

State of California  
The Resources Agency  
DEPARTMENT OF FISH AND GAME

REF  
90400

ANNUAL REPORT  
VAN ARSDALE FISHERIES STATION 1982-83

by

Stephen W. Sanders, Fish Culturist  
Region 3, Inland Fisheries

Anadromous Fisheries Branch

Administrative Report No. 83-8

1983

ANNUAL REPORT  
VAN ARSDALE FISHERIES STATION 1982-83<sup>1/</sup>

by

Stephen W. Sanders, Fish Culturist  
Region 3, Inland Fisheries

ABSTRACT

This report covers the operation of Van Arsdale Fisheries Station (Snow Mountain Station) for the 1982-83 season. Counts of migratory steelhead, Salmo gairdneri, and chinook salmon, Oncorhynchus tshawtscha, have been made at this station annually since 1933. During the season, 9 chinook salmon (2 males, 5 females, and 2 grilse) were trapped and 369 steelhead (129 males and 240 females) were trapped.

The number of adult fish trapped, weather, water temperature, and river flow were recorded (Appendix 1).

---

<sup>1/</sup> Anadromous Fisheries Branch Administrative Report No.  
Submitted October 1983.

## INTRODUCTION

Van Arsdale Fisheries Station is located about 25 miles northeast of Ukiah, California, on the Eel River at Capehorn Dam, which forms Van Arsdale Reservoir. The station was constructed by Snow Mountain Light and Power Company in 1907 and subsequently sold to Pacific Gas and Electric Company. The fish ladder is maintained by Pacific Gas and Electric Company; the counting station grounds and other facilities are maintained by the Department of Fish and Game.

## METHODS

Temperatures were taken at 0900 each morning with a hand held thermometer; water flow data are taken from Pacific Gas and Electric Company reports for the gauging station (E-11) just below Van Arsdale Dam.

1982-83

### Steelhead Program

The first fish entered the Station on November 30, 1982 and the last on May 23, 1983. There were 129 males and 240 females trapped, for a total of 369 fish. There was only one spawning this season. On April 18, 1983, 12 females were spawned and all 54,500 eggs were shipped to Mad River Hatchery. The fertility rate was 92%.

No juvenile steelhead were planted this year.

### Chinook Program

The first fish entered the station on December 4, 1982 and the last on January 3, 1983. There were two males, five females, and two grilse. All fish were released above Van Arsdale Dam. No chinook eggs were taken this year and no juvenile chinook were planted.

### Marked Returns

No marked fish were trapped this year.

APPENDIX 1. Van Arsdale Fisheries Station, Mendocino County,  
Fish Counting Data, 1982-83 Season

Date	Chinook salmon				Steelhead			Weather	Water temp. (°F)	Eel River flow (cfs)
	M	F	G	T	M	F	T			
<u>1982</u>										
Nov. 30	—	—	—	—	<u>1</u>	<u>1</u>	<u>2</u>	Rain	41	6800
Nov. Totals	0	0	0	0	1	1	2			
Dec. 1								Clear	40	4440
2								Lt. rain	45	2420
3					1	1	2	Lt. rain	47	1940
4		1		1	1		1	Lt. rain	46	1870
5	1			1	2	8	10	Lt. cloudy	46	1700
6					3	5	8	Clear	47	1630
7								Clear	43	1320
8								Clear	44	
9								Clear	44	687
10					1	4	5	Clear	44	462
11	Station not attended									
12	Station not attended									
13								Clear	44	207
14								Clear	44	182
15								Rain	44	221
16						1	1	Rain	45	1920
17								Pt. cloudy	45	15300
18								Pt. cloudy	44	
19		1		1				Clear	44	
20		1	1	2	4	3	7	Rain	45	3180
21					1	3	4	Rain	46	7600
22	Station not attended							Rain	46	
23	Station not attended							Rain	46	
24	Station not attended							Clear	44	4970
25	Station not attended									
26	Station not attended									2450
27					3		3	Clear	43	2050
28		1		1	6	16	22	Clear	43	1660
29	Station not attended							Clear		
30					1	2	3	Clear	40	1120
31	<u>1</u>	<u>1</u>	—	<u>2</u>	<u>1</u>	<u>3</u>	<u>4</u>	Clear	40	790
Dec. Totals	2	5	1	8	24	46	70			

APPENDIX L. (continued)

