

OPERATIONS REPORT

LYONS FERRY SALMON HATCHERY

AUGUST 1, 1985 THROUGH JANUARY 31, 1986

FUNDED BY U.S. FISH AND WILDLIFE

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INTRODUCTION

LYONS FERRY HATCHERY IS LOCATED ON THE SNAKE RIVER IN FRANKLIN COUNTY. IT IS 7 MILES NORTH OF STARBUCK ON HIGHWAY 261. THE HATCHERY IS 56 MILES UPSTREAM FROM THE MOUTH OF THE SNAKE RIVER AND 380 MILES FROM THE PACIFIC OCEAN.

THE HATCHERY WAS CONSTRUCTED IN 1983 AND 1984 BY THE U.S. ARMY CORPS OF ENGINEERS. IT CONSISTS OF 28 RACEWAYS, HATCHERY BUILDING, STORAGE BUILDING, VISTOR CENTER, SPAWNING BUILDING, 2 ADULT PONDS AND FISH LADDER. THE VISTOR CENTER, STORAGE BUILDING, FISH LADDER AND WATER SUPPLY, WHICH IS WELL WATER, IS SHARED WITH THE GAME DEPT. HATCHERY.

THE RELEASED FIGURES FOR 1985 WERE 650,300 YEARING FALL CHINOOK AND 539,400 FINGERLING FALL CHINOOK.

THE FOLLOWING INFORMATION IS A REPORT SHOWING THE ENTIRE HATCHERY ACTIVITIES FROM AUGUST 1, 1985 THROUGH JANUARY 31, 1986.

TRAPPING OPERATIONS

TRAPPING WAS DONE AT THE HATCHERY AND ICE HARBOR DAM FOR FALL CHINOOK. THE SPRING CHINOOK TRAPPING WAS DONE AT THE TUCANNON GAME DEPT. HATCHERY SATELLITE POND. DURING THE FALL CHINOOK RUN A NIGHT SECURITY GUARD IS HIRED TO PROTECT THE FISH.

ESCAPEMENT AND SPAWNING AUGUST 1, 1985 THROUGH JANUARY 31, 1986.
A SUMMARY DESCRIPTION FOR 1985 BROOD.

TUCANNON SPRING CHINOOK

THE 1985 TRAPPING OF SPRING CHINOOK WAS 16 ADULTS AND 6 ADULTS SEINED OUT OF THE RIVER. 5 FEMALES AND 4 MALES WERE SPAWNED; 9 FEMALES AND 4 MALES DIED IN THE POND. THE YEARS PRODUCTION WAS 14,843 EGGS TAKEN.

LYONS FERRY FALL CHINOOK

THE TRAPPING OF ADULTS STARTED AUGUST 31 AT ICE HARBOR DAM. A TOTAL OF 589 ADULTS AND 90 JACKS WERE TRUCKED TO THE HATCHERY. A TOTAL OF 6 ADULTS AND 4070 JACKS WERE TRAPPED AT THE HATCHERY. 318 FEMALES AND 136 MALES WERE SPAWNED. 64 FEMALES AND 77 MALES DIED IN THE HOLDING POND. THE YEARS PRODUCTION WAS 1,414,300 EGGS TAKEN. A TOTAL OF 1,182,189 EGGS WERE RECIEVED FROM KALAMA FALLS HATCHERY.

ESCAPEMENT AND SPAWNING for 1985 Brood TUCANNON SPRING CHINOOK Stock

Week Ending	Est Arrival		Upstream			Mortality			Spawmed			Green/Strip/Bud/SC	Sold/Donated			Shipped		
	Week	Season	M	F	J	M	F	J	M	F	J		M	F	J	M	F	J
JUNE 15	13	13																
JUNE 23	2	15																
JULY 6																		
JULY 27						1												
AUG. 17	1	16																
AUG. 24	6	22																
AUG. 31						1												
SEPT. 7						1												
SEPT. 21									4		1							
Report Total	22	22				3			10		4		5					
Pre-Balance																		
SEASON Total	22	22				3			10		4		5					

