

FIFTH AND SIXTH ANNUAL REPORTS

OF THE

STATE BOARD

OF

FISH COMMISSIONERS

TO THE

GOVERNOR OF OREGON.

PUBLISHED BY AUTHORITY.

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# FIFTH ANNUAL REPORT

OF THE

## STATE BOARD OF FISH COMMISSIONERS.

*To His Excellency, Sylvester Pennoyer, Governor of Oregon:*

SIR — We herewith present you with the fifth annual report of the state board of fish commissioners, from December 1, 1890, to November 30, 1891.

Having filed their bonds with the secretary of state, the commission organized on the 11th day of March, 1891, by electing F.C. Reed president, and George T. Myers secretary.

The work of the commission since its organization has been much the same as in former years. At the last session of the legislature, through the efforts of the commission, our state laws for the protection of fish were revised, which has been of great benefit to the fishing industry, especially so as far as the Columbia river is concerned, as this is the dividing line between the two states of Oregon and Washington, whose legislative sessions have heretofore been held in alternate years, thus rendering it impossible to make laws that would conform to the wants of both states. But during the past winter of 1890-91, the legislatures of the two states were in session at the same time, and a committee from each was appointed to revise the fish laws and have them conform with each other so far as the Columbia river was concerned. The committees met in Portland and were in session two days, during which time they took testimony from some of the leading salmon packers from both states, from fishermen engaged in the different modes of taking fish, viz., by pound-nets, seines and wheels, and by members of the fishermen's union who represented the gill-nets, and the fish commissioners of each state. From the testimony taken, the committee drafted bills which were introduced and passed by both legislatures, under which the commissions worked the past season, and have found them to be far in advance of the previous laws, but not fully up to the recommendations offered by the commission, of which we will say more as we advance in our report.

A law was passed by the last legislature, which goes into effect on the first of January, 1892, prohibiting any person from catching fish for barter or sale in the waters of this state who is not a resident thereof. This we believe will be found to be of great importance to the fishing industry, as it will tend to decrease the number of fishermen, and those who do engage in the business, being residents, will take a greater interest in the welfare of the industry.

We were kept quite busy during the beginning of the season in seeing that the sawmills in the different parts of the state were complying with the law in regard to putting sawdust in streams, and have succeeded beyond our expectations, for after being duly notified that such a law had been passed there was a disposition shown by mill-owners in general to fix their mills to comply with the law. We had the proprietors of a mill in Washington county arrested for allowing sawdust to go into the stream from his mill. He appealed from the justice court to the circuit court, and the case has not been decided up to the present time. The proprietor of one of the mills on the Santiam was complained of for putting sawdust in the stream, and was tried recently before Judge Boise of the second judicial district. The judge decided that the law was unconstitutional. As soon as we heard of his decision we immediately requested the prosecuting attorney of the district to appeal the case to the supreme court, and were informed that he would do so. Before hearing of Judge Boise's decision we had the proprietor of a mill in Astoria arrested for the same offense, and on a jury trial before the justice of the peace he was found guilty and fined. He appealed the case to the circuit court, and we can only wait for a decision.

The following arrests were made during the fishing season, viz.: Fishing with pound nets, 5; fishing with traps, 1; fishing with gill-nets, 17; all of whom were tried before the justice, who, in due time, will render his account to the state treasurer. While we do not pretend that the above comprises all the illegal fishing that was done during the season, nevertheless when we take into consideration the number of men employed in the different modes of fishing, we can only come to the conclusion that the laws for the protection of fish are observed as well as the majority of the laws of the state.

In May, Mr. Reed was requested by Mr. Lindsley, state treasurer, and Mr. Crawford, fish commissioner, of the state of Washington, to accompany the hatchery commission appointed by the legislature of Washington, composed of the governor, state treasurer, and fish commissioner, to select a site for a hatchery. Thinking that whatever was done in Washington in the way of propagating salmon would be beneficial to Oregon, Mr. Reed granted the request, and

on the 12th of May left Portland and joined the party at Tacoma. They then proceeded to the Methow river, which is a tributary to the Columbia, in the county of Okanogan. After examining this stream and getting all the information possible from the settlers, they proceeded to the Okanogan river, in the same county, and also a tributary to the Columbia, examining it and getting information as before, then proceeded to the Similakamean, which is a tributary to the Okanogan. All of these streams were quite full from the melting snow in the mountains, and being muddy, of course no fish could be seen. After carefully examining these streams and getting all the information possible from the settlers, the hatchery commission decided that the Methow was the best of the three, and a site was located about fourteen miles from where it empties into the Columbia. Here the river is narrow and shallow, which will make it easy to construct a rack, with still, deep water below, which is good to hold fish until they are ripe or ready to spawn. There is also a good spring of water from which a good supply can be taken for all hatching purposes. Having concluded their labors they returned, and arrived in Tacoma on the 28th of May.

As it was necessary for Mr. Crawford to visit the location again later in the year when the stream was low and construct a rack to ascertain the number of salmon that could be taken there, they have not erected any buildings or taken any eggs to hatch this season, but will do so in time for next year's run; and our wish is that the best of success may attend their labors, for our future supply of salmon in the Columbia river depends wholly upon the amount of young fry that can be planted in its waters.

In our last report, for 1890, we were quite confident that we felt the effects of the work that had been done in the way of propagation by the increase in the number of salmon of medium size that were taken during the season; we were also very confident that we should see greater results during the season of 1891. While we do not know what would have been the results during the past season if no propagating had been done, we will admit that our hopes for a large run of salmon were not realized. There are several causes which, in our mind, may account for the decrease in the number of salmon during this season as compared with that of 1890. In February, 1890, we had a heavy freshet, and all who have been in the salmon business for the past ten or twelve years will remember that each spring after a winter freshet we have had a good run of salmon. Then, fishing did not commence in 1890 until the middle of May; this gave the fish a chance to get well into the river; also the spring or summer freshet came very early, the highest water being in May, so with the heavy freshet in the winter and the early summer freshet

there was no lack of fresh water to toll the fish into the river. While during the winter of 1890 and 1891 we had no freshet, it being a very dry winter, and while we had an average spring freshet, it came late in the season. When we take these causes into consideration, also the fact that we have occasionally had seasons when salmon were scarce ever since 1866, we do not think there is any cause for alarm as to the future supply of salmon, or any reason why any one should think that propagation of fish is a failure. We still have as much faith in it as ever, and believe it is the only salvation for a supply of food fish in the state for the years to come. We have already said that the run of salmon was not as good the past season as in 1890, and have given our reasons for the decrease, but the past season has not been the worst that has been seen, and not entirely unsatisfactory either to the fishermen or packers.

The season opened upon the 10th of April and continued without any interruption until the 10th of August, when all were ready and willing to stop; in fact many of the fishermen quit before the season closed, as fish were too scarce to make it pay.

The amount of salmon packed in Oregon during the season will be found under the head of "Statistics of the Fishing Industry."

### OPERATIONS AND RESULTS OF THE LAW.

Under this head we will say that the laws passed by the last legislature, so far as they have come into operation, have proven to be a step in the right direction, and if more of the recommendations of the commission in their last report had been acted on by the legislature, and had become laws, the fishing industry would have been on much better footing than it is; but we are thankful for small favors, and will at the proper time renew some of our former recommendations and add some new ones, and by so doing we trust in time that our state may not be classed as a mossback in reference to its laws for the protection of fish.

There has been much said through the press of the state, as well as from citizens, on the matter of fish-ways. It is not so simple a thing to construct a practical fish-way as many suppose. We have done the best we could with our limited experience to have this part of the law complied with, and while in some cases it may have been a partial failure, in many we think we have obtained the desired object. We have written to every one we know of to obtain the best and cheapest fish-way. We found in some of the reports from the different state commissions that the McDonald fish-way was the best, and have written to the company for plans and cost of construction, but have been unable to get any reply. We wrote for a plan of the Rogers patent fish-way, which is a Nova Scotia patent,

and got some plans which gave us an idea of its workings, but think it quite expensive, and could not recommend it until we have seen more of it and become better acquainted with its efficiency to obtain the desired results.

### METHODS OF FISHING.

No new methods of taking fish have come to our notice since our last report, and one would think that there was little room for improvement in the methods now employed for the destruction of the inhabitants of our waters, but as this is an age of improvement and progression we need not be surprised if at any time some ingenious mind finds a way of taking the fish by the thousands where they are now taken by the hundreds.

### HATCHERIES.

We are sorry to say that our report under this head will be somewhat meager. As you are well aware, the legislature made no appropriation with which the commission could carry on the good work. We have already said that we have not lost faith in artificial propagation, and still hope that future legislators may be induced to see the necessity of making sufficient appropriation to carry on this great work, on which one of the largest industries of the state depends. In our last report, figures and comparisons may be found which we think will be an inducement to any thoughtful-minded man to help along a cause that promises so much for the present and future generations.

The work of the United States commission at the Clackamas station for the season of 1890 was all that could have been expected, as they took nearly 7,000,000 eggs and had the best of success in hatching them, losing less than ten per cent. As stated in our last report, we took 800,000 eggs from the Clackamas and hatched them out at the Warrendale station, losing less than one per cent in transporting and hatching. These young fish were planted in the Columbia in the vicinity of the station. The work at the Clackamas with that of 1890, which may be attributed to unavoidable causes. The principal one is the slack run of salmon all through the season; and, again, the fishing commenced on the Columbia the 10th of April, which prevented many of the early salmon from getting up the Clackamas, whereas in 1890 fishing did not begin until the middle of May, giving the early fish an unobstructed passage up the river. Owing to the limited number of eggs taken at the Clackamas this season we did not take any eggs to the Warrendale station. We still think with a small amount of money we could accomplish

much in conjunction with the United States commission, by going further up the Clackamas, which would enable us to get nearly all of the early salmon which go past the United States station before they can construct the rack in the spring; and when the eggs arrive at the stage when they can be transported with safety they could be taken down to the United States station, or elsewhere, to be hatched, and the fry planted.

From the last report we have received from the station we do not think they will secure more than 2,000,000 eggs this season. Allowing for ten per cent loss in hatching, it will leave 1,800,000 young fish to be planted. While this is a small amount to what should be turned out, it is nearly as many as have been taken from the river this season.

