

Biennial Report
of the
FISH COMMISSION
of the
State of Oregon
1957

NATURAL RESOURCES
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COVER PHOTOGRAPH

Biologist Edwin Holmberg is pictured checking an albacore tuna. This species formerly supported one of the State's most valuable commercial fisheries with 22,500,000 pounds landed in 1944. After a four-year absence, commercial quantities of albacore reappeared in 1956. The 1956 catches were closely examined to provide information that might aid in explaining the sporadic nature of the Oregon albacore fishery.

BIENNIAL REPORT
OF THE
FISH COMMISSION
OF THE STATE OF OREGON
TO THE
Governor and the Forty-Ninth
Legislative Assembly

1957



FISH COMMISSION OF THE STATE OF OREGON

Hon. John C. Veatch, Chairman, Portland

Hon. Robert L. Jones, Clifton

Hon. O. H. Hinsdale, Reedsport

M. C. James, State Fisheries Director

Letters of Transmittal

Portland, Oregon, August 1, 1956

TO HIS EXCELLENCY, the GOVERNOR, and the MEMBERS
of the FORTY-NINTH LEGISLATIVE ASSEMBLY

Gentlemen:

Herewith is transmitted the biennial report of the Fish Commission of the State of Oregon for the period from July 1, 1954 to June 30, 1956.

FISH COMMISSION OF THE STATE OF OREGON

John C. Veatch, Chairman.

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Portland, Oregon, August 1, 1956

FISH COMMISSION OF THE STATE OF OREGON,
Portland, Oregon.

Gentlemen:

In accordance with the provisions of statute, I herewith submit for your consideration the report of the operation of the department together with financial statement for the biennial period July 1, 1954 to June 30, 1956.

Respectfully submitted,

M. C. JAMES,

State Fisheries Director.

Report of the State Fisheries Director

INTRODUCTION

During the past two years the fisheries management and conservation program has reflected the rapid increase in the number of hydroelectric and water development projects within the State. These have imposed unprecedented demands for studies which will provide the basis for measures which will protect the fisheries values as they are affected by expanding economy.

The Commission has tried to meet these demands by assigning a water resources analyst to the task of analyzing the effects of competing water uses and devising methods of minimizing the damage to fish, principally salmon and steelhead. The Commission has legal responsibility for developing solutions to these problems but has no control over the work load involved, since it is dependent upon programs undertaken by other agencies, both public and private.

Another consequence of the expansion of water use projects for various purposes is the necessity for close coordination with other official agencies. This is being effected by maintaining contact with State agencies such as the Water Resources Board and with the fishery agencies of the adjoining states in matters affecting the Columbia River. Similar coordination with respect to the marine fishery resources is accomplished by participation in the activities of the Pacific Marine Fisheries Commission. The interests of Oregon extend beyond the three mile limit of jurisdiction in the ocean and this has required attention to international problems such as are involved in the North Pacific Fisheries Treaty between Canada, Japan and the United States.

All phases of conservation of a natural resource such as the stocks of food fish ultimately rest upon public acceptance of the need for such conservation and upon public understanding of the means of accomplishing it. The Commission has undertaken, in a small way, informational and educational activities designed to acquaint the public with the needs and methods for protecting this public resource.

There follows a condensed resume of the work which has been carried on by the principal units of the Commission during the period covered by this report.

DIVISION OF ENGINEERING

Many of the construction activities were carried on through the federally-financed Columbia River Development Program. The Klaskanine and Bonneville Hatcheries were completely remodeled and expanded under this program. Additional improvements were made at the Ox Bow, Cedar Creek, and Big Creek Salmon Hatcheries. Final plans for the Cascade Hatchery to be constructed on Eagle Creek, a Columbia River tributary near Bonneville, are nearly complete, and preliminary surveys have been completed for a hatchery site on the west fork of Hood River.

Salmon habitat improvement projects were also carried out under the Columbia River Development Program. Construction of concrete fishways over natural falls on the west fork of Hood River, and on Goble Creek has opened up several miles of formerly barren stream to salmon production. Another fishway is nearing completion at the middle falls on Eagle Creek, a Clackamas River tributary.

Removal of barriers to fish migration is another important aspect of the Columbia River Development Program. During the biennium, accumulations of logging debris were removed from the west fork of Hood River; from Cedar Creek, a Sandy River tributary; and from Gnat Creek, a tributary of the Columbia River. Work is also underway

to facilitate fish migration in the Calapooya River near Sweet Home. Another major project completed under the program was the Gnat Creek experimental weir. Fish Commission engineers designed this structure and supervised construction of the weir.

Stream improvement activities are also conducted by the Fish Commission with State appropriations. Under this program, a concrete fishway was constructed at Vaughn falls on the west fork of the Millicoma River in Coos County. Repairs necessitated by high water damage were made at fishways on Fall Creek in the Alsea drainage, and on the Little Nestucca, Willamette and Smith Rivers. Major stream clearance projects were completed in the Siletz, Millicoma and Coquille systems. A large log jam was also removed from the Lewis and Clark River near Warrenton.

The Engineering Division provided specifications for construction of 14 stream improvement projects, mostly fishways, to individuals or municipalities responsible for maintaining fish passage facilities at dams and other installations. Fish Commission personnel have also participated in developing fish passage facilities at major dams, notably Pelton Dam on the Deschutes River and the North Clackamas project. Assistance has also been provided in developing fish protection facilities for an industrial project at Siltcoos Lake and the Bennett Diversion Canal at Stayton and in developing plans for reducing pulp mill pollution in Yaquina Bay.

Expansion and improvement of facilities at the Fall Creek Salmon Hatchery were completed during the biennium. The fingerling holding capacity at this station was doubled by construction of a large rearing pond. The Engineering Division has also made periodic inspections of the 56 fishways throughout the western part of the State that are under Fish Commission jurisdiction.

DIVISION OF FISH CULTURE

The work of propagating food fishes for stocking public waters during the past biennium compares favorably with the previous records of this activity. More full-scale hatcheries were operated than heretofore; all old lines of work were actively prosecuted and new features were initiated. The actual number of fish distributed was somewhat less than in previous bienniums, the decrease being due to the present policy of raising fewer fish to a greater size. Also, on many streams greater stress has been placed upon natural propagation.

The necessity for maintaining the fish supply in the public waters is taxing to the utmost the resources of the fisheries stations throughout the State. In order to keep pace with the increased demand brought about by the loss of natural spawning area, the establishment of additional hatcheries from time to time may become a necessity. Additional funds are required to operate existing hatcheries to their maximum capacity.

The fall Chinook has been the most intensively propagated species of salmon in Oregon and much dependence is placed upon artificial measures for its perpetuation. The stations which are most concerned in this phase are the Bonneville, Ox Bow, and Big Creek Hatcheries. Parent run egg-takes at Bonneville which provided the adult returns of the 1954-56 biennium amounted to approximately 38,000,000 eggs. Egg-takes for the present biennium amounted to 7,745,000, about one-fifth the number of eggs produced by the parent runs. The decline can partially be accounted for by the intense fishing effort of both the commercial and sport fisheries. In an effort to offset the reduced egg-takes, fall Chinook salmon fingerlings were reared to a larger size before liberation in the belief that the survival and future return from the larger fingerlings would be greater.

The total number of eggs collected from all species during the two-year period amounted to 49,800,000, of which 14,000,000 were spring Chinook salmon, 13,000,000 were

fall Chinook salmon, 12,800,000 were silver salmon, 4,600,000 were steelhead, 4,000,000 were shad and 970,000 were chum salmon. The resulting fingerlings weighed 850,000 pounds. A total of 3,900,000 pounds of fish food was required to produce these fish. Thus, 4.66 pounds of food were required to produce one pound of fish for the hatchery system as a whole. The average cost of fish food is ten cents per pound and the cost of food to produce each pound of hatchery fish would be \$0.466.

A number of fish cultural stations were designed in the early days to function primarily as egg collecting stations or as short period rearing stations. In more recent years, the trend has been to raise fewer fish to a larger size before release. At some of the stations, due to deforestation of the adjacent drainage areas, water supplies have diminished to a point where a feeding program throughout the summer has been severely restricted. In this category are the South Coos and Nehalem stations, and it is recommended that the South Coos station be relocated.

Power grinding and feeding equipment has improved greatly in recent years and has simplified fish cultural practices markedly. This type of equipment has been installed at nine of the fifteen hatcheries and will be installed at the remaining stations as soon as funds are available. An electric self propelled feeding cart has considerably reduced the time and effort spent in fish feeding and has contributed to cleaner ponds by reducing the adherence of dried food to the pond walls.

The Fish Cultural Division is attempting to provide an economical diet for salmon and steelhead fingerlings, pending further development of production scale diets by the Research Division. A commercial meal is used as a base to which meat products and salmon viscera are added. It is felt that by continued effort and experimentation, nutritious hatchery diets will be developed which may be standardized at all of the stations. With the development of labor saving machinery and low cost food, the unit expense of artificial propagation of salmon and steelhead should be reduced and the hatchery production increased.

The returns of spring Chinook salmon to the Willamette River system have shown an increase during the past two seasons. These increases are possibly due to improved water conditions at the time young salmon are moving downstream. At the same time, however, it is well to keep in mind that serious inroads have already been made upon the natural habitat of spring Chinook salmon in the Willamette system due to construction of dams. Increases in the spring Chinook salmon runs resulting from the pollution abatement program could easily be nullified by the detrimental effects of existing and proposed dams.

Improvements and added facilities have been provided at most of the stations during the biennium. This includes repainting at the Coos, Trask, Nehalem and Sandy Stations, landscaping and pond repair at the Nehalem and Klaskanine Stations as well as the construction of several hundred feet of stone wall and drainage tile at the latter station. A completely new water supply headworks, including a dam, was built at the Trask River Station. Additional improvements at this station were the changing of the channel in Gold Creek, installation of a new settling pond, construction of a silver salmon trap and relocation of a roadway. A concrete floor was also poured in the garage and shop at this station.

