

SHELLFISH LABORATORY
OREGON FISH COMMISSION
220 S. W. BAY BLVD.
NEWPORT, OREGON

FISHERIES STATISTICS OF OREGON

F. C. CLEAVER
Editor



OREGON FISH COMMISSION
Portland, Oregon

Contribution No. 16
September, 1951

FISHERIES STATISTICS OF OREGON

F. C. CLEAVER
Editor



OREGON FISH COMMISSION
Portland, Oregon

Contribution No. 16
September, 1951

TABLE OF CONTENTS

	Page
INTRODUCTION	3
SOURCES OF DATA	4
DISCREPANCIES	5
COMMON NAMES	6
FISHERIES	9
Albacore	9
Anchovy	9
Bottom Fish	10
General	10
Gray Cod	13
Hake	13
Halibut	13
Ling Cod	13
Octopus	13
Perch	13
Rockfish	15
Sablefish	16
Shark	17
Scrap Fish	21
Skate	22
Sole and Flounder	22
Fish Livers	28
Carp	29
Herring	29
Mackerel	29
Lamprey	31
Pilchard	31
Columbia River Salmon and Steelhead	33
Coastal Salmon and Steelhead	42
Troll Salmon	47
Shad	53
Smelt	56
Striped Bass	59
Sturgeon	61
Shellfish	64
REFERENCES	76
TABLES	78
INDEX	175

INTRODUCTION

The major aim of this statistical bulletin is to provide a ready source of information concerning the productivity of the commercial fisheries of the State of Oregon. Need for such material is constantly arising in connection with research and planning operations in fisheries management and economics, as well as for a variety of other uses.

Time and resources have not permitted an exhaustive compilation of all of the catch records that exist for the earlier years. Many are not readily available, and their reliability is often questionable. Hence, with the exception of the river fisheries, only the statistics from 1928 to 1949 are presented. For the Columbia River fisheries, the records (from Craig and Hacker, 1940) are fairly complete; the coastal rivers are covered from 1923 to 1949 and the troll fishery data begin with 1925. This constitutes an important omission for the first 30 years on the coastal rivers, and for about one-half that period in the troll fishery. The marine fisheries were relatively minor prior to 1928. The accumulation of catch data is being continued. Future publications of this nature will contain both earlier and later records than are presented at this time.

The joint efforts of a number of persons have been required to assemble the material. Harrison S. Smith, auditor for the Fish Commission, collected and compiled the basic data for the Oregon fisheries except for the instances where other sources are credited. Individuals of the Division of Research prepared the first drafts of the tables, text and figures for the fisheries with which they are most concerned. The following staff members contributed directly or indirectly in this manner: A. D. Bajkov, M. D. Collins, G. Y. Harry, Jr., K. A. Henry, R. T. Heg, J. I. Hodges, E. K. Holmberg, D. R. Johnson, L. D. Marriage, C. R. Mattson, D. L. McKernan, T. R. Merrell, A. R. Morgan, A. T. Pruter, R. L. Rulifson, R. W. Schoning, R. Tollefson, J. M. Van Hyning, S. J. Westrheim, S. N. Wilkes, R. A. Willis and C. E. Woelke.

The State of Washington Department of Fisheries made a special compilation of the Columbia River salmon, shad, and sturgeon landings in that state for the years 1938 to 1949.

SOURCES OF DATA

The data presented were taken from three sources: Oregon Fish Commission records, the State of Washington Department of Fisheries records and publications of the federal government.

The Oregon catch statistics are gathered in connection with taxation. Beginning in 1921, salmon, shad, sturgeon, clam and crab landings were taxed. A tax was placed upon striped bass in 1931 and upon smelt in 1933. As a consequence, the State of Oregon maintained no catch statistics as such for other species during this period, with the exception of pilchard and albacore. Since 1941 the tax system has covered all major species, both fresh-water and marine. In 1921 and 1922 the fishermen were liable for the reports and taxes, but difficulties inherent in this arrangement led to a change whereby since 1923 the dealers have been responsible for reporting fish landings to the state. The fishermen were liable for taxes on clams and crabs until 1943.

These reports form the basis for the present statistical system. From them the species, amount, date, and area of catch are taken. These data are then transferred to I.B.M. punch cards so that mechanical sorting and tabulation can be utilized. In addition each fisherman has a personal passbook in which the amount of the individual sale is recorded. These are submitted to the Fish Commission at the time of fishing license renewal. The passbooks are particularly useful for checking reports for errors and omissions, and in addition furnish catch data not otherwise available.

From time to time a canvass of dealers has been made with regard to a particular fishery, but this method of data collection has been used infrequently. The statistics so gathered are generally incomplete.

The State of Washington Department of Fisheries furnished data for the Washington landings for the Columbia River fisheries for the years 1935 to 1949. The salmon, shad and sturgeon landings from 1938 to 1949 were compiled particularly for this purpose. Data for other species and other years were taken from the published annual reports of the Washington Department of Fisheries.

For the earlier years and for species not included in the Oregon statistics, figures have been taken from "Fishery Industries of the United States" and the continuation of this series, "Fishery Statistics of the United States" which began with the 1942 report. In addition, Craig and Hacker (1940) was used as a source of data.

DISCREPANCIES

The statistics presented have been carefully checked and are believed to be reasonably free from arithmetical mistakes. There are however, a number of ways in which error or apparent error can enter, and which are almost impossible to eliminate.

One of the most common difficulties is present in the later years. In theory, all catch reports are complete within a few months following the date of landing. In fact, these reports continue to be received for a matter of years. Consequently, the 1950 landings have been omitted, and the figures for 1949 and the years immediately preceding 1949 are subject to upward revision. However, such changes should be relatively slight, judging by past years.

No statistics are presented for the catch of salmon by anglers. Although surveys of the sport fisheries in the major rivers are conducted each year, the records are by no means complete. The sport landings, while exceeding 500,000 pounds in some years, are not of sufficient relative magnitude to upset the trends indicated by commercial landings. A similar quantity of salmon is taken by the Indians on the Columbia River for subsistence purposes. These are not included in the statistics.

The practice of landing a number of species both as whole and as dressed fish creates confusion and uncertainty. Ling cod, rockfish, sablefish and sharks are affected. The totals presented are above those which would be true if all of the landings were dressed fish, and somewhat less than if the landings were of whole fish. This is especially true of the shark data. These fish were caught primarily for their livers; the carcasses had a low price and were used for reduction purposes. Consequently, the sharks were landed as whole fish, as dressed fish and livers, or only the livers were landed and the carcasses were discarded at sea. Therefore, the total landing of sharks is less than either the quantity of whole or dressed fish caught, and the liver records are low because a portion were sold as whole fish at first sale.

The statistics of the shark livers sold in Oregon are recorded at the time of the initial sale of the fish by the fishermen to the dealer. Unfortunately, the fish livers were not always sold at the time of landing, and consequently considerable time often elapsed between the initial landing and final sale. The time varied from three days to a year or more. If the market was poor, the fisherman placed his livers in cold storage and awaited more favorable market conditions. Thus the landings of livers by year are not necessarily accurate with relation to time, particularly during the later years of the fishery when the liver prices fluctuated considerably.

For the ocean-caught fish, area of landing has only a general relationship to area of catch. The bottom fish landed were not necessarily caught off Oregon, nor were the fish taken off Oregon always landed in Oregon.

In some instances the separation into species has been poor. Thin white sturgeon may be sold at a lower price as green sturgeon, or a few green sturgeon landed may be lumped with a larger quantity of white sturgeon and reported as simply "sturgeon". In the earlier years low grade chinook and silver salmon were sold and reported as chum salmon.

For the years prior to 1943, the area separation for clams was accomplished through the use of dealers' records and fishermen's catch reports.

The percentage of the total catch composed of each species from each area was computed, and these percentages applied to the total catch to give the weight for each category. The clam statistics contain only a moderate error of estimate since the portion of the total used in computing percentages was quite high. A similar technique was employed for separating the clam catch into species.

In almost no case will the sum of the totals for catch by time interval or area be as large as the grand total for the species. This is caused by the elimination from the tables of a portion of the catch for which the data are uncertain. For example, the total of catch by months for the Columbia River chinooks for a given year is less than the chinook catch for the Columbia River for that year because some of the reports contained records of chinook landings for which the month of catch was unknown. These were included in the annual total but not in the monthly totals.

Confusion is introduced by the practice of maintaining the tax records and fish landings on a fiscal year basis, including from April 1 of the year to March 31 of the following year. Because calendar years are most easily understood by the majority of people, the data are presented in this manner with certain exceptions which are noted. Table 1 is in fiscal years because separation by months for all species in the earlier years is impossible. Fortunately, with only a few exceptions, for practical purposes the totals are much the same regardless of whether they are computed on a calendar year or fiscal year basis. The months involved, January, February and March, are those during which fishing activity is at a minimum.

The trends portrayed in the following figures and tables are usually the result of several factors which are chiefly abundance of fish, market demand, technical advances, and regulation. Most fisheries reflect the effect of all four. Caution should be used in interpreting trends. The difficulties enumerated above are in no case of sufficient magnitude to alter the reliability of the statistics appreciably.

LIST OF NAMES OF COMMERCIAL FISHES

<i>Common Name</i>	<i>Other Names</i>	<i>Scientific Name</i>
Albacore	Longfin Tuna	<i>Thunnus germon</i>
Anchovy		<i>Engraulis mordax</i>
Carp		<i>Cyprinus carpio</i>
Clams		
Cockles		<i>Cardium corbis</i>
Horseclams		<i>Schizothaerus nuttallii</i>
Razor		<i>Siliqua patula</i>
Softshell	Eastern	<i>Mya arenaria</i>
Crab	Dungeness Crab	<i>Cancer magister</i>
Crawfish	Crayfish, Crawdad	(<i>Astacus leniusculus</i> (<i>A. klamathensis</i>)
Gray Cod	True Cod	<i>Gadus macrocephalus</i>
Hake		<i>Merluccius productus</i>
Halibut		<i>Hippoglossus stenolepis</i>

Common Name	Other Names	Scientific Name
Herring		<i>Clupea pallasii</i>
Ling Cod	Cultus Cod	<i>Ophiodon elongatus</i>
Mackerel		
Jack	Mackerel	<i>Trachurus symmetricus</i>
Pacific	Mackerel	<i>Pneumatophorus diego</i>
Octopus		<i>Paroctopus apollyon</i>
Oyster		
Native	Olympia Oyster	<i>Ostrea lurida</i>
Pacific	Japanese Oyster	<i>O. gigas</i>
Perch		
	Silver Perch	<i>Damalichthys vacca</i>
	Pogie	<i>Holconotus rhodoterus</i>
	White Perch	<i>Hyperprosopon argenteum</i>
	Blue Perch	<i>Taeniotoca lateralis</i>
Pilchard	Sardine	<i>Sardinops caerulea</i>
Porpoise		Unknown
Rockfish	Groupers, Rockcod, Snappers, Rosefish	<i>Sebastes</i> sp.
Sablefish	Black Cod, Skilfish	<i>Anoplopoma fimbria</i>
Salmon		
Blueback	Red, Sockeye	<i>Oncorhynchus nerka</i>
Chinook	King, Tyee	<i>O. tshawytscha</i>
Chum	Dog	<i>O. keta</i>
Silver	Silversides	<i>O. kisutch</i>
Steelhead	Steelhead Trout	<i>Salmo gairdnerii</i>
Shad		<i>Alosa sapidissima</i>
Shark		
Dogfish	Grayfish	<i>Squalus suckleyi</i>
Grouper		Unknown
Soupfin		<i>Galeorhinus zyopterus</i>
Skate		<i>Raja</i> sp.
Smelt		
Bay	Capron, Jack	<i>Atherinops affinis</i>
Columbia River	Eulachon, Candlefish	<i>Thalichthys pacificus</i>
Surf	Silver	<i>Hypomesus pretiosus</i>
Sole and Flounders		
Arrowtooth Sole	Longjaw, Turbot, Bastard Halibut	<i>Atheresthes stomias</i>
Dover Sole	Slime Sole, Slippery Sole	<i>Microstomus pacificus</i>
English Sole	Lemon Sole, Pointed Nose Sole	<i>Parophrys vetulus</i>
Petrale Sole	Round-nosed Sole, Brill	<i>Eopsetta jordani</i>
Rex Sole		<i>Glyptocephalus zachirus</i>
Rock Sole		<i>Lepidopsetta bilineata</i>
Sand Dab		<i>Citharichthys sordidus</i>
Sand Sole		<i>Psettichthys melanostictus</i>
Flounder	Starry Flounder	<i>Platichthys stellatus</i>
Striped Bass		<i>Roccus saxatilis</i>
Sturgeon		
Green		<i>Acipenser medirostris</i>
White		<i>A. transmontanus</i>
Tomcod		<i>Microgadus proximus</i>



FIGURE I. See Table I.

FISHERIES

Albacore

The albacore (*Thunnus germon*) fishery as such in the Pacific Northwest began in 1936 when a few thousand pounds were taken off Coos Bay, Oregon. In the following two years the landings increased greatly. The poundage landed in Oregon during 1937 and 1938 was estimated from questionnaires and dealers' records because of the lack of official reports during this period. Beginning in 1939 the dealers were obliged to record the pounds of albacore landed.

The largest annual catch as shown by Figure 1 was made in 1944 when about 22,500,000 pounds were landed in Oregon. Two years later in 1946 the landings had dropped to only 4,000,000 pounds.

The reason or reasons for the great fluctuations in the numbers of albacore available to the fishermen are not known. Various theories have been advanced, such as a change in the ocean currents or poor spawning conditions. The weather has almost a controlling influence on the success of fishing. Strong westerly winds make fishing impossible.

Length-frequency measurements indicate that there are only two principal age groups in the fishery. Such a condition tends to cause sharp fluctuations in the landings since, if either or both of the groups are poorly represented in the catches, there is no cushion of several other age classes to hold the take relatively stable.

For the first few seasons albacore were caught in Pacific Northwest waters principally by trolling feather jigs at the surface. Then the use of live anchovies to attract the fish became important, particularly in the latter part of the season after mid-August. In 1949 and 1950 most of the boats again resorted to trolling and very little live bait was used.

The landings of albacore recorded in the Oregon statistics are from catches made in waters from Northern California to British Columbia.

Anchovy

Anchovies occur in abundance along the Oregon Coast throughout the year, but are available for capture only during the summer months when they enter the bays and inshore waters. They seldom exceed seven inches in length. Although not used for human food to any great degree, they appear to be an important forage fish in providing food for salmon and other valuable species.

The fish are caught primarily for use as bait, particularly as live bait in the albacore tuna fishery. Small schools are surrounded by seines and dipped from the net into a live well in the boat where they are held until needed. Although no records exist of the amount of anchovies so used, the catch is known to be large. One thousand or more pounds of anchovies may be required for a baiting.

In addition the small quantities listed in Table 1 have been landed from time to time for use as food.

The anchovy fishery is of commercial value at the present time only as a bait supply for the tuna fishery. The fish are palatable and in good supply; consequently it can be expected that at some future time an industry based upon use of anchovies will develop.

BOTTOM FISHERIES

General

The bottom fish and sharks landed in Oregon ports are caught chiefly by means of otter trawls, long-line gear, and gill nets. The otter trawl fishery accounts for at least 95 percent by weight of the bottom fish landings.

The otter trawl is a tapered, bag-like net with a wide front opening or mouth and a narrow, closed tail or bag. It is towed along the bottom of the ocean and traps the fish in its path. The principal species of food fish landed by otter trawl fishermen are the Dover sole, English sole, petrale sole, and rockfish. Many minor species are also caught in the otter trawl nets, but these are not regularly sold by the fishermen due to limited market demand. The major species in this category are ling cod, gray cod, arrowtooth sole, and rex sole. There was also, until 1950, an extensive otter trawl fishery for dogfish sharks.

The Oregon otter trawl fishery is confined to the continental shelf off the coasts of Oregon, Washington, and southern Vancouver Island. The continental shelf is that portion of the ocean bottom which is adjacent to a land mass and is characterized by a gradual shelving to 100 to 200 fathoms. Beyond this shelf the bottom drops sharply to 500 to 1,000 fathoms or more. The shelf varies from 10 to 30 miles in width off the Oregon and Washington Coasts. With the exception of the rosefish (*Sebastes alutus*) banks the grounds which are currently in use range from 5 to 90 fathoms in depth. Numerous reefs, snags, and canyons serve to further restrict the area available to otter trawl fishing.

The long-line gear consists of a main line to which hooks are attached at intervals by leaders three to four feet in length. This type of gear is fished on the bottom.

Halibut is the principal species caught in the long-line fishery, and is landed mainly during May and June. Throughout the remainder of each year, weather permitting, smaller quantities of ling cod, sablefish, rockfish and petrale sole are caught. Prior to 1943 there was a considerable long-line fishery for soupfin sharks. By 1943 the long-line gear had been supplanted in the shark fishery by the more efficient gill nets.

The long-line fishery is conducted at depths ranging from 20 to 200 fathoms. It is not limited by reefs to the extent that the otter trawl fishery is. In fact, the best long-line fishing for some species is usually found adjacent to or on these reefs.

The gill nets used to capture soupfin sharks may be fished on the bottom or at the surface. If fished on the bottom they are called diver nets, and if they are fished at the surface they are called floater nets. In either case they are fished in an upright fence-like position and capture the fish by entangling them in the meshes of the net.

The gill nets were used in the ocean exclusively for shark fishing. The soupfin shark was the most sought-after species, but many other species of sharks were also captured in the nets. In addition to dogfish, the minor shark species include the basking (*Cetorhinus maximus*); blue (*Prionace glauca*); bonito (*Isurus glaucus*); cow (*Notorynchus cepedianus*); hammer-head (*Sphyrna zygaena*); mackerel (*Lamna ditropis*); mud (*Hexanchus griseus*); thresher (*Alopias vulpinus*); and tiger (*Galeocerdo cuvier*). Of

these minor species, the blue shark is the most abundant. At times it was unfortunately more abundant than the soupfin shark which the fishermen were seeking.

The diver net fishery was confined to waters 20 to 80 fathoms in depth, but here again the reefs were avoided for fear of tearing the nets. Since this fishery was conducted during the winter months, the grounds fished were often those in the vicinity of the port of landing. The Oregon ports from which these fisheries operated were Astoria, Depoe Bay, Newport, Coos Bay, and Port Orford.

The floater net fishery took place as far as 100 miles offshore and was not restricted to any specific depth since the nets float at or near the surface of the ocean. The boats began fishing in April off Point Conception and ended up in Hecate Straits, British Columbia, in September or October.

The mention of surface nets in connection with a discussion of "bottom fish" gear introduces an inconsistency which needs explanation. These gill nets were used to catch soupfin shark. This is not a bottom-dwelling form in the strictest sense, but is present near the bottom during certain times of the year. At other times it is to be found at or near the surface many miles offshore. During the earlier years of the fishery this pelagic phase of the shark's life was not known, and the fishery was conducted entirely on the bottom with long-line or diver net gear. During the last four or five years of the fishery both surface and bottom gear were used to catch these fish.

In general there are no restrictions upon the bottom fisheries other than those imposed by weather and market. The notable exception is the regulation of halibut fishing by the International Fisheries Commission, a treaty organization of the United States and Canada for the regulation of the halibut fishery. The season is based upon a catch quota (in pounds) and ends when the specified quota has been caught. The season for the Oregon fishermen usually lasts through May and part of June of each year. On a special permit basis there is also an incidental fishery for halibut by the long-line fishermen which ends on or before November 15, but the landings are small.

The otter trawl fishery expanded rapidly during World War II in order to satisfy the demand for large quantities of fish. Since the end of the war, however, the fishery has been restricted by a sharp decline in the demand for fish together with a rise in costs of gear and labor. Market limits, varying as to quantity and kind, have been imposed on all species of otter trawl fish. In addition to this, the dogfish shark fishery ended in 1949 with the collapse of the liver market due to foreign competition and synthetic vitamin A. This species had contributed substantially to the income of the otter trawl fishermen. World War II cut off this country's regular supply of cheaper foreign fish livers and liver oils, which were a source of vitamin A. The resulting high prices offered for domestic fish livers led to considerable exploration by the fishermen for suitable sources of vitamin A from the livers of local species of fish. The two principal sources discovered were the livers of the dogfish shark (*Squalus suckleyi*) and soupfin shark (*Galeorhinus zyopterus*). The demand was such that even the less valuable livers of other species were retained at times for limited sale at lower prices.

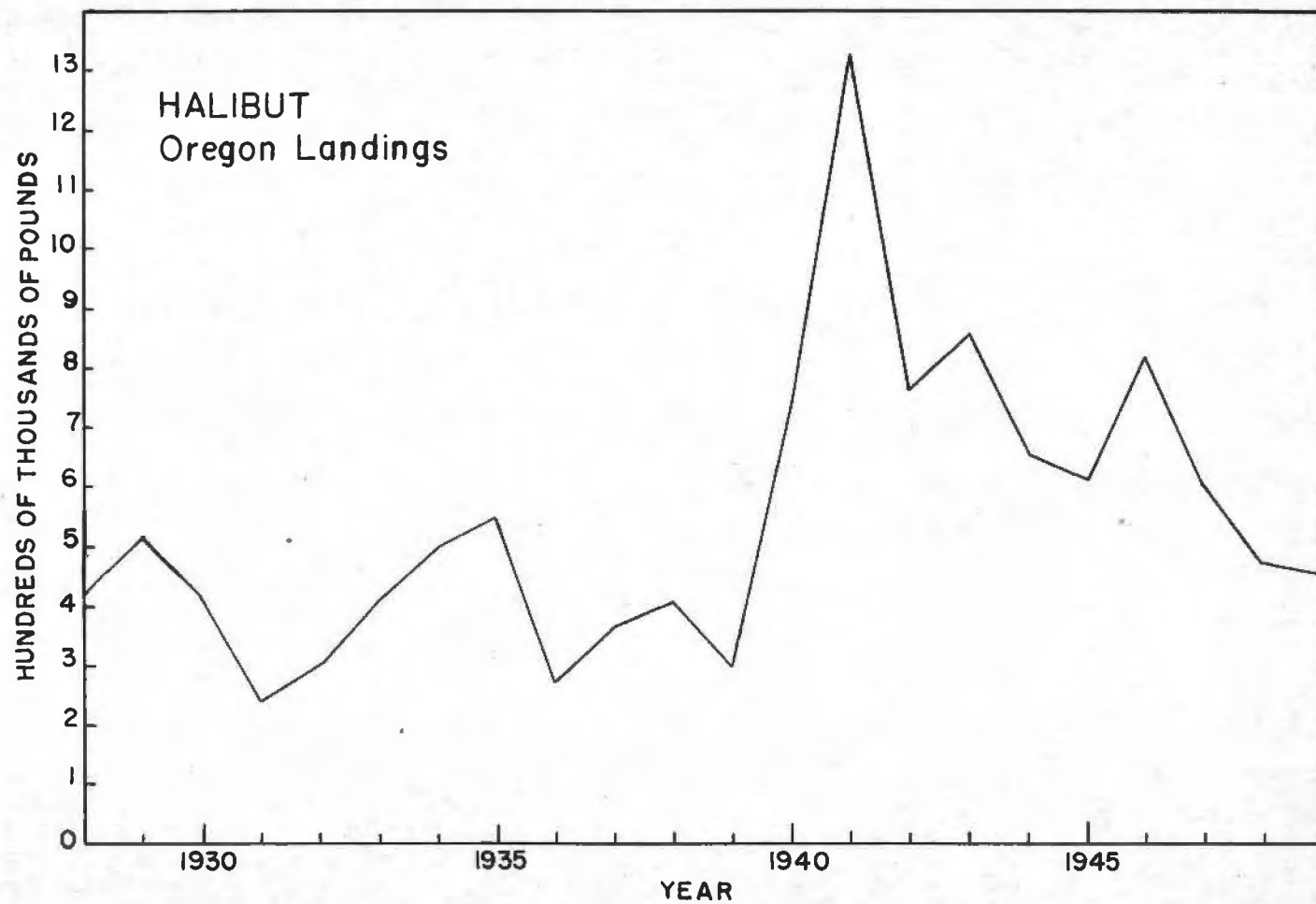


FIGURE 2. See Table I.

The demand for halibut landed by the long-line fishery has remained good. The markets for other long-line species such as sole, ling cod, and rockfish are not, however, in good condition.

Gray Cod

The gray or true cod (*Gadus macrocephalus*) is of little importance in the Oregon landings. It has averaged about 25,000 pounds per year with an atypical peak of 253,998 pounds in 1946.

These fish are usually landed dressed by the otter trawl and long-line boats but the amount landed by each is not known.

Hake

The hake (*Merluccius productus*) is not utilized for human food due to its soft flesh and poor keeping qualities. The primary uses have been for mink food and as a source of liver oils. The average annual landing for the period 1946-49 was 6,000 pounds. There were only 804 pounds landed in 1941, 66 pounds in 1944, and no landings in 1942, 1943, and 1945. Hake are very abundant on the otter trawl grounds during the summer months and large numbers caught in the nets are discarded at sea in a dead or dying condition.

Halibut

The halibut (*Hippoglossus stenolepis*) is caught primarily by long-line gear. The Oregon landings have fluctuated from 455,467 to 1,323,900 pounds per year for the period 1941-49 (Fig. 2). The greater proportion of the landings has been made during May or June when the general season is open.

Ling Cod

Ling cod (*Ophiodon elongatus*) are caught by otter trawl and long-line fishermen. The fish are landed dressed and round, but it is not known in what proportions these categories are present. Most of the landings are from otter trawl vessels.

The landings remained near 1,000,000 pounds per year from 1942 through 1946 as shown in Figure 3. After 1946 the landings declined somewhat to about 700,000 pounds average per year. This decline was largely due to market restrictions.

Octopus

The octopus (*Paroctopus apollyon*) landings in Oregon are of negligible importance. They probably represent incidental landings by the otter trawl boats for use as bait by the long-line fleet. There is no regular octopus fishery such as is found in California. The Oregon landings have not exceeded 400 pounds per year.

Perch

A small fishery utilizes several of the salt water perches (*Embiotocidae*) of the Oregon Coast. The species involved are blue perch, silver perch, surf perch and shiners. With the exception of the last, which is used primarily for bait, these species are used for both food and for bait in other fisheries.