#### EXPENSES INCURRED.

Date.	Payee.	On what account.	Amount.
1891.			
Jan. 2.	F. C. Reed	Reimbursement for expenses for Warrendale hatchery to January 1, 1891	\$ 352 00
Jan. 2.	F. C. Reed	Salary for quarter ending December 30, 1890	500 00
April 1.	F. C. Reed	Salary	500 00
April 1.	F. C. Reed	Reimbursement	41 85
April 1.	Geo. T. Myers	Salary	75 00
April 1.	R. C. Campbell	Salary	50 00
April 1.	R. C. Campbell	Expenses	24 00
July 2.	F. C. Reed	Salary	500 00
July 2.	F. C. Reed	Reimbursement	80 95
July 2.	Geo. T. Myers	Expenses	61 00
July 2.	R. C. Campbell	Salary	100 00
July 2.	R. C. Campbell	Expenses	42 00
July 15.	F. C. Reed	Reimbursement	21 50
Aug. 10.	W. W. H. Sampson	Expenses	17 50
Oct. 1.	R. C. Campbell	Salary	100 00
Oct. 1.	R. C. Campbell	Expenses	50 00
Oct. 1.	Geo. T. Myers	Salary	175 00
Oct. 1.	F. C. Reed	Salary	500 00
Oct. 1.	F. C. Reed	Reimbursement	305 05
	Total		\$ 3,495 85

We have done nothing at the Warrendale station this year, so we have no hatchery expenses. The estimated expenses for the commission from quarter ending September 30, 1891, to January 1, 1892, including salaries, was \$650. As will be seen the first two items in the above table were to close up the year 1890, or the work of the outgoing commission, and should be deducted from the total. The remainder, including the above estimate, will be the expenses of the commission for the year 1891.

#### STATISTICS OF THE FISHING INDUSTRY.

We still find great difficulty in obtaining correct figures with which to make up statistics of the industry, as many of those engaged

both in the catching of the fish and in handling them after they are caught, are very backward in giving figures of the amount of fish handled by them, some of the dealers who handle large quantities even absolutely refusing to give us any information. We know of no reason they can have for refusing, as we only give the total amount of the different varieties of fish handled by all of them.

Such as we have been able to obtain we give in the following tables:

TABLE SHOWING THE SALMON PACKED IN TINS IN 1891.

Where packed.	No. of cases.	No. of pounds.	Value.
Columbia river	245,550	11,786,400	\$ 1,227,750
Nehalem river	3,500	168,000	14,000
Tillamook bay	3,850	184,000	15,400
Siuslaw river	3,500	168,000	14,000
Coquille river	4,000	192,000	16,000
Rogue river	21,000	1,008,000	105,000
Totals	281,400	13,506,400	\$ 1,392,150

TABLE

Showing the number of pounds of salmon and other fish consumed locally and shipped east fresh.

Variety.	No. of pounds.	Value.
Salmon	5,680,500	\$ 397,635
Sturgeon	2,870,500	143,525
Caviar of sturgeon	30,000	3,000
Shad	50,000	5,000
Trout	40,000	4,000
Smelt	150,000	12,000
Carp	30,000	1,500
Catfish	10,000	500
Tomcod	10,000	500
Sardines	8,000	400
Oysters	300,000	3,750
Clams	100,000	1,650
Fish oil	210,000	9,000
Fertilizer	60,000	600
Totals	9,549,000	\$ 583,060

TABLE SHOWING FISHING APPARATUS.

Designation.	No. of each.	Total tonnage.	No. men employed by each.	Value.
Steamers carrying fish	5	30 tons	7	\$ 5,000
Sloops and plungers carrying fish	7	30 tons	7	3,000
Fishing boats	540 }			54,000
Gill nets	600 }		1,080	60,000
Seines	17		136	10,000
Pound nets	27		54	21,600
Traps	13		13	7,000
Fish wheels	27		75	54,000
Total value				\$ 214,600



TABLE OF FACTORIES.

Where located.	No. of each.	No. men employed.	Value of buildings and machinery.
Columbia river	18	1,020	\$ 180,000
Columbia river (not operated)	5		
Oil and fertilizer	1	3	3,000
Nehalem	1	30	3,500
Tillamook	1	30	4,000
Nestucca	1		4,000
Coos Bay	2		7,000
Coquille	1	35	4,500
Yaquina	1		3,000
Alsea	1		5,000
Siuslaw	2	40	7,000
Umpqua	1		8,000
Rogue	1	60	10,000
Totals	36	1,218	\$ 233,000

NOTE.—This estimate does not include real estate.

TABLE

Showing number of men employed, and average rate of wages for season.

Where employed.	No. of men.	Wages per man of season's work of four months.	Amount.
Factories	1,218	\$ 200	\$ 243,600
Steamers	7	200	1,400
Sloops and plungers	7	240	1,680
Gill nets	1,080	300	324,000
Sekes	136	240	32,640
Pound nets	54	200	10,800
Traps	13	200	2,600
Fish-wheels	75	240	18,000
Totals	2,590		\$ 634,720

As will be seen by the above statistics, we have confined our report entirely to the industry as carried on in Oregon. This will make our fishing interests look small when compared with our former reports, as we have heretofore given Oregon and Washington together in reference to the Columbia river, whereas now we will leave the state of Washington entirely to their commissioner, believing him capable of giving a better report than we can make; and we also hope it may be the means of getting both the reports of Oregon and Washington more carefully examined by the residents of the two states, and by so doing instigate a friendly rivalry between them that may be of benefit to each.

It is with pride and pleasure that we record the fact that in looking over the statistical review of the coast fisheries of the United States, as prepared under the direction of J. W. Collins, assistant in charge of the division of fisheries of the United States commission, we find that Oregon in 1888, based on value of products, was fourth in rank of the coast states in their general fisheries, Massachusetts, Maine and California being the three states that outranked us. If

we confine these three states to the product of their shore fisheries and compare them with Oregon, our product will be found to exceed that of the other three states combined. You will notice that our fishing industry is confined entirely to inland fisheries, while the bulk of the products of the other states are taken from the ocean. Our ocean fisheries will not be developed until we have railroad communication established between our seaports and the cities of the interior, when quite an industry may be looked for.

## RECAPITULATION

Of the salmon fishing industry of Oregon, also of the Pacific coast.

Where packed.	Number of cases packed.	Pounds consumed at home and shipped east fresh.	Value.
<b>Oregon —</b>			
Columbia river.....	245,550		\$ 1,227,750
Nehalem.....	3,500		14,000
Tillamook.....	3,850		15,400
Siu-law.....	3,500		14,000
Coquille.....	4,000		16,000
Rogue.....	21,000		105,000
		5,650,500	397,635
<b>Total.....</b>	<b>281,400</b>	<b>5,680,500</b>	<b>\$ 1,789,785</b>
<b>Washington —</b>			
Columbia river.....	144,763		\$ 728,815
Gray's harbor and vicinity.....	8,000		32,000
Puget sound and Shoalwater bay.....	45,000		180,000
		3,500,000	175,000
<b>Total.....</b>	<b>197,763</b>	<b>3,500,000</b>	<b>\$ 1,115,815</b>
<b>California.....</b>	<b>45,000</b>	<b>*2,500,000</b>	<b>\$ 202,500</b>
			175,000
<b>Total.....</b>	<b>45,000</b>	<b>2,500,000</b>	<b>\$ 377,500</b>
<b>Alaska.....</b>	<b>785,000</b>	<b>†8,000,000</b>	<b>\$ 2,725,000</b>
			160,000
<b>Total.....</b>	<b>785,000</b>	<b>8,000,000</b>	<b>\$ 2,885,000</b>
<b>Grand total for Pacific slope of United States.....</b>	<b>1,309,163</b>	<b>19,680,500</b>	<b>\$ 6,169,100</b>
<b>British Columbia—</b>			
Fraser river.....	140,000		\$ 560,000
Nass river.....	10,000		40,000
Skeena river.....	100,000		400,000
Other rivers.....	15,000		64,000
		‡4,000,000	80,000
<b>Total.....</b>	<b>265,000</b>	<b>4,000,000</b>	<b>\$ 1,144,000</b>
<b>Grand total for Pacific coast.....</b>	<b>1,575,163</b>	<b>23,680,500</b>	<b>\$ 7,313,100</b>

\* Estimated. † Indian consumption, estimated. ‡ Estimated home consumption.

In comparing these figures with our last report it will be seen there was a small falling off in the number of cases packed on this coast, with a corresponding falling off in values. The Columbia river and British Columbia packs are short, while the Alaska pack is far in advance. Our fishing industry, aside from salmon, is steadily increasing in quantities and varieties, as you will notice we have added carp and catfish to the list; the latter, while they are and perhaps always will be called catfish, are only a species of them, and are known in their native waters as bullheads, and do not get to more than two or three pounds' weight, but are said to be a nice fish for the table when fresh. The carp are mostly taken from the Willamette river in the vicinity of Portland, and while the greater part of them are consumed by the Chinese, we find them on the tables of nearly all the fish markets, which goes to show that they are becoming a cheap article of food for our citizens. The shad are still increasing in our waters and in our opinion will, within a few years, rank next to our salmon as an industry. They have been taken in large numbers during the past season by pound nets and seines, and many of them have been shipped to the markets, while the greater part have been consumed by the fishermen and distributed among their friends. They are far superior to the shad of the Atlantic coast, being much larger, some weighing eight pounds and nearly as fat as mackerel.

Before closing our report we think it our duty to call your attention to the fact that some of the fish dealers in our towns are apt to handle salmon too late in their season, or when they are near the period of reproduction. This is true of every species of the salmon family. They are handled in vast numbers, too, with the exception of the real Chinook; of these they get but few, as they go to the headwaters of our streams to deposit their spawn, and are not so far advanced when in the vicinity of the fishing grounds; but it is especially noticeable in respect to the varieties that come in the fall, and are classed as fall salmon, among which are the Silversides. They are a very good fish if taken before they have been in fresh water too long, but as they near their spawning season, their skin begins to turn red and the flesh soft, and while they may not be poisonous, we think they are unwholesome for food—as much so as any animal flesh would be at the same period, which no one would think of eating.

Before closing our report we think it our duty to call the attention of our readers to the subject of the coming World's Columbian Exposition, to be held in Chicago in 1893. We think if the people of Oregon let this great opportunity pass to advertise the resources of this growing state, not only before the people of our own country,

but before the people of the whole civilized world, that it will be one of the greatest mistakes ever made, and more especially so in regard to our fish industry. The one product that Oregon is best known by in remote states of our own country, and in foreign countries, is its canned salmon, and people coming to this exposition would expect to see this great industry, in its details, fully shown, and if disappointed would very naturally conclude that as a state we were lacking in enterprise, and our industries in decadence. We believe with such a showing as this state could make before the people of the world with our fish and fish products, it would be an inducement to hundreds of people and thousands of dollars of capital to come here. We have received several inquiries from J. W. Collins, chief in charge of the department of fish and fisheries, as to whether Oregon was going to make an exhibit of her fisheries and fish products. The only answer we could give was that Oregon had appropriated no money for the purpose; and unless the people engaged in the business think it to their advantage to make a display of their goods, we can do nothing.