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EGG TAKE AND DISPOSITION FOR 1985 Brood TUCANNON SPRING CHINOOK Stock

Week Ending	No. Eggs Taken-est.	No. Eggs Received/From	No. Eggs Shipped/To	No. Eggs Lost	No. Eggs on Hand
AUG. 24	10,500				10,500
SEPT. 21	3,500				14,000
SEPT. 28				558	13,442
OCT. 26				652	13,633
Report Total	14,000			1,210	13,633
Pre-Balance					
Season Total	14,000			1,210	13,633

INCUBATION SUMMARY

THE FIRST TAKE OF SPRING CHINOOK EGGS WAS ON AUGUST 24, 1985. THEY WERE SHOCKED AND PICKED OFF SEPTEMBER 23. THERE WAS A LOSS OF 558 EGGS FOR A 5.45 PER CENT LOSS.

THE SECOND TAKE WAS SPAWNED ON SEPTEMBER 18, 1985. THEY WERE SHOCKED AND PICKED OFF OCTOBER 20. THERE WAS A LOSS OF ~~652~~ EGGS FOR A 14.13 PER CENT LOSS.

THERE WAS A ACTUAL TOTAL OF 14,843 EGGS TAKEN WITH A 1210 EGG LOSS, FOR A 8.15 PER CENT EGGS LOSS. THE FEMALES AVERAGED 3,710 EGGS EACH.

ESCAPEMENT AND SPAWNING for 1985 Brood LYONS FERRY FALL CHINOOK Stock

Week Ending	Est Arrival		Upstream			Mortality			Spawmed			Green/Strip/Bad/SC	Sold/Donated			Shipped		
	Week	Season	M	F	J	M	F	J	M	F	J		M	F	J	M	F	J
AUG. 31	26	26																
SEPT. 7	195	221						1										
SEPT. 14	267	488						1										
SEPT. 21	121	609																
SEPT. 28	213	822				1		3										
OCT. 5	484	1306				1	3											
OCT. 12	621	1927				1	10	1										
OCT. 19	450	2377				1	16	4										
OCT. 26	567	2944					19	5										
NOV. 2	1365	4309				1	4	12			18	624						
NOV. 9	470	4779				5	2	17	1		41	1115						
NOV. 16	47	4826				6	3	284	5		101	924	2 GREEN					
NOV. 23						20	1	826	28		74		1 GREEN					
NOV. 30						14	5	37	32		57	157	2 GREEN					
DEC. 7						22		30	44		21	109	2 S.O.					
DEC. 14						5		9	26		6	1	4 GREEN					
Report Total						77	64	1230	136	318	2930							
Pre-Balance																		
Sp on Reval						77	64	1230	136	318	2930							

EGG TAKE AND DISPOSITION for 1985 Brood LYONS FERRY FALL CHINOOK Stock

Week Ending	No. Eggs Taken-est.	No. Eggs Received/From	No. Eggs Shipped/To	No. Eggs Lost	No. Eggs on Hand
NOV. 2	88,140				88,140
NOV. 9	202,907				291,047
NOV. 16	461,291				752,338
NOV. 23	332,189				1,084,527
NOV. 30	229,378				1,313,905
DEC. 7	88,191	158,309 KALAMA FALLS		24,100	1,536,305
DEC. 14	12,246			49,900	1,498,651
DEC. 21				36,300	1,462,351
DEC. 28				11,200	1,451,151
JAN. 4		756,000 KALAMA FALLS		12,400	2,194,751
JAN. 11				24,300	2,170,451
JAN. 25		267,880 KALAMA FALLS		3,698	2,434,633
Report Total	1,414,343	1,182,189 KALAMA		161,898	2,434,633
Pre-Balance					
Season Total	1,414,343	1,182,189 KALAMA		161,898	2,434,633

INCUBATION SUMMARY

THE FIRST TAKE OF FALL CHINOOK EGGS WAS ON OCTOBER 31 AND THE LAST TAKE WAS ON DECEMBER 10, 1985. THERE WAS A TOTAL OF 1,414,343 EGGS TAKEN. A TOTAL OF 53,155 DEAD EGGS WERE PICKED OFF FOR A LOSS OF 3.99 PER CENT. ALSO 84,000 EGGS WERE BURIED DUE TO I.H.N. VIRUS. THESE EGGS WERE FROM THE NOVEMBER 14-21 AND 26 TAKES. THE FEMALES AVERAGED 4,652 EGGS EACH AND THE EGGS AVERAGED 1,412 PER POUND.