In addition to the commercial fishery, a sport fishery which is growing

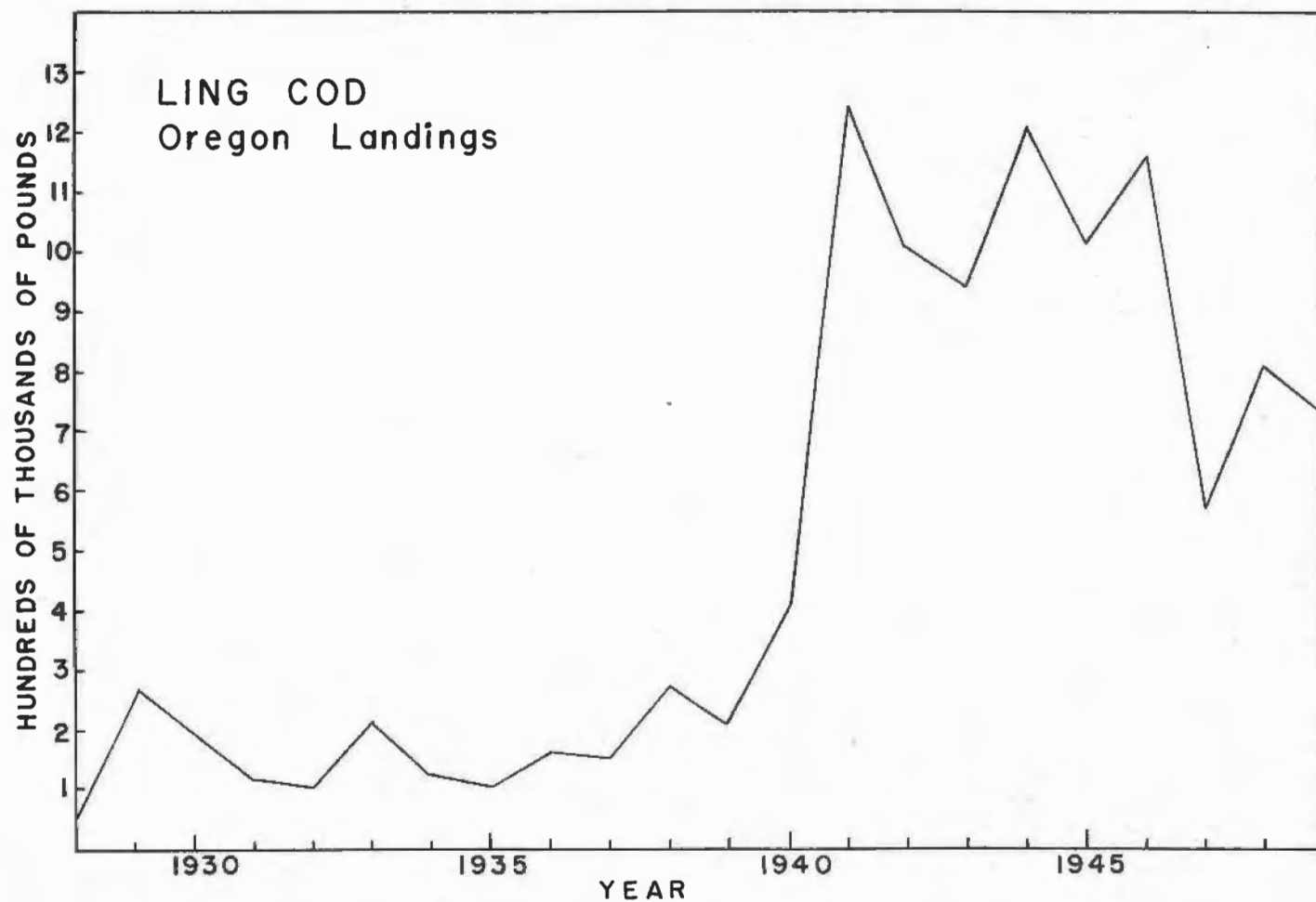


FIGURE 3. See Table I.

in popularity is based upon perch. One or another of these species occur abundantly along most of the coast.

Rockfish

The rockfish are caught by otter trawl and long-line gear. The principal species caught by the otter trawl fleet are the black rockfish (*Sebastes melanops*); green or yellow-tail rockfish (*S. flavidus*); red or orange rockfish (*S. pinniger*); and rosefish (*S. alutus*). The confusion of common names applied to these fish makes the differentiation of landings by species impossible. Frequently the general terms rock cod or snapper are applied indiscriminately to any or all of the species.

The landings of rockfish (all species) rose rapidly during the war from 1,301,400 pounds in 1941 to a peak of over 17,000,000 in 1945. Subsequently

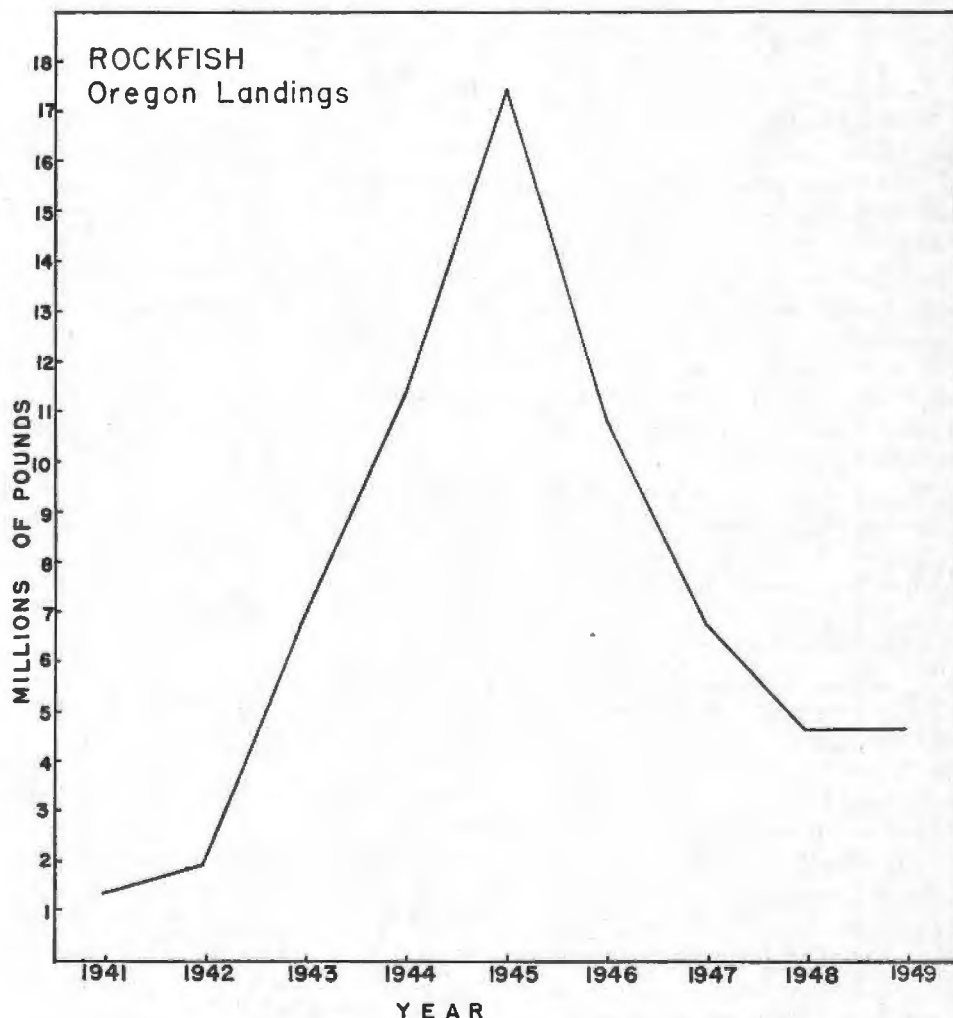


FIGURE 4. See Table I.

the landings fell rapidly because of decreased demand and leveled off at about 4,000,000 pounds per year in 1949. Recent trends in this fishery are shown in Figure 4.

These fish are available throughout the year, but currently the demand has been greatest during the winter and early spring when the flatfish are not abundant on the grounds.

The rosefish (*S. alutus*) was first fished regularly in 1945 with otter trawl gear. Subsequent exploration has indicated that it is abundant at depths between 90 and 150 fathoms along the coasts of Oregon and Washington. The landings were not reported separately as rosefish until May 1949. The magnitude of the landings prior to this date is not known but during 1949 about 1,000,000 pounds of rosefish were landed.

The principal rockfish caught by the long-line fishery is the "red snapper" (*S. ruberrimus*) which is found in or near rocky reefs and thus is not commonly available to the otter trawl gear.

Sablefish

The sablefish, (*Anoplopoma fimbria*) is known by several different names along the Pacific Coast, some of the more common of which are black cod, coal cod, blue cod, skilfish and coalfish. It ranges from Southern California to Alaska and supported a fishery by long-line vessels as early as 1884.

During the halibut season a considerable number of sablefish are taken by long-line vessels, for the two species appear in similar habitats. In former years many of the vessels continued to fish for sablefish and several species of rockfish after the close of the halibut season, but the practice in recent years has been for the majority to enter the albacore fishery. Adverse weather conditions during the late fall and winter months generally curtail the landings of sablefish.

An average of about 600,000 pounds (Fig. 5) of sablefish per year was landed in Oregon during the period from 1941 through 1947, which is about one-fourth of the average annual Washington catch and slightly less than one-fourth of the annual California catch. This disparity may be attributed, in part at least, to the relatively restricted waters off Oregon in which the sablefish occurs in commercial quantities.

Although sablefish are usually landed dressed, i. e., heads off and cleaned, the statistics are complicated by the fact that during the war years a considerable number were landed whole. This particularly applies to the small fish which were landed by trawlers and sold on the fresh fish market. Unfortunately, it is now impossible to determine accurately the percentage of the landings which consisted of round fish.

The World War II expansion of the trawl fleet resulted in the removal of large numbers of sablefish. During this period a practically unlimited demand existed for all sizes. Because of the limited demand at the present time, however, concentrations of small fish are avoided whenever possible by the trawl vessels.

It is the consensus among the fishermen that the sablefish are not nearly as abundant now as during former years. Whereas catches of 40,000

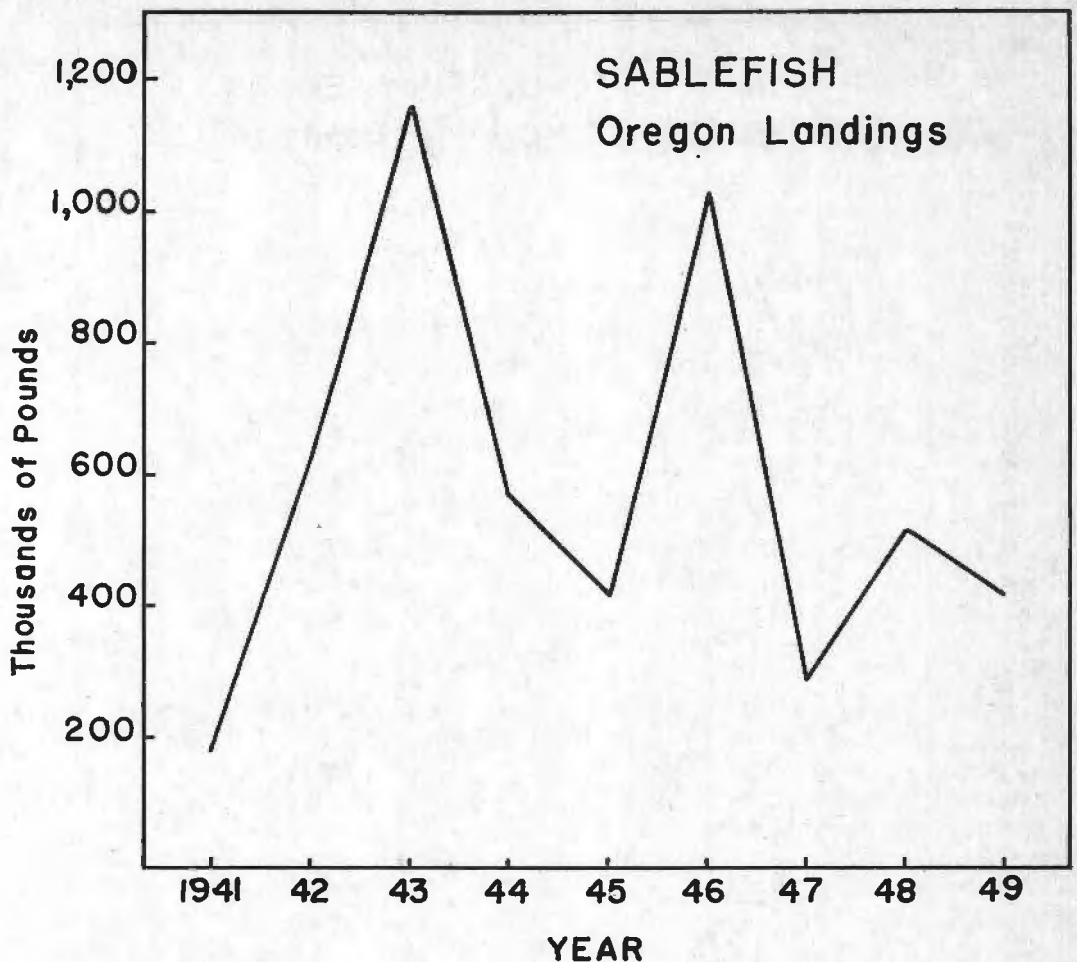


FIGURE 5. See Table I.

to 60,000 pounds per vessel were landed at Astoria between 1936 and 1939, a catch of 20,000 pounds is considered unusually large at the present time (1950). A decrease in average size of sablefish taken by long-line vessels has also been reported by fishermen in recent years.

Dogfish Shark

The dogfish shark (*Squalus suckleyi*) is a relatively small shark, generally less than five feet in length, and the livers are correspondingly small, usually weighing from one half of a pound to two pounds each. They were fished during the fall, winter, and spring months when they appeared in large numbers on the otter trawl grounds off the Oregon Coast. The Oregon otter trawl fleets fished for them from Coos Bay to Vancouver Island.

The statistics on the dogfish shark are complicated by the practice of selling the round fish and livered carcasses without differentiation between them in the records. Thus, for example, in 1941 over one million pounds of

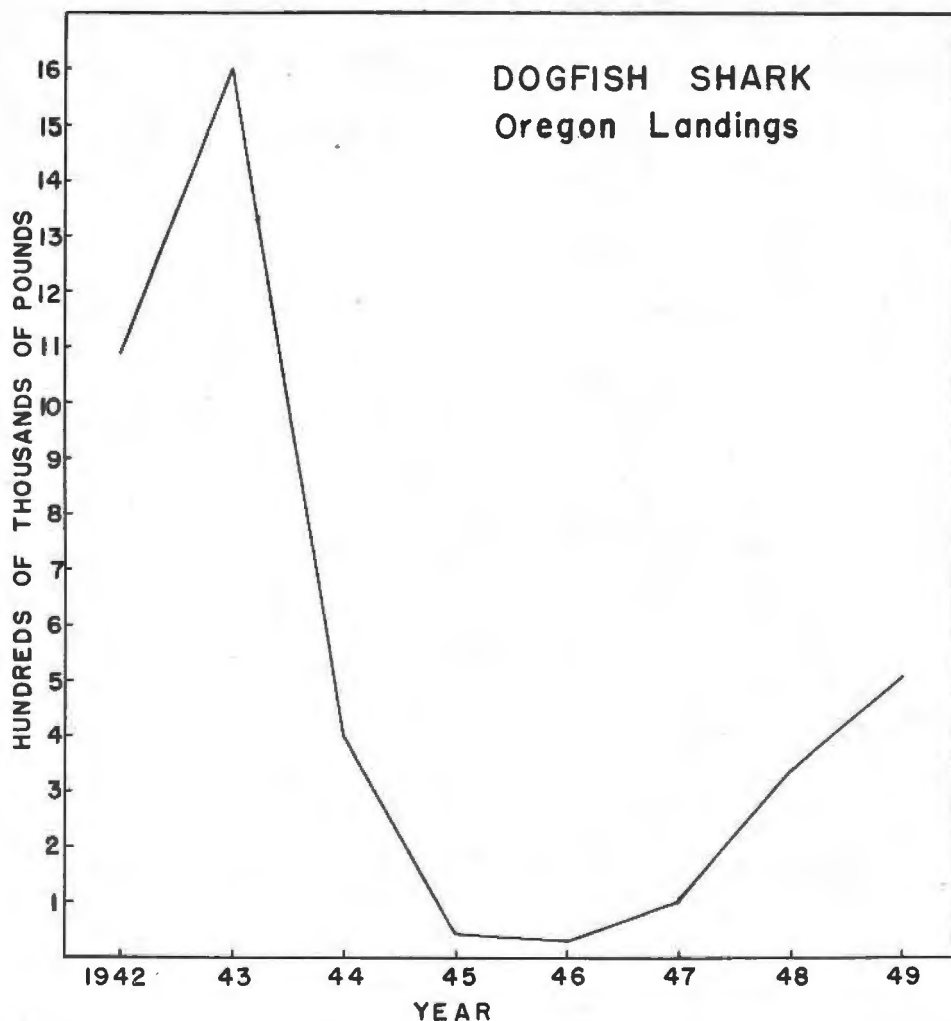


FIGURE 6. See Table I.

dogfish shark were landed together with 220,000 pounds of dogfish shark livers. According to the fishermen, the landings during the period 1941-1944 were practically all in the round. This practice was discontinued when it was found that the livers constituted more than ten percent of the body weight. The ten percent formula had been the basis for determining the price. After that the fishermen "livered" the sharks at sea and usually discarded the carcasses, especially when the fishing was done far from port. The landings from 1947 to 1949 consisted of "livered" carcasses which were sold for reduction purposes (Figs. 6 and 7).

Soupin Shark

The soupfin shark (*Galeorhinus zyopterus*) was the most desirable shark because of its rich (in vitamin A) liver and large size. These fish averaged

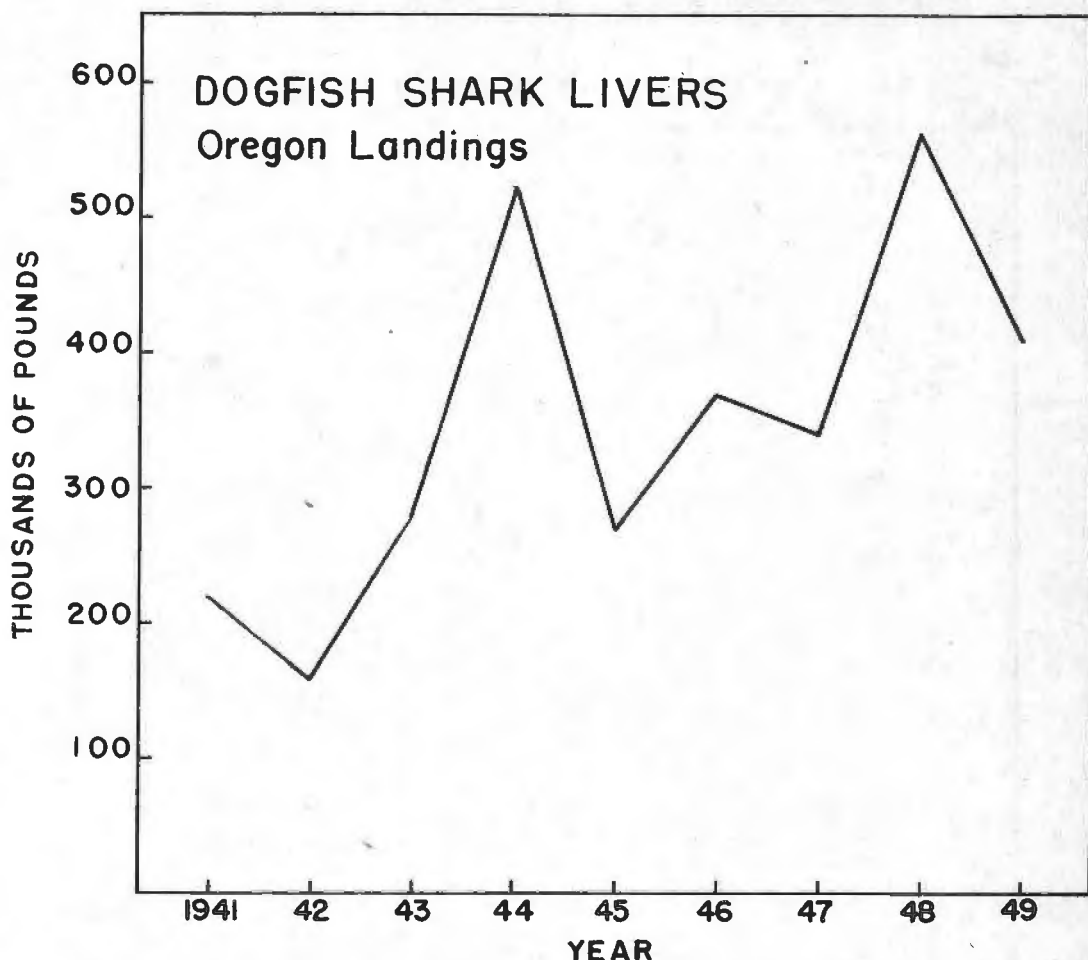


FIGURE 7. See Table I.

six to eight feet in length with livers of about four pounds apiece and, if of high vitamin content, were worth up to \$50 each.

These fish were never as plentiful as the dogfish, but their higher quality and larger livers more than made up for the difference. They were not commonly caught by the otter trawl nets, nor were they always to be found at the bottom of the ocean.

The landing receipts as shown in Figures 8 and 9 follow a similar pattern to that of the dogfish shark, and the same problem of round and livered fish is present; also it is probably safe to assume that the early peak represents round fish (with livers at about 13 percent of body weight) while the later peak (Table 1) represents livered carcasses sold for reduction purposes. The gradual reduction in the numbers of soupfin shark livers landed through 1949 probably indicates a declining abundance of these fish.

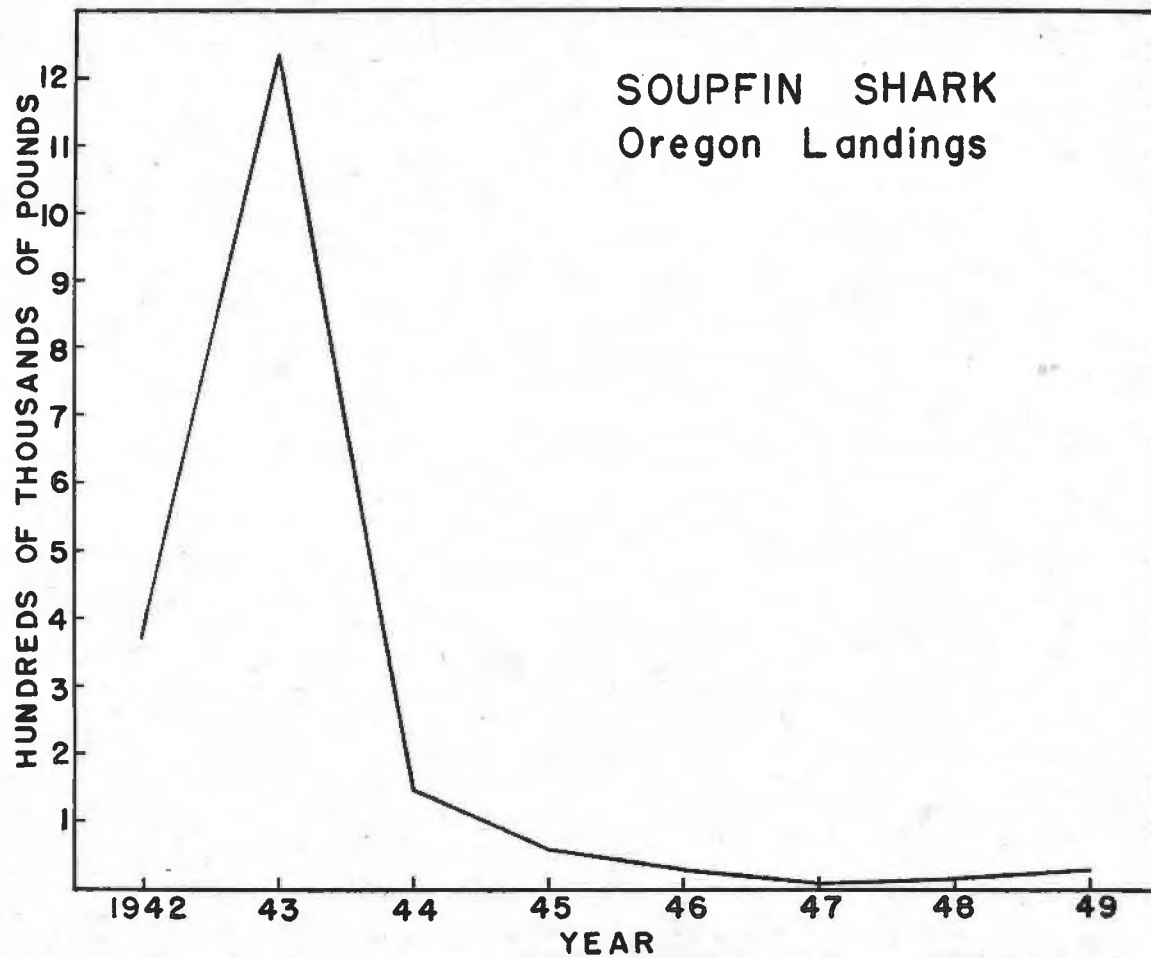


FIGURE 8. See Table I.

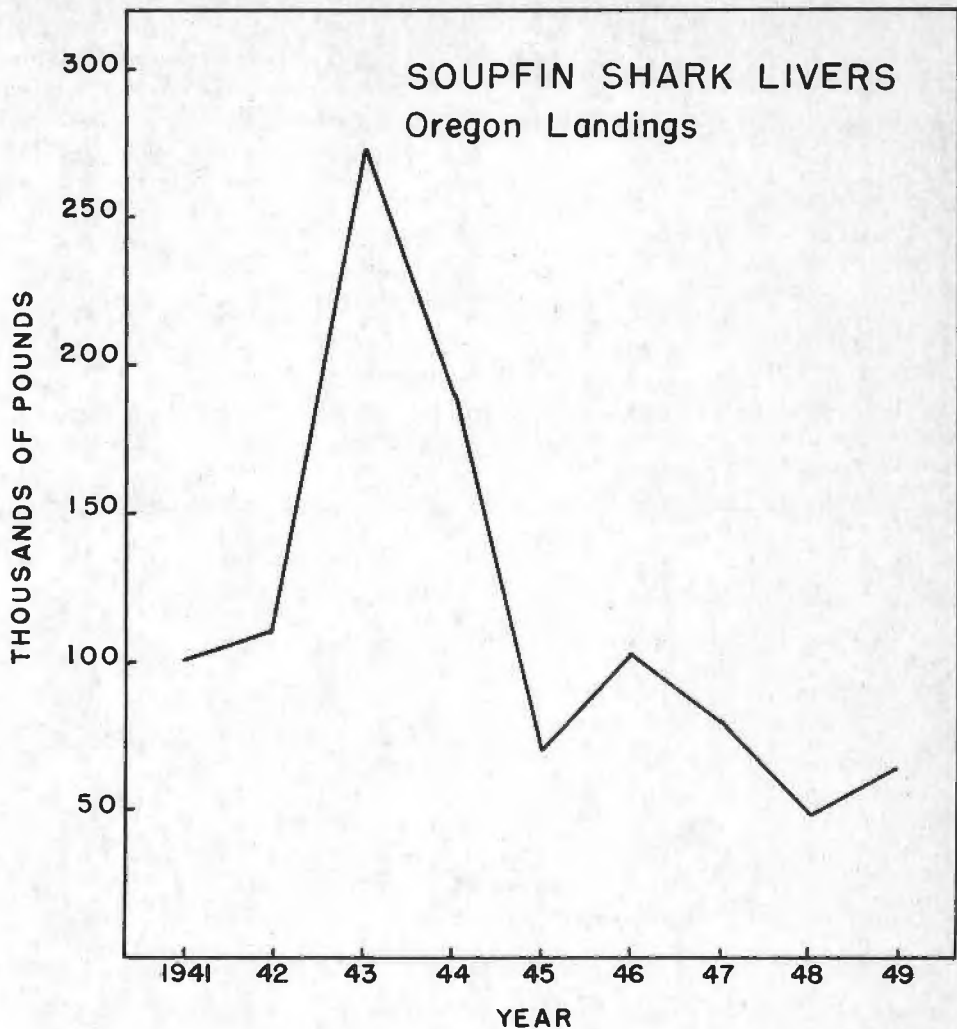


FIGURE 9. See Table I.