In conclusion we will say that from our experience in the past we still have great hopes for the future of the fish industry of our state, and of the whole Pacific Northwest.

F. C. REED,  
R. C. CAMPBELL,  
GEO. T. MYERS,  
Commissioners.

# FISH LAWS OF OREGON.

## RELATING TO OYSTERS.

SEPT. 27, 1862 §1  
Who privileged  
to take oysters.

§ 3846. No person not a citizen of the United States, or competent to become such under the laws of congress, and actually domiciled within the state, and subject to state and county taxes, shall gather oysters in natural beds, for sale or transportation or for replanting, nor shall own any artificial oyster-bed or any interest therein; nor shall any person purchase oysters for transportation or replanting, except from persons so qualified.

OCT. 21, 1864.  
Oysters, when  
they may be  
removed from  
natural beds.  
Same as to arti-  
ficial beds.

§ 3845. No person shall remove oysters from natural beds between the fifteenth day of June and the tenth day of September in any year; *provided*, that nothing in this chapter shall be so construed as to prevent any person owning artificial beds from taking oysters from said beds at any time.

OCT. 29, 1870.  
Natural oyster  
beds free to cit-  
izens of this  
state.

§ 3844. The natural beds of oysters on the waters of this state shall be free to all citizens thereof who shall have resided in this state one year, and shall have been residents of the county where such beds are located for a period of six months immediately preceding the time of taking such oysters; but artificial plantations of oysters belonging to citizens of this state, if distinctly marked out by means which shall not obstruct navigation, and not exceeding the extent allowed by local regulations, shall be deemed and protected as private property; and the following portions of Yaquina bay, in Benton county, are hereby designated and set apart for artificial plantations of oysters, to wit: Brown's flat, Pool's slough, Lyman's eddy, and Green point; and the size and dimensions of said oyster-beds shall remain as they have been fixed by the local regulations of the oystermen's association, not exceeding two acres in any one plantation; and every person holding a claim for the cultivation of oysters shall in all respects comply with the local regulations applicable thereto.

Artificial beds  
private prop-  
erty.  
Private beds in  
Yaquina bay.

§ 3847. No person shall gather or take oysters from natural beds within the waters of this state with a scoop, scrape, drag, or dredge, where the water is of a less depth than twenty-four feet at low tide; nor shall any person gathering oysters from natural or artificial beds commit or permit waste by casting young oysters or shells on the shore or in places unfavorable to their growth or increase.

OCT. 29, 1876. §1  
Persons taking  
oysters not to  
commit waste  
or use scoop, etc  
St. 1876. p. 7.

§ 1951 [701]. Every person who shall be guilty of violating any provision of sections 3844, 3845, 3846 and 3847, shall, on conviction thereof, be fined in any sum not exceeding one thousand dollars for every such offense.

OCT. 29, 1870. §1  
Violating act  
relating to oys-  
ters.

#### KILLING FISH WITH EXPLOSIVES.

§ 1948 [697]. It shall be unlawful for any person or persons, at any time, to place, or use, in any of the streams or rivers of this state, any drugs, charms, or powder, or to use any giant-blasting or gunpowder, or other explosive material, for the purpose of catching, killing, or destroying fish; and any person violating the provisions of this section shall be fined twenty dollars for the first offense, double that sum for the second, and treble that sum for each succeeding offense, to which may be added imprisonment for any time not exceeding ninety days.

OCT. 17, 1872. §6  
Killing fish  
with explo-  
sives.

§ 1949 [698]. It shall be unlawful for any person or persons to place in any fresh water stream, lake, or pond, any lime or deleterious substance with intent to injure fish, or any drug or medicated bait with intent to poison or catch fish; and any person offending against the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than one hundred dollars, or be imprisoned not less than five nor more than ninety days, at the discretion of the court.

Id. § 7  
Catching fish  
with drugs.

§ 1950 [700]. Any person or corporation who shall hereafter construct any dam or other obstruction across any stream of this state in which salmon or other migrating fish run, shall provide a ladder or way, so as to permit such fish to pass such dam or other obstruction; and any offending against the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not less than fifty nor more than five hundred dollars; *provided*, that the provisions of this section shall not be construed to apply

OCT. 16, 1878.  
§1, laws of 1878.  
p. 21.  
Obstructing  
migration of  
fish in streams.

OCT. 16, 1878.  
§ 1 laws of 1878,  
p. 21.

Obstructing  
migration of  
fish in streams.

to any person or corporation duly organized for the purpose of propagating salmon or other fish in any of the streams of this state.

#### PROTECTION OF RED FISH.

OCT. 25, 1880.  
§ 1, p. 27.

Protection of  
fish.

§ 1949. It shall be unlawful for any person or persons to take, kill, or destroy, or to pursue with intent to take, kill, injure, or destroy any red fish or any lake trout in any of the lakes, rivers, or streams in the state of Oregon, from the 10th of August to the 31st of December, inclusive, of each year. Any person violating the provisions of the preceding section shall, upon conviction thereof, be punished by a fine not less than twenty dollars nor more than fifty dollars, or by imprisonment in the county jail not less than twenty days nor more than sixty days. Justices of the peace shall have jurisdiction of all offenses against the provisions of this act.

OCT. 20, 1882. 27

Unlawful tak-  
ing of trout.

§ 1936. Every person who shall, within the state of Oregon, during the months of November, December, January, February and March of any year, catch, kill, or have in possession, sell, or offer for sale, any mountain or brook trout, shall be guilty of a misdemeanor. Every person who shall, within the state of Oregon, take, or attempt to take, or catch, with any seine, net, weir, or other device than hook or line, any mountain or brook trout at any time after the passage of this act, shall be guilty of a misdemeanor.

Nov. 21, 1885. 31  
Laws of special  
session, 1885, p. 7

Obstructing  
passage of fish  
through the  
fishway.

§ 1945. Any person or persons who shall take, catch, kill, molest, injure, or destroy fish on any fish-ladder, fishway, or other structure or superstructure for the passage of fish, or shall, with any seine or nets, fish-traps, or other device, obstruct the free passage of fish in the channel of the approaches to said fish-ladder or way, or other structure or superstructure, for a distance of six hundred feet from the approach of said ladder or way, or within two hundred and fifty feet from the upper portion of said fish-ladder or way, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined not less than five dollars nor more than one hundred dollars for each offense; and each additional fish after the first fish so taken, caught, killed, molested, injured, or destroyed, shall constitute and be deemed a separate offense within the provisions of this act; a justice of the peace shall have jurisdiction to try all violations of this act.

§ 3482. There shall be chosen biennially, by the legislative assembly of the state of Oregon, three competent persons, who shall be denominated the fish commission, whose term of office shall continue two years, and until their successors be chosen and qualified.

FEB. 18, 1887. 21  
Fish commis-  
sioners to be  
chosen by the  
legislative  
assembly.  
Their terms of  
office.

§ 3483. Before entering upon his duties each member of said commission shall file with the secretary of state a bond, with ten or more sufficient sureties, and in the sum of five thousand dollars, conditional that he will discharge his duties under this act faithfully.

Id. § 1.

Their quali-  
fications.

§ 3484. Said commissioners shall choose one of their number as chairman, and he shall be known as president of the fish commission.

Id. § 3.

The commis-  
sioners choose  
president.

§ 3485. It shall be the duty of the president to give his entire time and attention to the fishing interests of the state of Oregon, and by and with the advice of the fish commissioners see that all laws for the propagation, protection, and preservation of food fishes in the public waters of the state of Oregon, whether entirely or partially within the state boundaries, are enforced; to select and purchase suitable land, build, operate, and manage thereon a fish hatchery on the Columbia river, or on its tributaries, for the purpose of supplying said waters with young fish; to employ necessary and competent men to successfully carry on said hatchery on the Columbia river, or on its tributaries, and to examine into and report upon the result of the salmon hatchery on the Rogue river.

Id. § 4.

Duties of the  
president.

§ 3486. Said fish commission shall annually, on December 1st, report to the governor of this state a full account of its actions under this act; also of the operations and results of the laws pertaining to the fish industry, the methods of taking fish, the number of young fish hatched, and where distributed, amount of expenses incurred, and make suggestions as to the needs of further legislation, if any, and full statistics of the fishing business.

Id. § 5.

Reports of the  
commissioners

§ 3487. The president of the fish commission shall receive an annual salary of two thousand dollars; the other members of the commission shall receive five dollars each per day for time actually employed, not exceeding fifty days each per annum.

Id. § 6.

Compensation  
of the commis-  
sioners.

§ 3488. All expenses incurred under the provisions of this bill shall be audited by the secretary of state, upon

Id. § 8.

Expenses in-  
curred under  
this act, how  
audited and  
paid.



FEB. 18, 1887. <sup>28</sup> bills being presented properly certified by the president as approved by the commission, and the said secretary of state shall from time to time draw warrants upon the state treasurer for the amount.

Expenses incurred under this act, how audited and paid.

FEB. 16, 1891. AN ACT to Protect Salmon and Other Food Fishes in the State of Oregon, and Upon All Waters Upon Which this State has Concurrent Jurisdiction, and to Repeal Sections 3489, 3490, 3491, 3492, 3493, 3494, 3495, 3496, 3497 and 3498 of Hill's Annotated Laws of Oregon.

Title of the act.

*Be it enacted by the Legislative Assembly of the State of Oregon:*

Season of fishing for salmon.

Section 1. It shall be unlawful to take or fish for salmon in the Columbia river or its tributaries by any means whatever, in any year hereafter, between the first day of March and the tenth day of April, or between the tenth day of August and the tenth day of September, or in any of the rivers and bays of the state or the Columbia river during the weekly close time—that is to say, between the hours of six o'clock P. M. on each and every Saturday and six o'clock in the afternoon of the following Sunday; *provided*, that in Clackamas river it shall not be lawful to take or fish for salmon, by any means whatever, between the tenth day of August and the first day of October; and any person or persons fishing for or catching salmon in violation of this section, or fishing for salmon by leaving or having any fishing gear in the water in a condition to take fish, or purchasing salmon so unlawfully caught, or having in his or their possession any such salmon, shall be deemed guilty of a misdemeanor, and upon conviction thereof, be fined in a sum not less than fifty dollars nor more than two hundred and fifty dollars.