At the Marion Forks Station, the grinding room and garage were enlarged to accommodate new and additional equipment. The area about the hatching house and ponds and station access roads were paved. Newly designed screens and screen frames were installed in 48 ponds at the station. Aluminium roofing was laid on each building early in the biennium to protect against the heavy snowfall which occurs in that area.

Considerable damage was inflicted on the water supply headworks at the Middle Willamette Station by flood waters of the Salmon River. Temporary repairs were made by hauling in large boulders. The U. S. Army Engineers are preparing plans for a new and more permanent diversion and headworks on Salmon River. Permanent spawning and sorting facilities were installed at each of the two adult salmon holding ponds at Dexter Dam. Most of the maintenance and operating funds as well as construction funds for both Marion Forks and Middle Willamette are provided by the U. S. Army Engineers.

Changes and additions were made at the Siletz Station during the biennium. A rearing pond of approximately $\frac{1}{2}$ acre has been excavated. The cold storage plant was moved to a new location near the food preparation room. Cement bottoms have been poured in the ten concrete rearing ponds and a new and permanent rack location has been selected. Ground has been cleared and levelled for additional dwellings which are needed at this station.

RESEARCH DIVISION

The Research Division of the Commission provides much of the information upon which the management of the commercial fisheries of Oregon is based. This information is obtained by means of a research program which gathers basic biological data on the species involved and analyzes the statistics of the various fisheries. In addition, considerable contract research work is accomplished with funds provided by the federal government.

Fish Commission personnel together with members of the Washington Department of Fisheries continued to make observations at The Dalles Dam. Particular attention was given to the effect of the constriction of flow upon fish passage during periods of high water. While some delay was encountered by fish during high flow periods, the situation never reached critical proportions. Results of underwater demolition have also been recorded indicating the destruction of considerable numbers of sturgeon.

The Columbia River commercial salmon and steelhead catch was sampled intensively for average weights, the presence of marks and tags, and other biological data. Approximately 308,000 Chinook, 100,000 steelhead, 32,000 blueback, 29,000 silver salmon, and 3,000 chum salmon, together with lesser numbers of white sturgeon, green sturgeon and shad, were checked during the biennium.

Because of an anticipated small run of blueback in the Columbia River during the summer of 1955, a minimum mesh size of $5\frac{1}{4}$ inches was placed in effect. Biologists accompanying commercial fishermen found that the regulation was successful in limiting the blueback catch to only 3 per cent of the total run.

A joint steelhead tagging program was conducted by the Fish Commission and the Washington Department of Fisheries near the mouth of the Columbia River during the winters of 1954-55 and 1955-56. A total of approximately 4,200 steelhead, 2,000 chinook salmon, 700 white sturgeon and lesser numbers of other species was tagged during the two seasons. The returns from these tags are now in the process of analysis.

A salmon and steelhead tagging program was conducted on the Siletz River in 1954. The purpose of the program was (1) to make estimates of the populations of these fishes entering the system, and (2) to measure the intensity of the commercial and Indian gill net fisheries on the stocks. A report on this program has been completed but not published.

During the 1955 season, a tagging program was also conducted to determine the numbers of silver salmon utilizing the Ten Mile Lake system. It was calculated that 41,500 adult and 36,000 jack silver salmon comprised the run in 1955.

Survival studies of young silver salmon are being continued at the weir on Spring Creek, a tributary of the Wilson River. At the present time the number of adult females

placed above the weir is restricted to 5, and the production of these fish is being compared to that of past seasons when as many as 57 adult female salmon were placed above the weir. A fingerling salmon food study is also being conducted to determine how the availability of food influences the survival of juvenile silver and Chinook salmon in certain streams of the State.

Research to aid the hatchery program is carried out at laboratories located at the Sandy Hatchery and at the Oakridge Hatchery. Nutrition and disease studies are carried on at both laboratories. The purpose of the nutrition studies, which began in 1948, is to develop a nutritious and economical hatchery diet for salmon and steelhead fingerlings. In 1955, an experimental diet tested on a pond-scale basis with an adequate control produced excellent results at considerably less cost than the present hatchery diets. Progress has been made in the control of kidney disease, and the incidence and control of so-called tuberculosis in salmon is also being investigated.

Major emphasis in research work on the ocean troll salmon fishery during this period was placed upon sampling of commercial catches for fin-marked fish. Large numbers of salmon had been marked by removing different combinations of fins at hatcheries all along the Pacific Coast. Troll catches at the main fishing ports were sampled to determine the whereabouts of various stocks of salmon in the ocean, their migrations, the intensity of the troll fishery and the contribution of various streams to the ocean fishery. In 1955, for example, 190,000 troll-caught salmon (28 per cent of the total catch) were examined at Oregon ports. Close to 700 fin-marked fish were found. The sampling program was reduced in 1956, and will be further limited in 1957. More time will then be given to analysis of the marked fish returns. A report was completed, for later publication, summarizing much of the troll salmon information from past years.

Closely interrelated with a new hydrography program is a recently established ecological study of the estuaries. Information is being assembled on the populations of animal and plant life in the various bays with respect to abundance, range and the animal and plant interrelationships within communities. Both are intended to aid in establishing standards for assessing the effects of pollution.

A crab tagging program inside Yaquina Bay was conducted in the spring of 1955 to determine the proper release pattern for observing movement habits and making population studies of these animals.

Studies of the razor clam stocks on Clatsop County beaches and the fisheries operating on these stocks were continued throughout the biennium to determine the effect of new regulations which increased the minimum size limit on commercially taken clams and decreased the bag limit of clams taken for personal use. These observations included keeping poundage records of both sport and commercially taken clams by area. Age composition of the clams was also determined.

The results of a kelp resources survey made during the summer of 1953 were compiled and published. A calculated 5.3 square miles of kelp beds were present off the Oregon Coast with harvestable concentrations off Lincoln, Coos and Curry Counties.

Research on albacore tuna gathered momentum during the biennium when the Pacific Oceanic Fisheries Investigation (a branch of the Fish and Wildlife Service stationed in Hawaii) entered the study. All albacore research has been coordinated by an Albacore Steering Committee which was organized for this purpose through the Pacific Marine Fisheries Commission. Several combined expeditions of research vessels have searched the waters of the northeastern Pacific Ocean to determine the distribution of albacore tuna. A study made under contract with the University of Washington Department of Oceanography to catalog existing oceanographic data revealed surface and sub-

surface water temperature records. A brief commercial albacore season in 1956, the first in four years, resulted in landings of about 2.5 million pounds. Otter-trawl investigations during the biennium have been primarily concerned with production records, biology of the Dover sole, and the mink food fishery. These studies included a migration study on a recently discovered stock of Dover sole which is present during the winter months in the deeper offshore waters, i.e., 1,200 to 2,400 feet deep. These fish are apparently concentrated in the winter to spawn in small areas along the coasts of Oregon and Washington. A tagging experiment was launched during April 1955 to determine, if possible, whether these deep water stocks migrate into shallower waters to contribute to the extensive summer fishery for this species. Preliminary results obtained from recaptured tagged fish indicate that at least some of these fish do migrate inshore during the late spring and summer months.

A second long-term program on Dover sole involves the annual sampling of the catches taken from the principal summer fishing grounds off the Columbia River. The sampling program, together with detailed analysis of landing records, will yield valuable information concerning annual fluctuations in abundance of the stocks of Dover sole on this trawling ground and should produce clues to the causes of these fluctuations.

The otter-trawl investigation has also included a detailed study of the rapidly increasing mink food fishery in this State. The production of trawl-caught whole bottom fishes for mink food has risen from 2,000,000 pounds in 1952, to 11,000,000 pounds in 1955. The estimated production for 1956 is 14,000,000 pounds.

The Corps of Engineers financed Snake River tagging project that was initiated in the Lower Snake River near Lewiston, Idaho, in November, 1953, was continued during the biennium. Tagging was terminated in August, 1956, to be followed by analysis of the data and writing a final report.

Under a contract with the Fish and Wildlife Service, the Fish Commission completed a study of adult Chinook salmon killed near Bonneville Dam. Tagged Chinook salmon carcasses were released in the Columbia River at the Dam. Downstream recovery of tagged carcasses intermingled with floating carcasses of fish killed near the Dam formed the basis for estimating the total number of Chinook salmon mortalities in the area during the period of the study. A report has been completed but has not yet been published.

Under another contract with the U. S. Army Corps of Engineers, a study of the effects of The Dalles Dam upon salmon migration was begun in May, 1956. By tagging salmon at Bonneville Dam and recovering tagged fish at McNary Dam, the rate of migration of tagged fish between the two dams was determined in 1956, prior to completion of The Dalles Dam. The same tagging and recovery system will be used in 1957 to assess any changes in the migration rate that might be attributed to a complete closure of the Columbia River at The Dalles Dam site.

The Research Division again received funds from the federal government for salmon rehabilitation work through the Columbia River Development Program. Under this program, efforts were initiated during the biennium to establish silver salmon runs in the Yamhill River system. The first returns from hatchery fish liberated in the Yamhill River are expected in the fall of 1956.

The Gnat Creek weir, another Columbia Program project, was put into operation in 1955. This structure is located on a small tributary of the Columbia River near Astoria. All fish utilizing spawning areas above the weir are counted as they move upstream. The resulting young fish are trapped and counted as they move downstream towards the ocean. Studies have been started at the weir to provide detailed information concerning the stream and ocean survival of salmon.