Scrap Fish

The term scrap fish refers to mink food landings which consist mostly of undersized Dover, English, and petrale sole, some rockfish, and non-marketable flatfish such as Bellingham sole (*Isopsetta isolepis*), rex sole (*Glyptocephalus zachirus*), and sand dab (*Citharichthys sordidus*). During the period when the flatfish market was good, the mink farmers utilized the fillet scraps for mink food. However, during 1948 and 1949 when the food fish market was poor and landings irregular, there were not enough fillet scraps to satisfy the demand for mink food. Accordingly more mink farmers turned to buying whole fish of all kinds for their mink. The sudden increase of scrap fish landings from 375,000 pounds in 1947 to 1,650,000 pounds in 1948 and 1,620,000 pounds in 1949 reflects this trend.

Skate

Skates are taken incidentally to the fishery for other species of bottom fish. As a rule they are not found in large concentrations as are other species of trawl fish, and the market value is low. Small amounts of the pectoral fins or "wings" of these fish are occasionally sold for human food, but the catch, if landed at all, is normally sold to reduction plants for conversion to oil and fish meal.

The skates (*Raja rhina* and *R. binoculata*) were landed for their livers by the otter trawl fishermen. The decline of the landings to zero in 1949 probably indicates that the low potency skate livers were a marginal product in the liver market.

Sole and Flounder

The "soles" and flounders are fished almost exclusively with the otter trawl. An exception is the petrale sole which is caught in small quantities by the long-line fishermen.

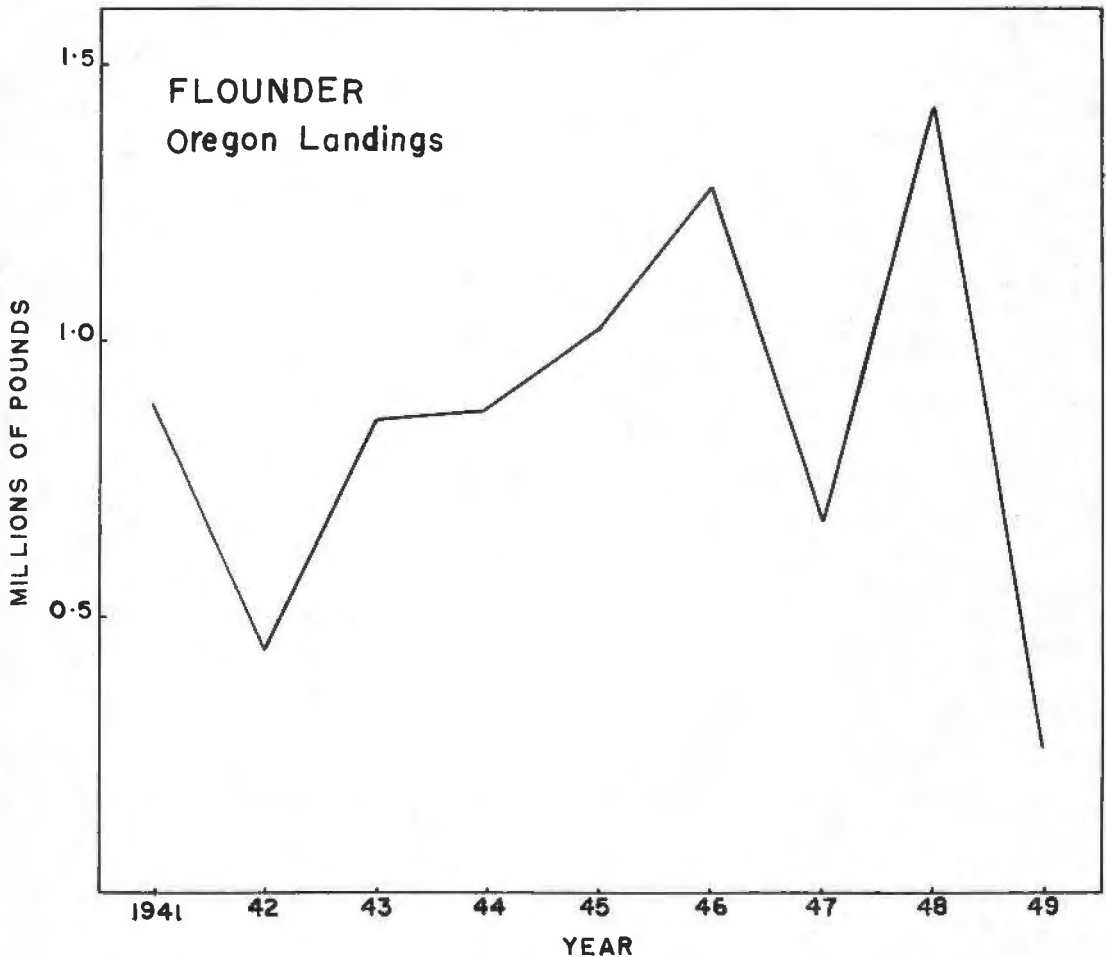


FIGURE 10. See Table I.

These fish are caught in waters of 5 to 70 fathoms in depth and all are filleted to be sold fresh or frozen.

None of these species is a true sole (*Soleidae*), but all are members of the flounder family (*Pleuronectidae*) with the lone exception of the sand dab which belongs to the family *Bothidae*.

The principal species landed in Oregon are the petrale, English, and Dover soles which are listed here in the order of their value to the fishermen.

Flounder

While not commanding the highest price among the Oregon flatfish, the starry flounder (*Platichthys stellatus*) constitutes a large portion of the

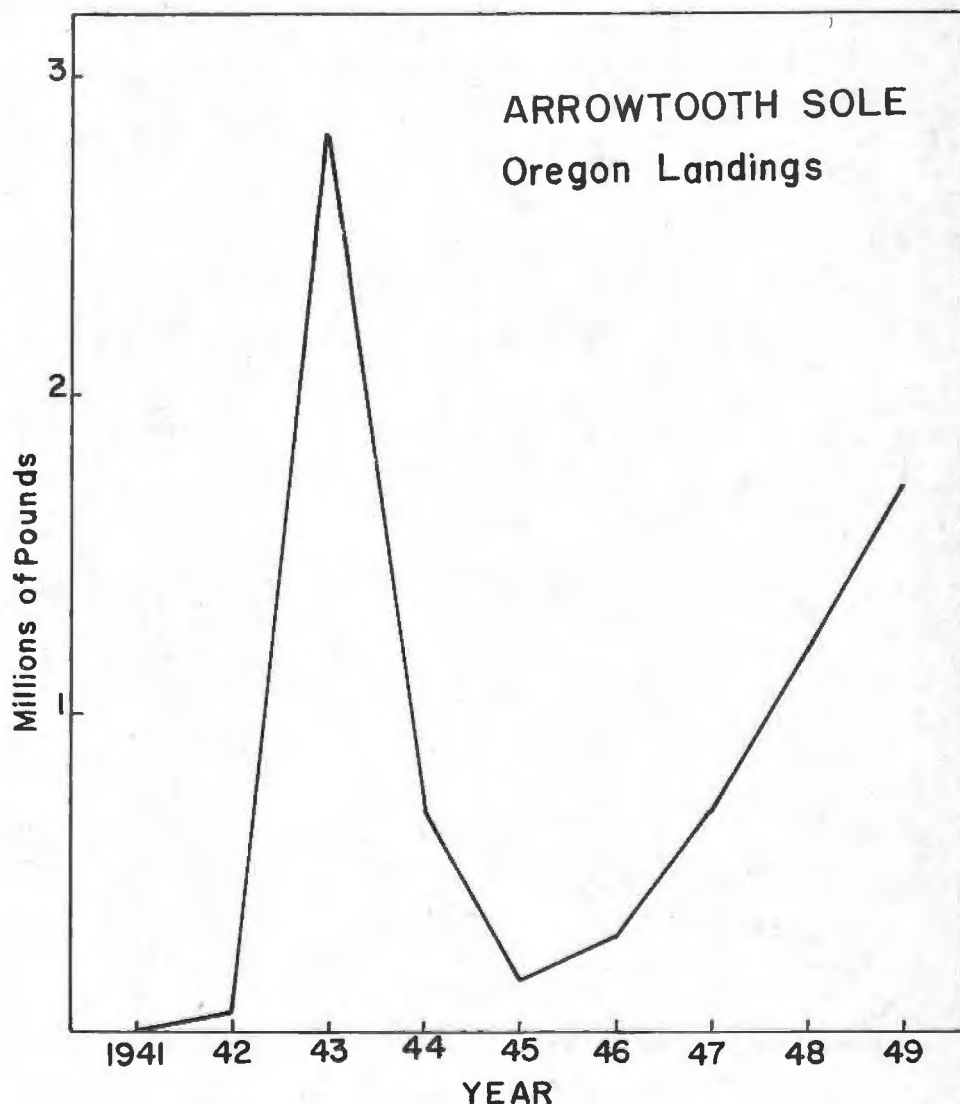


FIGURE 11. See Table I.

catch of these fishes. The flesh is firm and palatable, but the extremely rough skin coupled with the body proportions of the flounder make it difficult to handle and reduces the yield in fillets when the fish are processed. From 1940 to 1949 the landings have fluctuated between 272,042 and 1,434,689 pounds (Fig. 10).

This species is unique in that it is the only one of the Oregon flounders which migrates into fresh water. The starry flounder commonly occurs in the lower portions of the larger streams flowing into the ocean. As a result, small numbers of flounders are taken in conjunction with the river salmon fisheries.

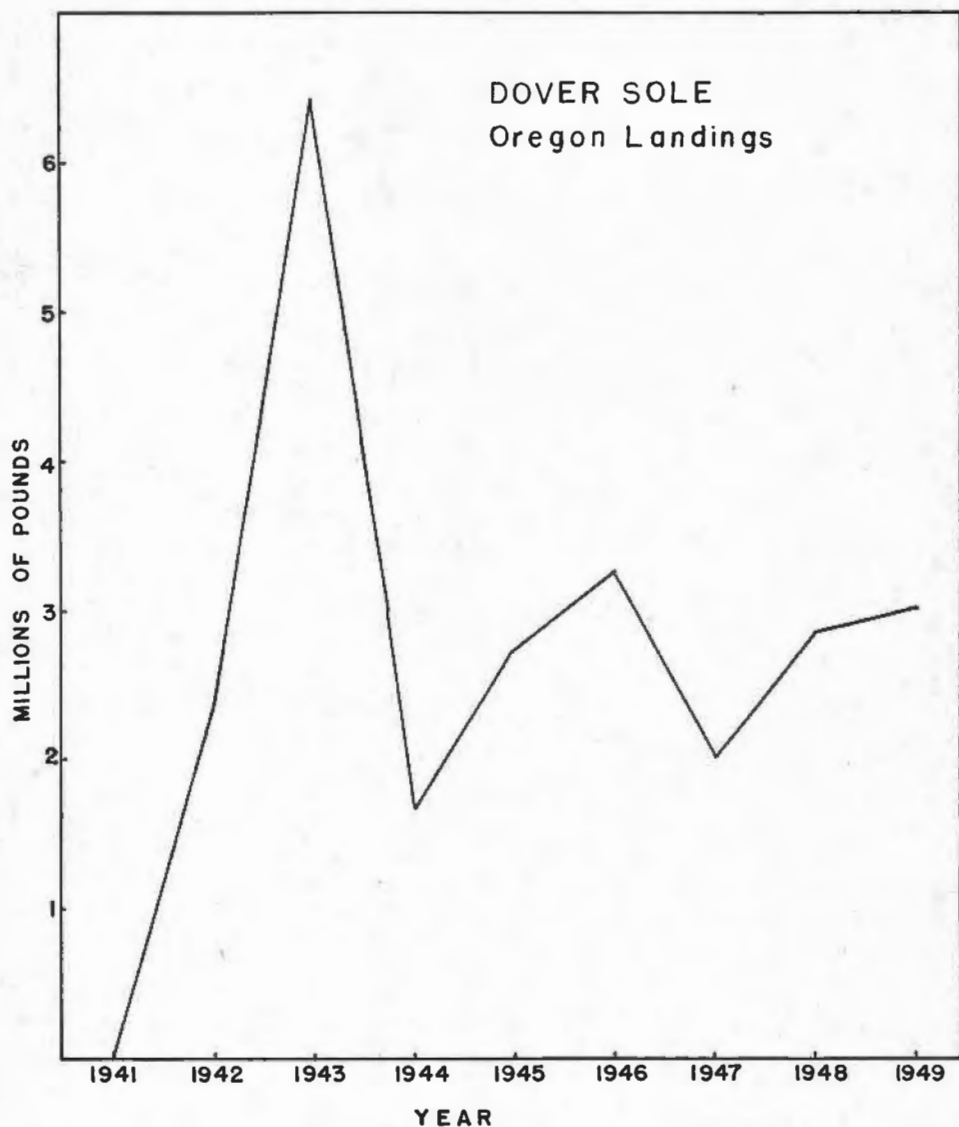


FIGURE 12. See Table I.

Arrowtooth Sole

The arrowtooth sole or turbot (*Atheresthes stomias*) is a large, soft fish. It is abundant on the grounds during the spring and summer months, but has not yet proven successful as a fillet product. As shown in Figure 11, the two peak years of production, 1943 (2,831,013 pounds) and 1949 (1,723,963 pounds), were preceded and followed by considerably lower landings. In 1950 there was no market for arrowtooth sole as a food fish although some were sold as mink food. The 1943 peak represents the result of the sharp rise in demand for fillet fish during the war years. The 1949 peak resulted from an attempt to develop a satisfactory product for the market. While



FIGURE 13. See Table I.

not satisfactory as a filleted product, there are other uses to which it might be put such as fish meal for salmon hatcheries and mink food.

Dover Sole

The Dover or slime sole (*Microstomus pacificus*) is caught off the Oregon and Washington Coasts, the largest proportion of the total landings coming from the vicinity of the mouth of the Columbia River. This fish appears on the fishing grounds in May and early June and leaves again in October. Presumably it migrates to deeper waters out of reach of the otter trawl fishermen for the winter.

The demand for Dover sole fillets followed a similar pattern to that of the other otter trawl-caught species. The landings (Fig. 12) rose from about 200,000 pounds in 1941 to a peak of 6,431,666 pounds in 1943. Following this the landings leveled off at about 2,000,000 pounds per year. The small increase in landings during 1948 and 1949 represented an increased demand for cheaper fish.

English Sole

The English sole (*Parophrys vetulus*) is a smaller fish than either the Dover or petrale sole. It averages 14 to 15 inches in length in the commercial landings.

The demand for this fish developed slowly during the war, and a maximum production of 3,950,609 pounds was reached in 1946. For the period from 1947 to 1949 the landings averaged about 2,000,000 pounds (Fig. 13).

These fish are available in limited quantities throughout the year, but the landings reach a peak during July, August, and September.

The abrupt drop in English sole landings in 1949 marked the declining demand for bottom fish.

Petrале Sole

The petrale sole (*Eopsetta jordani*) is the most valuable of the three principal species of flatfish landed by the Oregon otter trawl fleet. This is the only species for which there has been an almost steady demand since the inception of the Oregon otter trawl fishery in 1936.

Little is known of the magnitude of the landings prior to 1941, but since that time they have followed the familiar pattern of a peak in 1943 and a subsequent decline. The later petrale landings have fluctuated about the 2,000,000 pound level. The abrupt drop in landings for 1949 marks the declining demand, as with English sole, for bottom fish (Fig. 14).

Rex Sole

The rex sole (*Glyptocephalus zachirus*) is one of the minor species of flatfish in the otter trawl fishery. The fish are usually not filleted because they are too thin. Although abundant on the grounds they are commonly discarded at sea when caught.

The peak landing in 1943 of 569,737 pounds represents a heavy demand for food fish, while the peak of 223,667 pounds in 1949 represents an increasing demand for mink food.

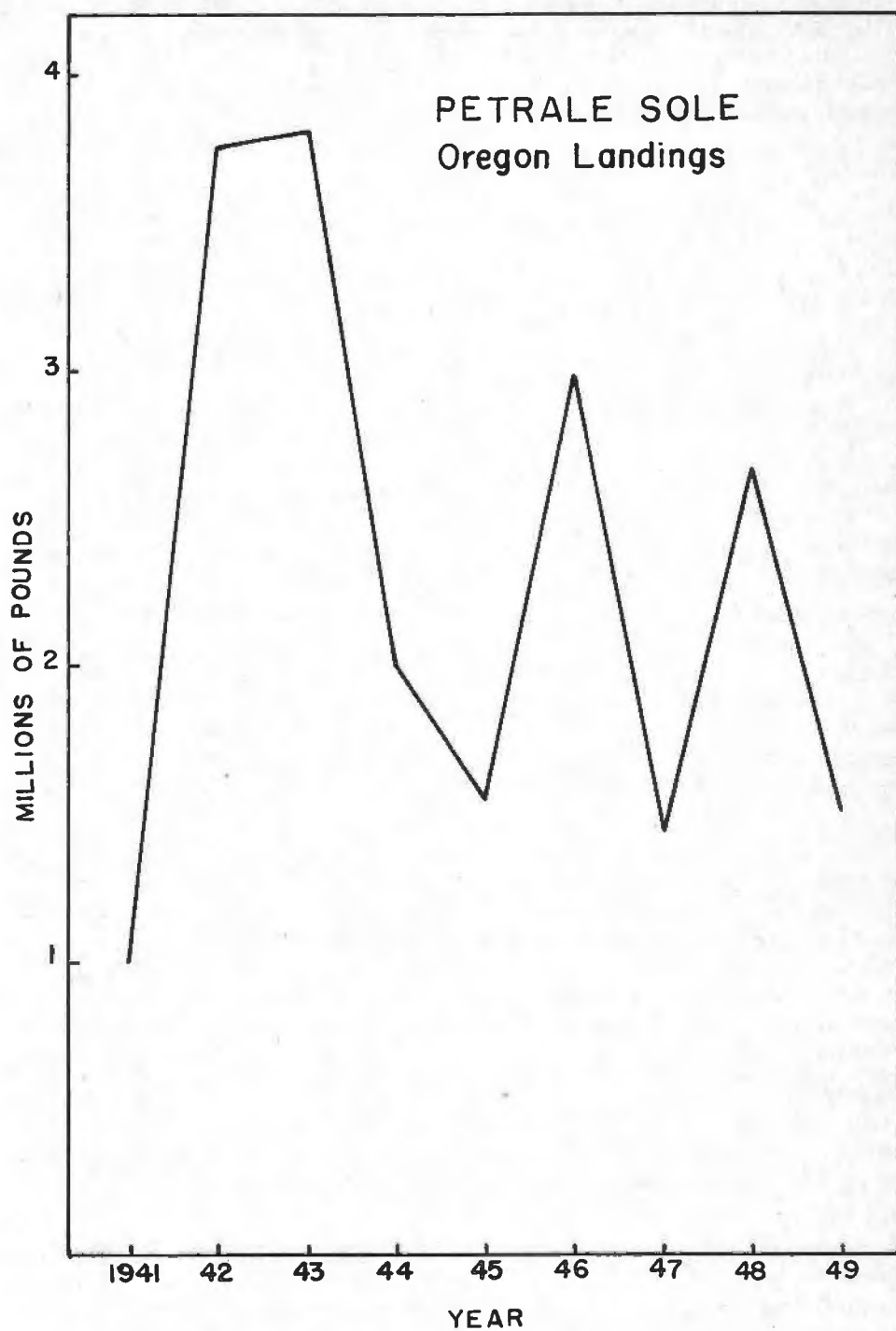


FIGURE 14. See Table I.

Rock Sole

The rock sole (*Lepidopsetta bilineata*) is of negligible importance in the otter trawl fishery. Landings have only been made in two years, i. e., 1944 (30,573 pounds) and 1948 (1,465 pounds). This species is not abundant on the local otter trawl grounds.

Sand Sole

The sand sole (*Psettichthys melanostictus*) is a minor species in the otter trawl landings. They are not abundant on the fishing grounds and are often included with petrale sole when landed.

The average annual landing in recent years has been 41,000 pounds with the lowest landing (7,513 pounds) in 1942 and the highest (111,953 pounds) in 1948.

Sand Dab

The sand dab (*Citharichthys sordidus*) is of no value to the otter trawl fishermen. Its small size (four to eight inches) precludes its use as a frozen fillet and there are no large fresh fish markets available with a demand such as exists in San Francisco. There the sand dab is considered a delicacy.

The statistics indicate little as to the nature of the fishery. Most of the sand dabs which are not discarded at sea are sold as mink food and as such may have been included under the categories "miscellaneous sole" or "scrap."

Miscellaneous Sole

The term "miscellaneous sole" was formerly applied to the landings of mixed species which were of the same price. A check of the records of one plant for June and July of 1943 indicated that various combinations of Dover, English, rex, and arrowtooth soles had been lumped together and reported as "miscellaneous sole" or "sole." During the later years of the fishery it is believed that the term has been applied to sales of mink food.

Sturgeon

Two species of sturgeon, the green (*Acipenser medirostris*) and the white (*A. transmontanus*) are landed from time to time by the otter trawl fishermen. The green sturgeon, which is a marine form, is landed in greater numbers, but the landings are small. A peak of 23,000 pounds occurred in 1943, but since then the landings have declined to none in 1949. The white sturgeon is primarily a freshwater or brackish water resident and few are captured in the ocean. A peak landing of 199 pounds was made in 1943 by the otter trawlers.

Tomcod

The tomcod (*Microgadus proximus*), despite its small size (five to eight inches), is commonly found amidst the catches in the otter trawl nets. There is little or no market for them and they are normally discarded at sea.

Fish Livers

The demand for livers of all kinds was good until 1949. During this period the livers of practically every catchable marine fish were tested for vitamin A potency. Quite a few species had sufficient potency to warrant the trouble of removing the livers.

The major sources of livers, other than sharks, were the halibut, ling

cod, sablefish and rockfish. The otter trawl and long-line fishermen retained the livers of these fish when they were dressed at sea.

Carp

The carp, which was introduced into Oregon almost 100 years ago, has spread to many of the lakes and streams of the state becoming abundant in many areas. While widely valued as a foodfish, carp have never been in demand in Oregon. As a consequence they have remained a minor source of food being fished but little if at all. There has been a limited use for carp as reduction plant raw material.

Ghost Shrimp

The ghost shrimp, (*Callinassa californiensis*) lives up to its name by having a translucent, pinkish-white color and seldom being seen except when dug from its three- to four-foot burrow in the mud flats of the bays along the Oregon Coast. It is not used as human food as are its close relatives the edible shrimps, but rather as bait for flounders, perch, kelp cod, and other fish. Considerable numbers are sold by moorage operators to tourists and sportsmen.

Forcing water through a nozzle driven beside the shrimp hole in the mud causes the shrimp to be washed to the surface where it is picked up with a hand net. While this is the commercial method many thousands more are obtained by sportsmen using a shovel for equipment.

There is estimated to be 10,000 acres of tide flats in Oregon which furnish a suitable habitat for these mud dwellers. It is calculated that there are 344,000 shrimp or 1,720 gallons per acre on heavily populated flats. For two of the smaller bays, the Alsea and Siletz, the value of the ghost shrimp fishery to five fishermen was calculated at \$1,200 for the summer of 1948. It is conservative to say the sports catch equalled this value for the same period.

Herring

The Oregon herring fishery is among the smaller fisheries of the state. Although used for human food to only a minor degree, the fishery has some importance as a source of bait for other species and as an animal food. The trend of the fishery is given in Figure 15.

Herring are caught when they enter the bays to spawn during the late winter months at which time fishermen are able to catch them in quantity with seines and gill nets. The demand is such that the catch is in general limited, but as the fish are not nearly as abundant as in British Columbia and Alaska, the fishery appears to be suited to the abundance of fish.

Shortly after entering the bays, the herring deposit their adhesive spawn on eel grass, sticks, piling, and similar objects in shallow water. On occasion they spawn on the hulls of fishing boats which are tied to the dock. After a period of about two weeks, depending upon water temperatures, the eggs hatch. The fry for the most part depart for the ocean where they remain until they return to spawn. Schools of small herring are found in the bays from time to time throughout the year, however.

Mackerel

Jack mackerel occur regularly in the ocean near the Oregon Coast during the summer months, and occasionally Pacific mackerel are also taken.

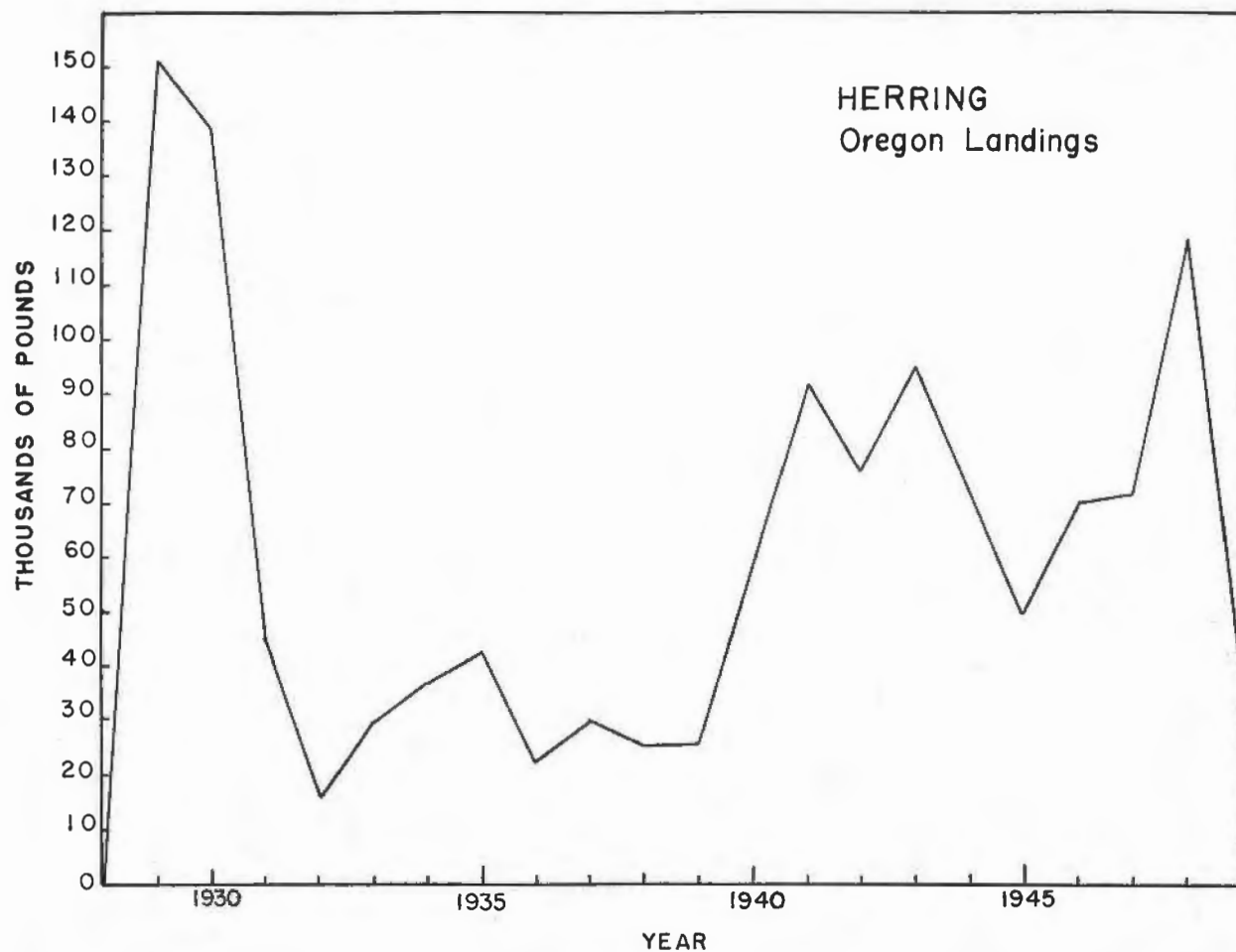


FIGURE 15. See Table I.