When unlawful to catch salmon.  
Penalty.

Section 2. It shall be unlawful in any manner to catch, kill, or destroy any salmon on or within one mile below any rack or other obstruction erected across any river or stream for the purpose of obtaining fish for propagation, and any person or persons violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and, upon conviction thereof, be fined in a sum not less than fifty dollars nor more than two hundred and fifty dollars, and any and all appliances used in the violation of this act, viz.: boats, nets, traps, wheels, seines, or other appliances, shall be subject to execution for the payment of the fine herein imposed.

Section 3. It shall not be lawful for any person or persons to take or fish for salmon in the waters of the Nehalem, Tillamook, Nestucca, Salmon, Siletz, Yaquina, Alsea, Siuslaw, Umpqua, Coos Bay, Coquille, Sixes, Elk, Chetco, Rogue river, Windchuck, or any of their tributaries, or in any other streams or bays in this state, except the Columbia river and its tributaries, from the 15th day of November until the first day of April during any year hereafter, and any person or persons violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and, upon conviction thereof, be fined in a sum not less than fifty dollars nor more than two hundred and fifty dollars.

FEB. 16, 1891.  
Same subject.

Section 4. It shall not be lawful for any pound-net, set-net, trap, weir or other fixed appliance for taking fish, to extend more than one-third of the way across the breadth of any stream, channel or slough, at the time and place of such fishing; and any person or persons violating any of the provisions of this section, shall be deemed guilty of a misdemeanor, and upon conviction thereof, be fined not less than fifty dollars nor more than two hundred and fifty dollars.

How far net, trap, etc., shall extend in the stream.

Section 5. It shall not be lawful to cast or pass or allow to be cast or passed into any waters of this state into which salmon or trout are wont to be, any lime, gas, coculus indicus, or any other substance deleterious to fish; and any person or persons violating any of the provisions of this section, shall be guilty of a misdemeanor, and upon conviction thereof, be fined in a sum not less than fifty dollars nor more than two hundred and fifty dollars.

Deleterious substances prohibited.  
Penalty.

Section 6. It shall be unlawful for any person or persons to receive or have in his possession, or to offer for sale or transportation, or to transport during the close season in the spring, namely, from March first to April tenth, any of the following varieties or kinds of fresh fish: Chinook salmon, silver salmon, steelhead or blueback; and any person or persons violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and be fined in a sum not less than fifty dollars nor more than two hundred and fifty dollars.

Penalty for possessing certain fish.

Section 7. Any person or persons now owning and maintaining, or who shall hereafter construct or maintain any dam or other obstruction across any stream in this state which any food fish are wont to ascend, without

Persons owning dam must construct fish-way or ladder.

FEB. 16, 1891.  
Persons own-  
ing dam must  
construct fish-  
way or ladder.

providing a suitable fishway or ladder for the fish to pass over such obstruction, shall be deemed guilty of a misdemeanor, and upon conviction thereof be punished by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars, and said dam or obstruction may, in the discretion of the court, be abated as a nuisance.

Sawdust not to  
be thrown in  
stream.

Section 8. It shall not be lawful for the proprietor of any sawmill in this state, or any employe therein, or any other person, to cast sawdust, planer shavings or other lumber waste made by any lumber manufacturing concern, or suffer or permit such sawdust, shavings, or other lumber waste to be thrown or discharged in any manner into the waters of this state, or the Columbia river, or to deposit the same where high water will take the same into any of the waters of this state, or the Columbia river; and any person or persons violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not less than one hundred dollars nor more than two hundred and fifty dollars.

The term  
"salmon."

Section 9. Whenever the term salmon is used in this act, it shall be considered to include Chinook, Steelhead, Blueback, Silverside, and all other species of salmon.

Fish commis-  
sion fund.

Section 10. All the moneys collected under the provisions of this act shall be paid into a fund to be known as a fish commission fund.

How fine en-  
forced.

Section 11. Payment of any fine and cost imposed under the provisions of this act shall be enforced in the same manner as is now provided by law in other criminal actions.

Concurrent  
jurisdiction.

Section 12. Justices of the peace shall have concurrent jurisdiction with the circuit court of all offenses mentioned in this act.

Propagation.

Section 13. Nothing in this act shall be construed so as to prevent the taking of fish at any time of the year and in any manner for propagation.

Closing of  
pound net.  
Posting of  
number.

Section 14. Every person or persons owning or operating or using any pound net shall, during the weekly close times aforesaid, cause the entrance thereto and into the heart thereof to be securely closed in such manner as to prevent fish from entering the same, and the tunnel thereof shall be lifted so that fish cannot pass through it. And every person owning, using, or operating any pound

net or trap in any river or waters of this state, or in any river or waters over or upon which this state has concurrent jurisdiction, shall cause to be posted in a conspicuous place thereon a number not less than six inches high, painted in black on a white ground, which number shall be named and designated to such person by the fish commission, and such person or persons owning, using, or operating any such trap or pound net shall conspicuously show at night time, between sunset and sunrise, a bright white light; and any person violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than ten dollars nor more than two hundred and fifty dollars.

FEB. 16, 1891.  
Closing of  
pound-net.  
Posting of  
number.

Section 15. That sections 3489, 3490, 3491, 3492, 3493, 3494, 3495, 3496, 3497, and 3498 of the general laws of Oregon, as annotated and compiled by W. Lair Hill, be and the same are hereby repealed.

Section 16. This act shall be in force from and after its passage.

Approved February 16, 1891.

AN ACT to Regulate Salmon and Sturgeon Fishing in the Rivers and Waters of this State, and in the Rivers and Waters Over Which it Has Concurrent Jurisdiction. Title of the act.

*Be it enacted by the Legislative Assembly of the State of Oregon:*

Section 1. That from and after the first day of January, 1892, it shall be unlawful for any person to fish for or take any salmon or sturgeon fish in any of the rivers or waters of this state or over which it has concurrent jurisdiction in civil and criminal cases, unless such person be a citizen of the United States, or has declared his intention to become such, one year prior thereto, and is and has been for six months immediately prior to the time he engaged in such business an actual resident of this state.

Who disqualified from fishing.

Section 2. Any person desiring to fish for salmon or sturgeon fish in any such rivers or waters may go before any recorder of conveyances, or county clerk of any county of this state, and furnish satisfactory evidence of his citizenship, or of the fact that he has declared his intentions to become such one year prior thereto, and file his own affidavit and the affidavit of two other persons

Satisfactory evidence of citizenship.

FEB. 16, 1891.  
Satisfactory  
evidence of  
citizenship.

to the effect that he is and has been for six months prior thereto an actual and *bona fide* resident of this state, and thereupon such recorder or clerk shall issue to him a certificate briefly reciting these facts; and thereupon in any prosecution against such person for a violation of the provisions of this act such certificate or duly authenticated copies of the record in the office of the clerk or recorder relative thereto shall be *prima facie* evidence of his citizenship and residence, as in this act required. But in all prosecutions under this act the burden of proof shall be on the defendant to establish the facts of his citizenship and residence.

Penalty.

Section 3. Any person violating any of the provisions of this act, upon conviction thereof before any justice of the peace, shall be fined not less than five nor more than two hundred and fifty dollars.

Fee of recorder  
or clerk.

Section 4. For taking the affidavits and issuing the certificates herein provided for, the recorder or clerk shall be entitled to receive and collect from the party applying the sum of one dollar, and he shall keep in his office a record of all certificates issued pursuant to this act.

Proviso.

Section 5. Nothing in this act shall be construed to prevent citizens of any state having concurrent jurisdiction with this state over or upon any rivers or waters from fishing upon such rivers or waters.

Title of the act. AN ACT to Protect and Promote the Fishing Industry of the State of Oregon, and to Collect Money from Certain Persons Engaged in said Industry to be Used to Protect and Promote the Same.

*Be it enacted by the Legislative Assembly of the State of Oregon:*

Dealers re-  
quired to keep  
accurate ac-  
count of all fish  
handled.

Section 1. That every person, persons or corporation within the state of Oregon engaged in canning, packing, preserving, dealing in, shipping from first hands for profit, or speculating in salmon or any variety or species thereof, including those catching or taking the fish used by them, shall be required to keep an accurate account of all such fish handled in his or their business during each year, and shall, on or before the first day of March and the first day of September of each year hereafter, make to the secretary of state a full and correct report of the number of each variety of salmon taken, purchased, or received by him or them for the purpose of and used in canning, packing, preserving, shipping, buying from first hands

for profit, or dealing in or speculating in for sale or profit, with the name of each person from which said fish were purchased or procured, or if taken or caught by such person or corporation, the number thereof, which report shall be duly subscribed and sworn to before an officer authorized to administer an oath in this state.

FEB. 16, 1891.  
Dealers re-  
quired to keep  
accurate ac-  
count of all  
fish handled.

Section 2. That, for the purpose of this act, the state shall be divided into three fishing districts, known and designated as follows: District number one, to include all streams and bays included between the California state line on the south and Hecla Head on the north; district number two, to include all streams and bays from Hecla Head on the south to Tillamook Head on the north; and district number three to include all north of Tillamook Head, including the Columbia river and its tributaries in Oregon.

Division of  
state into three  
fishing dis-  
tricts.

Section 3. That every person or corporation within the state, engaging in canning, preserving, dealing in, packing, shipping, buying from first hands for profit, or speculating in salmon or any variety thereof, shall pay one-half of one cent apiece for chinook salmon, and one-sixth of one cent each for steelheads, and one-sixteenth of one cent apiece for bluebacks, and one-fourth of one cent apiece for silversides taken in district number three; and every such person or corporation shall pay one-half of one cent apiece for each chinook salmon, and one-fourth of one cent apiece for each silverside taken in districts numbers one and two.

Dealers to pay  
certain amount

Section 4. That all moneys made payable or collectible by this act shall be due and payable semi-annually, within thirty days after the first day of March and the first day of September of each year hereafter, to the state treasurer, which money shall constitute a fund to be known and designated as the fund for the benefit of the salmon industry; the money to be credited to each district respectively in proportion to the amount received from each, and appropriated as may seem proper by the legislative assembly for the benefit of the industry in the respective districts from which it accrued only.

To state treas-  
urer semi-  
annually.

Section 5. That if the money made payable by this act shall not be paid when due, as specified in section 4, the same shall be deemed delinquent, and the secretary of state shall certify to the respective sheriffs of the counties within which the same is due the names of all delin-

When deemed  
delinquent.