Statement of Receipts and Disbursements

STATE GENERAL FUND ACCOUNTS

Biennial Period Ending June 30, 1956

RECEIPTS

	<i>Fiscal Year Ending June 30, 1955</i>	<i>Fiscal Year Ending June 30, 1956</i>
Appropriations:		
Unexpended Balance, 1951-1953	\$37,554.44	
Reverted to State General Fund	37,554.44	
Unexpended Balance, 1951-1953 Emergency—Alsea Hatchery \$	4,017.56	
Reverted to State General Fund	4,017.56	
Unexpended Balance, 1953-1955	\$ 749,428.98	\$ 82,444.08
Appropriation, 1955-1957		1,346,658.00
Total	\$ 749,428.98	\$1,429,102.08
Licenses:		
Fishing	\$ 60,763.00	\$ 67,014.00
Dealers and Processors	21,866.00	21,062.00
Total License Receipts	\$ 82,629.00	\$ 88,076.00
Other Income:		
Poundage Fees	\$ 111,993.54	\$ 146,122.03
Fines and Confiscated Property Sales	3,621.51	2,710.31
Miscellaneous	1,912.49	1,695.59
Total Other Income	\$ 117,527.54	\$ 150,527.93
Total Receipts	\$ 200,151.54	\$ 238,603.93
Total Appropriations and Receipts	\$ 949,580.52	\$1,667,706.01
Transferred to State General Fund	200,151.54	238,603.93
Available for Disbursement	\$ 749,428.98	\$1,429,102.08

Statement of Receipts and Disbursements

STATE GENERAL FUND ACCOUNTS

Biennial Period Ending June 30, 1956

DISBURSEMENTS

	<i>Fiscal Year Ending June 30, 1955</i>	<i>Fiscal Year Ending June 30, 1956</i>
Department of State Police	\$ 61,318.50	\$ 53,989.00
Pacific Marine Fisheries Commission	2,200.00	2,000.00
Division of Administration:		
Commissioners' Per Diem	880.00	790.00
Commissioners' Expenses	457.60	546.99
Salaries and Wages	69,564.11	81,099.14
Other Personal Services Expense	4,495.02	5,397.24
Materials and Services	31,017.56	33,365.31
Capital Outlays	1,386.34	574.13
Total	\$ 171,319.13	\$ 177,761.81
Division of Fish Culture:		
Salaries and Wages	\$ 106,678.45	\$ 114,530.38
Other Personal Services Expense	7,393.34	7,482.08
Materials and Services	117,151.62	131,714.61
Capital Outlays	5,417.33	8,662.81
Total	\$ 236,640.74	\$ 262,389.88
Division of Research:		
Salaries and Wages	\$ 141,064.07	\$ 134,466.92
Other Personal Services Expense	7,187.04	7,566.34
Materials and Services	39,587.41	44,661.67
Capital Outlays	17,545.38	5,600.39
Total	\$ 205,383.90	\$ 192,295.32
Division of Engineering:		
Salaries and Wages	\$ 36,088.44	\$ 31,258.28
Other Personal Services Expense	1,948.88	1,876.95
Materials and Services	13,900.14	12,684.84
Capital Outlays	1,703.67	2,682.37
Total	\$ 53,641.13	\$ 48,502.44
Total Disbursements	\$ 666,984.90	\$ 680,949.45
Balance at End of Period	\$ 82,444.08	\$ 748,152.63

Statement of Receipts and Disbursements

STATE GENERAL FUND ACCOUNTS

Service Account (ORS 291.658)

Biennial Period Ending June 30, 1956

Funds were made available by the Oregon State Game Commission under Memorandum of Understanding dated August 30, 1955, relative to fish and wildlife investigations connected with the proposed hydroelectric developments by the Pacific Northwest Power Company in the Snake River basin—Mountain Sheep and Pleasant Valley dams.

Fiscal Year Ending June 30, 1956

Funds Allotted		\$ 14,024.00
Disbursements:		
Salaries and Wages	\$ 3,332.54	
Other Personal Services Expense	191.83	
Materials and Services	903.72	
Capital Outlays	262.96	4,691.05
Balance Available at End of Period		\$ 9,332.95

Surplus Equipment Account (ORS 291.656)

	Fiscal Year Ending June 30, 1955	Fiscal Year Ending June 30, 1956
Fund Balance at Beginning of Period	\$ 4,430.48	\$ 7,566.68
Receipts from Sale of Equipment	3,136.20	2,152.12
Total Funds Available	\$ 7,566.68	\$ 9,718.80
Disbursements		1,920.92
Fund Balance at End of Period	\$ 7,566.68	\$ 7,797.88

Building Appropriation (Chapter 622, O.L. 1955)

Fiscal Year Ending June 30, 1956

	Appropriation	Disbursements	Balance
Utility Building—Alsea Hatchery	\$ 9,600.00	\$ 4,349.63	\$ 5,250.37
Rearing Ponds—Alsea Hatchery	5,400.00	254.27	5,145.73
Remodeling of Buildings and Grounds—			
Research Laboratory—Clackamas	35,298.00	213.66	35,084.34
	\$ 50,298.00	\$ 4,817.56	\$ 45,480.44

Statement of Receipts and Disbursements

SEAL FUND ACCOUNT

Biennial Period Ending June 30, 1956

			Fiscal Year Ending June 30, 1955		Fiscal Year Ending June 30, 1956
Fund Balance at Beginning of Period			\$27,217.49		\$26,128.99
	Rate	Number Issued		Number Issued	
Receipts—Sale of Seal Certificates:					
Gillnet	\$ 2.50	465	\$ 1,162.50	470	\$ 1,175.00
Troll	2.50	29	72.50	69	172.50
Canner	50.00	8	400.00	9	450.00
Total Receipts			\$1,635.00		\$ 1,797.50
Less 10% Tithing to State General Fund			163.50		179.75
Total Beginning Balance and Net Receipts			\$28,688.99		\$27,746.74
Disbursements:					
Bounties Paid for Seals Destroyed		(9 @ \$15) (97 @ \$25)	\$ 135.00 \$ 2,425.00	(82 @ \$25)	\$ 2,050.00
Total Seal Bounties			\$ 2,560.00		\$ 2,050.00
Fund Balance at End of Period			\$26,128.99		\$25,696.74

Statement of Allotments and Disbursements

FEDERAL AID FUND—COLUMBIA RIVER SALMON REHABILITATION PROGRAM
U. S. Fish and Wildlife Service

Fiscal Year Ending June 30, 1955

	Balance from Previous Year	Allotted	Disbursed	Reverted to Reserve	Balance
Plans and Surveys	\$ 34,362.72	\$ 20,050.00	\$ 11,496.08	\$ 190.99	\$ 42,725.65
Hatchery Construction; Facilities; Equipment	272,162.88		223,149.11	3,528.42	45,485.35
Hatchery Operation and Maintenance	7,535.57	209,697.28	146,065.88	7,255.99	63,910.98
Fishways, Stream Gauging, Improvement, Maintenance	26,047.48	45,033.20	47,881.20	3,662.83	19,536.65
Equipment Warehouse Rental, Maintenance	380.75			380.75	
Fisheries Research	65,337.57	58,461.00	88,465.24	1,855.32	33,478.01
Total	\$405,826.97	\$333,241.48	\$517,057.51	\$ 16,874.30	\$205,136.64

Fiscal Year Ending June 30, 1956

Plans and Surveys	\$ 42,725.65	\$ 6,200.00	\$ 22,443.20	\$ 127.20	\$ 26,355.25
Hatchery Construction; Facilities; Equipment	45,485.35		7,168.08	200.60	38,116.67
Hatchery Operation and Maintenance	63,910.98	182,600.00	187,243.98	21,766.23	37,500.77
Fishways, Stream Gauging, Improvement, Maintenance	19,536.65	110,831.00	50,997.67	2,899.49	76,470.49
Fisheries Research	33,478.01	46,000.00	60,674.69	12,742.60	6,060.72
Total	\$205,136.64	\$345,631.00	\$328,527.62	\$ 37,736.12	\$184,503.90

Statement of Receipts and Disbursements

Expenditures Advanced from the Revolving Fund—Chapter 176, Oregon Laws 1951

FEDERAL AID—WILLAMETTE RIVER BASIN PROGRAM
U. S. ARMY ENGINEERS

North Santiam River—Marion Forks Hatchery

Fiscal Year Ending June 30, 1955

Unreimbursed Advances July 1, 1954	\$ 9,623.29	
Operating and Maintenance Expenditures	75,008.96	\$ 84,632.25
Reimbursed by U. S. Government, Army Engineers	\$ 64,745.67	
Reimbursed from Fish Commission Funds	6,500.04	
Total Reimbursed		71,245.71
Receivable from U. S. Government	\$ 12,844.87	
Receivable from Fish Commission Funds	541.67	
Unreimbursed Advances June 30, 1955		\$ 13,386.54

Fiscal Year Ending June 30, 1956

Unreimbursed Advances July 1, 1955	\$ 13,386.54	
Operating and Maintenance Expenditures	87,775.69	\$101,162.23
Reimbursed by U. S. Government, Army Engineers	\$ 84,942.32	
Reimbursed from Fish Commission Funds	6,500.04	
Total Reimbursed		91,442.36
Receivable from U. S. Government	\$ 9,178.20	
Receivable from Fish Commission Funds	541.67	
Unreimbursed Advances June 30, 1956		\$ 9,719.87

Willamette River—Oakridge Hatchery

Fiscal Year Ending June 30, 1955

Unreimbursed Advances July 1, 1954	\$ 13,963.04	
Operating and Maintenance Expenditures	86,910.23	\$100,873.27
Reimbursed by U. S. Government, Army Engineers	\$ 79,980.41	
Reimbursed from Fish Commission Funds	7,836.60	
Total Reimbursed		87,817.01
Receivable from U. S. Government	\$ 12,403.21	
Receivable from Fish Commission Funds	653.05	
Unreimbursed Advances June 30, 1955		\$ 13,056.26