However, the catches are sporadic and are often made while fishing for pilchard. The center of abundance for the mackerel stocks lies in southern California waters.

Lamprey

Although this species is not generally considered to be of commercial importance, in recent years a fishery for reduction purposes has been developed. The bulk of the catch comes from the Oregon City Falls on the Willamette River. Table 3 records these landings from 1943 to 1949. In addition to the figures presented, a small commercial fishery exists at the Savage Rapids Dam on the Rogue River. While not of industrial proportions, fisheries for subsistence and other purposes have long existed. The Indian tribes of the region utilized lampreys for food. More recently small quantities have been used as bait by sturgeon fishermen and fur trappers.

The lamprey (*Entosphenus tridentatus*) is found in almost all of the larger streams in Oregon which allow access to and from the ocean. Because of their ability to cling to vertical walls with their mouth they are able to pass falls and rapids which are impassable to salmon. Like the salmon, they spawn in fresh water but mature in the sea. In the spring months they migrate relatively great distances to the streams where spawning takes place, some reaching the tributaries to the Snake River.

The eggs are deposited in a nest made in the sand and gravel of the stream bed. After hatching the young spend several years in the streams where they burrow in the silt and sand. Following this, the young make their way to the sea where they remain until maturity.

Pilchard

The Oregon fishery for pilchards (*Sardinops caerulea*) began in 1935 when the state laws were changed to permit the use of pilchards for reduction purposes. In 1935 four plants were established at Coos Bay and three at Astoria. Over 26,000 tons of pilchards were taken during the first season, 62 percent of the catch being landed at Coos Bay and the remainder at Astoria. This proved to be a record catch which has not been equalled since. In 1936, about 54 percent of the catch was landed at Coos Bay and the remainder was landed at Astoria, with the exception of a few tons landed at Reedsport. By 1939 the Coos Bay landings had declined to an insignificant percentage of the total, and in 1940 all of the pilchards were landed in the Astoria area. Since 1942 the catches of pilchards have been very poor (Fig. 16). In 1949 and 1950 no landings were made in Oregon.

In the last few years recruitment of young fish into the California fishery has been generally poor. Poor spawning success coupled with a high fishing intensity has resulted in most of the pilchards being caught in California waters before they have had an opportunity to migrate from the principal spawning grounds off southern California to the Pacific Northwest.

The future of the Oregon pilchard fishery is not bright. A series of very successful brood years will probably be necessary before enough fish can escape the intensive California fishery to allow a successful season in Oregon; a situation which can be expected to occur only sporadically.

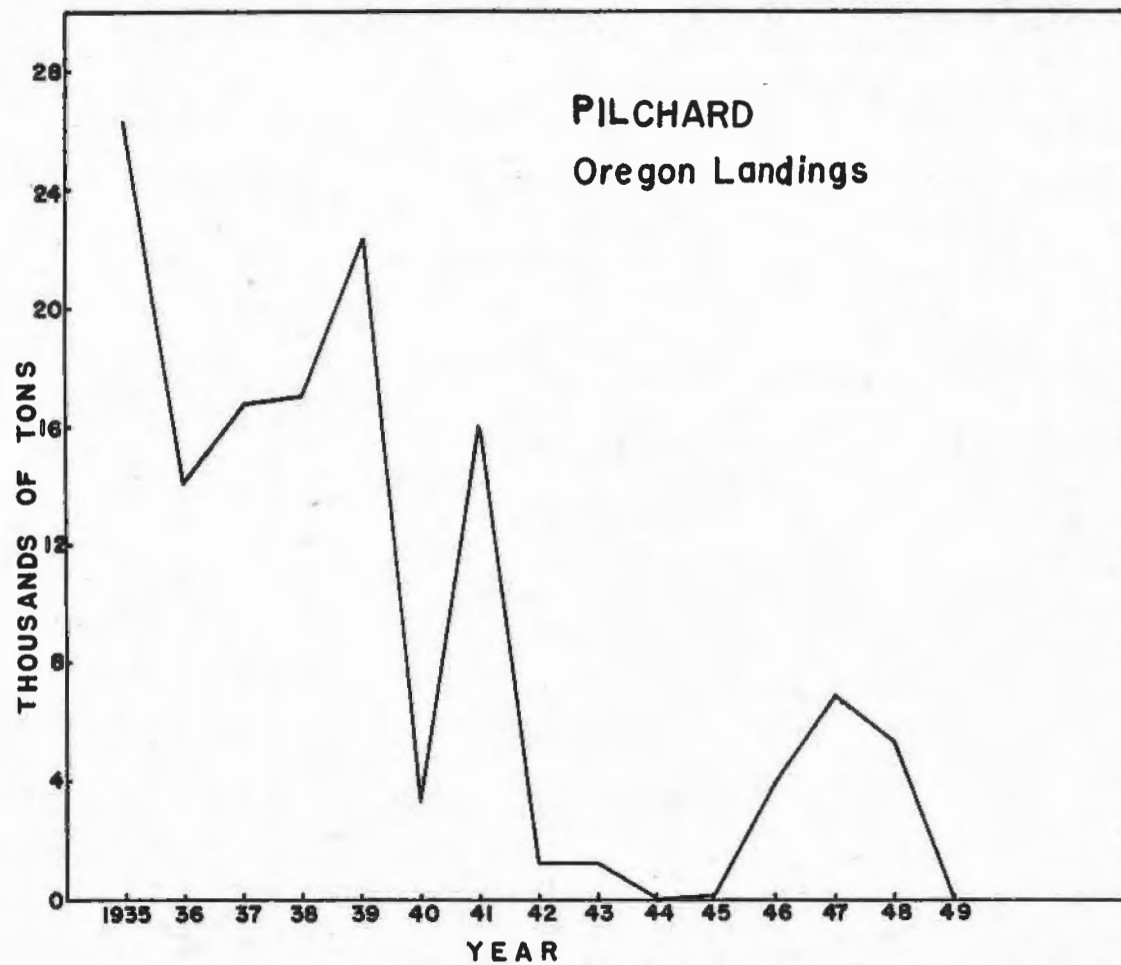


FIGURE 16. See Table I.

COLUMBIA RIVER SALMON AND STEELHEAD

General

The Columbia River is the mainstay of Oregon's salmon, steelhead, sturgeon, and smelt fisheries and supports important runs of shad as well.

There is ample evidence that a flourishing Indian fishery existed prior to the arrival of white men in the Columbia Basin. Lewis and Clark found numerous Indian villages along virtually the entire course of their journey as they travelled down the Clearwater, lower Snake and Columbia Rivers. Craig and Hacker (1940) have made an interesting compilation of the observations of early explorers and mention a sketch by Clark showing some 100 fishing establishments on the lower Snake, Yakima, and Wenatchee Rivers and adjoining areas. Fishing lodges were abundant below the mouth of the Snake and particularly at Celilo Falls and Cascade Rapids, the latter of which has been obliterated by the lake above Bonneville Dam. Other notable fishing sites mentioned were at Kettle Falls, Willamette Falls, and Salmon Falls. The Indian take of this early period has been estimated at 18,000,000 pounds annually by Craig and Hacker.

Apparently the Indians used a variety of gear including the hook and line, gig, spear, dip net, weir, and seine.

White men entered the fishery in the mid-1800's and were using gill nets by 1853. Traps, haul seines, and fish wheels soon came into use. So-called set nets, or fixed gill nets came into use at about the time of the drift gill net. Purse seines were used for a time at the mouth of the river. A sport fishery has developed in comparatively recent years and takes significant numbers of chinook and silver salmon and steelhead trout. This recreational fishery occurs at all times that the species sought are running but particularly at the mouth of the river in late August. Legislation has eliminated all except drift gill nets, dip nets, and sport gear from the Columbia River salmon fishery. By far the bulk of the Columbia River catch is now taken in gill nets.

A drift gill net is essentially a free floating wall of web so designed that fish may partially pass through and then become entangled. Simple "single wall" floating nets were used initially on the Columbia and are still in use to a considerable extent, particularly on the lower river. Other variations that are now common are diver nets that follow the bottom. According to Johnson, Chapman and Schoning (1948) "Various 'strings', 'slackers', and 'trammels' are also attached to the cork and lead lines to form a net of up to three layers or 'walls' . . . Another attachment is an apron, which floats ahead of the (main mesh) and over the fish."

Columbia River gill net boats have become somewhat standardized. All are powered and the tendency has been to obtain more and more powerful engines. "Bow pickers" in which the net is pulled in at the bow and stored immediately aft of the forward working space are almost universal, the small cabin being aft with a fish locker amidships. A powered roller aids the fisherman to retrieve his net.

Area and Fishing Seasons

Commercial fishing takes place from the mouth of the Columbia to the mouth of the Deschutes River, a distance of close to 200 miles (Fig. 17).

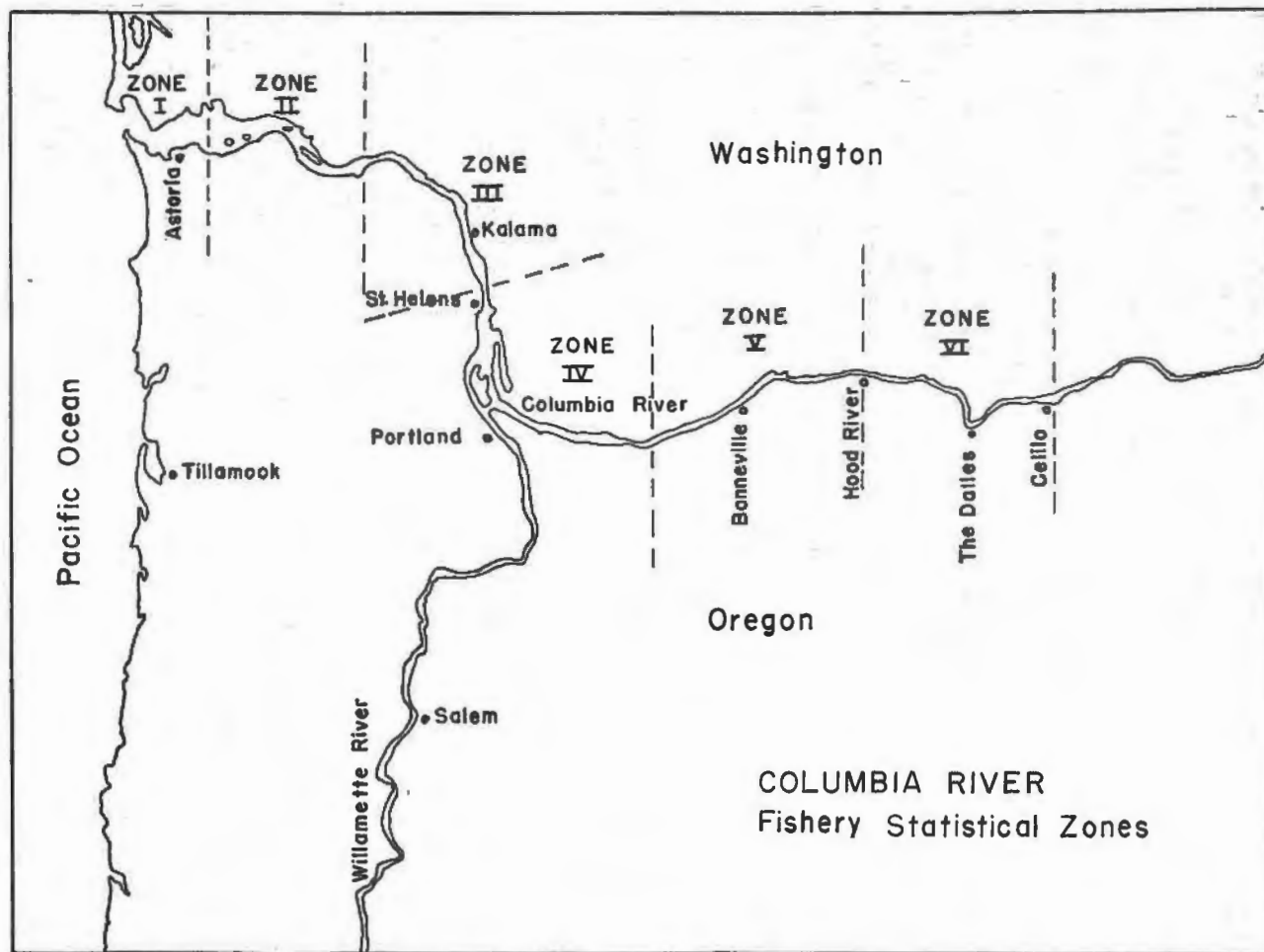


FIGURE 17. See Tables 11-15.

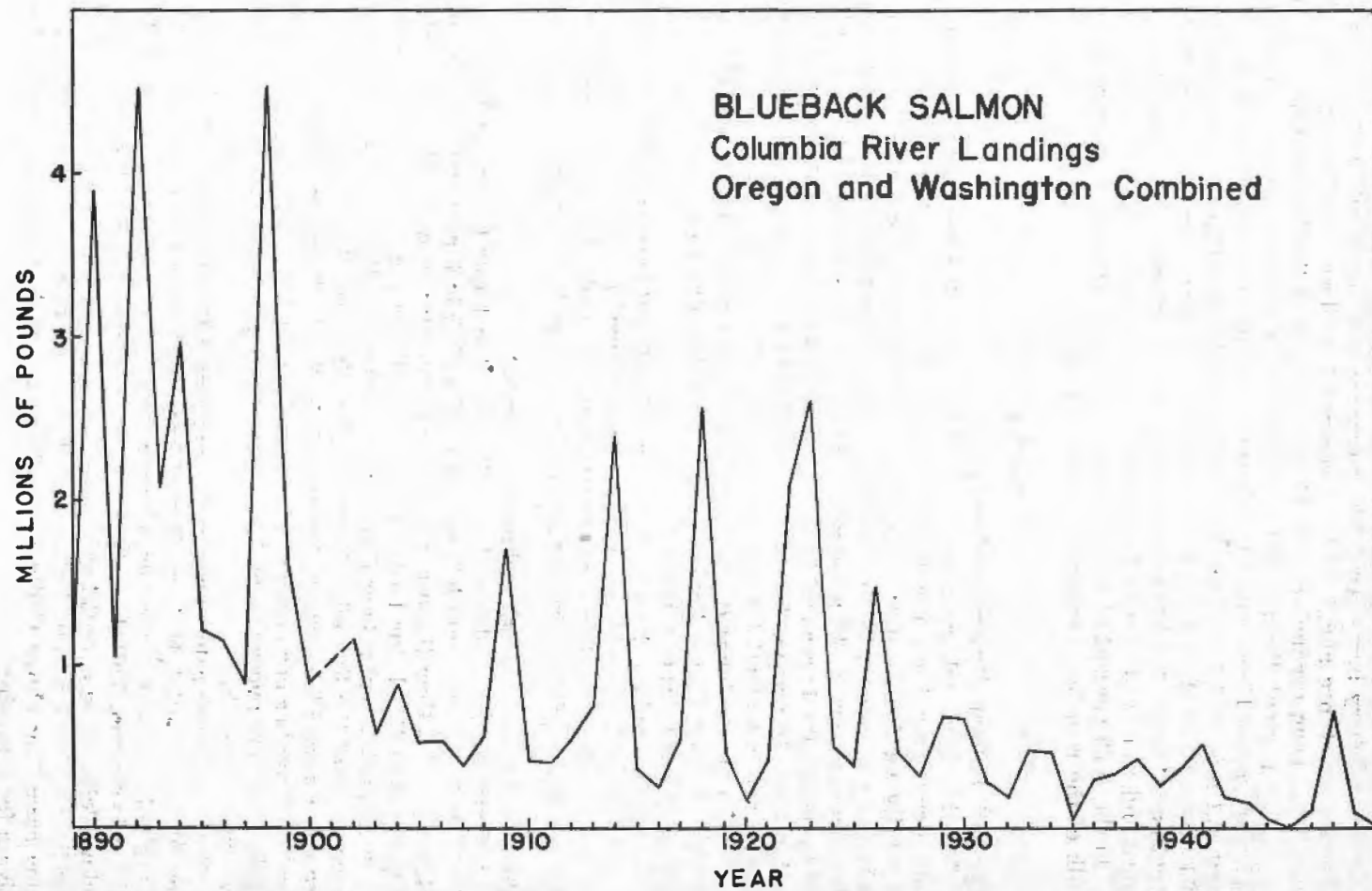


FIGURE 18. See Table 9.

When the fishery began, conflicting seasons were in effect in Oregon and Washington. Since about 1909 the seasons have been identical. The open season has been gradually reduced, particularly in the last decade.

At the present the seasons are roughly as follows: January, closed; February, open; March and April, closed; May, open; June, closed; July and August (to August 26), open; August 26 to September 10, closed; September 10 through November, open; December, closed. Closed week ends of varying length exist throughout the open season. Sport fishing is permitted in most areas and at most times that salmon are available.

Perhaps 80 percent of the Columbia River salmon catch is canned, the bulk of the remainder going to the fresh market.

Species

Blueback Salmon (*Oncorhynchus nerka*)

The blueback salmon or sockeye has suffered the greatest harm from dam development on the Columbia since their spawning grounds are primarily located far upstream. The adults enter the river in June and July and spawn only in river systems which have lakes in the vicinity of the spawning areas. The young spend one or two years in fresh water before migrating to sea and then two or three years at sea before returning to the river to spawn. The adults which are landed by the commercial fishery average about three pounds in weight.

The annual catches of blueback salmon are shown in Figure 18 and Table 9. The decline in the landings represents a real decline in the abundance of this species of salmon.

Recent runs of blueback have shown a significant increase, which demonstrates that this valuable species can be developed by proper management. Since the fishery for this species was drastically restricted in 1948 and 1949 the landings do not reflect the size of the runs in those years.

Chinook Salmon (*Oncorhynchus tshawytscha*)

Chinook salmon enter and pass through the lower Columbia River in significant numbers from late winter until well into the following autumn. At the present time there are peaks in abundance in early May and late August, the latter being by far the greater. Since the fish migrating until early August travel a long distance and are generally of top quality and since many of the fish migrating after that time travel short distances and are not of such high quality, the end of the "spring" run and beginning of the "fall" run has been somewhat arbitrarily selected as being August first. Spring chinook average about 17 pounds in weight whereas fall chinook average 20 pounds.

Spring chinook salmon spawn in the Salmon River in Idaho; the Tucan-non, Yakima, Entiat, Methow, Wenatchee, Klickitat, and Cowlitz Rivers in Washington; and the Imnaha, Grande Ronde, Deschutes, and Willamette Rivers in Oregon. Fall chinook, generally speaking, utilize all the tributaries below Celilo Falls except the Willamette which is grossly polluted during the time of the fall run. So far as is known all of the major fall chinook runs ascending above Celilo Falls utilize the main Columbia and Snake Rivers for spawning.

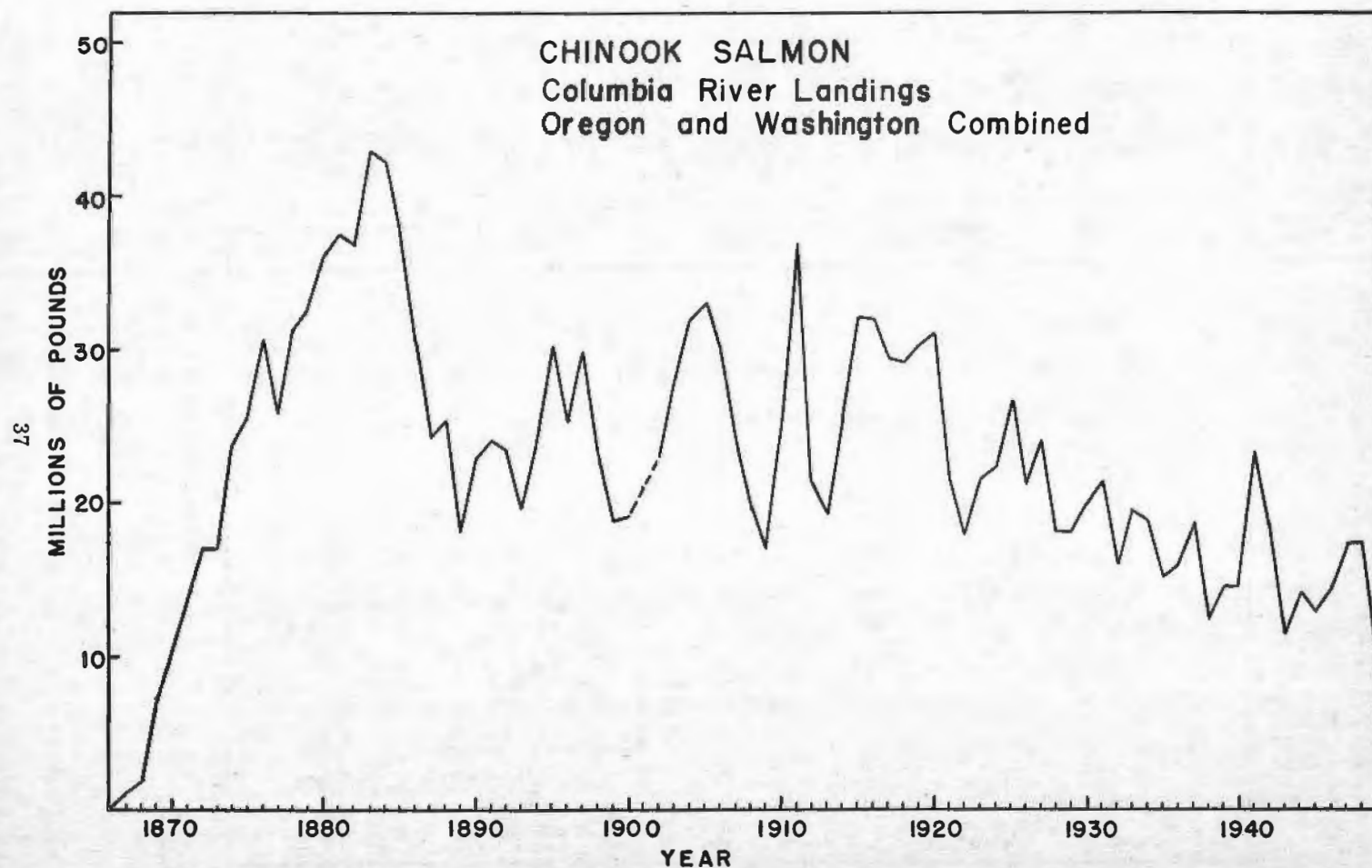


FIGURE 19. See Table 9.

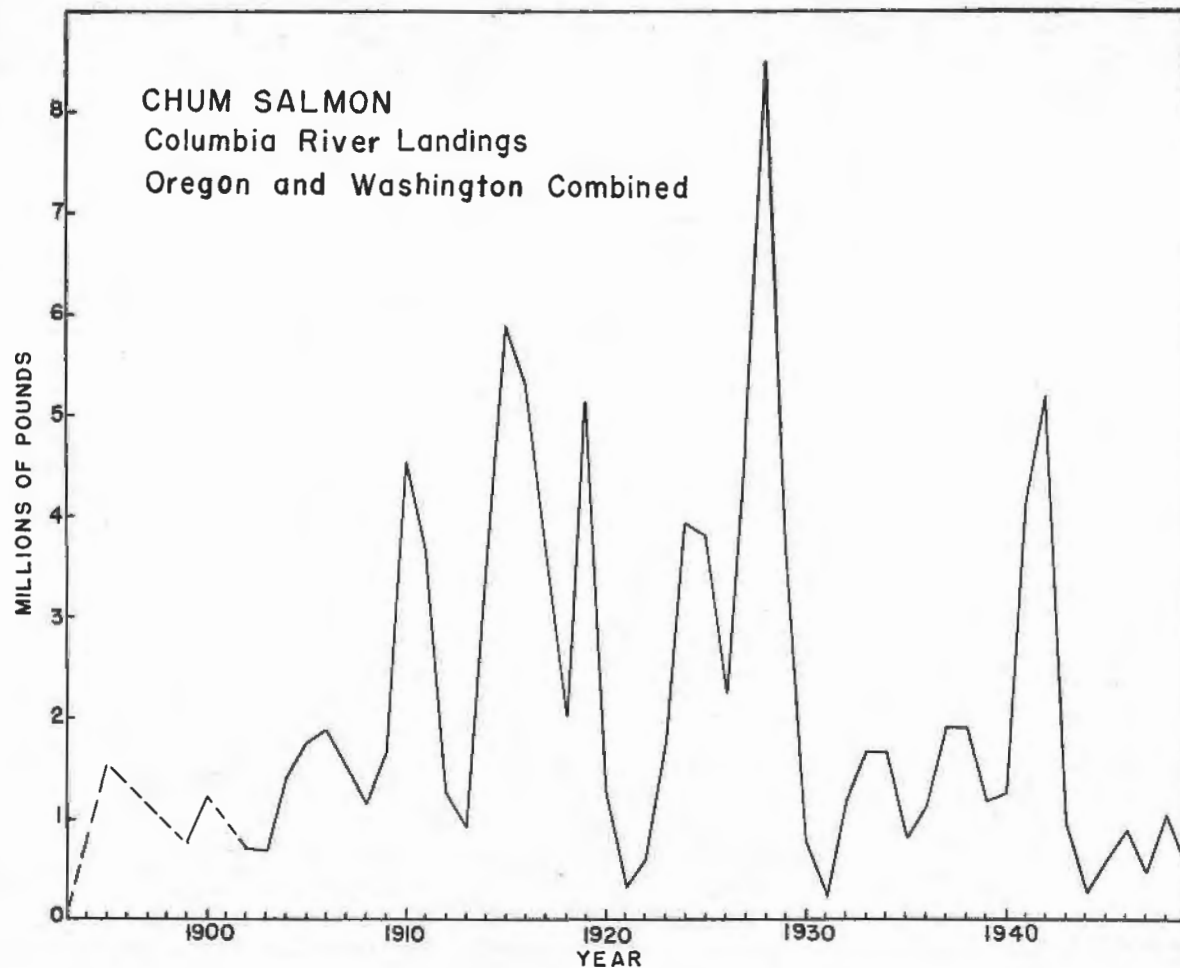


FIGURE 20. See Table 9.