1,182,189 EGGS WERE RECIEVED FROM KALAMA FALLS HATCHERY. THESE WERE SPAWNED FROM THE EGG BANK PROGRAM FISH.

THE FIRST FISH WERE PONDED JANUARY 16, 1986.

FEBD USAGE BY STOCK for AUGUST 1, 1985

through

JANUARY 31, 1986

Stock Feed Type/Size	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	Totals
1984 FALLS							
OMP 3/32	1924						1924
OMP 1/8	2007	1804	5449	6147	5834	10,720	31,961
1/8 GALLINUM	264	2,684	302				3,250
1/8 TM-50					3,472	2,128	5,600
1985 FALLS							
BIO-STARTER						19	19
1985 SPRINGS							
OMP 1/32				1	11	7	19
						9	9
Report Total	4,195	4,488	5,751	6148	9,317	12,883	42,782
Pre-Balance							
Season Total	4,195	4,488	5,751	6,148	9,317	12,883	42,782

DISEASES AND TREATMENTS

DATE	BROOD YEAR	SPECIES	POND NUMBER	TREATMENT	DISEASE
8/85	1984	FALL CHINOOK	15-16-17 18-19	GALLIMYCIN=50	KIDNEY DISEASE
8/85	1985	FALL CHINOOK	29	MALICHITE	FUNGUS
9/85	1984	FALL CHINOOK	15-16-17 18-19-25 26-27-30	GALLIMYCIN-50	KIDNEY DISEASE
9/85	1985	FALL CHINOOK	29	MALICHITE	FUNGUS
9/85	1985	SPRING CHINOOK EGGS	INCUBATION ROOM	MALICHITE	FUNGUS
10/85	1985	FALL CHINOOK	25-26-27 30	GALLIMYCIN-50	KIDNEY DISEASE
10/85	1985	FALL CHINOOK	29	MALICHITE	FUNGUS
10/85	1985	SPRING CHINOOK EGGS	INCUBATION ROOM	MALICHITE	FUNGUS
11/85	1985	FALL CHINOOK EGGS	INCUBATION ROOM	MALICHITE	FUNGUS
11/85	1985	SPRING CHINOOK EGGS	INCUBATION ROOM	MALICHITE	FUNGUS
12/85	1985	FALL CHINOOK EGGS	INCUBATION ROOM	MALICHITE	FUNGUS
12/85	1984	FALL CHINOOK	21-22-30	TM-50	LOW-TEMPERATURE DISEASE
1/86	1984	FALL CHINOOK	21-22-30	TM-50	LOW-TEMPERATURE DISEASE
1/86	1985	FALL CHINOOK EGGS	INCUBATION ROOM	MALICHITE	FUNGUS

SUMMARY

THE FALL CHINOOK EGG TAKE WAS ABOUT THE SAME AS LAST YEAR, BUT THE EGGS RECIEVED FROM KALAMA FALLS IS UP APPROXIMATELY FIVE TIMES WHAT IT WAS LAST YEAR. THIS IS THE FIRST YEAR FOR TAKEING THE TUCANNON SPRING CHINOOK EGGS. THE AMOUNT OF EGGS IS WAY DOWN DUE TO PROBLEMS WITH THE ADULT POND AT THE TUCANNON HATCHERY.

THERE IS STILL A PROBLEM ASSOCIATED WITH THE WATER SUPPLY. THE MANGANESE IN THE WATER IS CAUSEING A TOXICITY PROBLEM WITH THE FISH. THE ARMY CORPS OF ENGINEERS IS STUDING THE PROBLEM AND HOPEFULY CAN COME UP WITH A SOLUTION.