FEB. 16. 1891.  
When deemed  
delinquent.

Penalty for  
failure to pay.  
Informer's  
compensation.

Concurrent  
jurisdiction.

quents, and the amount due from each, and they shall present and collect the amount so delinquent from any person or corporation, with ten per cent added for fees of collecting, in like manner as delinquent school taxes are collected under existing laws.

Section 6. That any person or persons representing any corporation in any manner, who shall violate the provisions of this act, as specified in section 3, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be subject to a fine of not less than ten dollars nor more than five hundred dollars, or imprisonment in the county jail not less than five days nor more than six months, or by both such fine and imprisonment. Any person acting as informer in case of conviction under this act shall be entitled to one-half of the fine imposed, and the other half of such fine shall be transmitted by the justice of the peace before whom such conviction is had to the state treasurer, and be placed by him in the salmon industry fund and credited to the respective district from which the conviction is had.

Section 7. That justices of the peace shall have concurrent jurisdiction to try any offense made a misdemeanor by this act.

## GAME LAWS OF OREGON.

§ 1930. Every person who shall, within the state of Oregon, between the first day of November in each year and the first day of July of the following year, hunt, pursue, take, kill or destroy any male deer or buck, shall be guilty of a misdemeanor. Every person who shall, between the first day of January and the first day of August, from and after the passage of this act, pursue, hunt, take, kill or destroy any female deer or doe, shall be guilty of a misdemeanor. Every person who, after the passage of this act, shall take, kill or destroy any female deer at any time, unless the carcass of such animal is used or preserved by the person slaying it, or is sold for food, is guilty of a misdemeanor.

Oct. 20, 1882. §1  
Laws of 1882.  
p. 11.  
Killing deer  
out of season.

§ 1931. Every person who buys, sells, or has in possession any of the deer enumerated in the preceding section, within the time the taking or killing thereof is prohibited, except such as are tamed or kept for show or curiosity, is guilty of a misdemeanor.

Id. § 2.  
Buying, selling, etc., of  
deer out of  
season.

§ 1932. Every person who shall, within the state of Oregon, between the first day of January and the first day of August of each year, hunt, pursue, take, kill or destroy any elk, moose, or mountain sheep, shall be guilty of a misdemeanor.

Id. § 3.  
Unlawful killing of moose, elk, etc.

§ 1933. Every person who shall, within the state of Oregon, between the fifteenth day of March and the first day of September of each year, take, kill, injure or destroy, or have in possession, sell or offer for sale, any wild swan, mallard duck, wood duck, widgeon, teal, spoon-bill, gray, black, sprig-tail or canvas-back duck, shall be guilty of a misdemeanor.

As amended  
FEB. 19, 1891.  
Unlawful killing of duck, swan, and the like.

§ 1934. Every person who shall, within the state of Oregon, between the first day of April and the fifteenth day of June of each year, for any purpose take, kill, injure, or destroy, or have in possession, sell, or offer for sale any prairie chicken or sage hen, shall be guilty of a misdemeanor.

OCT. 20, 1882.  
Unlawful killing of prairie chicken and sage hen.



OCT. 20, 1882,  
as amended  
FEB. 19, 1891.

Unlawful killing of grouse, pheasant, and the like.

§ 1935. Every person who shall, within the state of Oregon, between the fifteenth day of November and the first day of September of the following year, take, kill, injure, or destroy, or have in possession, sell, or offer for sale any grouse, pheasant, Mongolian pheasant, quail, or partridge, except for breeding purposes, shall be guilty of a misdemeanor.

OCT. 20, 1882. 28

Catching certain fowl with traps, etc.

§ 1937. Every person who shall, within the state of Oregon, at any time after the passage of this act, trap, net, or ensnare, or attempt to trap, net, or ensnare any quail, or bob-white, prairie chicken, grouse, or pheasant, or have in possession any live quail or bob-white, prairie chicken, grouse, or pheasant, shall be guilty of a misdemeanor.

Id. § 9.

Destroying the nests of certain fowls.

§ 1938. Every person who shall, within the state of Oregon, at any time after the passage of this act, destroy, or remove from the nest of any mallard duck, widgeon, wood duck, teal, spoonbill, gray, black, sprigtail, or canvas-back duck, prairie chicken, or sage hen, grouse, pheasant, quail, or partridge, or other wild fowl, any egg or eggs of such fowls or birds, or have in possession, sell, or offer for sale any such egg or eggs, or wilfully destroy the nest of any such fowls or birds, shall be guilty of a misdemeanor.

Id. § 10.

Having game birds and animals in possession out of season.

§ 1939. Every person who shall have any male deer or buck, or any female deer or doe, or spotted fawn, elk, moose, or mountain sheep, swan, mallard duck, wood duck, widgeon, teal, spoonbill, gray, black, sprigtail, or canvas-back duck, prairie chicken, or sage hen, grouse, pheasant, quail, bob-white, or partridge, mountain or brook trout, at any time when it is unlawful to take or kill the same, as provided in this act, shall be guilty of a misdemeanor; and proof of the possession of any of the aforesaid animals, fowls, birds, or fish at any time when it is unlawful to take or kill the same in the county where the same is found, shall be *prima facie* evidence in any prosecution for a violation of any of the provisions of this act that the person or persons in whose possession the same is found, took, killed, or destroyed the same in the county wherein the same is found during the period when it is unlawful to take, kill, or destroy the same.

Id. § 11.

Penalty for violating this act. Disposition of fines.

§ 1940. Every person convicted of violation of any of the provisions of this act shall be punished by a fine of not less than ten dollars and not more than three hundred dollars, or imprisonment in the county jail of the

county where the offense was committed for not less than five days nor more than three months, or both such imprisonment and fine.

OCT. 20, 1882. § 11  
Penalty for  
violating this  
act.  
Disposition of  
fines.

One-half of all money collected for fines for violation of the provisions of this act shall be paid to informers, and one-half to the district attorney in the county in which the case is prosecuted.

§ 1941. It shall be unlawful for any person in the state of Oregon, for and during the term of six years from and after the passage of this act, to injure, take, kill, expose, or offer for sale, or have in possession, except for breeding purposes, any ring-neck Mongolian pheasant, any green Japanese pheasant, any copper pheasant, or scholineringer, any tragopan pheasant, silver pheasant, or golden pheasant, being the species of pheasants imported into this state by the Hon. O. N. Denny, ex-United States consul-general to Shanghai, China.

Nov. 21, 1885. § 1  
Laws of special  
session of 1885,  
p. 5.  
Taking or kill-  
ing Mongolian  
pheasant.  
These pheas-  
ants now have  
the same pro-  
tection of  
grouse and  
other pheas-  
ants.

§ 1942. Any person violating the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine not less than fifty dollars nor more than one hundred dollars; and in default of payment of the fine imposed, shall be imprisoned in the county jail at the rate of one day for each two dollars of the fine imposed.

Id. § 2.  
Penalty there-  
for.

§ 1943. The one-half of all fines imposed and collected under the provisions of this act shall be paid to the informer, and the rest into the county treasury of the county in which the crime was committed.

Id. § 3.  
Disposition of  
fines.

§ 1944. Justice courts shall have jurisdiction of the offenses defined in this act.

Id. § 4.  
Jurisdiction in  
justice's court.

SIXTH ANNUAL REPORT  
OF THE  
STATE BOARD OF FISH COMMISSIONERS.

*To His Excellency, Sylvester Pennoyer, Governor of Oregon :*

SIR—As provided by law, the Oregon board of fish commissioners submit herewith their sixth annual report.

The commissioners have the honor to report that the work of the commission for the past year has been carried on with such measures of success as the limited amount of funds would warrant, and so far as we can judge in a satisfactory manner to the people of the state.

The commission has visited many of the different portions of the state during the past year, attending to the enforcement of the laws, etc. In March we received complaint that certain parties were fishing in the Upper Nehalem river contrary to law, but on visiting that section found that no fishing was being done; in fact, do not think a fish could be had, as we followed the river for about ten miles, and did not see one.

In April we went to Niagara to examine the fishway, reports having come to us that no water was coming through it. We found plenty of water in the fishway, and were told by responsible parties living there that they had seen fish go through the fishway. We ordered changes in some parts of it, which the owners promised to make, and have had no complaint since.

The sawdust case of the State of Oregon *v.* Shaw, in which Judge Boise held the law was unconstitutional, was taken to the supreme court, which reversed the decision of the lower court on the constitutionality of the law.

In May complaint came from Canyon City that parties were putting sawdust in the streams, and upon going there, found that such had been the case to some extent, as the millowners had read the decision of Judge Boise and supposed the law was of no force; but some time before we went there they saw the decision of the supreme court and had stopped the sawdust from going in the streams, and

since the above decision became generally known there has been no complaints, and the law has been well observed, which, in due time, will be of much importance toward maintaining the supply of trout and other food fish in many of our streams, as there is no doubt in our minds that sawdust will do more toward destroying these fish in the smaller streams than anything except giant powder, of which we will say more as we advance.

In June there was quite a controversy in the papers over a report from the Cascades to the effect that the wheels in that vicinity were catching more fish than the canneries could take care of, and that the canners were cutting them from the barrels on which they were floated down stream and taking the barrels ashore but letting the fish go to waste; and the papers appealed to the fish commission and requested them to put a stop to this wanton destruction of fish. The request was so urgent from some of the leading papers of the state that the commissioners began to think that perhaps they did not know their duty, or that some law had been passed with which they were not conversant, whereby they had power to tell a fisherman that he must stop fishing when the fish were plenty for fear that he could not sell them all, and if he had to throw some of them away he would be arrested for wanton destruction of fish. So the statutes were looked over carefully, but we failed to find any law thereon giving us any power in the premises. We did, however, go to the Cascades to investigate, and, as near as we were able to learn, the report came from parties at the Cascade locks and was intended to convey the idea that Mr. Stevenson, who was running a fish-wheel opposite there on the Washington shore, was the guilty party. Mr. Stevenson has a yearly contract with the owners of the cannery at Warrendale to take his total catch of fish at a certain price per pound, and ships them all in boxes over the narrow gauge portage railway to the Lower Cascades, where they are taken by the Union Pacific boats and carried to the cannery; so it is safe to say that none of his fish were cut loose from barrels. We questioned two of the employes of the cannery who run the two small steamers and pick up all the fish that come down the river on barrels. They admitted that they had cut the fish loose from four barrels, and no more, up to that time. Two of these got caught under the wharf-boat at the Lower Cascades, and had laid there so long that the fish were spoiled. One barrel was caught in a setnet, and the fish cut loose to save the barrel and net, but I believe the owner of the net got the fish when he took in his net, and sold them; so they were not a total loss. The other barrel was caught in an old scow-wheel, and the fish spoiled. This accounts for the four barrels of fish lost, and as each barrel will carry about 800 pounds of fish the total loss was about 2,400 pounds.