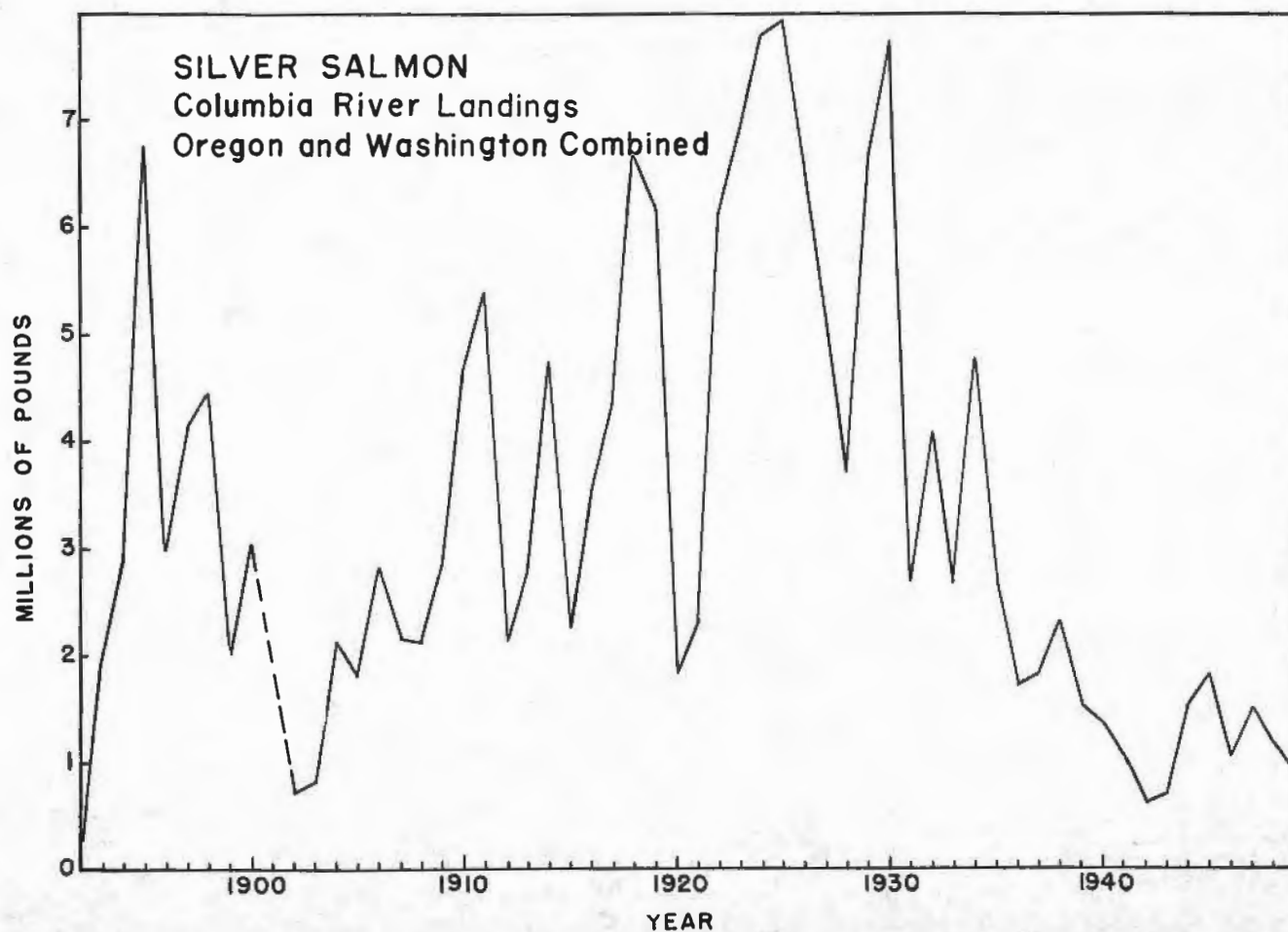


FIGURE 21. See Table 9.

Since spring chinook salmon generally spawn in upper tributaries, that race has been affected most sharply by dams and diversions. Fall chinook have been eliminated from the Willamette by pollution, but have otherwise been less drastically affected by general factors. Overfishing has very probably affected the abundance of some runs.

As is the case with all Pacific salmon (genus *Oncorhynchus*), the adults spawn only once, after which they die. For the most part it appears that the young spring chinook migrate to sea after spending a year and a half in fresh water and return to spawn at about five years of age. The fall run appears to migrate to sea after spending only a few months in fresh water and they generally spawn at four years of age.

The overall chinook catch, as shown in Figure 19 and Table 9 started from a small beginning and rose rapidly to a peak of almost 43,000,000 pounds in 1883. The catch has diminished since that time and now averages about 15,000,000 pounds. It should be pointed out that the early take was primarily from the spring run whereas the present take is primarily from the fall run. Since about 1910 the Columbia River has also been contributing very appreciably to the ocean troll fishery for chinook salmon. In the last two decades the spring run has declined, and the fall run has increased.

Chum Salmon (*Oncorhynchus keta*)

The chum or dog salmon is found in the lower tributaries of the Columbia. The spawning migration takes place in October and November. The young migrate to sea very soon after hatching and most return as adults at three or four years of age. The average weight of the adult chum salmon taken commercially is about ten pounds.

The annual landings of chum salmon are shown in Figure 20 and Table 9. From the commercial landings it can be seen that the abundance of chums fluctuates violently.

Silver Salmon (*Oncorhynchus kisutch*)

The silver salmon enter the river in the fall months from August through December. Most of the fish spawn in the lower tributaries soon after arriving at their destinations; a few early silvers spawn in some of the tributaries of the upper Columbia River. The young silvers spend about one and one-half years in fresh water before going to sea. Most of them mature at three years of age. The average weight of silvers in the commercial landings is about ten pounds.

The annual landings of Columbia River silver salmon are given in Figure 21 and Table 9. A decline in the size of the landings is apparent.

Steelhead Trout (*Salmo gairdnerii*)

The steelhead trout makes a spawning migration from the ocean into practically all of the tributaries of the Columbia River and, unlike the salmon, it does not necessarily die after spawning. The young spend one or two years in fresh water before returning to the ocean and mature after an additional two or three years spent at sea.

The adults migrate into the Columbia practically the year round, with spawning occurring from January through May. The so-called summer steelhead pass through the lower river area from June through October and

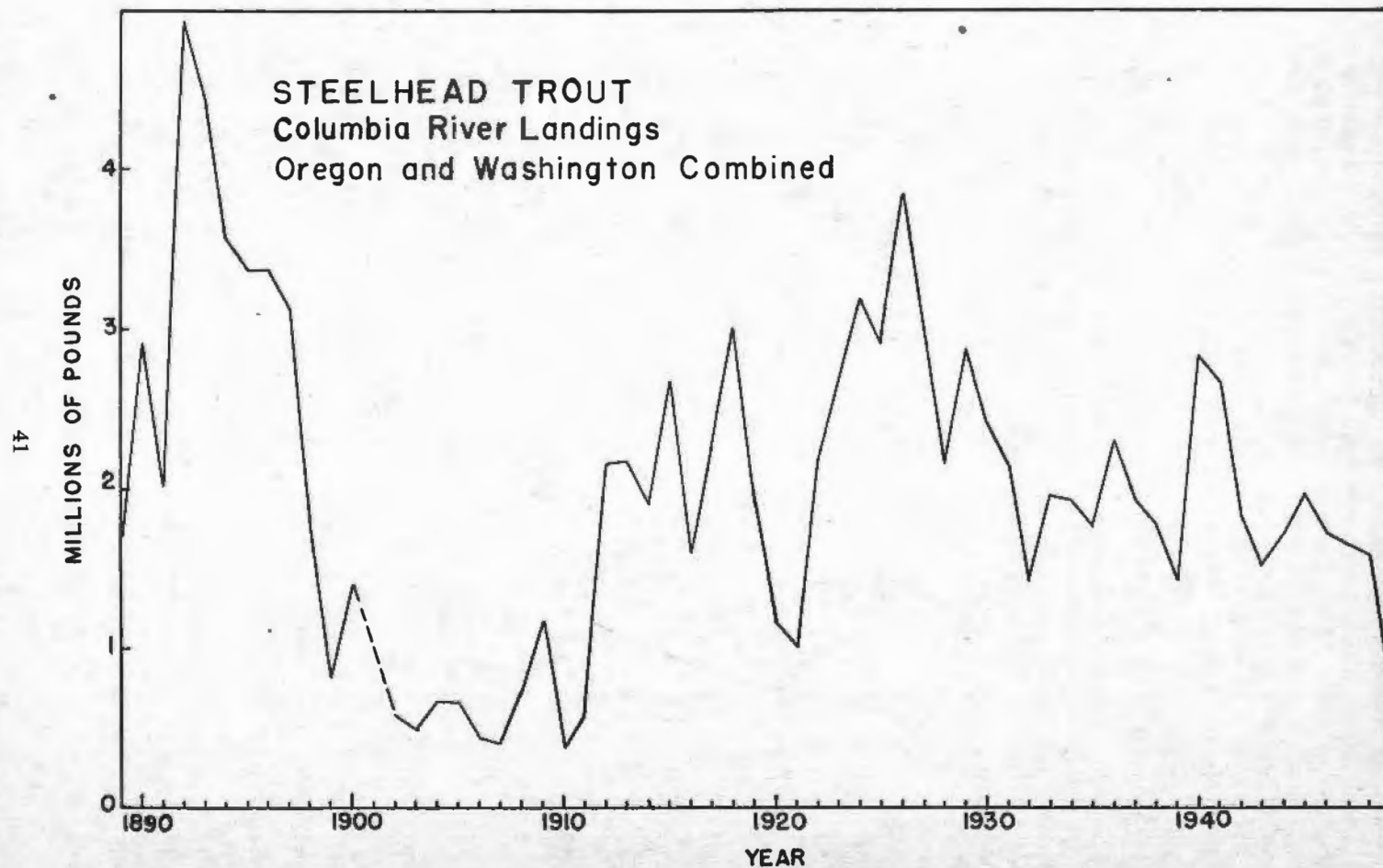


FIGURE 22. See Table 9.

average about nine pounds in weight. These are especially fine fish which have stored up enough fats and oils in their bodies to sustain them until the following spring. The winter steelhead pass through the lower river from November through May. They spawn primarily in the lower tributaries of the Columbia. The date for the division of the summer and winter runs has been arbitrarily chosen as October 31.

The annual landings of steelhead on the Columbia River are shown in Figure 22 and Table 9. The catch is marketed both fresh and canned.

COASTAL SALMON AND STEELHEAD

Salmon inhabit, in varying numbers, nearly all of the larger streams entering the Pacific Ocean on the Oregon Coast. In earlier years the majority of these runs were fished commercially in the streams, but by 1949 only the Alsea, Coquille, Nehalem, Siletz and Siuslaw Rivers in addition to Tilla-

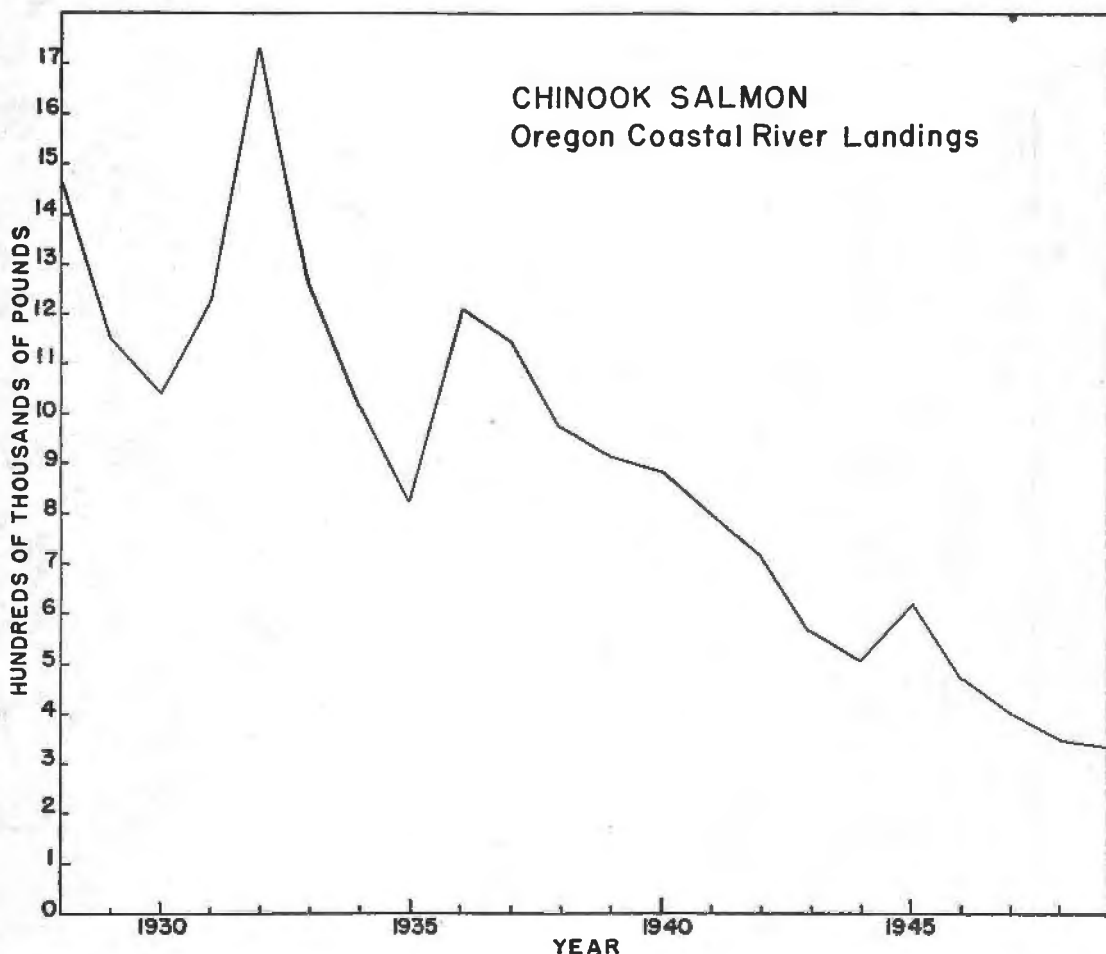


FIGURE 23. See Tables 21 to 67.

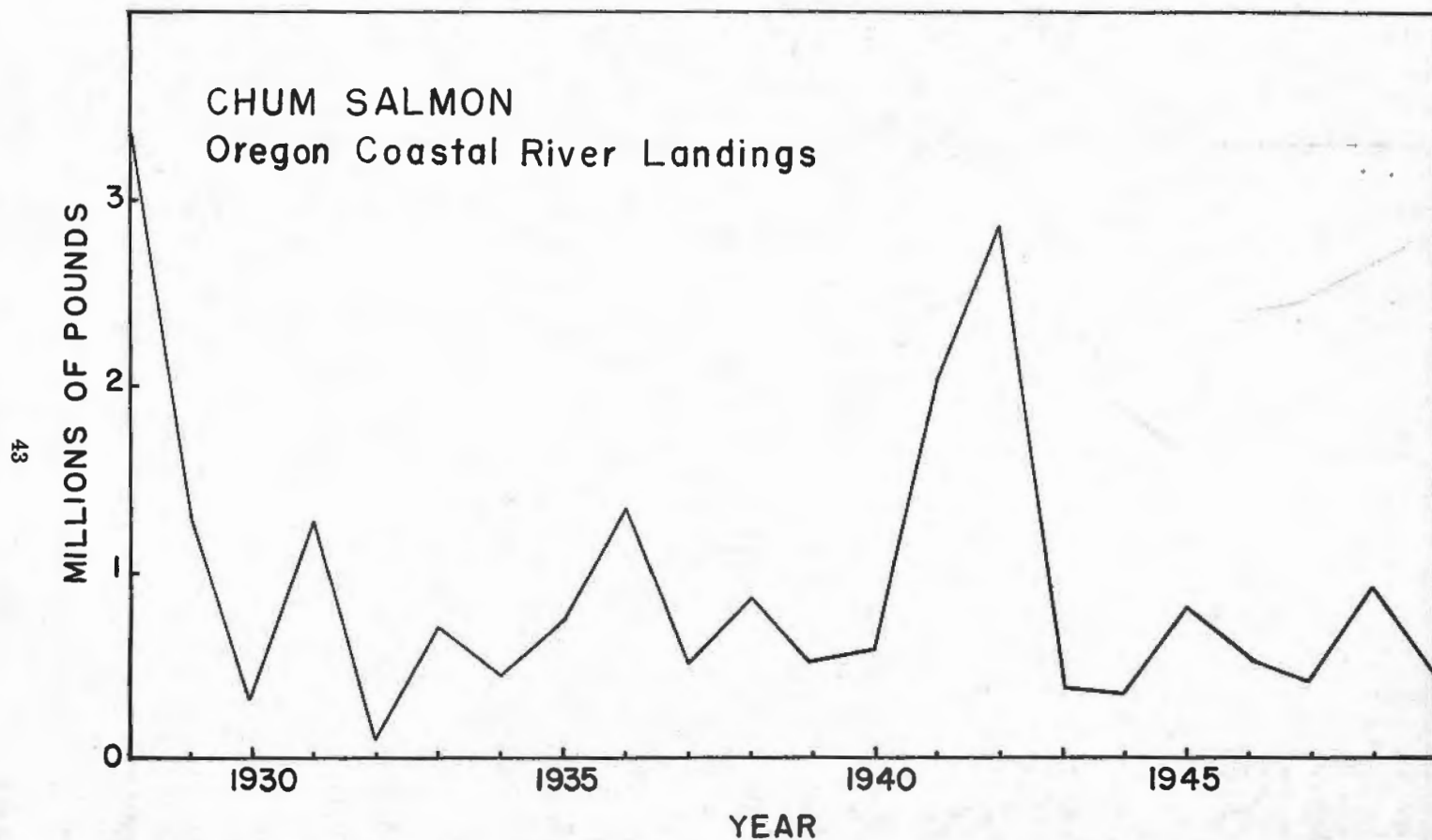


FIGURE 24. See Tables 21 to 67.

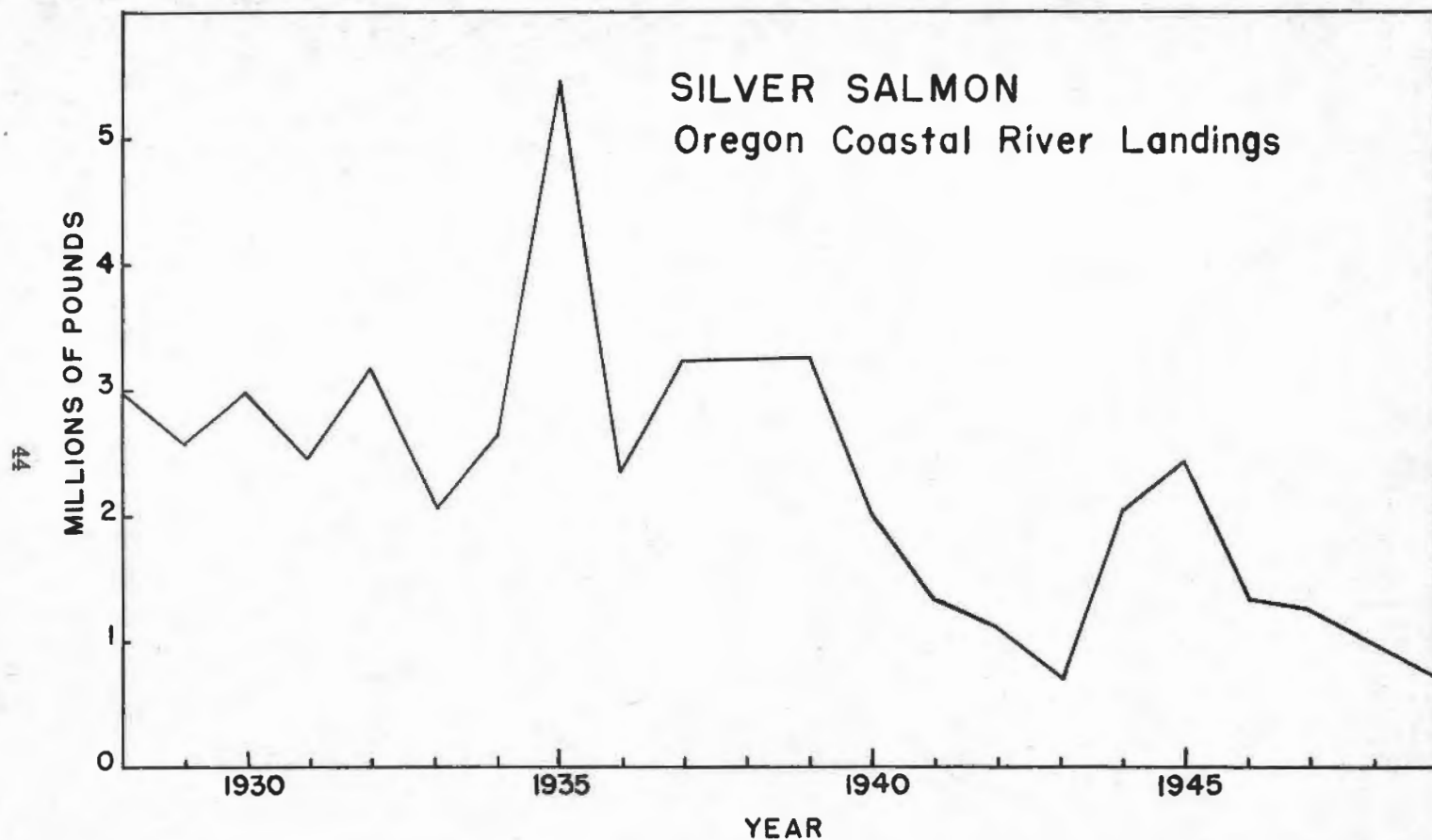


FIGURE 25. See Tables 21 to 67.

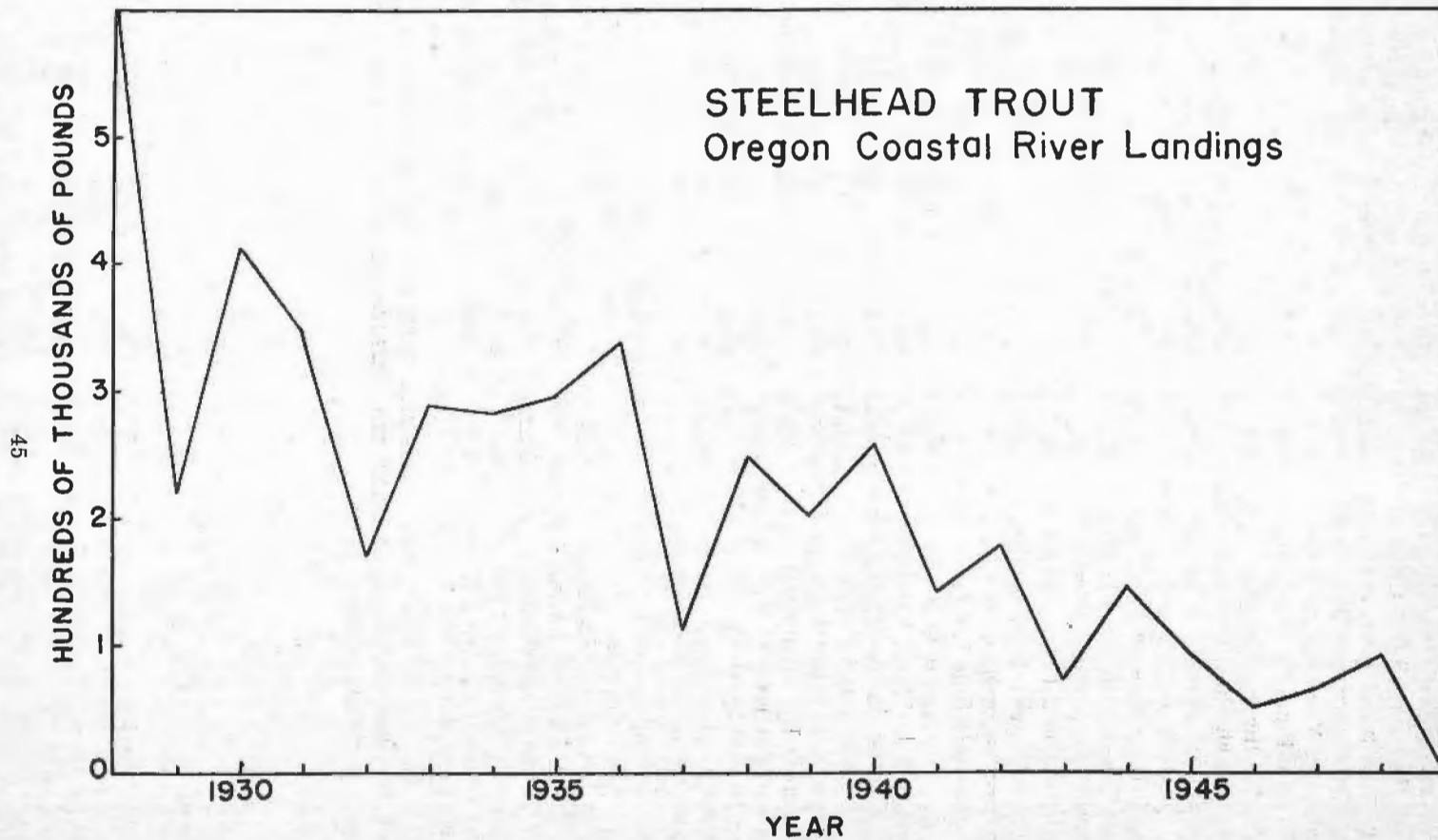


FIGURE 26. See Tables 21 to 67.

mook and Yaquina Bays remained open to commercial fishing. Sandlake and Netarts Bays remain open to chum salmon fishing. In addition to closures, the remaining fisheries have been subject to increasingly stringent regulation of gear, season, and area fished; a quota limiting the total catch of silver salmon has been placed upon the Alsea, Coquille, Nehalem, Siuslaw and Yaquina fisheries. Drift gill nets, and to a lesser degree set gill nets are the only forms of gear permitted.

Initially the coastal stream fisheries caught chum, chinook, and silver salmon and steelhead trout. In general the catch no longer includes steelhead trout in appreciable quantity except in Tillamook Bay. The decline in catch (Fig. 26) is primarily the result of season closures which have prevented fishing for steelhead. The downward catch trends which appear in Figures 23 and 25 and Tables 21 to 67 for chinook and silver salmon are more complex. The chum salmon catch, although fluctuating widely, has shown no distinct trend throughout the period (Fig. 24).

The decline exhibited by the chinook landings is caused by several factors. The spring migrations, which at one time appeared prior to mid-August, have uniformly failed and in most cases hardly exist at present. The fortunes of the fall runs are more varied. Several streams still maintain a good stock of these fish, but most have paralleled the spring chinook in trend. In addition to declines in the total number of salmon in the runs, other factors have tended to reduce the river catch. Perhaps the most important of these is the troll catch which has increased in recent years. It effects a reduction in stream catch by the simple mechanism of capturing the fish before their arrival in the rivers. Regulations have decreased the opportunities for capture of fish by the gill net fishermen, but this may be partially counter-balanced by improved fishing techniques and a much greater market demand for river caught chinook salmon.

Similar declines in landings obtain in regard to the silver salmon runs of the coastal streams with the possible exception of the Alsea River. The landings have been declining for some time. With the exception of 1949 when the catch limits were imposed, the effect of regulation in reducing the catch has probably been small. Further, the catch by the troll fishery has declined throughout the same period, as shown in Figure 29. According to these indications, the silver salmon populations of the coastal rivers have been reduced during the last two decades.

All of the coastal rivers have successful sport fisheries of varying magnitudes for salmon. Silver salmon are pursued primarily, but sizeable numbers of chinooks are caught.

THE OREGON TROLL FISHERY FOR SALMON

Commercial trolling for salmon in the ocean off the Oregon Coast began about 1912 and reached its peak in 1919. The early fishery was concentrated off the mouth of the Columbia River and later spread to the other coastal areas. There were between one and two thousand boats operating off the Columbia River in 1919 according to Smith (1920) and Cobb (1921). Since then there has been a decrease in the number of boats, but a great increase in their efficiency.

These early troll catches were often not differentiated from the river catches so there is no information on the troll landings of the early days although they must have been quite impressive. From 1925 on, adequate statistics have been collected and are presented here.

