3-1663

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

A N N U A L R E P O R T

C A L E N D A R Y E A R

1960

ABERNATHY NATIONAL FISH HATCHERY

LONGVIEW, WASHINGTON

BRANCH OF FISH HATCHERIES

Submitted by Edward B. Horn Title Manager. Date Jan. 20, 1961

Regional Office:
Received date _____

Central Office:
Received date _____

Reviewed by _____ Date _____ Reviewed by _____ Date _____

Original forwarded to Central Office

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INTRODUCTION

All distribution from this station was made by liberation of fish into Abernathy Creek, a tributary of the Lower Columbia River in Cowlitz County, Washington.

As in the last Annual report there is no comparison in operations with a former year as this year (1960) is the first full year of operation.

No specific operational difficulties were encountered. We did not hatch any eggs so the silt did not bother while eggs were in the stacks. Of course all operations were far from perfect. As this it was the first year we were forced to learn the behavier of the ponds, water supply equipment etc., as we progressed thru the year.

The station was visited during the year by Messers Ross B. Leffler, Perry, Kemmerich, Pressey, Barnaby, Maxwell, Baker, Tuttle, Cannady Smith, Parkhurst, Zimmer, Shelton, Anders, Baetke, Johnson and Bigej. and several National Fish Hatchery employees, various State personnel from Oregon and Washington also visited along with some 400 public visitors.

General weather conditions were nearly normal for this area throughout the year.

FISH CULTURAL OPERATIONS

No spawn was taken during 1960. The eggs brought in last winter were hatched and reared to their liberation date as perscribed by the Regional Office.

No startling results were obtained, but, I think fair results were. Heavier than what I would call normal losses were encountered during the rearing season. Various microscopic organisms which might cause disease were detected, however these were not sufficiently numerous to cause sickness in the fish.
The losses we believe can best be contributed to the newness of the ponds, pipe lines and other hatchery equipment.
Silver Salmon were reared on a Commercial dry feed (Clarks) with satisfactory results.

The station cared for the operation of the Incubation channel under the direction of J.M.Shelton, results of which can best be obtained from Mr. Shelton.

Friendly relations were maintained with other Federal and State Agencies. No actual cooperative dealing with other agencies were carried on.

SAFETY

The station held 11 Safety meetings this calendar year 1960. The type of safety meetings conducted were open discussions by those present of all or any unsafe practises or conditions noticed on the Station. Corrective action was then taken by either corrective discussions on operation of equipment etc., or physical changes were made to remove the hazard.

The station has operated for 439 accident free days.

IMPROVEMENT AND DEVELOPMENT

I can make no recommendations for improvement and development as the Abernathy National Fish Hatchery will soon be re- modeled into a Salmon-Cultural Laboratory and be under new management.

CONSTRUCTION AND REPAIRS

A retainer wall was completed between the fish ladded and the screen chamber at the Abernathy Creek intake. Cost approximately $ 1300.

Most of the landscaping was completed in the residence areas.

Well No.1 was completed with pump installed.

STATION HISTORY

Abernathy National Fish Hatchery was placed in operation on monday, October 19, 1959.
It's estimated cost is $ 300,000. The station was built under Authority 52 (Stat. 345) dated May 11, 1938 (Mitchell Act).

The station land is located in Township 9 North, Range 4 West, Willamette Meridan in Sections 26 and 35 of Cowlitz County, Washington. Consisting of approximately 100 acres and costing $ 10,000. in 1957 and 1958 when purchased.

The hatchery building which houses the entire unit, Office, laboratory, trough room, feed preparation room, cold storage, garages and shop. Furnace room and rest rooms is of pumace block construction, with metal window frames and doors, composition roof and is 121 by 47 feet in size.

Three frame constructed dwellings, 57 by 30 feet with composition shingle roof, garages attached. Three bedrooms, living and dining room combined, kitchen, full basement, fire place and 1½ baths.

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DISTRIBUTION DATA AND COSTS

Part I - Fish Distribution Data

Species	Fish Distributed by Station		Number of Trips	Pounds Distributed per Trip	Numbers Distributed per Trip
	Number	Weight			
SALMON	1,357,242	7,172.0	3	2,390.3	452,414
TROUT					
WARM-WATER					
TOTALS and AVERAGES	1,357,242	7,172.0	3	2,390.3	452,414

Part II - Analysis of Distribution Costs

Species	Truck Costs	Salaries & Expenses	Total Costs	Average Distribution Cost
SALMON	xxx	$9.76	$9.76	per lb. $. 0014
TROUT				per lb.
WARM-WATER				per M
TOTALS	xxx	$9.76	$9.76	

Part III - Miles Traveled in Distribution

Total Number of Trips	Total Miles Traveled	Average No. of Miles per Trip
	None	

Comments:

Fish planted from ponds into creek without hauling.

Number of trips- 3 plants.

Expenses- O.T.- plants made after dark.