Date	Chinook salmon				Steelhead			Weather	Water temp. (°F)	Eel River flow (cfs)
	M	F	G	T	M	F	T			
<u>1983</u>										
Jan. 1					1	1	2	Clear	40	652
2					1	1	2	Overcast	42	533
3			1	1	2	2	4	Overcast	44	467
4					5	2	7	Clear	42	407
5					1	1	2	Clear	42	417
6						3	3	Clear	42	375
7					4	8	12	Clear	44	325
8					2	2	4	Clear	47	249
9					13	21	34	Clear	44	163
10						7	7	Clear	42	190
11					1	4	5	Clear	41	198
12					2	1	3	Clear	42	160
13								Clear	41	121
14								Clear	43	144
15					3		3	Cloudy	44	133
16						1	1	Cloudy	44	114
17					2	6	8	Lt. rain	44	103
18					6	10	16	Rain	43	236
19					3	6	9	Rain	41	2380
20					1	1	2	Clear	41	1760
21						1	1	Lt. rain	43	1060
22					2	6	8	Rain	44	1330
23								Rain	44	2530
24					2	4	6	Cloudy	44	11700
25					2	1	3	Cloudy	42	6170
26					3	4	7	Rain	43	7150
27					4	5	9	Overcast	43	20800
28								Cloudy	46	8635
29					1	3	4	Rain	45	5990
30					4	7	11	Pt. Cloudy	46	4150
31					3	4	7	Clear	44	3320
Jan. Totals	0	0	1	1	68	112	180			
Feb. 1					5	4	9	Clear	42	2550
2					1	9	10	Overcast	43	3270
3						2	2	Overcast	42	1870
4					1	1	2	Overcast	42	1610
5					3	1	4	Rain	44	1260
6								Overcast	45	1940
7					2	7	9	Rain	45	4930
8					1	2	3	Rain	43	6390
9					1	2	3	Rain	43	6580
10					1	2	3	Overcast	43	8350

APPENDIX 1. (continued)

Date	Chinook salmon				Steelhead			Weather	Water temp. (°F)	Eel River flow (cfs)
	M	F	G	T	M	F	T			
<u>1983</u>										
Feb. 11					2	2		Cloudy	46	5430
12					1	1		Rain	47	5970
13								Clear	47	8402
14						1	1	Cloudy	47	6220
15					1	1	2	Overcast	47	4210
16								Clear	44	3460
17					2	3	5	Overcast	43	2840
18	Station not attended							Rain		
19								Clear	47	6800
20						3	3	Clear	47	4220
21					1	1	2	Overcast	46	3170
22					2	6	8	Overcast	48	2590
23					1	2	3	Rain	47	2310
24						2	2	Clear	47	2580
25								Rain	45	2600
26								Rain	48	4690
27								Rain	47	5500
28								Rain	47	8730
Feb. Totals	0	0	0	0	22	52	74			
Mar. 1								Cloudy	47	20530
2								Rain	48	13950
3								Overcast	48	10850
4								Rain	48	6920
5	Station not attended									
6	Station not attended									3270
7								Rain	48	4610
8								Cloudy	48	4050
9								Overcast	48	3400
10								Overcast	49	3390
11								Clear	48	2580
12	Station not attended									
13	Station not attended									
14								Cloudy	48	9510
15								Clear	48	5370
16								Rain	47	3780
17								Overcast	47	3690
18								Clear	47	3450
19	Station not attended									
20	Station not attended									
21					1		1	Overcast	46	2680
22								Rain	47	2870
23								Rain	47	3500

APPENDIX I. (continued)

Date	Chinook salmon				Steelhead			Weather	Water temp. (°F)	Eel River flow (cfs)
	M	F	G	T	M	F	T			
1983										
Mar. 24								Rain	45	4990
25								Clear	47	5340
26	Station not attended									
27	Station not attended									
28								Lt. rain	45	4490
29								Rain	47	3610
30								Rain	47	4150
31								Clear	47	9215
Mar. Totals	0	0	0	0	1	0	1			
Apr. 1								Clear	47	5780
2	Station not attended									
3	Station not attended									
4								Clear	46	2880
5								Clear	47	2480
6								Clear	47	2150
7								Clear	47	1940
8								Clear	47	1820
9	Station not attended									
10	Station not attended									
11								Clear	49	940
12					5	9	14	Pt. cloudy	47	854
13					3	5	8	Clear	47	744
14					1	6	7	Clear	47	616
15					1	3	4	Clear	47	536
16	Station not attended									
17	Station not attended									
18								Cloudy	48	488
19								Overcast	49	452
20						2	2	Rain	50	505
21								Cloudy	50	551
22								Overcast	50	527
23	Station not attended									
24	Station not attended									
25								Overcast	48	2720
26								Overcast	48	2160
27								Rain	48	2010
28								Rain	47	2990
29								Rain	49	2700
30	Station not attended									
Apr. Totals	0	0	0	0	10	25	35			

APPENDIX 1. (continued)

Date	Chinook salmon				Steelhead			Weather	Water temp. (°F)	Eel River flow (cfs)
	M	F	G	T	M	F	T			
<u>1983</u>										
May	1							Cloudy	49	2270
	2							Pt. cloudy	49	2000
	3							Overcast	49	1800
	4							Overcast	50	1720
	5				1		1	Rain	51	
	6							Clear	49	2240
	7	Station not attended								
	8	Station not attended								
	9							Clear	49	1080
	10							Clear	49	771
	11							Clear	49	771
	12							Clear	49	715
	13							Overcast	49	687
	14	Station not attended								
	15	Station not attended								
	16							Clear	50	687
	17				2		2	Clear	52	684
	18					1	1	Clear	54	666
	19							Clear	54	730
	20					2	2	Clear	58	939
	21	Station not attended								
	22	Station not attended								
	23					1	1	Clear	63	958
	24							Clear	63	879
	25							Clear	63	846
	26							Clear	63	863
	27							Clear	66	834
	28	Station not attended								
	29	Station not attended								
	30	Station not attended								
	31	Station not attended								
May	Totals	0	0	0	0	3	4	7		
Seasonal	Totals	2	5	2	9	129	240	369		