The fishery has been divided into three areas: Columbia River, Newport, and Coos Bay. The Columbia River area extends from Willapa Bay, Washington, to Cape Lookout, Oregon. Most of the fish caught in this area are landed at Astoria, Oregon and Ilwaco, Washington, with lesser landings at other small ports and along the lower Columbia River and at Tillamook Bay, Oregon. Most of the fishery takes place directly off the mouth of the Columbia River, but boats also fish north and south of the river and deliver to Columbia River ports. Since the fish landed on the Washington and Oregon sides of the Columbia River come from the same area, they are grouped. The proportion of the landings on the Washington or Oregon side fluctuates from year to year, depending on which buyers offer the best price or have buying scows nearest to the fishing grounds. Since this is purely an economic factor, it would give an incorrect picture of the Columbia River troll fishery if the Washington and Oregon landings were not combined. The Columbia River and Grays Harbor fleets often intermingle on the fishing grounds, but the amount of fish caught off the Columbia River and landed in Grays Harbor is rather inconsequential. Likewise, the amount of fish caught off Grays Harbor and landed in Astoria is of minor importance compared with the landings of fish caught directly off the mouth of the river.

The Newport area includes the area from Cape Lookout to Heceta Head. Most of the fish caught in this area are landed at Newport and Depoe Bay with the Siletz River and Pacific City getting occasional landings.

The Coos Bay area extends from Heceta Head to the California border. The several ports around Coos Bay (Charleston, Empire, North Bend, and Coos Bay) are grouped together and most of the landings are made in that area. Reedsport (Winchester Bay) also gets substantial amounts, while Florence (Siuslaw River), Bandon (Coquille River), Port Orford, and Brookings get lesser amounts.

Early statistics have been compiled from the original landing records. Although they may not agree with some figures previously published, they are believed to be the most accurate obtainable.

The weights given are "round" weights, computed by adding 15 percent, and in the case of Washington, 17 percent, to the dressed weight recorded at the time of landing.

The troll landings on the Washington side of the Columbia River from 1925 to 1934 are from Craig and Hacker (1940), and from 1935 to 1949 from

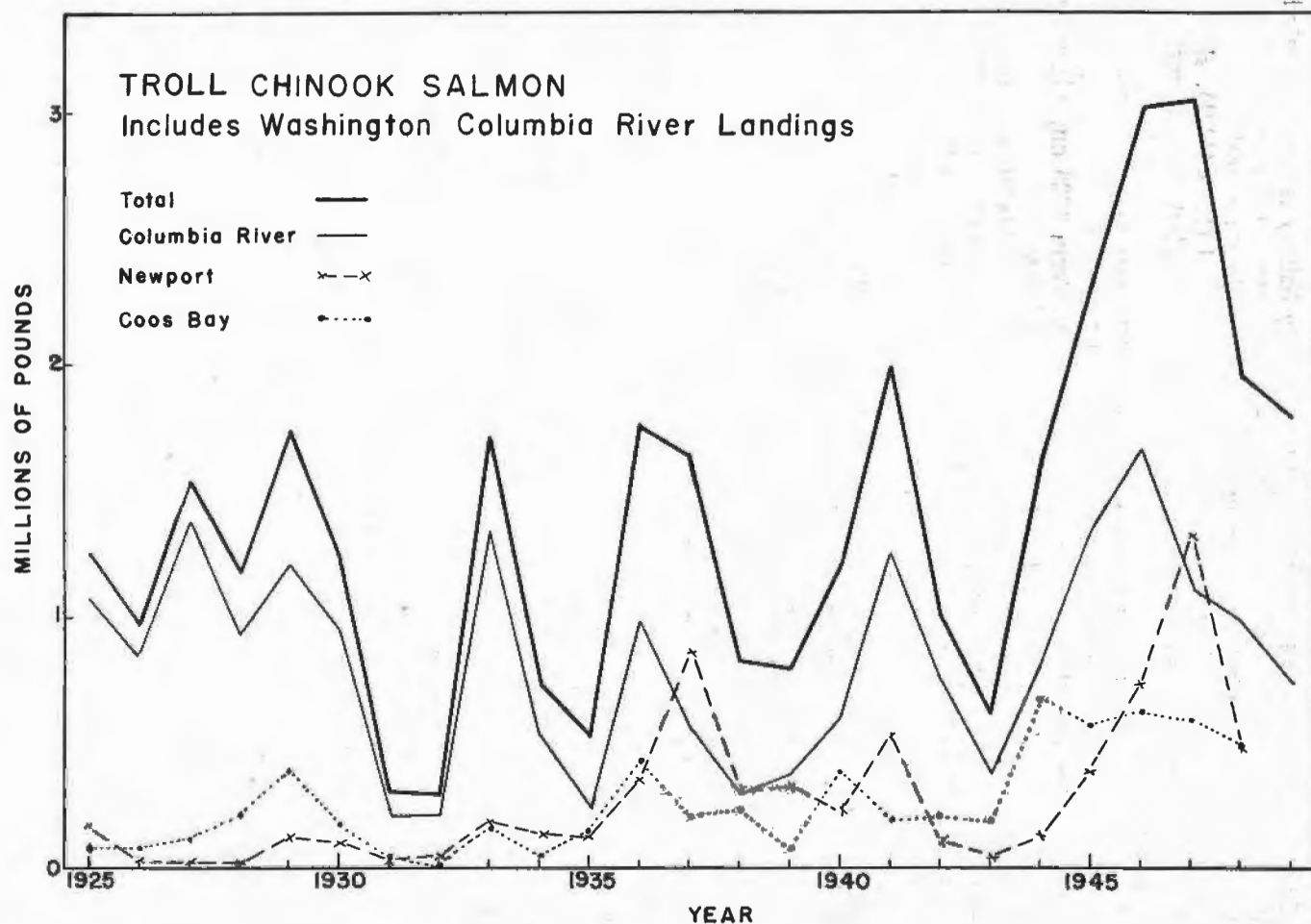


FIGURE 27. See Table 69.

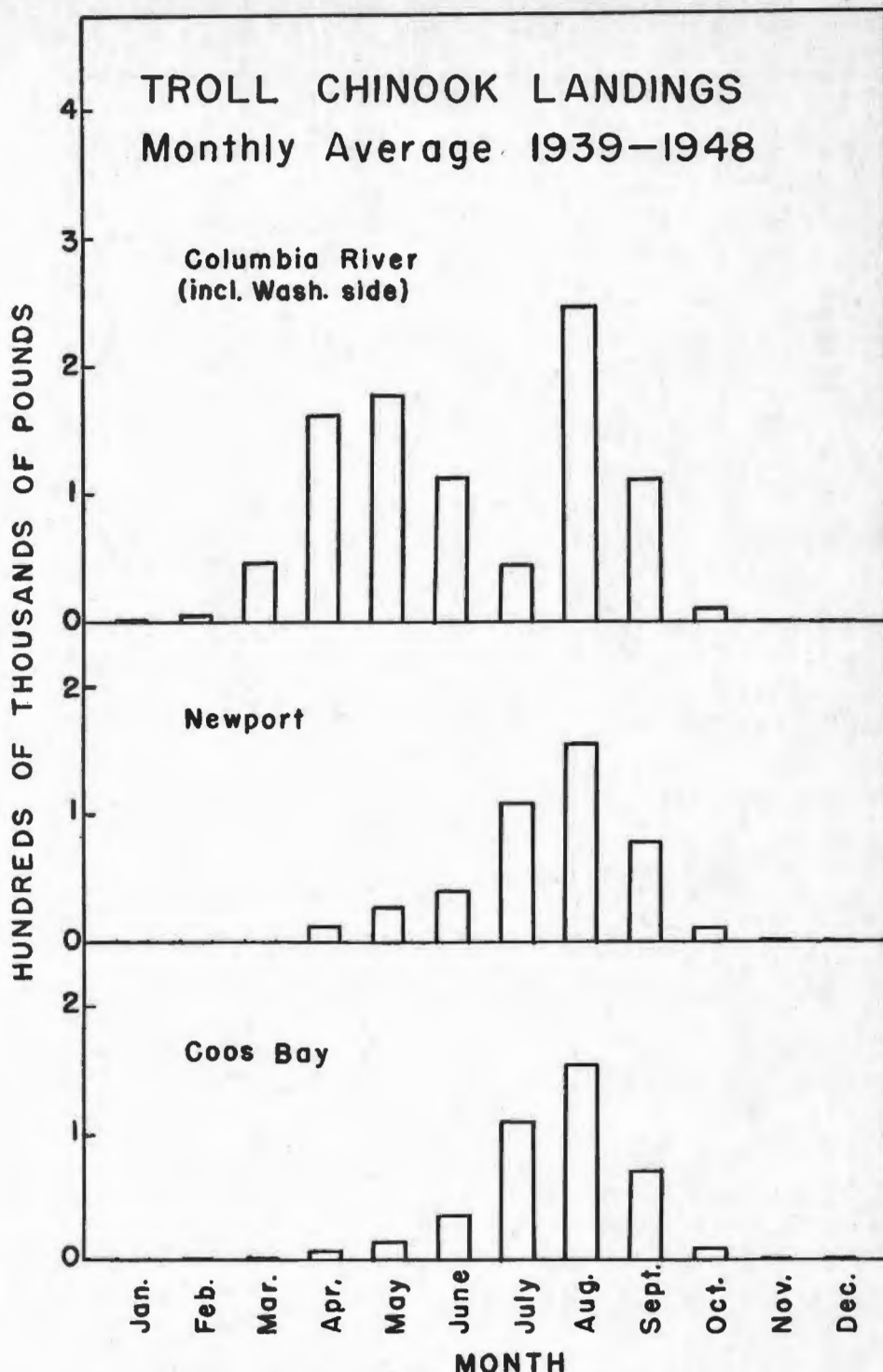


FIGURE 28. See Table 69.

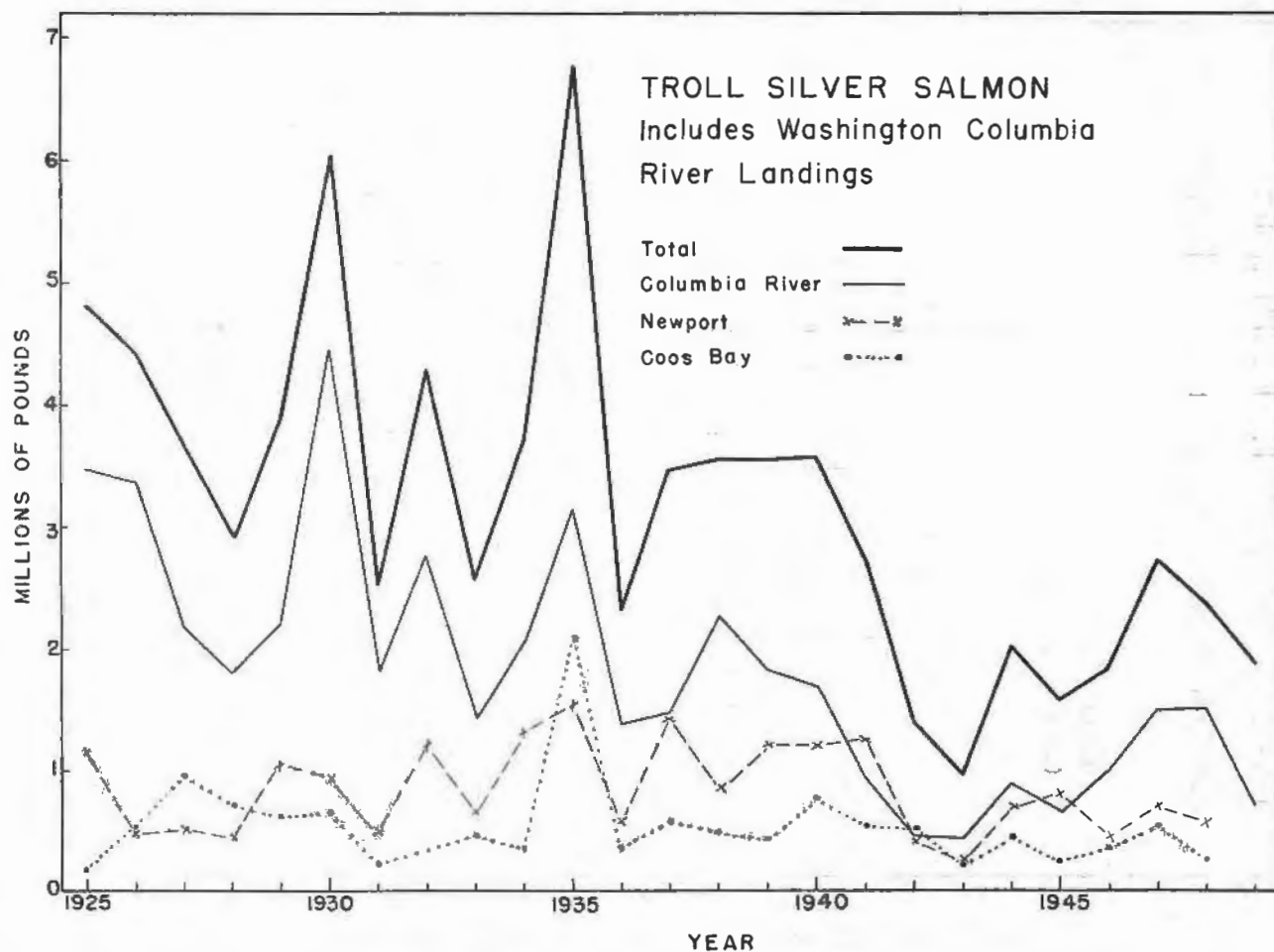


FIGURE 29. See Table 70.

the records of the State of Washington Department of Fisheries. The 1949 figures have not been separated by port or month as yet, so only the total landings are shown.

Table 69 gives the landings of troll-caught chinook salmon. No monthly figures are available for Washington prior to 1935, so only the annual totals are included. The minor ports are grouped in their respective areas.

Figure 27 shows the landings in each area and the total landings. There appears to be an upward trend in the total landings of chinook salmon. It is difficult to say what causes such a trend, but it is at least partly due to an increase in fishing intensity. The Columbia River area landings show a more or less level trend, while the Newport and Coos Bay landings show an upward trend. The Newport and Coos Bay trolling fleets have expanded in later years, and the Columbia River trollers have gone farther afield in search of the fish. As a result increasingly large amounts of chinooks are landed in these coastal areas.

In Figure 28 is shown the average monthly chinook landings in the three areas. This is a 10-year average from 1939 to 1948. There is an extensive spring fishery off the Columbia River which does not take place along the rest of the coast. This is occasioned by the presence of fish off the Columbia River during the spring and their absence near other ports during this time. The biggest landings are made during August in all three areas.

Table 70 gives the statistics for silver salmon in the same manner as for chinooks, and Figure 29 shows the yearly landings of silvers in each area and the total landings. The downward trend is very noticeable. The landings in the Columbia River area have shown the greatest decline, while the catch in the Newport and Coos Bay areas has remained relatively constant. This decline in the silver landings may be partly due to the effect of the tuna fishery, in that many salmon trollers go tuna fishing during July and August. However, the decline was evident before the albacore fishery started in 1937, and good landings of silvers were made between 1937 and 1940 when intensive tuna fisheries were also prosecuted. If the tuna fishery had an effect of lessening the fishing intensity, one would also expect a decrease in the chinook landings, which has not taken place. There thus appears to be a decrease in the abundance of silver salmon which is reflected in the catch statistics.

Figure 30 shows the average monthly landings in the three areas. This is largely a summer fishery, the bulk of landings being made in July, August and September.

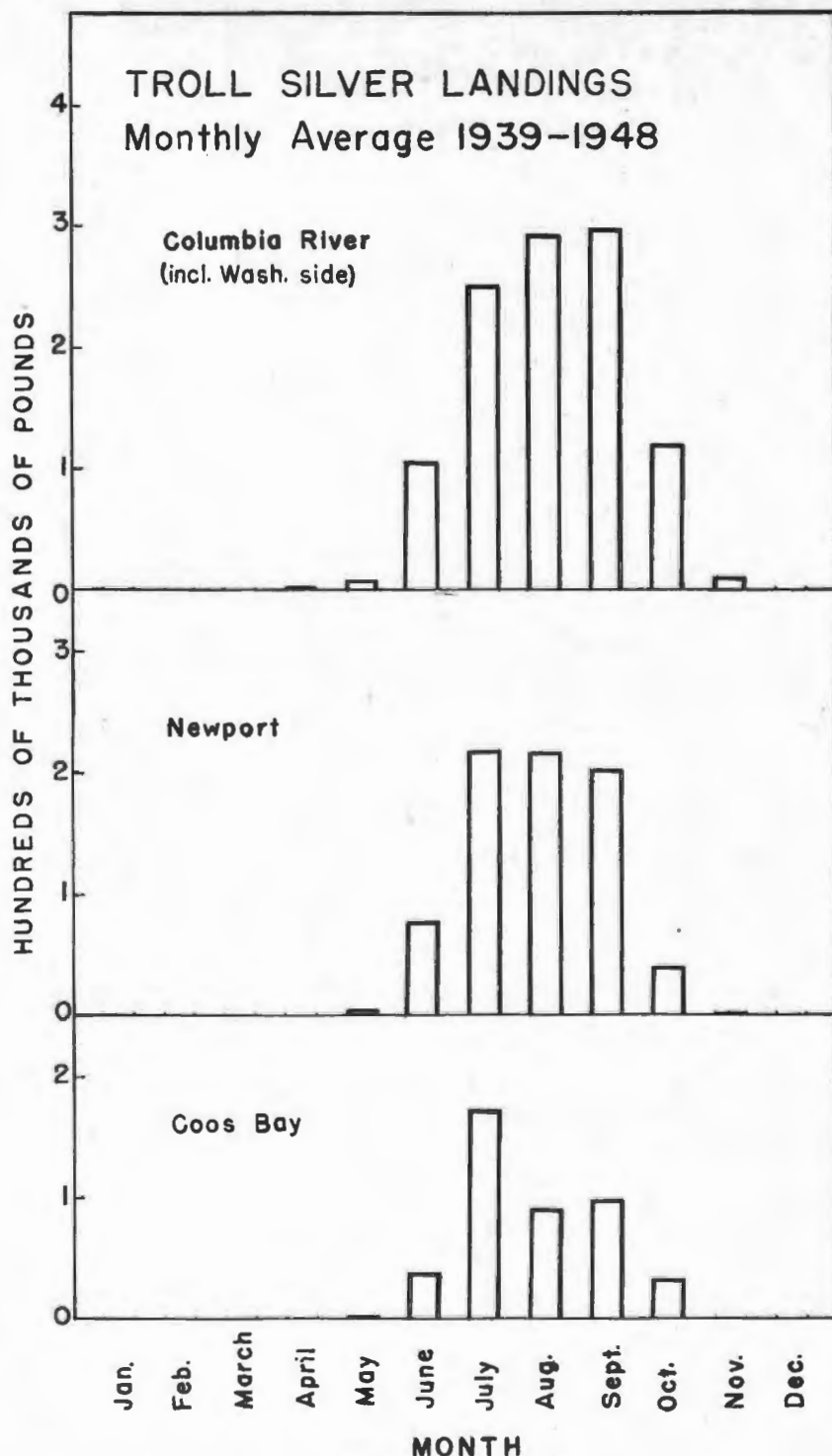


FIGURE 30. See Table 70.

SHAD

General

The shad (*Alosa sapidissima*) is an anadromous fish of the herring family which was artificially introduced into the waters of the Pacific Coast about 80 years ago. Its home is the Atlantic Ocean where it occurs from the Gulf of St. Lawrence and Newfoundland to Florida. The first introduction of shad took place in California in 1871 when 10,000 newly hatched fry were liberated in the Sacramento River. Six years later the first run of mature fish entered the river to spawn. During the same decade more than 600,000 additional shad fry were planted in the Sacramento River and the species shortly gained great commercial importance. By 1914 the catch of shad had risen to its peak of 7,000,000 pounds. The first introduction of shad in the Columbia River system took place in 1885 and 1886 when about 900,000 fry were planted in Oregon and Washington. The fry were planted in the Willamette and Snake Rivers as well as in the Columbia River proper.

The fact that the first shad appeared in the Columbia River several years prior to the actual introduction indicates that those first fish were the result of the California planting. The homing instinct in shad is not so highly developed as in salmon. At the present time considerable shad runs exist also in the Umpqua, Coos, Siuslaw and Coquille Rivers, where this fish has never been planted. In the Umpqua River where the shad is now the principal commercial species, the landings in 1946 were 758,652 pounds.

At the present time shad have become established along 3,000 miles of the Pacific Coast from Southern California to Western Alaska. The present status of the shad resources of the Pacific Coast is practically unknown because no studies have been made to determine the extent of the Pacific shad populations. While on the Atlantic Coast, due to overfishing, pollution, and the erecting of dams, the runs of shad are steadily declining, there are indications that the Pacific shad may be increasing in abundance. On the Pacific Coast the shad is still regarded as an inferior fish and is shipped to the eastern states where it finds good market and is esteemed as one of the best of food fishes. It may be added that as a whole the shad is a valuable river fish in the United States and ranks next to the chinook salmon in this regard.

The annual shad production on the entire Pacific Coast is about 3,000,000 pounds, valued at slightly less than \$1,000,000. The Columbia River has become one of the most important shad rivers in North America.

Shad enter the streams in the spring, but the peak of the run takes place in the early summer. They can spawn anywhere in the river, but usually prefer shallow places with sand or gravel bottom near the mouth of the tributaries. The actual spawning is nearly always done in the dark, starting after sunset. The eggs are spawned near the surface in small numbers and after fertilization remain semi-buoyant for a short time; then they slowly sink to the bottom. The eggs are not adhesive as in herring or sturgeon, and their specific gravity is slightly greater than that of the water. They are carried downstream at the mercy of currents and eddies until they fall in small crevices between the stones or gravel or among the aquatic vegetation. The fertilized eggs have a diameter approximately one-eighth of an inch, while unfertilized eggs are somewhat smaller.

The shad is a very prolific species. It has been estimated that the number of eggs in a female shad ranges from 25,000 to 156,000, depending on the size and age of the fish. The average number of eggs in a medium sized shad is about 30,000. The eggs are always deposited in fresh water.

The incubation period for shad eggs varies from approximately three days at 74 degrees Fahrenheit to slightly more than six days at a temperature of 52 degrees. In the Columbia River shad usually spawn in June when the turbidity of the water is quite high. This is believed to have a favorable influence on the development of the eggs because it intercepts a great amount of light and facilitates the incubation.

The newly hatched larvae are scarcely two-thirds inches long; they grow rapidly and by the end of July double their length. At the end of August they are nearly three inches in length.

Shad do not die after spawning and may spawn several times during their life. The average age of spawning roe-shad is six years, but the males often become ripe one year earlier than females. Although the average weight of shad is about four pounds, the heaviest female recorded from the Pacific Coast weighed 14 pounds.

The food of shad consists of various small to minute planktonic forms, such as crustaceans, small fishes, insects, worms, mollusks, and various larvae as well as vegetable matter.

Like many other anadromous fish shad rarely feed while they migrate upstream. However this does not prevent them from taking an artificial fly or small spinner. After spawning, shad begin to feed again and at that time can be easily caught on hook and line. They are considered to be excellent game fish on the Atlantic Coast and in California. Unfortunately only very few fishermen in Oregon are acquainted with this sport.

Columbia River Shad Fishery

In the Columbia River fishery shad ranks approximately sixth in quantity and seventh in value. In spite of the fact that there is enough shad in the Columbia River to support a larger fishery, until recent years the catches of that fish were rather incidental and supplemental to the salmon fisheries. The main reason was that the run of shad coincides with the run of blueback salmon which has higher market value. In the early days and even to some extent now, only roe-shad were in demand; the buck-shad had no value and were discarded. The price of the fish was low in comparison with salmon, and for many years the catches of shad were limited by marketing difficulties. However, due to the steady decrease of salmon on the Pacific Coast, the Columbia River shad fishery may grow in order to fill the space in the fish market. It is a great advantage for the fishery that the runs of shad in the Columbia River are not severely handicapped by the dams, for the main spawning grounds of the shad are located below Bonneville Dam.

In the past the traps, seines and fish wheels were widely used to catch shad in the Columbia River, but at the present shad are taken commercially only by gill nets with mesh limits between five and one-half and six and one-half inches. The shad fishery is mostly confined to the time of the spawning migration which occurs during the month of June.

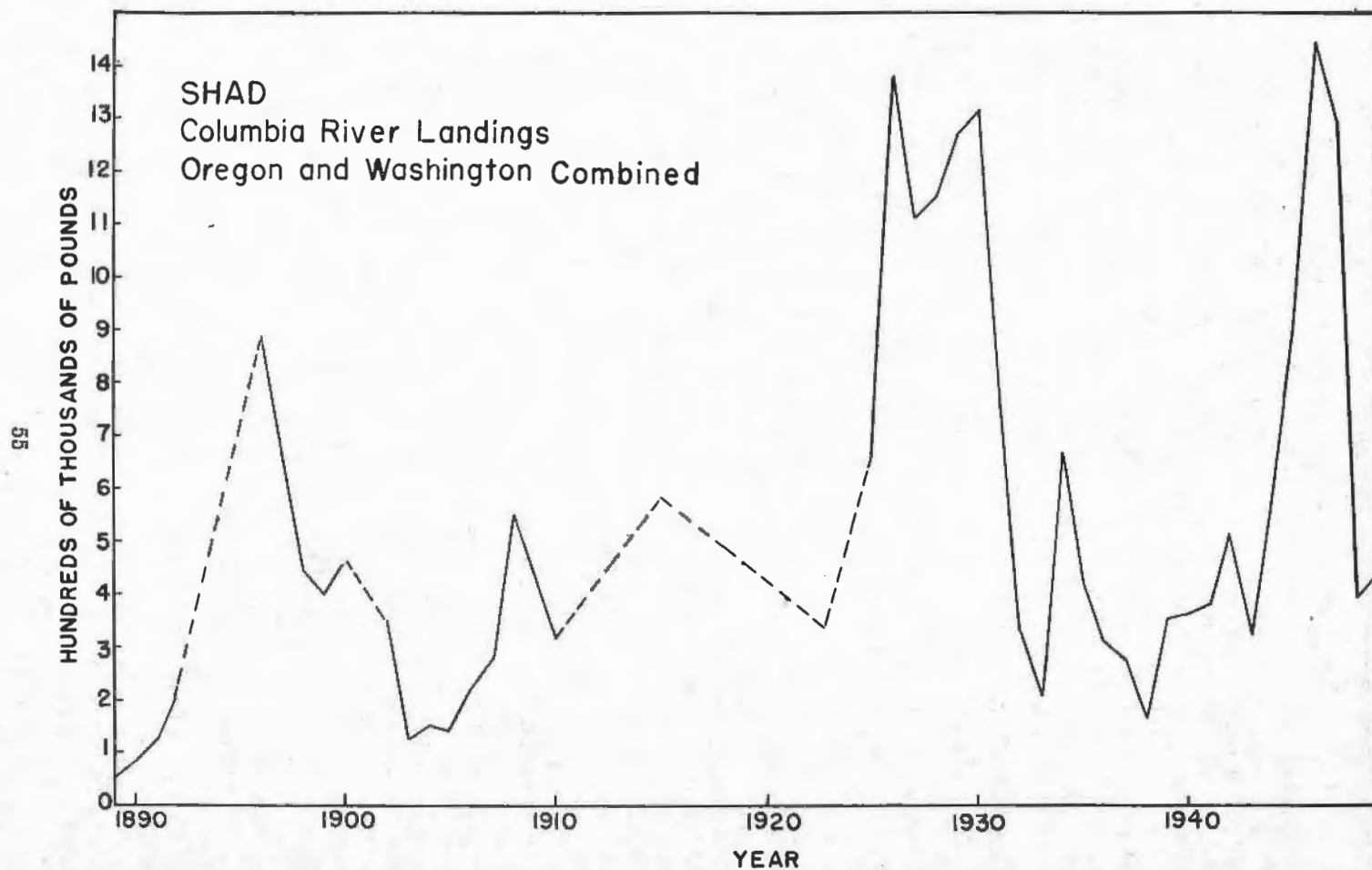


FIGURE 31. See Table 71.