Fiscal Year Ending June 30, 1956

Unreimbursed Advances July 1, 1955	\$ 13,056.26	
Operating and Maintenance Expenditures	93,669.78	\$106,726.04
Reimbursed by U. S. Government, Army Engineers	\$ 89,761.77	
Reimbursed from Fish Commission Funds	7,836.60	
Total Reimbursed		97,598.37
Receivable from U. S. Government	\$ 8,474.62	
Receivable from Fish Commission Funds	653.05	
Unreimbursed Advances June 30, 1956		\$ 9,127.67

FEDERAL AID FUND—U. S. ARMY ENGINEERS**Columbia River Fisheries Research Investigation**

	<i>Balance from Previous Year</i>	<i>Allotted</i>	<i>Disbursed</i>	<i>Reverted</i>	<i>Balance</i>
Fiscal Year Ending June 30, 1955	\$ 27,785.52	\$110,775.25	\$ 54,191.19	\$ 356.92	\$ 84,012.66
Fiscal Year Ending June 30, 1956	84,012.66	55,000.00	68,158.50	23,316.58	47,537.58

Recapitulation**FEDERAL AID FUNDS****Allotments and Disbursements—Biennial Period July 1, 1954 to June 30, 1956**

	<i>Balance July 1, 1954</i>	<i>Allotted</i>	<i>Disbursement</i>	<i>Reverted to Reserve</i>	<i>Balance June 30, 1956</i>
Columbia River Salmon					
Rehabilitation Program	\$405,826.97	\$ 678,872.48	\$ 845,585.13	\$ 54,610.42	\$184,503.90
(U. S. Fish and Wildlife Service)					
Willamette River Basin Program		343,364.66	343,364.66		
(U. S. Army Engineers)					
Columbia River Fisheries Research					
Investigation	27,785.52	165,775.25	122,349.69	23,673.50	47,537.58
(U. S. Army Engineers)					
Total	\$433,612.49	\$1,188,012.39	\$1,311,299.48	\$ 78,283.92	\$232,041.48

ARRESTS FOR VIOLATION OF COMMERCIAL FISHERIES CODE

	<i>Fiscal Year Ending June 30, 1955</i>	<i>Fiscal Year Ending June 30, 1956</i>
Fishing and delivering fish without a license	16	23
Fishing prohibited methods	12	19
Fishing closed season and closed waters	42	17
Dealing in food or shellfish without a license	39	20
Possession of overlimit of clams	80	45
Unlawful possession of food or shellfish	26	33
Pollution of waters	1	1
Failure to file dealer reports	10	22
Molesting spawning salmon	3	6
Miscellaneous violations	7	9
Total Arrests	236	195
Number of convictions	221	187
Number pending, dismissed or not guilty	15	8
Amount of fines imposed	\$11,760.76	\$ 8,424.00
Amount of fines suspended or remitted	\$ 1,927.50	\$ 2,949.50

COMPARATIVE STATEMENT OF LICENSES ISSUED**Fiscal Years Ending on June 30th**

<i>Licenses</i>	1956	1955	1954	1953	1952	1951
Gillnet	717	731	818	863	897	956
Setnet	188	255	246	255	300	338
Trap .....	.....	.....	.....	.....	.....	.....
Seine .....	.....	.....	.....	.....	.....	4
Troll	866	486	290	118	139	91
Boatpuller .....	.....	.....	.....	.....	.....	.....
Personal	2710	2203	2223	2219	2341	1663
Retail Fish Dealer and Peddler	1364	1441	1414	1428	1477	1629
Wholesale Fish Dealer	168	175	159	165	162	192
Broker	3	4	4	2	3	4
Buyer	70	62	55	71	72	82
Salmon Canner	15	14	16	19	19	24
Shellfish Canner	8	7	9	8	14	18
Reduction Plant	4	2	3	4	2	4
Bagnet	(l)83	(k)34	(j)90	(i)142	(h)165	(g)148
Carp Permit	6	7	3	5	8	4
Clam	402	479	576	767	819	772
Crab	192	146	174	17	.....	.....
Crawfish	25	17	21	4	.....	.....
Shrimp .....	.....	1	.....	.....	.....	.....
Crab-Shrimp-Crawfish .....	.....	.....	.....	136	135	116
Setline	8	16	26	33	36	19
Bait Net	7	6	9	4	3	5
Delivery	486	511	726	793	924	848
Supplemental to Delivery	2	5	11	9	4	3
Oyster Tongers .....	.....	.....	.....	.....	1	.....
Wholesale Distributor	55	66	41	33	41	19
Retail Dealer Packaged Frozen Food Fish	1162	1271	767	719	803	87
Indian Gillnet	3	6	5	2	1	.....
Indian Bagnet	3	5	1	3	8	.....
Indian Personal	17	21	15	4	9	.....
Indian Wholesale Fish Dealer .....	.....	.....	.....	.....	1	.....
Indian Retail Fish Dealer .....	.....	.....	.....	2	1	.....
Indian Clam	13	16	13	.....	.....	.....
Indian Troll	4	3	1	.....	.....	.....
Indian Crab .....	.....	2	1	.....	.....	.....
Indian Setline	3	4	.....	.....	.....	.....
Total Licenses	8584	7997	7717	7825	8385	7026

(g) Includes 104 issued for Sandy River Smelt.

(j) Includes 2 issued for Sandy River Smelt.

(h) Includes 60 issued for Sandy River Smelt.

(k) Includes 1 issued for Sandy River Smelt.

(i) Includes 12 issued for Sandy River Smelt.

(l) Includes 2 issued for Sandy River Smelt.

License Years Ending on March 31st

<i>Licenses</i>	1956	1955	1954	1953	1952	1951
Alsea Bay and River						
Gillnet	44	41	41	53	49	74
Setnet .....	.....	.....	.....	.....	.....	.....
Retail Fish Dealer and Peddler	68	67	53	38	36	37
Wholesale Fish Dealer	6	8	5	3	4	4
Clam	4	2	4	4	5	7
Crab	4	10	6	.....	.....	.....
Crab-Shrimp-Crawfish .....	.....	.....	4	8	5	10
Salmon Canner .....	.....	.....	.....	1	1	1
Total Alsea Bay and River	126	128	113	107	100	133

COMPARATIVE STATEMENT OF LICENSES ISSUED—Continued**License Years Ending on March 31st—Continued**

<i>Licenses</i>	1956	1955	1954	1953	1952	1951
Brookings Harbor						
Wholesale Fish Dealer .....	.....	.....	.....	.....	.....	.....
Retail Fish Dealer and Peddler .....	.....	.....	.....	.....	.....	.....
Crab .....	.....	.....	.....	.....	.....	.....
Total Brookings Harbor .....	.....	.....	.....	.....	.....	.....
Chetco Bay						
Retail Fish Dealer and Peddler	4	4	4	5	6	3
Wholesale Fish Dealer	2	1	.....	1	1	1
Crab .....	.....	.....	.....	.....	.....	.....
Salmon Canner	1	1	.....	.....	.....	.....
Total Chetco Bay	7	6	4	6	7	4
Clatsop Beaches						
Retail Fish Dealer and Peddler .....	.....	.....	.....	.....	1	1
Shellfish Canner	2	2	.....	.....	4	5
Clam	23	38	67	67	180	652
Crab .....	.....	.....	.....	.....	.....	.....
Wholesale Fish Dealer	1	.....	.....	1	1	1
Buyer .....	.....	.....	.....	.....	.....	3
Crab-Shrimp-Crawfish .....	.....	.....	.....	.....	1	.....
Indian Clam .....	.....	16	.....	.....	.....	.....
Total Clatsop Beaches	26	56	67	68	187	662
Columbia River and Tributaries						
Gillnet	474	516	533	563	585	613
Setnet .....	.....	.....	.....	.....	.....	108
Trap .....	.....	.....	.....	.....	.....	20
Seine .....	.....	.....	.....	.....	.....	13
Troll	43	48	55	38	37	65
Retail Fish Dealer and Peddler	1007	1000	1025	1031	1176	1229
Wholesale Fish Dealer	80	85	80	83	90	109
Broker .....	.....	.....	.....	.....	.....	.....
Shellfish Canner	2	2	7	8	9	1
Salmon Canner	8	10	10	13	14	14
Reduction Plant	3	3	3	3	3	3
Bagnet	(i)40	(k)84	(j)144	(i)159	(h)153	(g)46
Clam	1	.....	.....	1	3	3
Crab	18	18	.....	.....	.....	.....
Crawfish	24	15	13	.....	.....	.....
Setline	18	26	31	32	27	10
Bait Net	1	1	.....	.....	.....	.....
Buyer	54	46	55	63	67	71
Carp Permit	5	5	5	7	6	9
Crab-Shrimp-Crawfish .....	.....	.....	12	23	39	51
Indian Gillnet	5	5	4	.....	1	.....
Indian Bagnet	3	3	3	2	6	.....
Indian Wholesale Fish Dealer .....	.....	.....	.....	2	1	.....
Indian Retail Fish Dealer .....	.....	.....	2	.....	1	.....
Indian Setline	2	2	.....	.....	.....	.....
Indian Troll	4	1	.....	.....	.....	.....
Indian Crab	1	1	.....	.....	.....	.....
Total Columbia River	1793	1871	1982	2028	2218	2365

(g) Includes 14 issued for Sandy River Smelt.

(h) Includes 103 issued for Sandy River Smelt.

(i) Includes 59 issued for Sandy River Smelt.

(j) Includes 12 issued for Sandy River Smelt.

(k) Includes 2 issued for Sandy River Smelt.

(l) Includes 1 issued for Sandy River Smelt.

