9	9
0	3	0	1			0	0
1	1	1	2			1	1
2	2	2	1			2	2
3	3	3				3	3
4	4	4				4	4
5	5	5				5	5
6	6	6				6	6
7	7	7				7	7
8	8	8				8	8
9	9	9	1			9	9
0	4	0	1			0	0
1	1	1				1	1
2	2	2				2	2
3	3	3				3	3
4	4	4	2			4	4
5	5	5				5	5
6	6	6	2			6	6
7	7	7	1			7	7
8	8	8	1			8	8
9	9	9				9	9
0	5	0	1			0	0
1	1	1	2			1	1
2	2	2	2			2	2
3	3	3				3	3
4	4	4				4	4
5	5	5	2			5	5
6	6	6				6	6
7	7	7	1			7	7
8	8	8				8	8
9	9	9				9	9