The Columbia River commercial landings of shad both in Oregon and Washington were combined and plotted in Figure 31.

Shad Fishery of Oregon Coastal Streams

Commercial fishing for shad is conducted in the Siuslaw, Umpqua, and Coos Rivers; in addition, a small fishery exists in the lower Coquille River. Although several types of fishing gear have been employed in the past, fishing is now permitted with gill nets only. The fish are caught in the late spring and early summer when they enter the rivers to spawn.

The coastal shad catch (Fig. 32) shows no evidence of declining runs. As on the Columbia River, marketing difficulties impose rather strict limits upon the intensity with which fishing is done. The fishery is of considerable importance, nonetheless, and has served to sustain the fishing industries on the Coos and Umpqua Rivers which have been closed to salmon fishing.

COLUMBIA RIVER SMELT

The adult Columbia River smelt, or eulachon, is a small fish ranging from five to nine inches in length that spawns in fresh water but matures in the sea. Relatively little is known concerning the habits of this fish; the eggs are spawned in the late winter or early spring and hatch within a few weeks, depending upon water temperatures. Being adhesive, the eggs adhere to the sand and gravel of the river bottom. Their movements are obscure from the time of hatching until they re-enter the streams. Columbia River smelt are occasionally caught in the ocean off Grays Harbor, Washington, during the winter months, and presumably they are enroute to the Columbia River which they enter from November to March. The first fish which reach the river appear to proceed upstream very slowly, perhaps spending more than a month in the lower reaches of the main stream. From February to April spawning takes place in the tributary streams such as the Cowlitz, Lewis, and Sandy Rivers. Available data indicate that the smelt also spawn in the Columbia River proper, but this point is uncertain.

Two forms of fishing gear are employed by the fishermen. During the earlier part of the season there is a gill net fishery in the lower Columbia River. The amount of equipment and labor required results in a relatively expensive catch of firm, prime fish. Later, after hordes of fish have entered the tributaries, they are taken with dip nets. These fish are generally less expensive because of the relative ease of capture but are of somewhat lower quality because of advanced maturity.

The total reported catch for the Columbia River (Oregon and Washington combined) has increased until it reached 5,719,214 pounds in 1945 (Table 79). Figure 33 shows a rising catch trend for the past 50 years. In addition to large fluctuations in the size of the runs, the landings have been strongly affected by market conditions. For the past decade demand has been relatively good at prices sufficiently high to provide incentive to the fishermen. This was not true in 1930 and the years immediately thereafter. Had the market been favorable, the landings for these years would have certainly been larger.

The smelt are also the basis of a popular sport fishery. Regulations permit taking 25 pounds of fish for personal use, and it is not uncommon to see large crowds of people capturing smelt with dip nets or improvised gear.

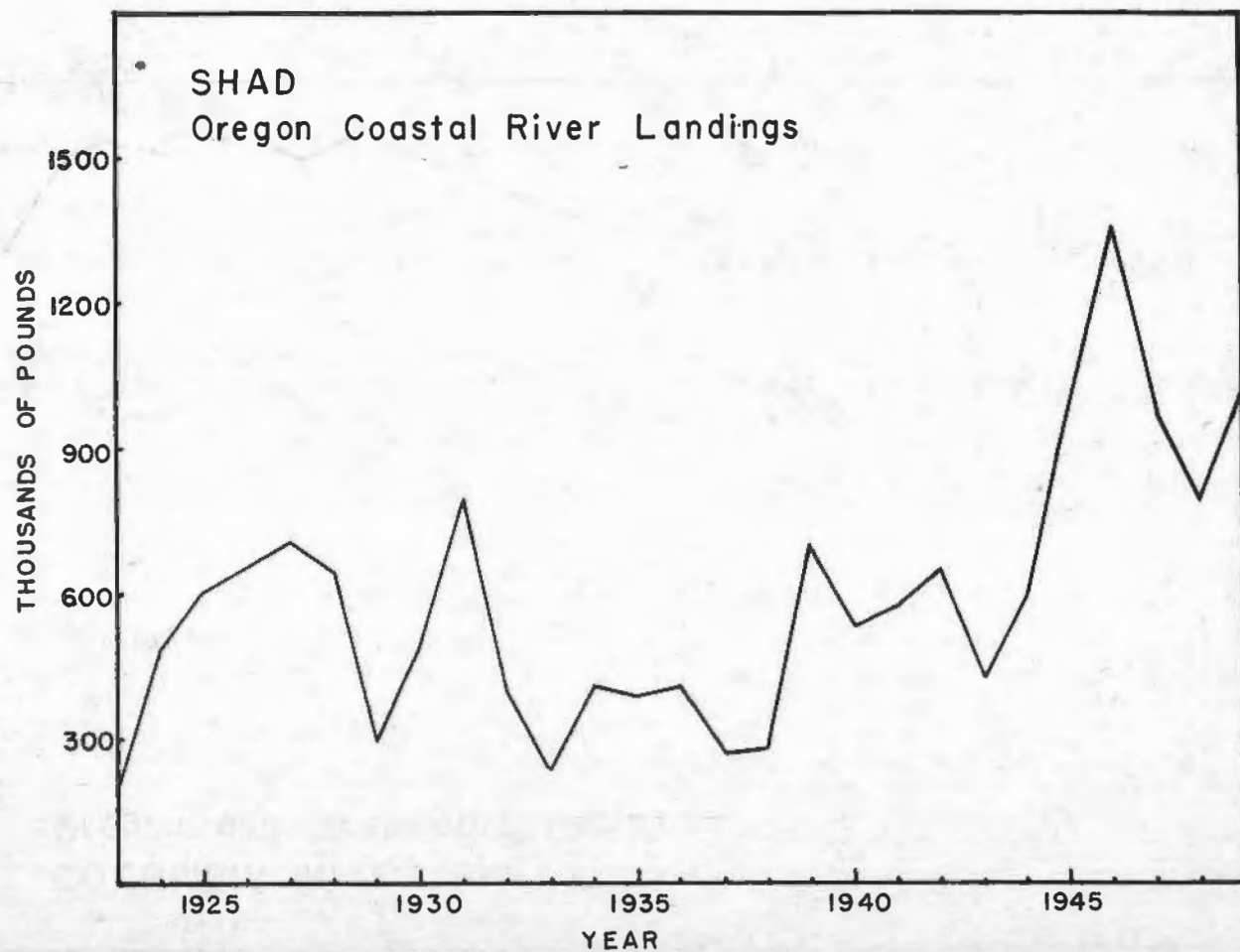


FIGURE 32. See Table 72.

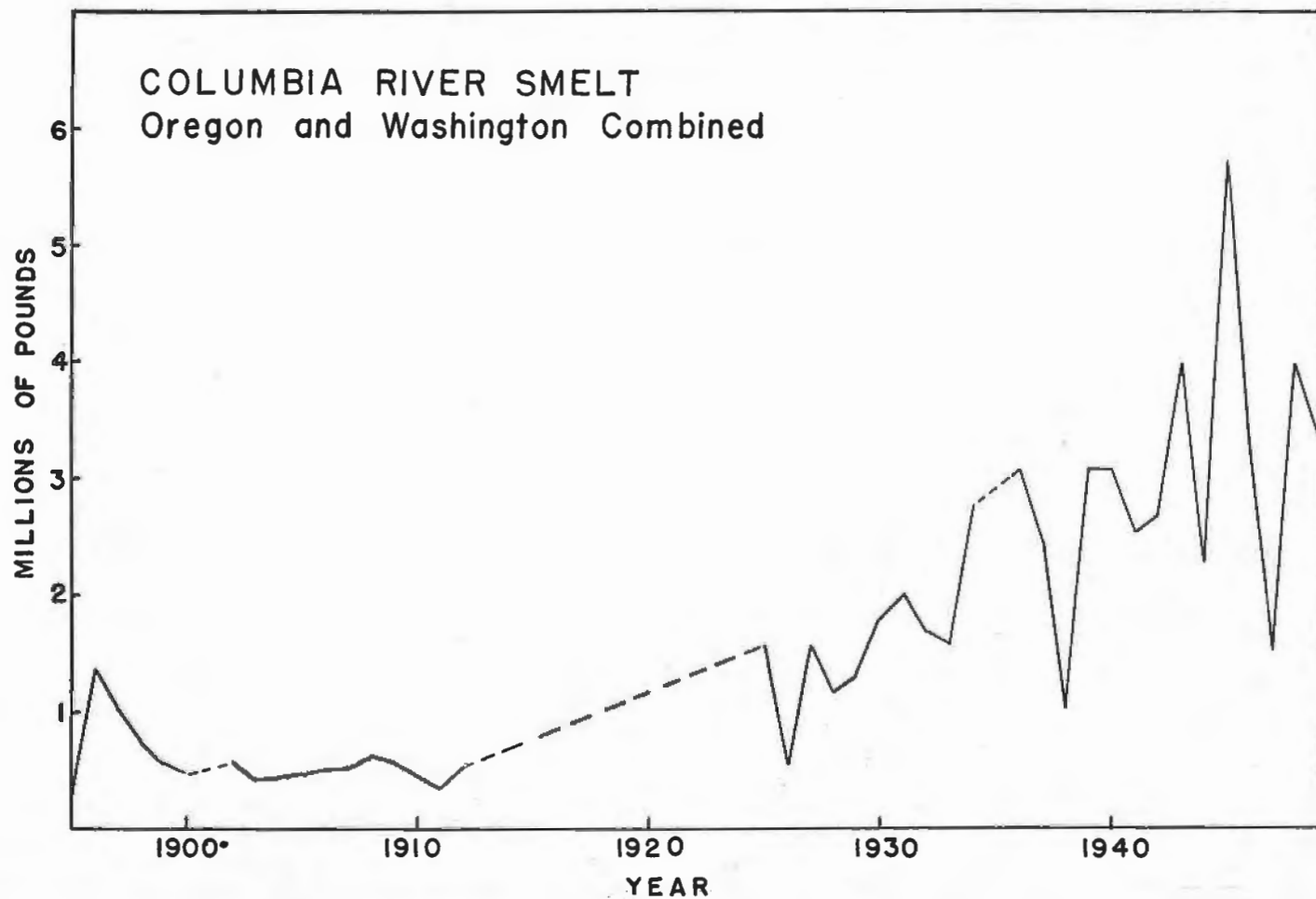


FIGURE 33. See Table 79.

SURF SMELT

The surf smelt (*Hypomesus pretiosus*) occurs in varying numbers along the Pacific Coast from Central California to Southern Alaska. In the State of Washington commercial catches of 200,000 to 500,000 pounds per year are landed, but there is no regular commercial fishery in Oregon. A sport fishery exists near Yachats and Cape Arago, Oregon, however, and irregular catches are frequently reported from several other areas along the Oregon Coast. At the present time a catch of 25 pounds per sport fisherman is permitted.

Because of the nature of the fishery, statistics concerning the catches are extremely limited. Investigations conducted at Yachats in the summer of 1949 indicated a total catch there of some 4,000 pounds, and the catch taken at Cape Arago that year was probably of a similar magnitude. These estimates are based upon sample censuses taken by biologists during the season.

The fishery catches mature smelt which have arrived in the surf zone along the ocean beaches to spawn. In Oregon the spawning season extends from April into October, and spawning is limited to areas where fine gravel and coarse sand are present. Spawning most often occurs during the afternoon tides and usually takes place just after high water.

The three types of gear commonly used in the sport fishery are the dip net, two-man seine, and the squaw net. The squaw net is an adaptation of the gear formerly used by Indians, and it consists of an "A" frame of two poles up to nine feet long with a cross bar near the apex to facilitate handling. A bag net is hung at the open end of the "A" frame. The two-man seine is a net strung between two poles with a lead line along the bottom of the net. Such nets vary in length from 5 to about 30 feet. The two-man seine is undoubtedly the most efficient of the three types of gear, and the squaw net is considerably more efficient than the dip net.

STRIPED BASS

Striped bass were introduced on the Pacific Coast by planting young fish in San Francisco Bay in 1879 and again in 1882. The bass, like the shad, spread northward until occasional specimens are now taken in streams in the State of Washington. In Coos Bay on the Oregon Coast, striped bass are quite abundant and support a commercial fishery. In addition to Coos Bay, the gill net fishery also takes smaller numbers of this fish from the Coquille and Umpqua Rivers.

The first recorded catch in Coos Bay occurred in 1914. Since that time, the Oregon catch has generally increased (Fig. 34). A peak of over one quarter of a million pounds was recorded in 1945, but the average landing for the years 1941 to 1950 was 90,530 pounds.

In addition to the commercial fishery, the striped bass support a thriving sport fishery; this was particularly true in 1949 when it was estimated that more than 60,900 pounds of striped bass were caught by sport fishermen.

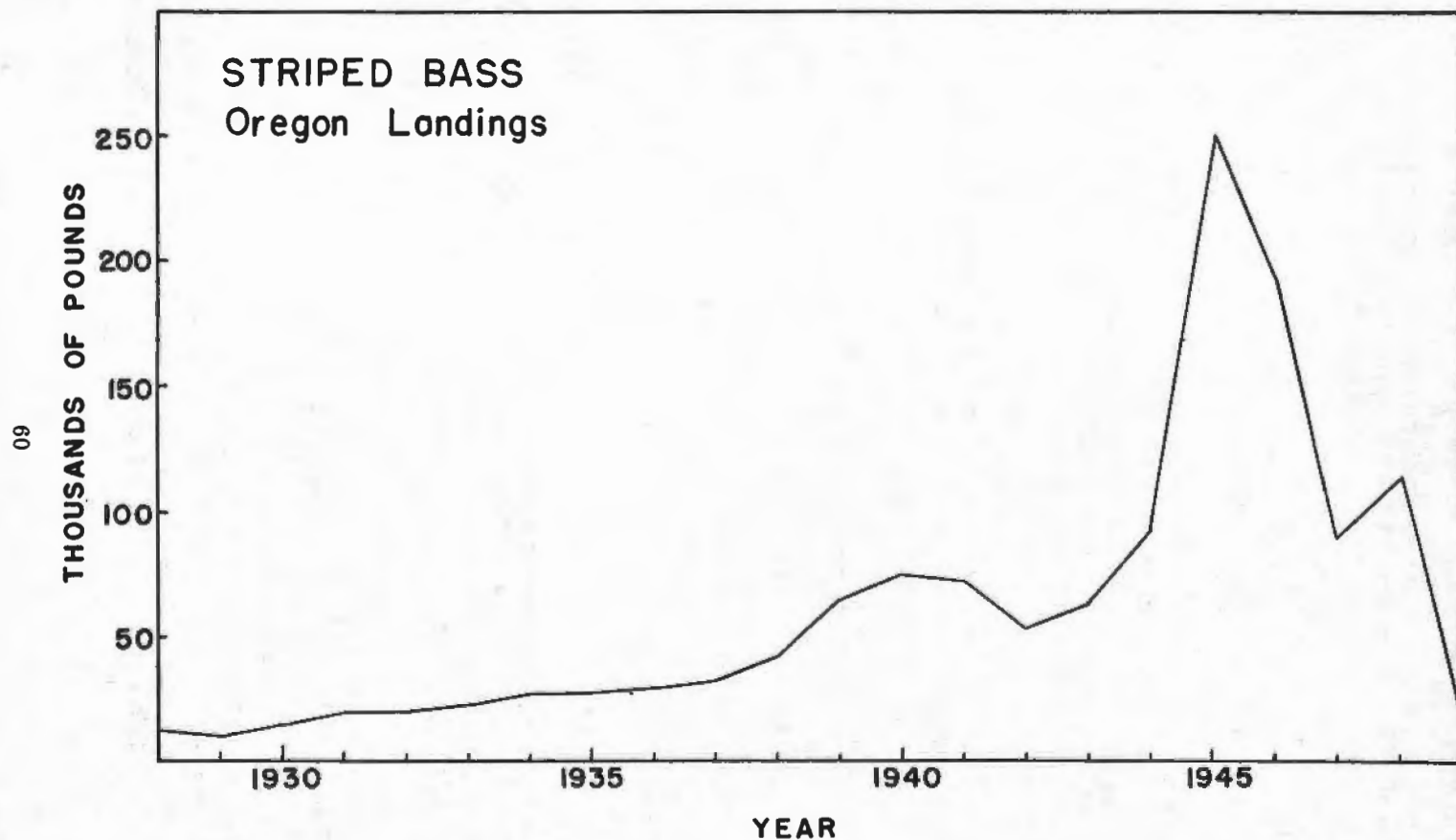


FIGURE 34. See Table I.

STURGEON

General

Decades ago the sturgeons were extremely common in North American waters, but they were at that time of little commercial value. However, when caviar and smoked sturgeon became popular, the prices of these products rose rapidly, and about 50 or 60 years ago fishermen found that sturgeon fishing was profitable. As a result sturgeon were heavily fished and in many places almost exterminated. At that time there was neither proper management nor regulation of the sturgeon industry. Little or nothing was known about the fish.

The lack of such information resulted in disastrous overfishing and in the elimination of the breeding stock of practically all American and European sturgeons in the waters where they were extremely abundant. The profitable sturgeon fisheries of the Atlantic Coast and inland waters of North America as well as that of Western Europe are gone, and there is practically no hope that they will ever be restored. The world's largest sturgeon industries still exist in the Caspian and Black Seas, and to some extent in Siberia; some of the fish caught there attain up to 3,500 pounds in weight but extreme sizes are becoming rare.

The female sturgeon mature and deposit their eggs at between 15 and 20 years of age when they weigh approximately 100 pounds. The males as a rule become ripe somewhat sooner and are usually smaller than the females. Furthermore, breeding in sturgeon does not appear to take place every year, as indicated by the fact that large females often show very small immature eggs during the regular spawning time, which is usually at the beginning of summer. The intervals between spawning in a large fish can be three or even more years, but the number of eggs increases rapidly with the age of fish. The oldest sturgeon examined from the Columbia River was approximately 50 years old and its weight was slightly more than 500 pounds.

Because of slow growth and relatively great age at maturity, sturgeon must be more rigidly protected than some other commercial fishes; this is particularly true with respect to the breeding females. A new regulation established in 1950 protects the fish over 72 inches in length.

The sporting qualities of this fish are great, and during recent years sport fishing for sturgeon in the Columbia River has gained greater popularity.

Columbia River White Sturgeon

The white sturgeon of the Columbia River (*Acipenser transmontanus*) is the third largest representative of the sturgeon family and one of the largest freshwater fish in the world. Unlike the Columbia River sturgeon, the other two sturgeons are anadromous species. The largest known specimen of white sturgeon weighed approximately 1,800 pounds.

In 1880 when the sturgeon fishery was in its infancy, this fish was extremely abundant in the Columbia River. The prices were between one and two cents per pound for dressed fish and five cents per pound for caviar. At that time tremendous numbers of large and small sturgeon were destroyed by the fishermen because the fish had little commercial value

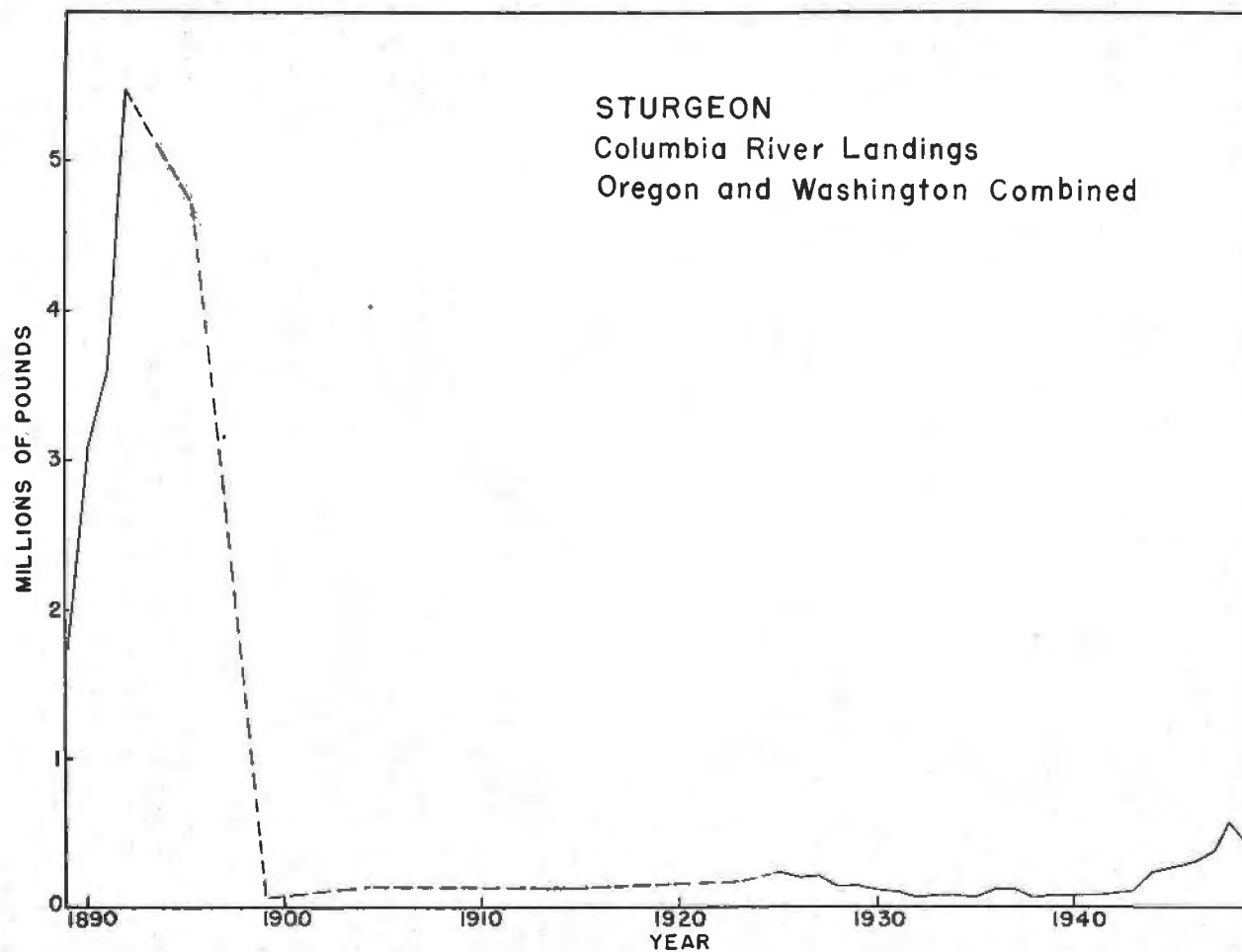


FIGURE 35. See Table 92.

and ruined the salmon nets. The average size of the Columbia River sturgeon in the commercial catches rapidly declined from several hundred pounds per fish to less than fifty pounds per fish. The peak of sturgeon production in the Columbia River was reached in 1892 when about 6,000,000 pounds of this valuable fish were landed. Ten years after the intensive fishery had started, the annual catch declined rapidly and was for a number of years in the vicinity of 100,000 pounds. However, there are indications that the sturgeon population in the Columbia River is slowly increasing at the present time. Figure 35 shows the tremendous decline in the catch of the Columbia River sturgeon during the last 70 years. The declines in the catches of Atlantic and lake sturgeon were even more disastrous during the same period of time.

As far as the potential supply, population, and the annual catch of the Columbia River sturgeon is concerned, it would be no exaggeration to say that they exceed that of the three other American species of sturgeon combined.

Green Sturgeon

The green sturgeon (*Acipenser medirostris*) is an anadromous fish which rarely occurs above the tidal waters. However, it enters the estuaries to spawn. It is distributed along the coast from California to Alaska, but is not as valuable commercially as the white sturgeon. The rate of growth of green sturgeon is somewhat slower than that of white sturgeon, and it never attains such a great size. The maximum weight which has been recorded for a green sturgeon is in the vicinity of 300 pounds.

For a long time the meat of green sturgeon was thought to be poisonous, which is not correct. However, the flesh is considered inferior to that of the white sturgeon, and its market value has never been as great. It is not abundant anywhere, and accurate statistics of catch for green sturgeon cannot be presented because in former days the species were not differentiated. Small white sturgeon were often included in the records as green sturgeon.

SHELLFISH

Bay Clams

Oregon's 300-mile coastline has many river mouths but relatively few bay and estuary areas. Of these, the following enter, or have entered, into the commercial production of bay clams for the State of Oregon. From north to south the clam producing bays are:

Nehalem Bay
Tillamook Bay
Netarts Bay
Nestucca Bay (now closed to commercial digging)
Yaquina Bay
Siuslaw Bay
Umpqua Bay
Coos Bay
Coquille Bay

Yaquina, Tillamook, and Coos Bays constitute the major production areas, producing 20, 25 and 40 percent respectively, or a total of 85 percent of the State's landings.

The horseclam (*Schizothaerus nuttallii*), the cockle (*Cardium corbis*), and the soft-shell clam (*Mya arenaria*) form the bulk of the commercial catch with only negligible landings of Washington butter clam (*Saxidomus giganteus*) and little neck clam (*Venerupis staminea*). During the period 1943-1949 an average of 47 percent of the total production was horseclams, 34 percent was cockles, and 19 percent was soft-shell clams.

All three species are used in the restaurant and fresh food trade. Cockles have additional use as fish and crab bait which takes a large part of the total cockle catch.

Shucked clams of all species for the period 1943-1949 ranged in value from \$2.00 to \$4.50 per gallon to the clam producer and \$1.50 to \$3.00 for a five-gallon can of cockles in the shell.

Personal Use

The personal or sport take (non-commercial) has not been estimated for the state as a whole, but some periods for certain bays have been analyzed for poundages taken. Increased advertising by the coastal cities to draw the tourists has resulted in a greater demand for bay clams. At Bayocean on Tillamook Bay from July 15 to August 26, 1950, 1,700 diggers were tallied. Taking into consideration that a portion of these were commercial men it is estimated that of a total catch for the period of approximately 22,000 pounds for Tillamook Bay, 10,000 pounds were taken by tourists. On one day in 1948 as many as 600 diggers were counted on the flats at the Bayocean area. Similarly, a survey made at Yaquina Bay showed the non-commercial take to be 21,900 pounds for the period July 14 through July 23, 1947, while the commercial take for a like period was about 6,000 pounds. In this case the personal take was the greater. Labor Day, the Fourth of July, and other holidays bring visitors to the beaches and bays by the thousands. The tourists reach their maximum numbers during the summer months and this is the time of greatest clamming activity.