COMPARATIVE STATEMENT OF LICENSES ISSUED—Continued
License Years Ending on March 31st

<i>Licenses</i>	1956	1955	1954	1953	1952	1951
Coos Bay and River						
Gillnet	4	4	5	9	7	11
Setnet	63	56	59	75	90	121
Retail Fish Dealer and Peddler	80	74	66	73	88	81
Wholesale Fish Dealer	20	20	22	18	26	22
Shellfish Canner	2	2	1	2	3	3
Salmon Canner	2	1	1	1	2	2
Clam	13	23	13	12	17	15
Crab .....	.....	5	2	.....	.....	.....
Broker .....	.....	.....	.....	.....	.....	.....
Crawfish .....	.....	.....	.....	.....	.....	.....
Setline .....	.....	.....	.....	.....	.....	2
Buyer	4	2	2	3	3	4
Bait Net	1	2	1	.....	1	1
Crab-Shrimp-Crawfish .....	.....	.....	18	19	30	38
Total Coos Bay and River	189	189	190	212	267	300
Coquille River						
Gillnet	21	28	30	35	40	36
Setnet	11	11	16	22	7	5
Retail Fish Dealer and Peddler	8	16	18	19	17	16
Wholesale Fish Dealer	6	5	4	5	4	3
Clam .....	.....	1	1	.....	2	1
Crab	2	1	3	.....	.....	.....
Buyer	2	1	1	1	2	2
Crab-Shrimp-Crawfish .....	.....	.....	.....	2	1	4
Salmon Canner .....	.....	.....	.....	1	.....	1
Total Coquille River	50	63	73	85	73	68
Depoe Bay						
Retail Fish Dealer and Peddler	4	7	9	9	13	5
Wholesale Fish Dealer	4	4	5	5	4	2
Crab .....	.....	.....	.....	.....	.....	.....
Salmon Canner .....	.....	.....	.....	.....	.....	.....
Clam .....	.....	.....	.....	1	.....	.....
Buyer	1	.....	.....	.....	.....	.....
Total Depoe Bay	9	11	14	15	17	7
Lincoln County Beaches						
Clam .....	.....	.....	.....	3	10	17
Crab-Shrimp-Crawfish .....	.....	.....	.....	1	.....	1
Total Lincoln County Beaches .....	.....	.....	.....	4	10	18
Nehalem River						
Gillnet	39	44	51	49	46	57
Setnet .....	.....	.....	.....	.....	.....	.....
Retail Fish Dealer and Peddler	12	13	13	13	14	14
Wholesale Fish Dealer	5	6	5	5	5	6
Clam	4	9	4	3	7	9
Crab	1	1	.....	.....	.....	.....
Buyer	1	1	1	2	1	1
Crab-Shrimp-Crawfish .....	.....	.....	2	3	3	6
Salmon Canner	1	1	1	1	1	1
Total Nehalem River	63	75	77	76	77	94

COMPARATIVE STATEMENT OF LICENSES ISSUED—Continued

License Years Ending on March 31st

<i>Licenses</i>	1956	1955	1954	1953	1952	1951
Nestucca River						
Retail Fish Dealer and Peddler	7	4	6	6	5	9
Clam .....	.....	.....	.....	.....	.....	.....
Crab .....	.....	.....	.....	.....	.....	.....
Wholesale Fish Dealer	1	1	1	1	1	2
Salmon Canner	1	1	1	1	1	1
Total Nestucca River	9	6	8	8	7	12
Netarts Bay						
Setnet	7	9	7	7	5	7
Retail Fish Dealer and Peddler	6	7	7	9	10	5
Crab	3	4	5	.....	.....	.....
Wholesale Fish Dealer .....	.....	.....	.....	.....	1	1
Crab-Shrimp-Crawfish .....	.....	.....	1	5	3	3
Clam	3	6	7	10	5	4
Total Netarts Bay	19	26	27	31	24	20
Pacific Ocean and Beaches						
Bait Net .....	.....	.....	5	3	.....	.....
Troll	542	293	80	91	73	9
Crab-Shrimp-Crawfish .....	.....	.....	43	44	40	51
Clam	380	466	609	629	462	160
Wholesale Fish Dealer .....	.....	1	1	1	.....	.....
Crab	104	87	17	.....	.....	.....
Indian Clam	15	.....	.....	.....	.....	.....
Total Pacific Ocean and Beaches ..	1041	847	755	767	575	220
Port Orford						
Retail Fish Dealer and Peddler	7	11	8	7	12	12
Wholesale Fish Dealer	2	2	2	1	5	6
Crab .....	.....	1	1	.....	.....	.....
Salmon Canner .....	.....	.....	1	.....	2	2
Crab-Shrimp-Crawfish .....	.....	.....	1	.....	.....	3
Shellfish Canner	1	1	1	1	.....	2
Total Port Orford	10	15	14	9	19	25
Sand Lake						
Setnet	8	5	6	7	5	8
Retail Fish Dealer	1	.....	.....	.....	.....	.....
Total Sand Lake	9	5	6	7	5	8
Sandy River						
Retail Fish Dealer and Peddler	5	4	5	11	12	4
Wholesale Fish Dealer .....	.....	.....	.....	.....	4	.....
Total Sandy River	5	4	5	11	16	4
Siletz River						
Gillnet	26	27	31	29	33	26
Setnet .....	.....	.....	.....	.....	.....	.....
Retail Fish Dealer and Peddler	21	21	27	25	32	26
Wholesale Fish Dealer	3	1	3	3	3	3
Crab-Shrimp-Crawfish .....	.....	.....	.....	.....	.....	.....
Total Siletz River	50	49	61	57	68	55

COMPARATIVE STATEMENT OF LICENSES ISSUED—Continued

License Years Ending on March 31st

Licenses	1956	1955	1954	1953	1952	1951
Siuslaw River						
Gillnet	18	19	18	22	25	28
Setnet	26	20	21	34	39	43
Retail Fish Dealer and Peddler	23	25	30	31	39	44
Wholesale Fish Dealer	3	2	1	3	3	3
Clam	-----	-----	2	2	10	11
Crab	-----	1	-----	-----	-----	-----
Buyer	2	1	1	1	1	1
Crab-Shrimp-Crawfish	-----	-----	-----	-----	-----	1
Total Siuslaw River	72	68	73	93	117	131
Tillamook Bay						
Gillnet	57	64	67	59	70	78
Setnet	64	75	69	79	92	120
Retail Fish Dealer and Peddler	41	32	34	34	35	37
Wholesale Fish Dealer	10	11	15	9	10	10
Salmon Canner	1	1	1	1	-----	-----
Shellfish Canner	-----	-----	-----	-----	-----	3
Clam	22	27	28	26	36	56
Crab	22	18	20	-----	-----	-----
Buyer	1	2	2	1	1	1
Crab-Shrimp-Crawfish	-----	-----	9	18	12	17
Oyster Tonger	-----	-----	-----	1	-----	-----
Bait Net	-----	-----	-----	-----	1	-----
Shrimp	1	-----	-----	-----	-----	-----
Total Tillamook Bay	219	230	245	228	257	322
Umpqua River						
Gillnet	22	28	26	32	26	39
Setnet (Smith River)	69	83	76	75	82	79
Troll	-----	-----	-----	-----	-----	-----
Retail Fish Dealer and Peddler	37	29	36	45	39	36
Wholesale Fish Dealer	8	8	8	7	7	8
Salmon Canner	-----	-----	-----	-----	-----	-----
Shellfish Canner	-----	-----	-----	-----	-----	-----
Clam	11	15	9	5	12	10
Crab	4	3	1	-----	-----	-----
Buyer	2	1	2	1	1	1
Crab-Shrimp-Crawfish	-----	-----	-----	3	1	2
Bait Net	3	4	1	-----	1	2
Total Umpqua River	156	171	159	168	169	177
Yaquina Bay and River						
Gillnet	14	18	24	28	23	31
Setnet	-----	-----	-----	-----	-----	-----
Retail Fish Dealer and Peddler	79	100	85	89	70	72
Wholesale Fish Dealer	15	15	15	16	15	12
Clam	8	9	11	16	11	27
Crab	12	12	12	-----	-----	-----
Setline	-----	-----	-----	-----	-----	2
Shellfish Canner	1	1	-----	2	2	1
Salmon Canner	1	-----	-----	1	1	2
Reduction Plant	-----	-----	-----	-----	1	1
Bait Net	1	-----	-----	-----	1	2
Crab-Shrimp-Crawfish	-----	-----	6	13	17	23
Buyer	-----	1	1	1	-----	-----
Total Yaquina Bay and River	131	156	154	166	141	173