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RECORD OF PRODUCTION

SALMONIDAE

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FISH AND EGGS

(1) Species	(2) Lot Number	(3) Source	(4) On Hand January 1		(5) Received During Year		(6) Total Distribution		(7) On Hand December 31		(8) Total Production in Pounds
			Number	Weight	Number	Weight	Number	Weight	Number	Weight	
Pink	1 9AC1	Abernathy Creek. State Elochomin Hatchery	23,506	13.0			22,808	11.0	xxx		-2
Silver	2 9EC2	Eagle Creek, Oregon N.F.H.	499,441	243.0					368,151	9630.	9,387
Chinook	3 9W3	Willard, Wash. N.F.H.	1,493,013	995.0			1,251,488	6,377	xxx		5,382
Chum	4 9Q4	Quilcene, Wash. N.F.H.			276,070	206.0	264,146	905.	xxx		699
TOTALS: Number			2,015,960		276,070		1,538,442		368,151		
Weight				1251		206.0		7,293		9,630.	15,466

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Species Chum

SALMON DISTRIBUTION DATA

INFORMATION ON EGGS					INFORMATION ON DISTRIBUTION				
		NUMBER OF EGGS			PLANTED IN PARENT WATERS		PLANTED IN OTHER WATERS		
Source	Brood Year	Received	Collected	Shipped	Number	Size	Number	Size	Name of Water
Walcott Slough-Hood Canal, Wash.	'59	276,070					264,146	2	Abernathy Creek, Wash.

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Species Pink

SALMON DISTRIBUTION DATA

INFORMATION ON EGGS					INFORMATION ON DISTRIBUTION				
		NUMBER OF EGGS			PLANTED IN PARENT WATERS		PLANTED IN OTHER WATERS		
Source	Brood Year	Received	Collected	Shipped	Number	Size	Number	Size	Name of Water
Abernathy Creek, Wash.	'59	23,506			22,808	7			

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Species Chinook (Fall)

SALMON DISTRIBUTION DATA

INFORMATION ON EGGS					INFORMATION ON DISTRIBUTION				
		NUMBER OF EGGS			PLANTED IN PARENT WATERS		PLANTED IN OTHER WATERS		
Source	Brood Year	Received	Collected	Shipped	Number	Size	Number	Size	Name of Water
Spring Creek, Wash.	'59	1,493,013					1,070,288	2	Abernathy Creek, Wash.

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FISH FOOD RECORD - TROUT OR SALMON PRODUCTION

	FISH FOOD	Cost per Pound (a)	Pounds (b)	Total Cost or Value (c)
1	Purchased During Year - List Kind			
	Beef Spleen	$.0703	27,304	$ 1,920.97
	Beef Livers	.1205	52,597	6,337.03
	Turbot	.0474	51,751	2,452.87
	Distillers Solubles	.0525	2,000	105.00
	Clarks Dry Fry	.1821	7,000	1,275.00
	Clarks Dry Fry W/ Sulfa.	.2919	250	72.98
	Clarks Dry Fry W/Conditioner	.1821	400	72.85
	Clarks Crumbles W/Sulfa.	.2475	600	148.50
	Clarks Crumbles	.1259	22,000	2,771. 00
			163,902	$15,156.20
2	Sub-total, Lbs. Purchased	Av.		
3	Fish Food on Hand, January 1			
4	Fish Food Received by Donation			
5	Fish Food Received by Transfer			
6	Sub-total, Lbs. Received	(2+3+4+5) →	163,902	$15,156.20
7	Fish Food Transferred (To other hatcheries)		5,140	$ 373.16
8	Fish Food on Hand, December 31		104,128	8,478.20
9	Sub-total, On Hand & Transf.	(7+8) →	109, 268	8,851.36
10	TOTAL FISH FOOD EXPENDED	(6-9) →	54,634	$ 6,304.84

11	Cost per pound of fish food expended (line 10, col. c ÷ col. b)	$.1154
12	Gain in weight of feeding fish produced during year	15,078
13	Food Conversion (line 10, col. b ÷ line 12)	3.62
14	Food cost per lb. of fish produced (line 10, col. c ÷ line 12)	.418

15 Give details for entries on lines 4, 5, and 7:

Line 7- Transferred Beef Spleen to Eagle Creek, Oregon N.F.H.

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SUMMARY OF FISH PRODUCTION AND OTHER COSTS

		Labor Expenditures				Expenditures Other Than Labor			
		Salaries and Overtime	Labor Paid From Station Allotment	Labor Paid Contributed Funds	Total Labor Expenditures	Project 611la	Project	Contributed Funds	Total Expenditures
		1	2	3	4	5		7	8
a.	Warm-water Fish								
b.	Trout								
c.	Salmon	8626.90	1760.42		10,387.32	15,348.45			25,735.77
d.	Totals - Fish Prod.	8626.90	1760.42		10,387.32	15,348.45			25,735.77
e.	Maintenance	5790.04	1261.32		7,051.36	5,129.43			12,180.79
f.	Capital Improvements	152.20			152.20	11,641.07			11,793.27
g.	Extraordinary Expend.	679.52	3.71		683.23	439.17			1,122.40
h.	GRAND TOTALS	15248.66	3025.45		18,274.11	32,558.12			50.832.23
i.	Percent of Expend. for Fish Production	Col.(4), line d ÷ line h			.56	Col.(8), line d ÷ line h			.506

j. Fish Production:

