

ANNUAL REPORT
Fiscal Year 1984
Hagerman, Idaho NFH

Hatchery Reconstruction and Expansion

The \$6.5 million construction by the Corps of Engineers under the Lower Snake River Compensation Plan was completed in F.Y. 1984. New facilities include 78 raceways (bringing total raceways to 102), hatchery-feed storage building, administration-laboratory-visitor use building and pollution abatement pond.

Fish Production

Species reared and released were steelhead trout (1.12 million smolts weighing 346,000 pounds), Snake River fall chinook salmon (427,000 smolts weighing 5,600 pounds) and spring chinook salmon (420,000 smolts weighing 14,000 pounds). As no anadromous fish are released from the hatchery, thus necessitating transport of all fish, reared the station logged 76 trips and 33,000 miles of truck operation.

The first year of production utilizing the new facilities went extremely well with no major problems experienced. Steelhead growth due to the constant 59 degree F spring water and timing of eyed egg arrival resulted in an average smolt length of nine inches. The size desired by Idaho Fish & Game Department is eight inches as Idaho believes smolt residualism (non-migration) is greatly increased by the larger fish. The problem may be self correcting within a few years with the advent of new egg sources with corresponding late spawning and colder egg incubation temperatures. During the interim, however, reduced size will be achieved through manipulation of daily food intake; as requested by Idaho.

Hagerman's production of spring chinook salmon was initiated in F.Y. 1983 as part of a three year project to reduce the impacts of Bacterial Kidney Disease (BKD) on spring chinook. The alkaline, hard, spring water has been observed to minimize the effects of BKD on trout, steelhead, and fall chinook salmon and the possibility existed that similar effects might occur with spring chinook.

Spring chinook salmon production was hampered by BKD and, after the F.Y. 1984 rearing, a decision was made to eliminate the station's participation in the BKD project. Concerns for the impacts of BKD on downstream

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hatchery users, and the Hagerman Valley aquaculture industry as a whole, were of prime concern in this decision.

Snake River fall chinook salmon are produced for purposes of an egg bank program to provide adequate eggs for the recently completed Lyons Ferry, Washington salmon hatchery; another Lower Snake River Compensation Plan facility.

Special Studies

Steelhead smolt size at release is of concern for fish reared in the constant 59 degree F Hagerman water. The size desired by Idaho Fish & Game Department is a length of eight inches; or 5 fish per pound. Fiscal year 1984 was the second, and final, year of a coded wire tagging project to compare results (survival, adult returns) of "A" group steelhead that were released at approximately 10 1/2 inches (2 fish per pound) and eight inches (5 fish per pound). Downstream smolt migrant survival in 1983, to Lower Granite Dam on the Snake River, was 22.5% for the large "A's" and 22.9% for the small "A's". Tag recovery information will not be available until 1985 and 1986.

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

HATCHERY PRODUCTION SUMMARY

Station

HAGERMAN NPH

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Period Covered
October 1, 1983 through September 30, 1984

Species and Lot	Density Index				Flow Index				Total Flow					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Number	Weight	Length	Number	Weight	Pounds	Cost	Con- ver- sion	Unit Per	Feed Cost Per 1000	T.U. Per Inch	T.U. to Date	Length to crease 30 day month	
3-UID-05	0	0	8.692	489.1	86,087	147,040	34,722.42	1.71	0.40	74.31	22.48	173.00	0.000	OK
3-UID-06	0	0	10.472	628.7	209,505	324,149	76,107.61	1.55	0.36	129.10	18.49	176.40	0.000	OK
CUTT														
3-UMT-07	0	0	3.147	72.0	-42	0	0	0.00	0.00	0.00	26.62	61.00	0.000	OK
SCS														
3-KK-08	0	0	5.143	187.5	7,391	12,963	7,223.12	1.75	0.98	39.39	27.05	107.00	0.000	OK
RBT														
3-EW-09	0	0	3.173	15.6	197	305	152.66	1.54	0.77	9.84	14.20	33.50	0.000	OK
SCS														
3-LW-10	0	0	4.978	232.2	6,617	15,052	6,317.98	2.28	0.96	25.16	30.16	101.00	0.000	OK
TOTALS														
AVERAGES														

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HATCHERY PRODUCTION SUMMARY

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HAGERMAN NFH

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Period Covered
October 1, 19 83 through

Species and Lot	Density Index				Flow Index				Total Flow				
	Number	Weight	Length	Fish shipped F.Y.	Gain this F.Y.	Pounds	Cost	Conversion	Unit Cost Per lb.	Feed Cost Per 1000	T.U. Per Inch	T.U. to Date	Length increase 30 day month Inches
1	2	3	4	5	6	7	8	9	10	11	12	13	14
FCS													
3-DS-11	0	0	3.530	427.2	5,284	8,345	3,499.82	1.58	0.66	8.22	21.63	50.50	0.000
STT													
4-UID-12	1,146.9	34,712	4.422	0	34,307	39,578	10,726.33	1.15	0.31	9.36	21.10	72.40	0.688
STT													
4-UID-13	303.4	7,851	4.197	0	7,692	9,629	2,656.99	1.25	0.35	8.79	21.98	68.50	0.673
TOTALS	1,450.3	42,563		2,052.4	357,039	557,061	141,406.93						
AVERAGES			4.375					1.56	0.40	40.37	22.63	93.70	0.680

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