COMPARATIVE STATEMENT OF LICENSES ISSUED—Continued

License Years Ending on March 31st

Licenses	1956	1955	1954	1953	1952	1951
Miscellaneous						
Delivery	500	644	738	822	871	910
Supplemental to Delivery		11	7	10	5	3
Personal	2316	2203	2255	2236	2302	2664
Broker	4	3	3	3	4	5
Salmon Canner (Rogue River)		1	1	1	1	.....
Retail Dealer Packaged						
Frozen Food Fish	1144	967	690	639	342	.....
Wholesale Distributor	56	49	38	34	27	.....
Indian Personal	20	19	5	.....	7	.....
Retail Fish Dealer and Peddler (Rogue)		1	.....	.....	.....	.....
Total Miscellaneous	4040	3898	3737	3745	3559	3582
Grand Totals	8024	7874	7764	7891	7912	8380
Recapitulation						
Gillnet	719	789	826	879	904	993
Setnet	248	259	254	299	320	491
Trap .....	.....	.....	.....	.....	.....	20
Seine .....	.....	.....	.....	.....	.....	13
Troll	585	341	135	129	110	74
Retail Fish Dealer and Peddler	1410	1415	1426	1445	1605	1631
Wholesale Fish Dealer	166	170	167	161	184	193
Broker	4	3	3	3	4	5
Salmon Canner	15	16	16	21	23	24
Shellfish Canner	8	8	9	13	18	15
Reduction Plant	3	3	3	3	4	4
Bagnet	(l)40	(k)84	(j)144	(i)159	(h)153	(g)46
Clam	469	596	755	779	760	972
Crab	170	161	67	.....	.....	.....
Shrimp	1	.....	.....	.....	.....	.....
Crawfish	24	15	13	.....	.....	.....
Setline	18	26	31	32	27	14
Delivery	500	644	738	822	871	910
Supplemental to Delivery		11	7	10	5	3
Personal	2316	2203	2255	2236	2302	2664
Crab-Shrimp-Crawfish			96	139	152	210
Buyer	67	55	65	73	75	84
Bait Net	6	7	7	3	4	5
Carp Permit	5	5	5	7	6	9
Oyster Tonger .....	.....	.....	.....	1	.....	.....
Retail Dealer Packaged						
Frozen Food Fish	1144	967	690	639	342	.....
Wholesale Distributor	56	49	38	34	27	.....
Indian Gillnet	5	5	4	.....	1	.....
Indian Bagnet	3	3	3	2	6	.....
Indian Personal	20	19	5	.....	7	.....
Indian Wholesale Fish Dealer .....	.....	.....	.....	2	1	.....
Indian Retail Fish Dealer .....	.....	.....	2	.....	1	.....
Indian Clam	15	16	.....	.....	.....	.....
Indian Setline	2	2	.....	.....	.....	.....
Indian Troll	4	1	.....	.....	.....	.....
Indian Crab	1	1	.....	.....	.....	.....
Totals	8024	7874	7764	7891	7912	8380

(g) Includes 14 issued for Sandy River Smelt.

(h) Includes 103 issued for Sandy River Smelt.

(i) Includes 59 issued for Sandy River Smelt.

(j) Includes 12 issued for Sandy River Smelt.

(k) Includes 2 issued for Sandy River Smelt.

(l) Includes 1 issued for Sandy River Smelt.

EGG TAKE

Number of Eggs Taken at Stations Operated by the Fish Commission

Fiscal Year Ending June 30, 1955

<i>Fisheries Station</i>	<i>Spring Chinook</i>	<i>Fall Chinook</i>	<i>Silver Salmon</i>	<i>Steelhead</i>	<i>Chum</i>	<i>Shad</i>	<i>Total</i>
Alsea			886,416				886,416
Bonneville		4,475,000	24,416				4,499,416
Coos			321,870	36,970			358,840
Klaskanine		76,281	875,119				951,400
McKenzie	2,016,800						2,016,800
Metolius	205,110						205,110
Nehalem			684,108				684,108
Ox Bow Springs		1,197,682	15,719		42,284		1,255,685
Sandy	502,430	92,865	828,815	119,711			1,543,821
North Santiam (Marion Forks)	1,927,278			2,013,018			3,940,296
South Santiam	593,678						593,678
Scappoose (Shad Battery)						1,129,836	1,129,836
Siletz			295,589	20,870			316,459
Tillasqua		230,464	2,004,600	26,112	407,400		2,668,576
Trask	540,719	223,771	474,201				1,238,691
Willamette	2,950,350						2,950,350
Total	8,736,365	6,296,063	6,410,853	2,216,681	449,684	1,129,836	25,239,482

Fiscal Year Ending June 30, 1956

<i>Fisheries Station</i>	<i>Spring Chinook</i>	<i>Fall Chinook</i>	<i>Silver Salmon</i>	<i>Steelhead</i>	<i>Chum</i>	<i>Shad</i>	<i>Total</i>
Alsea		96,178	536,479				632,657
Bonneville		3,270,000	111,000				3,381,000
Coos			175,672				175,672
Klaskanine		33,596	94,479				128,075
McKenzie	676,048						676,048
Metolius	59,100						59,100
Nehalem			320,188				320,188
Ox Bow Springs		2,566,589	170,356		7,391		2,744,336
Sandy	10,280	134,220	728,689	108,245			981,434
North Sanitam (Marion Forks)	1,219,802	95,228		2,028,039			3,343,069
South Santiam	154,792						154,792
Scappoose (Shad Battery)						2,902,081	2,902,081
Siletz			381,507	40,644			422,151
Tillasqua		447,896	3,198,904	168,568	516,572		4,331,940
Trask	399,500	57,000	671,000				1,127,500
Willamette	3,223,420						3,223,420
Total	5,742,942	6,700,707	6,388,274	2,345,496	523,963	2,902,081	24,603,463

NUMBER OF SALMON AND STEELHEAD FINGERLING LIBERATED INTO THE WATERS OF THE STATE OF OREGON BY THE FISH COMMISSION

Fiscal Year Ending June 30, 1955

Fisheries Station	Spring Chinook	Fall Chinook	Silver Salmon	Steel-head	Blue-back	Chum	Shad	Total	Where Liberated
Alsea		153,572	53,883					207,455	Fall Cr., trib. Alsea R.
Bonneville		196,852						196,852	Tanner Cr., trib. Columbia R.
Coos			153,902					153,902	Salmon Cr., trib. S. Coos R., trib. Coos R.
			32,443					32,443	W. and E. F. Millicoma R., trib. Coos R.
			6,379					6,379	Upper Coos R., Tioga Cr. and Williams R., trib. S. Coos., trib. Coos R.
			5,780					5,780	Coos R., trib. Coos Bay
Klaskanine		52,620						52,620	N. Klaskanine R., trib. Klaskanine R.
			75,068					75,068	Youngs R., trib. Youngs Bay
Marion Forks	1,489,691			72,072				1,561,763	N. Santiam R., trib. Santiam R., trib. Willamette R.
	22,413							22,413	Wiley Cr., trib. Santiam R., trib. Willamette R.
				550,394				550,394	Stout Cr., trib. N. Santiam R., trib. Santiam R.
				71,910				71,910	Willamette R., trib. Columbia R.
McKenzie	1,533,849							1,533,849	McKenzie R., trib. Willamette R.
	3,500							3,500	Cogswell Cr., trib. McKenzie R., trib. Willamette R.
*Metolius					51,833			51,833	Suttle Lake, trib. Lake Cr., trib. Metolius R.
	197,392							197,392	Metolius R., trib. Deschutes R., trib. Columbia R.
*Nehalem		64,522	180,547					245,069	Upper Foley Cr. and Foley Cr., trib. Nehalem R.
			48,875					48,875	Necanicum R., trib. Pacific Ocean
			113,125					113,125	N. F. Nehalem R., trib. Nehalem R., trib. Nehalem Bay
			56,625					56,625	Nehalem R., trib. Nehalem Bay
			51,500					51,500	Miami R., trib. Tillamook Bay
			50,044					50,044	Nehalem Bay, trib. Pacific Ocean
Ox Bow		767,810					40,770	808,580	Herman Cr., trib. Columbia R.
		86,588						86,588	Tanner Cr., trib. Columbia R.
Sandy	56,077							56,077	Sandy R., trib. Columbia R.
	197,000	83,603	344,097	80,932				705,632	Cedar Cr., trib. Sandy R., trib. Columbia R.
			50,986					50,986	S. F. Yamhill R., trib. Yamhill R., trib. Willamette R.
			50,649					50,649	Tualatin R., trib. Willamette R.
			25,000					25,000	Molalla R., trib. Willamette R.
Scappoose (Shad Battery)						(a)	1,051,056	1,051,056	Willamette R., trib. Columbia R.
Siletz			157,673	5,470				163,143	Rock Cr., trib. Siletz R.
			53,875					53,875	Gravel Cr., trib. Siletz R.
South Santiam	170,745							170,745	Santiam R., trib. Willamette R.
	114,527							114,527	S. Santiam R., trib. Santiam R., trib. Willamette R.
Tillamasqua		186,863	298,134	131,049		411,614		1,027,665	Big Cr., trib. Columbia R.
Trask	96,239	203,430	67,484					367,153	Gold Cr., trib. Trask R.
	170,477		76,176					246,653	Trask R., trib. Tillamook Bay
	85,239		32,228					117,467	Kilchis R., trib. Tillamook Bay
	51,144							51,144	Salmonberry R., trib. Nehalem R., trib. Nehalem Bay
	34,095		76,176					110,271	Wilson R., trib. Tillamook Bay
	50,684							50,684	S. F. Trask R., trib. Trask R., trib. Tillamook Bay
	27,807							27,807	N. F. Trask R., trib. Trask R., trib. Tillamook Bay
	26,540							26,540	E. F. Trask R., trib. Trask R., trib. Tillamook Bay
	25,873							25,873	Edwards Cr., trib. Trask R., trib. Tillamook Bay
			61,527					61,527	Tillamook R., trib. Tillamook Bay
			46,879					46,879	Little Nestucca R., trib. Nestucca Bay
			8,010					8,010	Jackson Cr., trib. Netarts Bay
*Willamette	1,075,154	57,415		276,494	52,089			1,461,152	Willamette R., trib. Columbia R.
	98,837							98,837	Row R., trib. Willamette R.
	66,767							66,767	McKenzie R., trib. Willamette R.
				20,839				20,839	Fall Cr., trib. Willamette R.
				25,102				25,102	Wiley Cr., trib. S. Santiam R., trib. Santiam R.
				25,093				25,093	S. Santiam R., trib. Santiam R., trib. Willamette R.
				25,085				25,085	Little N. F. Santiam R., trib. Santiam R.
				25,112				25,112	N. Santiam R., trib. Santiam R.
Total	5,594,050	1,853,280	2,177,065	1,309,552	103,922	452,384	1,051,056	12,541,309	

(a) Fry.

* Metolius Blueback stock received from U. S. Fish and Wildlife Service.