	Number	Pounds
Warm-water		
Trout		
Salmon	1,725,693	15,466
Total pounds:		15,466

		Cost	Percentage
k.	Production cost per lb. warm-water fish:	$	xxxx
l.	Labor cost per lb. WW fish & % of Prod. cost:		
m.	Production cost per lb. trout produced:		xxxx
n.	Labor cost per lb.of trout and % of Prod.cost:		
o.	Production cost per lb. salmon produced:	1.66	xxxx
p.	Labor cost per lb. salmon and % of Prod. cost:	.672	.403
q.	Average prod. cost per lb. of all fish produced:	1.66	

On reverse side breakdown cost of Extraordinary Expenditures if Total is in excess of 5% of Grand Total.

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REARING FACILITIES AND WATER SUPPLY

Part I - Rearing Facilities

	Type	Number in use	Capacity * in Cu. Ft.	Months in use	Total Months x Cu. Ft.
1. Facilities in Use:	Troughs	7.1	122.1	11	1,343
	Tanks				
	Raceways	4.4	5913.6	10	59,136
Other pools and ponds:	Concrete				
	Earth				

*Calculate at normal water level.

TOTAL: 60,479

Total Cu.Ft. in use, on Annual Basis (Divide by 12): 5,040

PART II - Water Supply

2. Sources of Water Supply: (Check appropriate source for each separate water supply)

	Spring	Well	Lake	Stream	Other
Supply No. 1:	☐	☐	☐	☒	☐
Supply No. 2:	☐	☐	☐	☐	☐
Supply No. 3:	☐	☐	☐	☐	☐

3. Volume of Water Used-g.p.m.: (If not all used, give total flow in parenthesis.)

	January	April	July	October	Annual Average
Supply No. 1:	120	560	2,140	2,140	1,240
Supply No. 2:					
Supply No. 3:					

4. Water Temperature (F°):

	January	April	July	October	Annual Average
Supply No. 1:	39.3	46.8	57.5	51.	48.7
Supply No. 2:					
Supply No. 3:					

5. Total pounds of Trout and Salmon Produced: 15,466
per g.p.m. Avg. Flow Used: 12.5
per Cu. Ft. (annual) Used: 3.

6. Is any water pumped for fish production? Yes ___ No X ; Heated? Yes ___ No X

If Yes in either case, give details as to flow involved, estimated cost, etc., on reverse side.

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REPORT OF PERMANENT PERSONNEL

Employee	Age	Grade	Married or Single	Number of Children under 16	Compensation		
					Salary Received	Overtime, Holiday &	Total
BRICE, RichardF.	38	GS-7	M	0	$5286.40	$62.97	$5349.37
HORN, Edward B.	50	GS-9	M	0	6256.64	17.28	6273.92
SHANNON, Jack L. E.O.D. This Station 3/1/60	39	Ungraded Leadman I	M	3	3819.20	109.59	3928.79
1. Total compensation of permanent personnel					15,362.24	189.84	15,552.08

Detail of Permanent Personnel to Station

Employee	From Station	Salary	Compensation		
			Overtime	Per Diem and Expenses	Total
None					

2. Total charges for detail of permanent personnel to your station: _____

3. Adjusted total charges for permanent labor: _____

Permanent Personnel Detailed from Station

Employee	To Station	Salary
None		

4. Total salaries of personnel while detailed to other stations: _____

5. Adjusted total charges for permanent labor: $15,552.08

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SUMMARY OF LABOR EXPENDED AND UTILIZATION

		Man Years of Labor
1.	Permanent Personnel	2.81
2.	Temporary Labor	.75
3.	"Outside" Labor	
4.	Paid Overtime for Work Performed at station by Above Employees	.03
5.	Total Labor	3.59
6.	Detail of Personnel to Station	
7.	Paid Overtime of Detailed Personnel at station	
8.	Total Labor for Detailed Personnel	
9.	Adjusted Labor Total	3.59
10.	Detail of Personnel from Station	
11.	Adjusted Labor Total	3.59
12.	Man Years of Labor Expended:	
	In Warm Water Fish Culture	
	In Trout Culture	
	In Salmon Culture	2.08
	In Maintenance	1.37
	In Capital Improvement	.11
	In Extraordinary Activities	.03
	Total (Equals Item 11)	3.59

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FIVE YEAR PRODUCTION AND DISTRIBUTION RECORD

Part I - Production Record

Year	Pounds of Fish Produced	Pounds Produced Per Man	Percent Production Cost of Total	Percent Labor Cost of Total	Production Cost per Lb. Fish	Labor Cost per Lb. Fish	Food Cost per Lb. Fish	Food Conversion
1960	15,466	4,309	.506	.40	1.66	.672	.418	3.62

Part II - Distribution Record

Year	Pounds Fish Distributed by Truck	Number of Truck Trips	Miles Traveled in Fish Distribution	Average Miles per Trip	Pounds Fish per Trip	Cost per Trip	Distribution Cost per Lb. of Fish

Comments:

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