Any one having much knowledge of the way canneries are operated can see at a glance how unreasonable it would be to cut loose and throw away fish that had just been caught, when, if the cannery was overstocked as the report said, they must have had fish on hand that had been caught at least one day, and they would have thrown them away before they would the fresh ones. Then again, these fish are all weighed by the fishermen and charged up to the cannerymen before they are sent down, and as the fisherman had his pay for them they were not a total loss.

We may have said far too much on this subject, but we wish to impress on the minds of the public that we have no authority to tell a fisherman to stop catching fish, for fear they will be wasted.

There always has been, and it is but fair to presume that there always will be, a great amount of jealousy between the owners of the different kinds of fishing gear in use, and it is the same in regard to localities. Some whose interests are near the mouth of the river will argue that no fish should be taken above tide water; others whose interests are farther up the streams have just as good an argument in saying no fish should be caught within a certain distance of the mouth of the river; and who shall say which is right?

August 4th, went to Gladstone to have the fishway over the dam at that place rebuilt, as the one built in 1891 did not give entire satisfaction, notwithstanding the same plan has been in use in California for several years, and as far as we know, is still in use in that state, having been adopted by the California fish commission several years ago. We mention this fact in justification of our action in having the fishway built on that plan, and to show that we were not altogether wrong; and will also say that not one of the parties who said most in condemnation of that plan of fishway could or did suggest any better one.

We are in hopes that the fishway built this season was an improvement on the California plan, as we have heard no complaint of its efficiency so far. Again, on September 14th, we examined the fishway, and as there were no salmon to be seen below the dam we could but come to one of two conclusions: Either there were no salmon in the river, or the fishway was amply sufficient to let them pass up as fast as they wished.

We also made a careful examination of the falls at Oregon City, in view of making some recommendations in regard to a fishway over that obstruction. We considered this a very important matter, both to the inhabitants of the Willamette valley and to the salmon industry of the state, as it will give the former an opportunity of having a good fresh salmon occasionally during the sea-

son, and it will benefit the latter, especially if no provisions are made for artificial propagation, by opening a way for the salmon to reach some as good spawning grounds as there are in the state. We believe a good substantial fishway, and one that will meet with all the requirements, can be constructed there at an expense to the State of not more than six thousand dollars. Two years ago we recommended the construction of a fishway there, to be built by blasting a channel or runway, with sufficient pools therein for resting-places, along the east side of the island, the mouth to be at the deep pool known to all who are familiar with the falls, and the head near the upper end of the pulp mills' basin. We will endeavor to have a plan or draft of the fishway as we would recommend it to be built, ready to present to the coming legislature.

During the latter part of September the coast streams were visited, to inquire into the industry, note the operation and enforcement of the law, and ascertain if any changes therein were necessary. On the Winchuck, which is the first stream on the south, there are eight men employed during the fishing season, which begins about the fifteenth of September and continues till the fifteenth of November. Two boats are used in fishing, valued at \$25 each; the catch being about 50,000 pounds, the most of which are hauled to the cannery at Smith's river in California. When the cannery is not in operation, the fish are salted and shipped to California from Crescent City.

The fisheries on the Chetco give employment to twelve men during the season and produce about 75,000 pounds of fish, which are disposed of in the same manner as those caught in the Winchuck.

There has been no fishing for market on the Pistol river for some years, but we have been informed since we were there that parties are fishing there at present and salting the fish. Rogue river, which is the best stream on the coast, aside from the Columbia, gives employment to about fifty fishermen for four months of each year, and the catch amounts to about 1,400,000 pounds, all of which are packed in cans, making about 20,000 cases of forty-eight pounds each; and about 6,000 pounds of tips, or throats, are saved each year and salted.

On Elk river there are five men, who fish about one month. All the fish are salted, amounting to about fifty barrels. There are five fishermen engaged in fishing on Sixes river for a short time, their catch being about 30,000 pounds of fish, all of which are salted, making about one hundred barrels.

At Port Orford we found a new industry well under way. There are twelve men engaged in hunting sea otter. Their catch last season was twenty, and up to the time we were there, October 1st, they had killed ten, with good prospects of bringing the catch up to last

season's. They use three boats, one of which is a sail boat, costing, when fitted out for fishing, \$300. The other two are row boats, and valued at \$125 each. The skins of the sea otter are worth from \$150 to \$225 each, the difference being in the size of the skin. One worth \$225 is about six feet long from tip to tip. These fish or animals are sometimes killed from the boats and sometimes shot from the shore. They are usually found in the surf around promontories or bold, rocky shores. The hunters frequently build stands in trees along the shore, and if there are no trees then they erect poles high enough for their purpose, and by means of pieces of scantling spiked across make their stands on these, and from this position locate their game, and if near enough, shoot them. A man, to be a successful otter hunter, must be an expert marksman and have good courage, for to shoot an otter in the rolling surf requires a certain amount of activity and good judgment, no matter whether the shot is fired from the boat or from the shore, and good courage is essential to manage the boat in the surf to obtain the game after it is killed.

Coquille River.—Only one cannery was in operation there this season, the pack being about 5,500 cases. Aside from this there will be about 1,000 barrels salted and 20,000 pounds used fresh. Sixty-four men are engaged in fishing, including four men engaged in salt water or sea fishing. The catch of sea fish is 36,000 pounds of red fish, 10,000 pounds of halibut and 9,000 pounds of cod, known as cultus cod.

Coos Bay.—No cannery operated this year; 38 men engaged in fishing, including six men engaged in sea fishing and two men digging clams. There will be about 1,000 barrels of salmon salted, and about 50,000 pounds used fresh. The catch of sea fish for the year is 48,000 pounds red fish, 7,000 pounds halibut, and 17,000 pounds cod.

Umpqua river.—One cannery in operation; pack, about 12,000 cases; used fresh, 20,000 pounds. There are 50 men engaged in fishing, the cannery taking all the fish except those used fresh.

Siuslaw river.—Two canneries were operated this season, packing about 18,000 cases. About 350 barrels will be salted, and 10,000 pounds used fresh. There are 60 men engaged in fishing, some of them going from the Columbia river after the season closed.

Alsea bay.—One cannery in operation this season, packing 3,600 cases; there will be about 100 barrels salted.

Yaquina river.—No cannery in operation this year. There are 52 men engaged in fishing, including 12 oystermen. Of the salmon caught there will be about 600 barrels salted, and about 125,000 pounds shipped fresh. The oyster fisheries are not improving to

any great extent, the amount for the past year being 1,217 sacks, containing two bushels each. The greater portion of these were shipped to San Francisco.

On the Siletz, Salmon, and Nestucca rivers no fishing was done except for home consumption. The catch of the streams combined may reach 50,000 pounds.

Tillamook bay.—One cannery operated during the season, packing 18,000 cases, most of which were silversides. Forty men engaged in fishing, many of them being Columbia river fishermen. We are unable to give the amount of fish used locally, but estimate it at 20,000 pounds.

Nehalem river.—One cannery in operation, packing 10,000 cases, nearly all of which were silversides. Twenty men engaged in fishing, most of them from the Columbia river.

Necanicum creek.—This is a small stream, and not much fishing is done in it. This year, however, about 20,000 pounds of salmon have been taken, the most of which went to the cannery.

It is very evident that the people on the coast streams have a great deal of faith in the propagation of fish, as they all demanded a hatchery, each claiming that theirs was the best stream on the coast for this purpose. On the Winchuck, Mr. Lake tried last season to hatch salmon, but having no knowledge of the business he had rather poor success. He did succeed in hatching a few, and asked for some instructions in regard to the methods to be used, as he intended to try again this season. We gave him all the information we could at the time, and on arriving home wrote him, giving him all the information possible in writing, and requested him to visit the hatchery of Mr. R. D. Hume at Rogue river, where he could see all the operations. While the claims of these people for hatcheries can not all be granted, we think there should be two hatcheries built by the state on the coast south of the Columbia river. One of these should be on the Coquille, as the young fry could be taken from there and planted in all the streams on the south, there being a good wagon-road from Bandon to the state line. The Umpqua is the best stream for the other, as both chinook and silverside salmon could be hatched there, and the fry distributed in the head waters of nearly all the streams to the north. If these hatcheries were built by the state, it is safe to say that the people interested in the fisheries would bear the expense of operating them, aided by the tax law passed two years ago.

The present law, allowing fishing to begin April 1st in the coast streams, should be amended so as to conform with the law for the Columbia, as a few poor steelheads are caught in some of these streams the first ten days in April and sent to market, which causes dissatisfaction and confusion.



Columbia river.—In giving the statistics for this river we shall give them only for the Oregon side, so far as we are able to separate them, except in a few cases where we will mention Washington.

We are pleased to report that the season of '92 shows quite an advance in the fishing industry from that of '91, both in the Columbia and coast streams, and we have reason to think that a part of the increase on the Columbia may justly be credited to the work done at the Clackamas hatchery during the season of 1888.

It will be remembered that there were turned loose at the Clackamas hatchery during that year 5,500,000 young salmon, and this being the fourth year, they would naturally return full grown fish. Had it not been for this large planting four years ago our crop this season might have been much smaller.

The proprietor of one of the largest packing establishments on the river said during the season that the salmon bought by him from the fishermen were the largest and best fish he had seen since he began the business, and it was his opinion they were the product of the hatchery.

It has been currently reported to the press during the season that the greater part of the salmon packed here this year were of an inferior quality, or that about one half of the pack were steelheads, which are sold as second-class fish. These reports were made for the purpose of misrepresenting the salmon industry, and, it may be safely said, for selfish motives. In order to be amply able to contradict these reports, we have obtained from every packer on the river the amount of each variety of fish packed by him, and we find the total number of cases of chinook salmon packed this season to be 344,050 cases, divided as follows: Oregon side, 204,660 cases; Washington side, 139,390 cases. While this is the correct account of chinook salmon, it is somewhat misleading as regards the pack of former years, and we wish to offer a few words of explanation in order to make it plain to all. The salmon have been packed this season the same as in former ones, that is the packers on the lower river that have but a few bluebacks have packed them with the chinooks, all bringing the same price; on the upper river, where the greater portion of their pack is bluebacks, they have simply reversed the above and packed their chinooks with the bluebacks, and sold them at the same price. In former years they have all been packed together and sold for the same price, one being as good as the other, and the packers paying the same price per pound for one as for the other. The steelheads are bought at a much lower rate, and packed separately by all, and sold at a lower price as second-class goods, and in making up reports in former years have gone in with the total pack without any comments.