* Willamette Blueback stock received from U. S. Fish and Wildlife Service.

* Nehalem Fall Chinook stock received from Bonneville Station.

NUMBER OF SALMON AND STEELHEAD FINGERLING LIBERATED INTO THE WATERS OF THE STATE OF OREGON BY THE FISH COMMISSION

Fiscal Year Ending June 30, 1956

Fisheries Station	Spring Chinook	Fall Chinook	Silver Salmon	Steel-head	Blue-back	Chum	Shad	Total	Where Liberated
Alsea		74,572	732,656	41,032				857,228	Fall Cr., trib. Alsea R.
								41,032	N. Santiam R., trib. Santiam R., trib. Willamette R.
Bonneville		4,814,113	22,971					4,837,084	Tanner Cr., trib. Columbia R.
		76,738						76,738	Gnat Cr., trib. Columbia R.
		100,374						100,374	Willamette R., trib. Columbia R.
Coos			186,133					186,133	Salmon Cr., trib. S. Coos R., trib. Coos R.
			37,290					37,290	Lake Cr., trib. Siuslaw R.
			27,655					27,655	S. Coos R., trib. Coos R., trib. Coos Bay
				29,470				29,470	Tioga Cr., trib. S. Coos R., trib. Coos R.
Klaskanine		26,467	698,636					725,103	Klaskanine R., trib. Columbia R.
				380,148				380,148	N. Santiam R., trib. Santiam R., trib. Willamette R.
				11,906				11,906	N. F. Klaskanine R., trib. Klaskanine R.
Marion Forks	1,322,667			792,279				2,114,946	N. Santiam R., trib. Santiam R., trib. Willamette R.
				228,720				228,720	Stout Cr., trib. N. Santiam R., trib. Santiam R.
McKenzie	336,455							336,455	McKenzie R., trib. Willamette R.
*Metolius	165,946				90,798			256,744	Metolius R., trib. Deschutes R., trib. Columbia R.
					50,501			50,501	Suttle Lake, trib. Lake Cr., trib. Metolius R.
Nehalem			372,312					372,312	Foley Cr., trib. Nehalem R., trib. Nehalem Bay
			5,000					5,000	E. Foley Cr., trib. Foley Cr., trib. Nehalem R.
Ox Bow Springs		2,454,517	33,838					2,488,355	Herman Cr., trib. Columbia R.
		40,010						40,010	Clackamas R., trib. Willamette R.
				27,135				27,135	N. Santiam R., trib. Santiam R., trib. Willamette R.
Sandy	238,135	128,974	473,812	93,064				933,985	Cedar Cr., trib. Sandy R., trib. Columbia R.
			95,486					95,486	S. Yamhill R., trib. Yamhill R., trib. Willamette R.
			11,000					11,000	Molalla R., trib. Willamette R.
Scappoose (Shad Battery)						(b)	2,164,236	2,164,236	Willamette Slough, trib. Columbia R.
						(b)	737,845	737,845	Columbia R. at Washougal Reef
Siletz			441,164	17,401				458,565	Rock Cr., trib. Siletz R.
South Santiam	321,476							321,476	S. Santiam R., trib. Santiam R., trib. Willamette R.
				45,116				45,116	N. Santiam R., trib. Santiam R., trib. Willamette R.
Tillamook		388,091	2,052,576	36,450		478,500		2,955,617	Big Cr., trib. Columbia R.
			163,200					163,200	Elk Cr., trib. Big Cr., trib. Columbia R.
			147,582					147,582	Pig Pen Cr., trib. Big Cr., trib. Columbia R.
			81,600					81,600	Mud Cr., trib. Big Cr., trib. Columbia R.
			81,600					81,600	Coon Cr., trib. Big Cr., trib. Columbia R.
			19,845					19,845	Chapman and Alder Crks., trib. Big Cr., trib. Columbia R.
			29,400					29,400	S. F. N. Scappoose Cr., trib. N. Scappoose Cr., trib. Columbia R.
			30,600					30,600	Tide and Goble Crks., trib. Big Cr., trib. Columbia R.
			43,370					43,370	Wilark Cr., trib. Clatskanie R., trib. Columbia R.
Trask	80,914	48,394	151,477					280,785	Gold Cr., trib. Trask R., trib. Tillamook Bay
	352,686							352,686	Trask R., trib. Tillamook Bay
*Willamette				399,862	43,873			443,735	Salmon Cr., trib. Willamette R.
									trib. Columbia R.
	2,375,508	105,030		363,025				2,843,563	Willamette R., trib. Columbia R.
Total	5,193,787	8,257,280	5,989,203	2,465,608	185,172	478,500	2,902,081	25,471,631	

(b) Fry.

* Metolius Blueback stock received from U. S. Fish and Wildlife service.

* Willamette Blueback stock received from U. S. Fish and Wildlife service.

COUNTS OF SALMON PASSING OVER BONNEVILLE DAM

Years 1938 to 1956

CHINOOK

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
January	*	6	—	4	1	11	1	6	1	—	10	—	—	—	—	—	—	—	—
February	*	12	—	—	15	6	2	4	2	2	—	—	—	—	—	—	2	—	—
March	*	121	504	1,380	34	43	65	81	25	141	251	5	21	32	255	1,254	657	1,391	161
April	*	51,410	37,253	51,501	9,506	12,172	15,970	17,148	14,179	83,520	21,205	6,765	6,630	28,801	8,130	126,450	82,877	84,436	8,850
May	22,371	25,159	28,621	19,445	30,915	53,268	15,127	26,270	53,313	49,899	20,262	44,304	50,638	86,055	107,807	42,583	51,230	85,769	54,438
June	8,221	5,602	7,028	7,013	11,816	5,440	4,363	11,293	30,081	25,502	44,137	24,232	16,667	54,889	62,491	27,228	46,801	45,502	64,262
July	6,556	17,845	14,938	9,395	12,821	8,044	8,341	16,327	20,960	13,358	23,100	22,500	32,937	24,394	21,800	30,593	32,596	37,437	36,938
August	34,765	32,919	58,643	12,590	27,581	28,985	55,468	32,254	45,421	43,062	35,834	41,500	40,462	33,785	82,290	27,396	24,969	32,833	42,203
September	197,294	150,851	240,515	351,967	303,995	201,414	139,254	189,675	277,075	260,385	270,238	137,599	205,521	97,131	135,053	75,145	80,426	70,558	92,030
October	2,302	2,197	3,765	7,179	4,485	3,354	2,388	4,281	4,521	3,945	3,928	1,571	4,356	6,489	2,576	1,495	1,189	1,803	—
November	263	78	287	866	639	365	164	137	170	529	467	215	143	212	477	333	200	124	—
December	27	16	34	134	190	21	29	6	25	36	23	6	—	—	—	—	—	—	—
Total	271,799	286,216	391,588	461,458	401,998	313,123	240,763	297,488	445,743	480,376	419,555	277,697	357,375	331,788	420,879	332,479	320,947	359,853	298,882

STEELHEAD

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
January	*	23	5	37	4	14	50	1,003	63	197	154	1	13	—	—	—	—	—	—
February	*	19	96	76	37	18	157	1,078	551	321	119	—	—	—	—	—	6	—	—
March	*	560	1,688	1,641	256	654	1,019	3,066	3,040	1,968	1,631	1,689	1,156	375	278	1,310	679	1,006	1,409
April	*	8,110	4,125	6,392	3,642	3,374	6,142	4,685	9,839	6,889	4,473	3,293	4,537	2,338	1,248	5,308	5,511	2,100	2,718
May	6,622	1,587	998	1,518	4,159	4,698	2,227	1,557	5,481	2,025	1,170	1,712	1,667	1,568	1,751	1,456	1,571	1,149	1,582
June	2,382	1,490	4,489	994	1,588	1,564	1,169	1,109	3,265	1,595	1,895	1,264	691	5,187	8,202	5,313	6,115	2,418	3,122
July	19,455	36,581	61,175	21,940	19,905	7,755	21,868	24,600	20,559	28,134	33,191	34,314	25,142	74,980	118,110	106,712	59,443	79,124	48,306
August	29,231	38,062	46,071	29,600	41,973	29,894	24,508	40,483	58,356	40,819	53,621	54,281	53,904	39,712	79,735	64,006	65,234	84,748	47,148
September	46,618	33,891	64,377	50,542	76,622	41,051	35,907	40,194	38,296	50,025	40,609	20,786	24,226	15,357	48,293	36,107	34,941	24,239	23,343
October	2,264	1,264	1,786	3,980	2,411	2,444	6,129	1,925	2,067	2,905	1,742	1,161	1,932	947	2,735	2,797	2,209	3,361	—
November	339	216	292	1,063	566	573	1,119	302	262	443	381	686	811	225	638	905	551	268	—
December	92	119	59	304	182	92	226	142	769	113	76	98	8	—	—	—	—	—	—
Total	107,003	121,922	185,161	118,087	151,345	92,131	100,521	120,144	142,548	135,434	139,062	119,285	114,087	140,689	260,990	223,914	176,260	198,411	127,628

BLUEBACK

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
January	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
February	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March	*	—	—	—	—	—	1	10	—	—	—	—	—	—	7	57	1	—	—
April	*	48	—	299	—	—	—	51	9	—	—	—	—	—	1	27	—	—	—
May	1,025	189	206	1,052	13	9	16	521	67	5	—	151	—	25	3	663	13	79	10
June	17,811	29,386	59,639	23,536	12,624	4,525	3,098	1,507	7,805	59,378	12,023	9,013	341	81,045	136,939	45,711	52,359	21,923	29,049
July	53,864	43,124	85,885	39,193	41,301	33,613	11,171	6,903	64,704	108,175	117,652	41,620	75,784	87,104	47,188	186,933	76,505	214,860	125,185
August	2,097	616	3,063	1,615	1,477	1,697	659	498	1,746	3,564	1,850	655	1,826	1,214	467	1,774	1,212	868	1,564
September	235	19	11	50	60	1	127	11	23	17	14	10	42	40	30	50	17	11	7
October	6	—	1	—	—	—	—	1	2	1	4	1	—	—	2	—	—	9	—
November	2	—	—	—	—	—	—	—	—	1	—	—	—	—	8	—	—	—	—
December	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Total	75,040	73,382	148,805	65,745	55,475	39,845	15,072	9,502	74,356	171,142	131,543	51,450	77,993	169,428	184,645	235,215	130,107	237,748	156,415