We have given the total pack of chinook salmon, and as it may be convenient for reference in years to come, we will give the pack of bluebacks and steelheads as obtained from the packers: Bluebacks, Oregon side, 57,744 cases; Washington side, 4,560 cases; total for both sides, 62,304 cases. Steelheads, Oregon side, 47,572 cases; Washington side, 26,295 cases; total for both sides of the river, 73,867 cases; making a total pack of all varieties on both sides of the river of 480,221 cases. The total pack for the season of 1891 was 390,313 cases, showing a gain for this season of 89,908 cases, and when the fall pack of 8,500 cases is added it shows a gain of 98,408 cases.

The Willamette and Clackamas rivers.—Owing to the high water in the spring, the fishermen were not able to prosecute their work on the Clackamas to so much advantage to themselves as in former seasons, and while there is no doubt that as many fish went up the stream as usual, the catch was very much less. The same was true regarding the Willamette, and the chances were very good for quite a number of spring salmon to go over the falls and on up to the headwaters of its different branches; all of which may have a beneficial effect on the supply for years to come.

This closes the list of streams in which fishing is carried on to any great extent. There are many branches to all of the streams we have mentioned above, where the trout exist in abundance, and it is here, in connection with the trout, that we wish to refer again to the use of giant powder. We have no positive evidence that it is used in any stream for the purpose of killing fish, but we have seen cases where circumstantial evidence pointed very strongly in that direction. For instance, on examining some large lots of trout that have been brought to market, it is almost impossible to find one that bears any mark of the angler's hook, and for this and some other reasons we are of the opinion that a law should be enacted prohibiting the sale of trout. This may at first thought seem hard on epicures and some of our city people who like a mess of trout, but nearly all of them can and do spend a few days during the season on some of our mountain streams, where they can catch enough to supply their wants while there, and on their return to town the markets are well supplied with other kinds of fresh fish; while on the other hand, the settlers living on the banks of the streams have not the means or opportunity of getting other varieties of fresh fish.

Would it be more than right to save the trout for them and such of the city people as enjoy going out for a few days of recreation? Then if they are lucky enough to capture a dozen or more of the speckled beauties, they have more than likely paid for them at the

rate of five dollars a dozen, and perhaps the settler has been a small gainer by this in furnishing the city gent with necessary food and lodging.

At any rate we believe the trout, the settler, and the sportsmen would all be protected by such a law.

While the trout and their protection may at present seem a small matter to dwell on, the time is not far distant when their presence in our mountain streams will be of vast importance, and "as an ounce of prevention is worth a pound of cure," so will one dollar judiciously spent now in protecting them be worth more than one hundred dollars in trying to restock the streams with these fish when the natural supply has become exhausted.

There is no better way to illustrate the value of keeping up the supply of fish in our streams than to quote from a report from the state of Maine, which says: "It is fairly estimated that about \$5,000,000 are spent annually in this state by summer tourists, attracted here by the many beautiful lakes, streams, and extensive forests, which abound in fish and game." If the above estimate is not very much exaggerated, there is still great hopes for the future of Oregon if we but preserve the means at hand.

Many of the middle and western states have caught the idea, and are appropriating large sums of money annually to keep their streams stocked with game fish, in order to attract the tourist and gain a share of the money he spends. The market value of the fish products of these states runs from \$250,000 to \$700,000.

Michigan appropriates annually more than four per cent of the market value of all her fish products. Wisconsin appropriates annually about three per cent of the value of her fish products, taking the season of 1890 as a basis. California appropriates \$10,000 annually, besides collecting about \$5,000 in licenses issued to the fishermen, which also goes to the fund for the protection and propagation of food fish. Thus we might go on were it necessary and name other states and the amount appropriated by each, but the above ought to show conclusively to all who are interested in the welfare of this State, and especially to the members of the coming legislature, that it is their duty to commence now, before it is too late, and make ample provisions to foster and protect one of its greatest sources of wealth.

#### OPERATIONS AND RESULTS OF THE LAW.

For the past two years we have been working under the best law this state has ever had for the protection of fish and the preservation of the industry, but there is still room for much improvement, of which we will say more as we proceed under this head. The

law enacted at the last session of the legislature requiring all persons fishing in the waters of this state, or in the waters over which this state has concurrent jurisdiction, to become citizens of the state, was a good one, and as far as we know, was well observed; but, as in many other good laws, there was no provision made for its enforcement, and the old saying, of "what is everybody's business is nobody's," will apply here; this defect should be overcome in some way.

The law making a weekly close time from 6 o'clock P. M. Saturday to 6 o'clock P. M. on the following Sunday, we think is a good one. And while we believe it is generally observed, it is impossible to enforce it to the letter with the means at our command. We have no power to appoint deputies, and the three commissioners can travel over but a small portion of the fishing grounds of this state in one night. So about all the law does, as it now stands, is to compel the law-abiding citizen to stay ashore, while some, who are always ready to dare the law, will go and fish. We shall recommend one of two remedies for this: Either repeal the weekly close time, and shorten the season fifteen days by extending the close time in the spring to the twenty-fifth of April, or by amending the law as we suggested in our last report by having every boat used in fishing a gill-net of any description numbered with a number to be designated by the fish commission; also every seine-boat or seine, and every fish-wheel; then instead of imposing a fine on the fishermen, many of whom will board it out at the counties' expense, let the penalty be the forfeiture of any and all the gear in use contrary to law.

We believe this would do more toward compelling all to comply with the law than any thing else that can be done. We notice the California commission have the same trouble and have asked for an appropriation of \$10,000 for patrol purposes. A law was passed two years ago compelling the owners of pound nets and traps to place a number on them, and we have found it a great help in enforcing the law. The bill passed by the last legislature known as the "Tax law" was, in our opinion, a law that would do much toward keeping up the supply of salmon in the future, and all but two—and I am sorry to say they were both cannerymen—that were liable to pay a tax under that law, paid for the season of 1891. Suit was brought against one of these, and his defense being that the law was unconstitutional, it will have to go to the supreme court, and we must wait for a decision. On account of this suit pending, but few have paid their tax for the season of 1892.

Another very important law was recommended in our report of 1890, and we again recommend the passage of a law in this state similar to the following one in the state of Wyoming upon this sub-

ject: "Any person or persons, corporation or corporations owning in whole or in part, or leasing, operating, or having in charge any millrace, irrigating ditch, or canal taking or receiving its waters from any river or stream in this territory in which fish has been placed or may exist, shall put or cause to be placed and maintained over the inlet of such ditch or canal or millrace a wire screen of such construction, fineness, strength, or quality as shall prevent any such fish from entering such ditch, canal, or millrace, when requested to do so by the fish commission.

"Any person or persons, corporation, or corporations violating the provisions of the preceding section, or who shall neglect or refuse to provide, put up, and maintain such screens, in accordance with the provisions of the preceding section, shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than ten dollars and not more than one hundred dollars, or by imprisonment in the county jail not exceeding thirty days for each offense; *provided*, that the continuance by any person of such neglect or refusal from day to day, after notification in writing, shall constitute a separate and distinct offense for each and every day of the continuance of such neglect or refusal; *provided further*, that no offense shall be committed by reason of such screens not over the inlet of any ditch, canal, or millrace when water is not entering the same."

We again recommend the passage of a law prohibiting the use of spears and hooks on poles, not because of the amount of fish caught in this way, but because the number of fish wounded and left to die by this practice is more than by all other modes of fishing.

We recommend a law compelling the owners of pound nets to remove the stakes or piles used in the construction of the same when they are not in use, or at the close of the fishing season.

As mentioned before in this report, we again recommend the construction of a fishway over the falls of the Willamette at Oregon City, and that the state appropriate the sum of \$10,000, or so much thereof as may be necessary for this purpose.

We also recommend the passage of a law to apply to the counties of Clatsop, Columbia, Multnomah and Wasco, compelling or authorizing the county clerk of said counties to pay the following bounty to the person bringing him the scalp of the following animals and birds: Sea lion, \$2.50; seal, \$1; cormorant, or shag, 20c; sheldrake, 10c. These are all fish-eaters and of no commercial value—except the seal, from each of which a few gallons of oil may be obtained, worth from 30 to 50 cents per gallon.

We suggest a change in the law creating and governing the fish commission, to the effect that there be but one commissioner, whose

duties shall be the same as the president of the present commission, and he shall have power to appoint deputies when and where needed, and discharge the same for just cause, the deputies to be paid when actually engaged in enforcing the law. We think much better service can be done the state in this way, and without any extra expense.

During the fishing season of '92 the following arrests were made, viz.: Fishing with gill-nets during the weekly close time, 13; for not having a light on pound nets, 1; for not having a light on traps, 4. These cases all came up before the justice of the peace, who will render his account to the state treasurer in due time. We have already suggested some changes in regard to the weekly close time, which if carried out will virtually put a stop to all fishing during this time.

### METHODS OF FISHING.

These are the same as in former years, but we give them again as some who read this report may be newcomers and not provided with former reports. We will give the methods of fishing in the order in which they rank in taking fish, as near as possible: Gill-nets, pound-nets, wheels, seines, traps, dip-nets, spears and hooks, each being used where the conditions are most suitable. The gill-nets in all the streams of the state; pound nets confined principally to Baker's bay on the Washington side of the Columbia river; the wheels are used entirely on the upper Columbia near the Cascades and the Dalles, in swift water; seines are used in all the larger streams; traps are used on the Columbia from Clifton to the mouth of the Willamette; dip-nets at the Dalles and Cascades; the spear is used mostly by the Indians at the Dalles, but we are loth to say they are used by some white men on the head waters of our streams, where the fish go to spawn; hooks are in general use, and for all kinds of fish.

### HATCHERIES.

Unfortunately for the interests of the state, our report under this head will be quite short, as the state has no hatchery, and all we can say will be a repetition of what we have said for the past four years, having already shown in the preceding pages of this report what other states, whose fishing industries are small in comparison to ours, have done and are doing toward the propagation of fish, which you and all others will admit is no longer a matter of experiment. We again urge you to recommend in your message to the coming legislature liberal appropriations for a state hatchery.

The hatchery on the Rogue river owned by R. D. Hume is still in successful operation, and we learned from him that he contem-

plates erecting and operating another hatchery on the head waters of the Rogue river, as he finds the loss and expense of holding the spring salmon until they are read to spawn, when taken so near the mouth of the river, too great.

## EXPENSES INCURRED.

Date.	Payee.	On what account.	Amount.
1892.			
Jan. 2.	F. C. Reed	Salary for quarter ending December 31, 1891	\$ 500 00
Feb. 5.	F. C. Reed	Reimbursement	3 30
Feb. 11.	R. C. Campbell	Expenses	13 00
April 2.	F. C. Reed	Salary	500 00
April 2.	F. C. Reed	Reimbursement	26 75
April 2.	R. C. Campbell	Salary	100 00
April 2.	R. C. Campbell	Expenses	15 75
July 1.	F. C. Reed	Salary	500 00
July 1.	F. C. Reed	Reimbursement	123 50
July 9.	R. C. Campbell	Salary	100 00
July 9.	R. C. Campbell	Expenses	24 50
July 15.	George T. Myers	Salary	250 00
July 15.	George T. Myers	Expenses	25 00
Oct. 5.	R. C. Campbell	Salary	50 00
Oct. 5.	R. C. Campbell	Expenses	16 00
Oct. 12.	F. C. Reed	Salary	500 00
Oct. 12.	F. C. Reed	Reimbursement	251 00
Nov. 10.	George T. Myers	Expenses	45 50
	Total		\$ 3,044 30

Note.—The above shows the expenses of the commission from October 1, 1891, to September 30, 1892.

## STATISTICS OF THE FISHING INDUSTRY.

Owing to the difficulty in obtaining correct figures from which to make up this part of our report, we would favor the idea of enacting a law compelling all persons in the state who purchase fish from fishermen, or from first hands with the intention of selling them again in any form for profit, to report to the fish commission on or before the first day of November of each year hereafter the number of fish purchased by them and the price paid for each fish, and if purchased by weight, then the number of pounds and the price per pound. This would not be a great task to any one, and as it goes into the report of the commission under this head only as a whole, no one would be giving his competitors any advantage over himself, and we believe it would show a large increase in the statistics of the fishing industry. We have no difficulty in obtaining correct statistics from the packers, and we know of no reason why other dealers should be backward in giving them. We give the results of the industry for the year, as we have collected them, in the following tables:

TABLE SHOWING THE SALMON PACKED IN TINS IN 1892.

Where Packed.	Variety.	No. of Cases.	Value.
Columbia River	Chinook	204,660	\$1,105,160 00
Columbia River	Steelheads	47,572	199,802 40
Columbia River	Bluebacks	57,744	311,817 60
Columbia River	Silversides	8,500	34,000 00
Nehalem River	Silversides	10,000	40,000 00
Tillamook Bay	Silversides	18,000	72,000 00
Alsea Bay	Silversides	3,600	14,400 00
Siuslaw River	Silversides	18,000	72,000 00
Umpqua River	Silversides	10,000	40,000 00
Coquille River	Silversides	5,000	20,000 00
Rogue River	Chinook	10,000	59,000 00
Rogue River	Silversides	9,000	36,000 00
Total	Chinook	214,660	\$1,164,160 00
Total	Steelheads	47,572	199,802 40
Total	Bluebacks	57,744	311,817 60
Total	Silversides	82,100	328,400 00
Total of all varieties		402,076	\$2,004,180 00

TABLE

Showing the amount of fish consumed locally and shipped away, including oil and fertilizer made from salmon offal.

Variety.	No. of pounds.	Value.
Salmon	5,500,680	\$357,544 20
Sturgeon	3,570,800	178,540 00
Caviar	35,500	3,550 00
Smelt	125,000	10,000 00
Shad	55,500	5,550 00
Trout	30,500	3,050 00
Tomcod	8,500	425 00
Catfish	18,500	925 00
Carp	26,000	520 00
Oysters	150,700	3,014 00
Clams	260,000	5,200 00
Fish oil	245,000	10,500 00
Fish fertilizer	65,000	650 00
Redfish or groupers	84,000	4,200 00
Halibut	26,000	2,080 00
Cod	26,000	1,300 00
Totals	10,227,680	\$587,048 20



TABLE

Showing apparatus used in fishing, and value of the same.

Designation.	No. of each.	Total Tonnage.	Value.
Steamers carrying fish.....	4	50	\$ 12,000 00
Sloops and plungers carrying fish.....	10	48	3,200 00
Fishing boats.....	949		115,425 00
Pound-net, seine and trap boats.....	190		5,550 00
Scows.....	23		6,500 00
Gill nets.....	873		189,900 00
Set nets.....	166		7,120 00
Seines.....	36		15,500 00
Horses used on seines.....	57		5,700 00
Pound nets.....	28		27,100 00
Piledrivers.....	4		3,200 00
Traps.....	13		6,500 00
Fish wheels.....	34		125,500 00
Dip nets.....	25		75 00
Total value.....			\$521,570 00

TABLE OF FACTORIES

In operation in 1892, showing where located, value of land, buildings, and machinery, and cash capital employed.

Where Located.	Number.	Value of Land, Buildings and Machinery.	Cash Capital Employed.
Columbia river.....	14	\$ 482,055 00	\$ 640,000 00
Oil and Fertilizer on Columbia river.....	1	2,500 00	5,000 00
Nehalem river.....	1	3,500 00	10,000 00
Tillamook bay.....	1	4,000 00	15,000 00
Coquille river.....	1	6,000 00	10,000 00
Alsea bay.....	1	4,000 00	10,000 00
Siuslaw river.....	2	20,000 00	30,000 00
Umpqua river.....	1	5,000 00	20,000 00
Rogue river.....	1	30,000 00	75,000 00
Totals.....	23	\$ 557,055 00	\$ 815,000 00

TABLE

Showing number of men employed in salmon fishing.

How employed.	No.	Average rate of wages per man for season's work of four months.	Amount.
Factories (including Chinese).....	1,120	\$ 200	\$ 244,000
Gill nets.....	1,909	210	400,890
Seines.....	240	235	56,400
Pound nets.....	314	200	62,800
Fish nets.....	82	230	18,860
Traps.....	10	200	2,000
Steamers.....	20	200	4,000
Sloops.....	11	200	2,200
Scows.....	23	160	3,680
Totals.....	3,829		\$ 794,830

The preceding tables, if carefully examined, will give some idea of the value to the state of its salmon and other fisheries, as they show the amount caught and how disposed of, with the value of the same; also the number and value of steamers, boats, nets, and other appliances used in catching fish, and the number of factories operated, and value of land, buildings, and machinery, and cash capital employed in carrying on the business, with the number of men employed and wages paid.

About three fifths of the chinook salmon caught on the lower Columbia are taken with gill nets, and the other two fifths are taken with pound nets and seines. All of the bluebacks and nearly all of the steelheads are caught with pound nets and seines—a few of the latter fish being caught in gill-nets. On the middle Columbia, or from the mouth of the Willamette to the Cascades, large numbers of bluebacks and steelheads are caught with gill nets, the meshes of which are small, being about two and one-quarter inches square.

On the upper Columbia or above the lower Cascades, all, or nearly all the fish are caught by wheels, a few being caught with dip nets at the Cascade locks and the Dalles.

The sturgeon fishery of the Columbia river is growing of more importance each year, giving profitable employment to a large number of fishermen at a time when there is little else for them to do, many of them making as good wages at this as they did in the summer fishing for salmon. The season for sturgeon fishing begins about the middle of September and continues until about the fifteenth of March. In the fish commissioners report for 1888, something was said about protecting the sturgeon, and we think now is the proper time, before it is too late, and would suggest for your consideration and that of the members of the coming legislature that no sturgeon be caught during the months of January and February, and perhaps it would be well to include March, and at no time hereafter should any be purchased or sold weighing less than fifty pounds live weight, making both buyer and seller liable to a fine on conviction for so doing.

Shad are still increasing in the Columbia river, and a few have been taken in some of the other streams. Quite a number were taken near the Cascades, where but few have been seen heretofore. A number of spent shad have been caught on the lower Columbia during the season, which shows they are spawning here, and in a few years will be an important adjunct to the fishing industry.

Carp and catfish, or bullheads can be had in abundance by those who choose to catch them, and the markets are well supplied at all times, and they can be purchased very cheap by those who

prefer to buy them, and from the results of an examination of one carp caught this season we have no fears of the supply of these fish becoming exhausted. The one examined would weigh about three pounds, and was nearly ready to spawn. On making a careful estimate of the eggs it contained, we found the number to be about 200,000, and if the large ones have as many eggs in proportion, they will not need to be artificially propagated for some years; so we have at least one variety of fish that needs no protection.

We have endeavored in this report to show to you, and all who will take time to read and examine it, the true condition of the fishing industry of the state as it exists at the present time; and it is with a great degree of pleasure that we can report at the end of six years, during which time there has been no cessation in the prosecution of the industry, but on the contrary each year has brought with it an increase in the number of the different appliances for catching fish, the fact that the past or sixth season shows quite a large increase in its products over any of the previous ones, notwithstanding the cry has been going up all these years that the industry was being ruined, in this way by some and in that way by others, and we think it is but fair to conclude that the industry is not entirely destroyed yet; and if the means provided by nature are aided by the scientific knowledge of man to that extent which the object in view justifies, we can have fish in abundance for years to come.

It gives us great pleasure to report that the genial and efficient agent of the United States fish commission, Mr. W. A. Wilcox, is again on the Pacific coast. Mr. Wilcox gathered the statistics of the fishing industry on this coast in 1889, since which time nothing has been done in that line until this season. He arrived here about the middle of August and immediately began his duties in this state by visiting all the fishing streams, and gathering full and complete information from all engaged in the business since his last visit in 1889. All who have had the pleasure of reading his work for that year, as published by the United States fish commission, will have no doubt of his being competent for the work, and if we wait patiently until the work of this visit is published, which will give the complete statistics of the fish industry for the past four years, not only of Oregon, but of the whole Pacific coast from British Columbia to Mexico, we may expect to see quite an advancement in the industry from his report of 1889.

In conclusion we will say that the suggestions made in regard to additional legislation for the good of the industry, as well as the changes in the old laws, has been done after careful consideration on our part, and are what our experience tells us is for the best

interests of all concerned, and we trust you will look upon them with favor and recommend to the coming legislative assembly favorable action on their part, so that our successors in office may have less difficulties to contend with in the discharge of their duties than we have had, and we hope they may be better qualified to overcome them.

Respectfully submitted,

F. C. REED,  
R. C. CAMPBELL,  
GEO. T. MYERS,  
Commissioners.