SILVERSIDES

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
January	*	3	3	2	—	—	—	—	—	12	1	—	—	—	—	—	—	—	—
February	*	—	—	—	—	—	—	—	10	2	—	—	—	—	—	—	—	—	—
March	*	—	—	—	—	—	—	—	4	1	—	—	—	—	—	—	—	—	—
April	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
July	—	—	—	—	—	—	—	2	22	—	11	17	—	—	10	1	—	—	7
August	3,070	1,810	1,451	1,317	1,193	762	1,052	239	227	217	158	270	1,570	197	2,581	7,094	668	443	1,158
September	10,995	12,226	10,212	16,061	11,061	1,676	3,021	533	3,609	10,928	3,893	703	8,545	4,773	5,131	5,890	3,319	3,188	4,879
October	972	310	213	369	147	89	103	16	1	10	10	5	36	225	22	22	74	94	—
November	141	15	33	160	—	20	29	—	—	3	3	8	—	6	24	11	1	—	—
December	7	18	5	2	—	—	2	1	24	1	5	1	—	—	—	—	—	—	—
Total	15,185	14,382	11,917	17,911	12,401	2,547	4,207	791	3,897	11,174	4,081	1,004	10,151	5,201	7,768	13,018	4,062	3,725	6,044

CHUMS

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
January	*	2	—	—	—	—	1	2	—	—	—	—	1	—	—	—	—	—	—
February	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
April	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
August	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
September	—	6	—	—	—	—	—	2	1	—	—	—	—	—	2	—	6	—	2
October	1,245	700	860	1,116	700	125	191	118	303	59	192	215	298	60	163	373	193	66	—
November	799	411	835	4,130	1,149	623	666	585	809	110	2,966	1,719	770	984	1,340	1,355	1,370	252	—
December	73	49	34	23	16	42	96	20	63	29	478	94	—	—	—	—	—	—	—
Total	2,117	1,168	1,729	5,270	1,865	790	954	727	1,176	199	3,636	2,028	1,069	1,044	1,505	1,728	1,569	318	2

TOTAL COUNTS BY MONTHS

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
January	*	34	8	43	5	25	52	1,011	64	209	168	1	14	—	—	—	—	—	—
February	*	31	96	76	52	24	159	1,082	563	325	119	—	—	—	—	—	8	—	—
March	*	681	2,192	3,001	290	597	1,085	3,157	3,069	2,119	1,882	1,694	1,177	407	540	2,621	1,337	2,397	1,570
April	*	59,568	41,378	58,192	13,148	15,546	21,812	21,884	24,027	90,409	25,878	9,058	11,167	31,139	9,379	131,785	88,388	86,536	11,568
May	30,018	26,938	29,825	22,015	35,087	57,975	17,370	28,354	58,861	51,929	21,433	46,167	52,305	87,648	109,561	44,702	52,814	86,997	56,030
June	28,414	36,478	71,156	31,543	26,028	11,529	8,630	13,909	41,121	86,475	58,655	34,509	17,699	141,121	207,632	78,252	105,275	69,843	97,033
July	79,875	97,550	181,998	70,528	74,027	49,412	41,289	47,832	108,245	149,607	173,954	98,451	133,863	186,478	187,108	324,239	168,544	331,421	210,436
August	69,163	73,407	109,228	45,123	72,224	61,338	61,607	73,474	105,750	87,663	91,583	96,706	97,762	74,908	165,073	100,272	92,083	118,888	92,073
September	255,142	196,993	315,115	416,620	391,738	244,142	179,309	230,415	319,004	321,355	314,754	159,098	238,334	117,301	188,509	117,192	118,709	97,996	120,261
October	6,789	4,471	6,625	12,644	7,743	6,012	8,811	6,341	6,894	6,921	5,876	2,953	6,622	7,721	5,498	4,687	3,665	5,333	—
November	1,544	720	1,447	6,219	2,354	1,581	1,978	1,024	1,241	1,082	3,817	2,628	1,724	1,427	2,487	2,604	2,122	644	—
December	199	202	132	467	388	155	344	169	881	180	582	199	8	—	—	—	—	—	—
Total	471,144	497,073	739,200	668,471	623,084	448,436	361,517	428,652	667,720	798,325	697,877	451,464	560,675	648,150	875,787	806,354	632,945	800,055	588,971

* Data not available. Figures for 1938 are from May 7 to December 31, inclusive.
 Figures show number of fish, subject to revision pending final audit.
 Courtesy—U. S. Engineers, Bonneville Division.

PACK OF CANNED SALMON ON THE COLUMBIA RIVER DURING THE YEARS 1928 TO 1955

Year	Number of Canneries	Chinook		Blueback		Silverside		Chum or Keta		Steelhead Trout		Total		Year
		Cases	Value	Cases	Value	Cases	Value	Cases	Value	Cases	Value	Cases	Value	
1928	24	251,404	\$4,355,218	4,814	\$ 100,131	49,136	\$ 478,355	124,953	\$ 747,619	15,339	\$ 222,139	446,646	\$5,903,462	1928
1929	21	242,838	4,234,214	10,072	181,296	90,684	917,561	54,619	314,928	23,804	257,025	423,117	5,905,024	1929
1930	21	281,346	4,082,810	9,823	194,480	110,430	1,156,042	11,371	43,324	16,535	171,541	429,505	5,658,177	1930
1931	20	294,798	3,754,929	4,125	68,000	39,268	247,878	3,518	11,754	11,990	110,429	353,599	4,191,000	1931
1932	15	216,511	2,023,390	2,795	33,540	46,492	280,853	17,261	44,879	13,132	91,924	286,191	2,474,588	1932
1933	14	251,157	2,719,303	6,921	96,894	36,430	263,190	24,398	107,351	17,805	142,440	336,711	3,329,176	1933
1934	13	251,068	2,630,152	6,869	82,428	65,428	536,731	24,455	92,608	14,901	121,000	362,721	3,468,919	1934
1935	10	205,870	2,479,450	1,302	17,619	95,184	725,868	15,495	59,499	14,838	122,846	332,739	3,405,282	1935
1936	11	220,188	2,964,058	9,837	137,718	36,541	303,263	30,597	110,149	19,282	317,867	316,445	3,833,055	1936
1937	11	291,343	4,256,819	7,526	126,436	69,801	725,996	30,592	138,309	17,568	189,734	416,830	5,437,294	1937
1938	10	173,892	2,707,267	13,889	260,369	67,257	630,364	37,704	143,275	15,248	152,480	307,990	3,893,755	1938
1939	10	207,595	3,336,206	5,301	102,359	69,082	730,549	15,201	75,416	25,293	320,025	322,472	4,666,141	1939
1940	11	244,570	3,785,681	23,974	471,530	59,737	623,681	25,282	125,420	33,436	373,514	386,999	5,379,826	1940
1941	11	328,609	5,558,254	33,070	661,400	35,727	481,834	83,144	572,994	33,162	453,502	513,712	7,727,984	1941
1942	12	274,750	5,692,929	23,256	625,230	26,541	497,070	118,051	911,538	21,803	429,678	664,401	8,156,445	1942
1943	11	130,373	3,094,505	2,880	77,586	5,707	61,065	12,439	112,421	16,261	323,874	167,860	3,669,451	1943
1944	10	163,047	3,714,591	758	20,342	12,210	137,072	1,525	11,590	19,222	375,838	196,762	4,259,433	1944
1945	8	132,014	3,095,228	112	3,001	22,154	244,060	1,032	8,848	19,314	363,068	175,670	3,723,456	1945
1946	11	159,872	5,940,740	9,726	369,588	6,883	206,490	15,617	247,392	17,373	510,720	209,471	7,274,939	1946
1947	10	250,318	8,613,000	15,079	664,000	42,789	1,278,000	17,121	252,000	21,999	650,000	347,306	11,457,000	1947
1948	12	235,310	9,342,000	3,339	147,000	39,425	1,099,000	26,201	498,000	19,977	615,000	324,242	11,701,000	1948
1949	12	133,347	3,682,000	6,630	225,000	16,740	415,000	12,386	186,000	9,019	221,000	178,122	4,729,000	1949
1950	11	136,635	4,964,201	3,630	146,687	29,507	939,296	12,952	234,457	10,266	360,830	182,990	6,645,471	1950
1951	10	143,046	5,497,305	4,552	186,543	29,099	841,234	11,566	192,850	14,862	469,615	263,125	7,187,547	1951
1952	9	95,353	3,506,181	9,824	413,774	29,701	875,380	13,759	214,837	18,979	612,987	167,616	5,623,150	1952
1953	8	97,320	3,267,303	3,014	127,791	24,219	676,237	9,775	130,062	19,420	616,621	183,199	4,823,332	1953
1954	8	71,993	2,550,257	8,485	336,212	12,670	367,000	12,530	190,484	13,379	453,303	119,657	3,902,256	1954
1955	8	116,138	4,349,750	3,242	145,924	21,392	716,283	9,190	170,199	14,056	476,002	164,018	5,868,158	1955

NOTE: Figures for the last year in this table are from "Pacific Fisherman's" compilation. Those for previous years have been revised from official data.
(We are able to show the above table through the courtesy of the Pacific Fisherman)