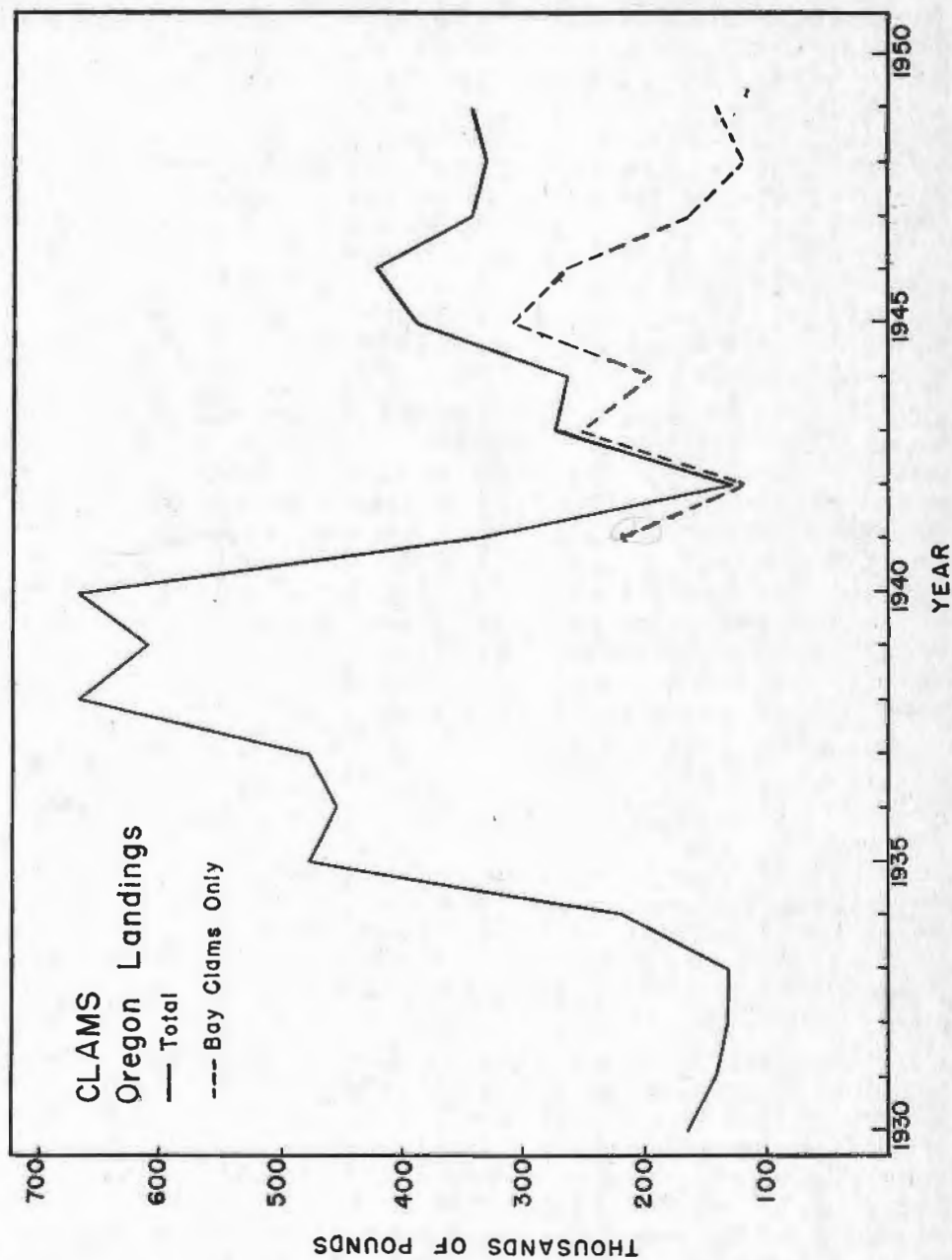


FIGURE 36. See Table I.

1930 - 40 Razor + Bays
1943 - 1949 - Separate Species
Commercial Production

Figure 36 portrays the history of the commercial fishery beginning with the year 1930. The records from 1930 to 1940 include both razor clams and bay clams and cannot be separated by month, area, or species. The bay clam poundages for 1941 and 1942 are available by total yearly landings. Detailed analysis by month and species is possible only from 1943 to 1949. The sharp increase in catch for the period 1934 to 1938 may be attributed to the fact that many people were hard hit by the depression and turned to "living off the land". The peak production of 664,297 pounds was reached in 1938. This high production more or less maintained itself until World War II (1942) when it dropped off sharply. Wartime restriction of night digging in coastal areas, the ocean beaches being closed entirely to digging for nearly a year, plunged the production of clams to the low point of 134,550 pounds by 1942. Relaxed restrictions brought an increase in production, but because of more favorable economic conditions the fishery did not regain its prewar intensity.

The bay clams show quite a serious drop in landings after 1945 and continue to decline until 1948. The years 1946, 1947 and 1948 were prosperous, with many jobs available, which may have been a factor in decreasing the pressure of clam digging. There has been a steady increase in oyster farming in the major bays during this period, and consequently some clam flat areas have been taken from use. Many of the oyster farmers allow clambers to trespass on ground being used, and periodically open oyster-free flats to both commercial and sports diggers. Nevertheless some clam-producing areas are put permanently out of use which increases the intensity on the remaining clam areas. The exact effect of this procedure and the acreages involved are not obvious at this time.

The main commercial production of bay clams takes place from March through September, as is shown by Figure 37. These are the months with the good daylight low tides. Average monthly bay clam landings for Coos, Tillamook, and Yaquina Bays vary considerably between bays (Tables 99 to 101). Coos Bay reaches maximum production considerably earlier than Yaquina and Tillamook Bays, which is caused by differences in species landed. The production of Coos Bay is almost entirely horseclams, while Yaquina and Tillamook Bays produce cockles and soft-shells predominantly. This, coupled with the use of each species, plays an important part in the time differences.

The annual clam landings from major bays presents another series of interesting points. Coos Bay clam production, roughly 40 percent of the state's total, increased sharply during the war, reached a peak production of 169,754 pounds in 1945, decreased somewhat in 1946, and dropped sharply in the following three years. Studies showed the stocks of horseclams to be dangerously low in 1947 and 1948, and restrictive regulations were imposed on digging for this species of clam. These measures were drastic, commercial and sport digging being closed from January 1 to June 30 during which time the clam is spawning and recuperating from spawning. The closure has reduced the intensity of digging and partially accounts for the lowered production in 1948 and 1949.

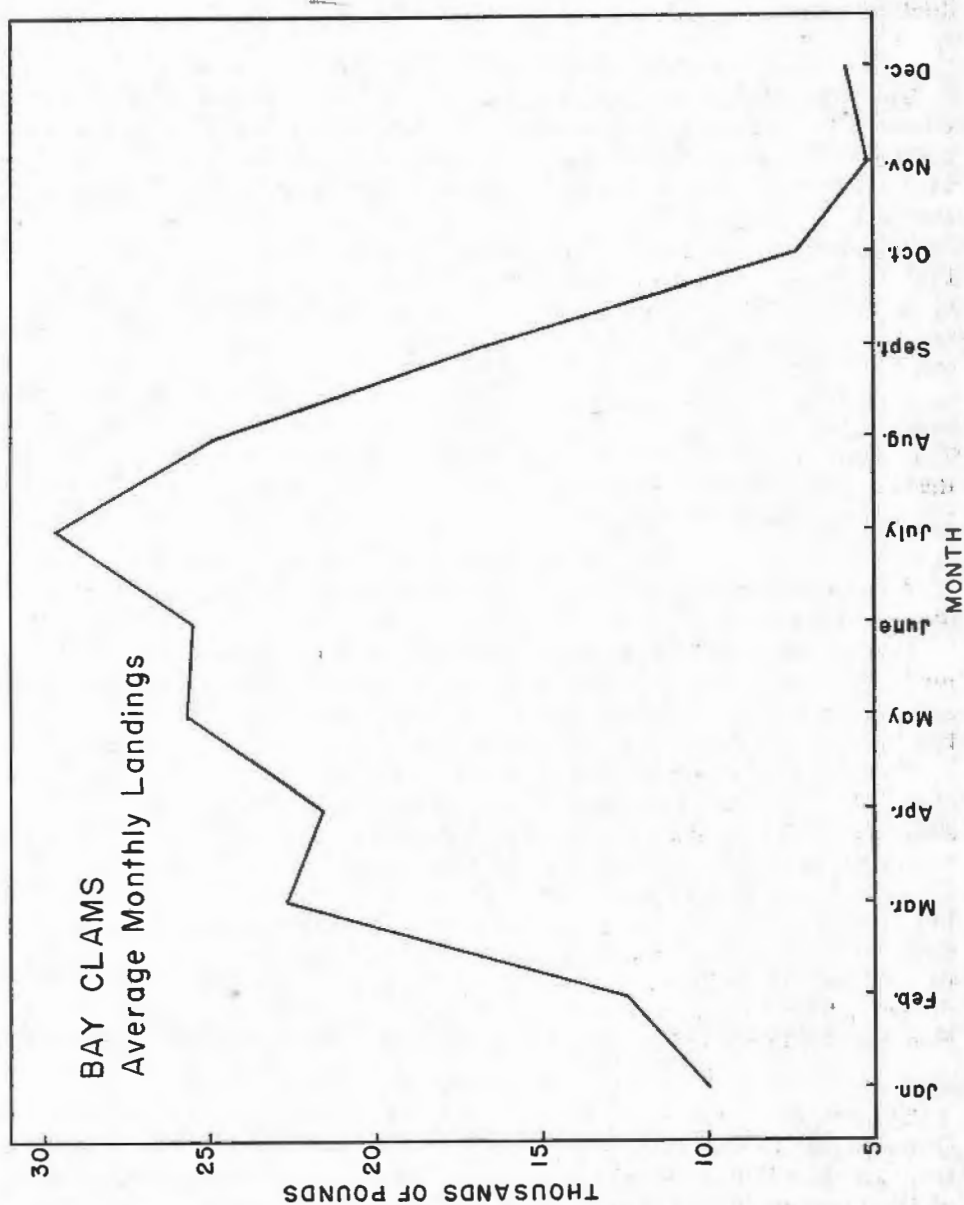


FIGURE 37. See Tables 99 to 101.

Tillamook Bay, on the other hand, did not show increased production during or after the war but indicates a downward trend throughout the seven-year span.

Landings from Yaquina Bay do not display a definite trend, the production remaining fairly constant at a lower level.

Production by Species

The production of horseclams is predominantly influenced by Coos Bay which is the main horseclam-producing bay. This relatively slow-growing clam is much sought after by both sports and commercial diggers. The average commercial production for the seven-year period 1943 through 1949 was 95,000 pounds.

The cockle is a relatively fast-growing clam. It is caught with a rake that is pulled through the upper one to three inches of sand or sand-mud mixture. The total production seems to be rather constant at roughly 70,000 pounds per year. This clam displays a certain amount of mobility that affects its availability at some times of the year.

The soft-shell clam appears to have an upward production trend. The average yearly production for the past seven years has been 39,000 pounds. This clam, too, has relatively rapid growth and appears to be maintaining itself in a fair fashion. Umpqua and Siuslaw Bays are noted for their large and abundant soft-shell clams.

Production by Species by Bay

As mentioned before, Coos Bay produces primarily horseclams although other species are present in the bay.

Cockles represent 77 percent of the total commercial production of Tillamook Bay, soft-shell clams 22 percent, and horseclams 1 percent for the seven-year period 1943-1949. Cockle production decreased sharply in 1944 but has more or less leveled off since that time.

Cockles form 67 percent of the total production of Yaquina Bay, horseclams 28 percent, and soft-shells 5 percent for the seven year period. Cockles show a definite increase in production; a good portion of these are used for crab bait, and an increasing amount is being put into restaurant use. The demand for cockles exceeds the supply, so that the digger is seldom at a loss for a market. Horseclams landings on the other hand show a marked decrease in Yaquina Bay, disappearing entirely from the commercial catch in 1948 and 1949. The soft-shell clams in Yaquina Bay have not been in demand. There has been no serious effort by any number of diggers for this clam due to its limited numbers, consequently landings have been sporadic.

Razor Clams

Though the razor clam (*Siliqua patula*) is known to occur from the Okhotsk Sea to Pismo, California, it is dug in commercial quantities only from the Aleutian Islands to Oregon. In the past decade 95 percent or more of the commercial poundage taken in Oregon has been from the Clatsop County beaches between the Columbia River and Tillamook Head. Figure 38 shows the trend in catch for the few years for which data are available. Little is known about the annual landings of this species prior to 1941. During the past war, military restrictions on the beaches plus a decreased

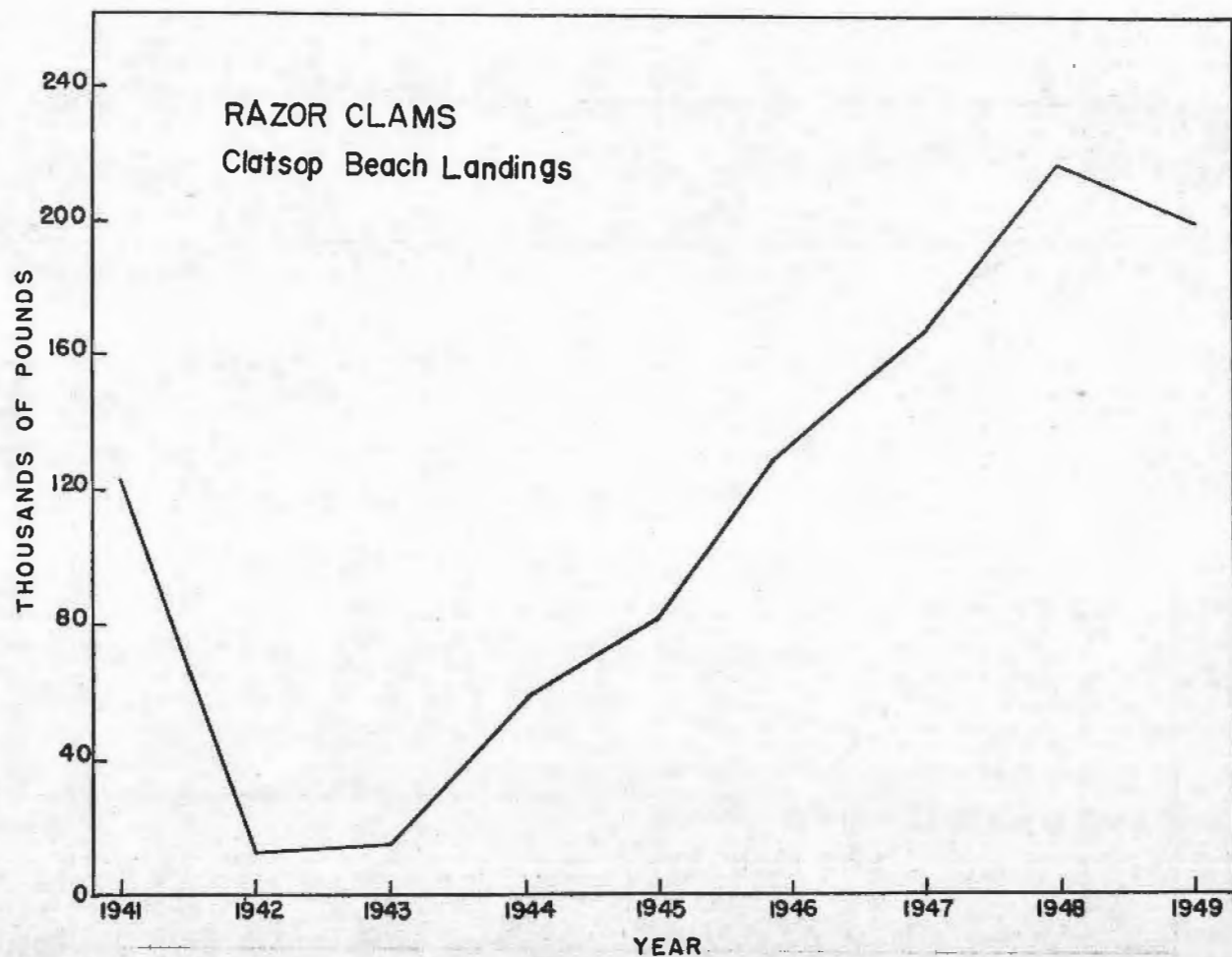


FIGURE 38. See Table 103.

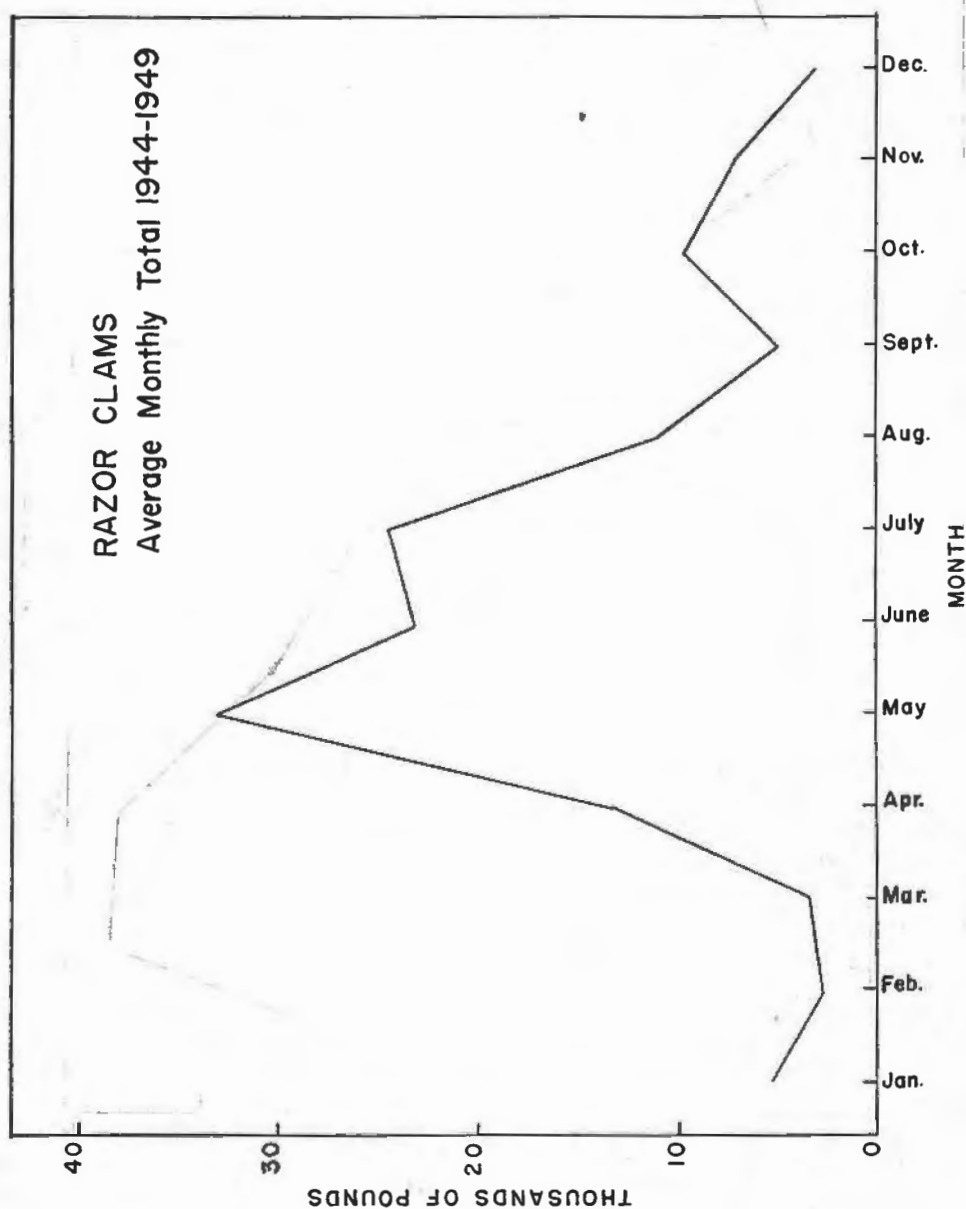


FIGURE 39. See Table 103.

number of diggers resulted in very low landings. However, since the war, this fishery has steadily increased in magnitude. Some of the older diggers feel that there are nearly as many clams now as there were in earlier years, though greatly intensified competition has reduced the number of pounds taken on a tide by any one digger. The razor clam at the present time also supports a heavy sport fishery which very nearly equals the commercial fishery in pounds taken per year.

Currently the greatest portion of the digging takes place during the spring and summer months (Fig. 39) although there are some landings throughout the year. The catch is divided among three markets; fresh, crab bait, and canned. It appears that the fresh market takes the most clams, followed by crab bait market and cannery market in that order. The winter production is sold primarily in the Portland retail outlets while during the summer months the coast resort areas are the main consumers. Crab bait consumption seems directly related to the degree of success of the crab fishery during a given year. When these two markets fail to absorb the total production and prices fall, then canning is done on a limited scale. From 1913 to 1916, 1923 to 1929, and 1931 to 1938 razor clams were abundant enough to be canned in varying quantities in Oregon. It appears that cheaper clams from Washington and Alaska tend to restrict the canning of Oregon clams to periods of low prices.

Crabs

Although many species of crabs are found in Oregon waters, the Pacific or Dungeness crab (*Cancer magister*) is the only one which reaches a sufficiently large size or occurs abundantly enough to provide a basis for a commercial fishery. This crab may be found throughout the year from the shallow waters of the bays to depths of over 50 fathoms. There are indications of annual migrations to and from deeper water, but such a movement is not universal among the population. In addition, crabs have been found to undertake coastwise migrations of more than 80 miles. Tagged crabs have moved from one bay to another.

The female crab carries the fertilized eggs attached to her abdomen until they hatch. Hatching generally takes place in the late spring and early summer months. The newly emerged crab larvae swim near the surface for some time and undergo several changes in form before settling to the bottom in adult form. Approximately four years are required for a male crab to reach commercial size.

Two forms of commercial gear are used, pots or traps and ring nets. The former provide by far the greater part of the catch. These are baited and set in depths ranging from 2 to 25 fathoms. At intervals of from 1 to 10 days, depending on weather and success of fishing, the fishermen lift the pots to remove the catch. The months in which crabs are fished are limited. In August, September and October shedding exposes a perfectly formed but soft shell. Marketing is undesirable at this time because of low yield and poor quality of the meat. After approximately three months, during which time the shell becomes hard and the meat firm, fishing is resumed. Winter storms limit the fishing intensity. It is not until March that any

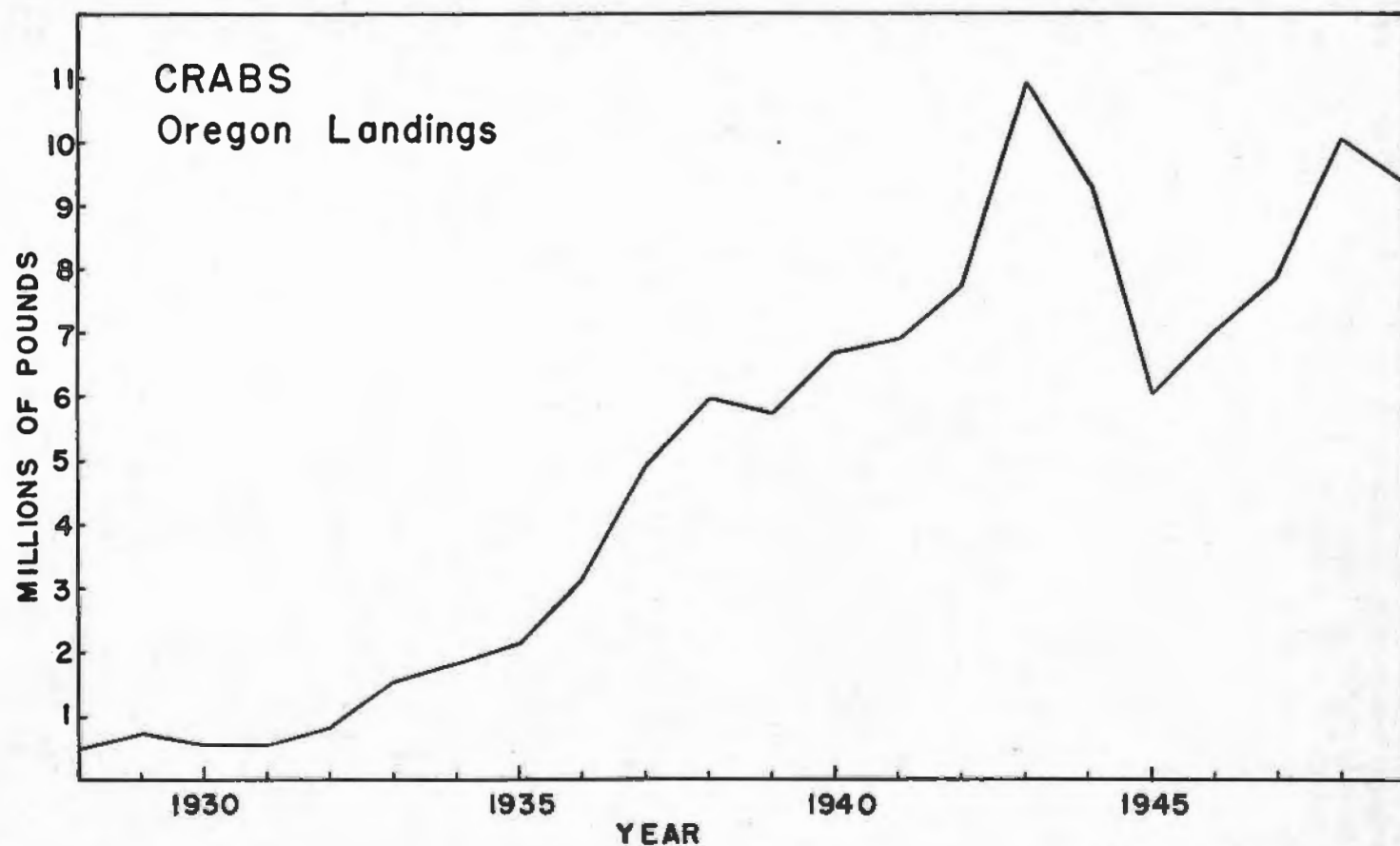


FIGURE 40. See Table I.

appreciable landings are made. March, April, and May are the months of peak production.

Closed seasons for the protection of the soft-shelled crabs, August 15 to November 15 in the southern area (south of Cascade Head) and September 15 to December 15 in the northern area (north of Cascade Head), limits fishing to the bays where crabs may be caught the entire year. Further regulations prohibit the sale of female crabs, thus adding assurance of successful spawning. A size limit of six and one-quarter inches on offshore males (straight-line measurement across the back in front of the points) and five and three-quarters inches on male crabs caught within the bays is the third major regulation affecting the fishery.

The reported crab landings have varied from 492,811 pounds in 1928 to over 10,000,000 pounds in 1943 and 1948. These fluctuations are in part the result of economic conditions and in part directly due to changes in the numbers of crabs available to the fishermen. The increase in landings from 1934 to 1943 shown in Figure 40 is largely the result of market improvement coupled with advances in fishing, processing, and shipping techniques. The low catch from 1928 to 1933 is largely due to poor market conditions. The landing totals presented may be incomplete, but not sufficiently so to materially affect the trend. Since 1943 the catch has fairly reflected variations in the abundance of crabs.

During the past five years the trend has been towards larger boats handling more pots. In effect this gives a wider fishing range. With the installation of live tanks in the hold of the boat, the fisherman may remain out of port for three or four days without danger of mortality in captured crabs.

There is no reason to believe that the intensified fishery has damaged the crab populations. It is expected that the catch will remain near the levels shown for the past 10 years so long as market conditions warrant.

Crawfish

Oregon's freshwater crawfish fishery takes place mainly in the Columbia and Willamette Rivers. In addition the Tualatin, Yamhill, and other tributaries to the Willamette are fished. The gear used commercially is of two types, a trap with two funnel openings, and a ring with netting over it. These are baited and left to fish and are raised at intervals of from several hours to several days. The product is sold mainly in restaurants specializing in fish dishes. Sportsmen take a considerable but unknown number for private use. The commercial fisherman gets from \$0.25 to \$0.50 per dozen for his product. Two species predominate in the commercial catch, *Astacus leniusculus* and *A. klamathensis*, but at least two other species occur.

Table 103 exhibits an upward trend for production with the catch per fisherman remaining about the same. The increase in production is caused by a general increase in fishermen. The average yearly catch is approximately 15,000 dozen, and the average catch per fisherman 1,165 dozen.

Oysters

The State of Oregon does not collect statistics on the production of oysters; therefore the data shown in Figures 41 and Table 1 are taken from other sources. The records are based upon pounds of shucked oysters,

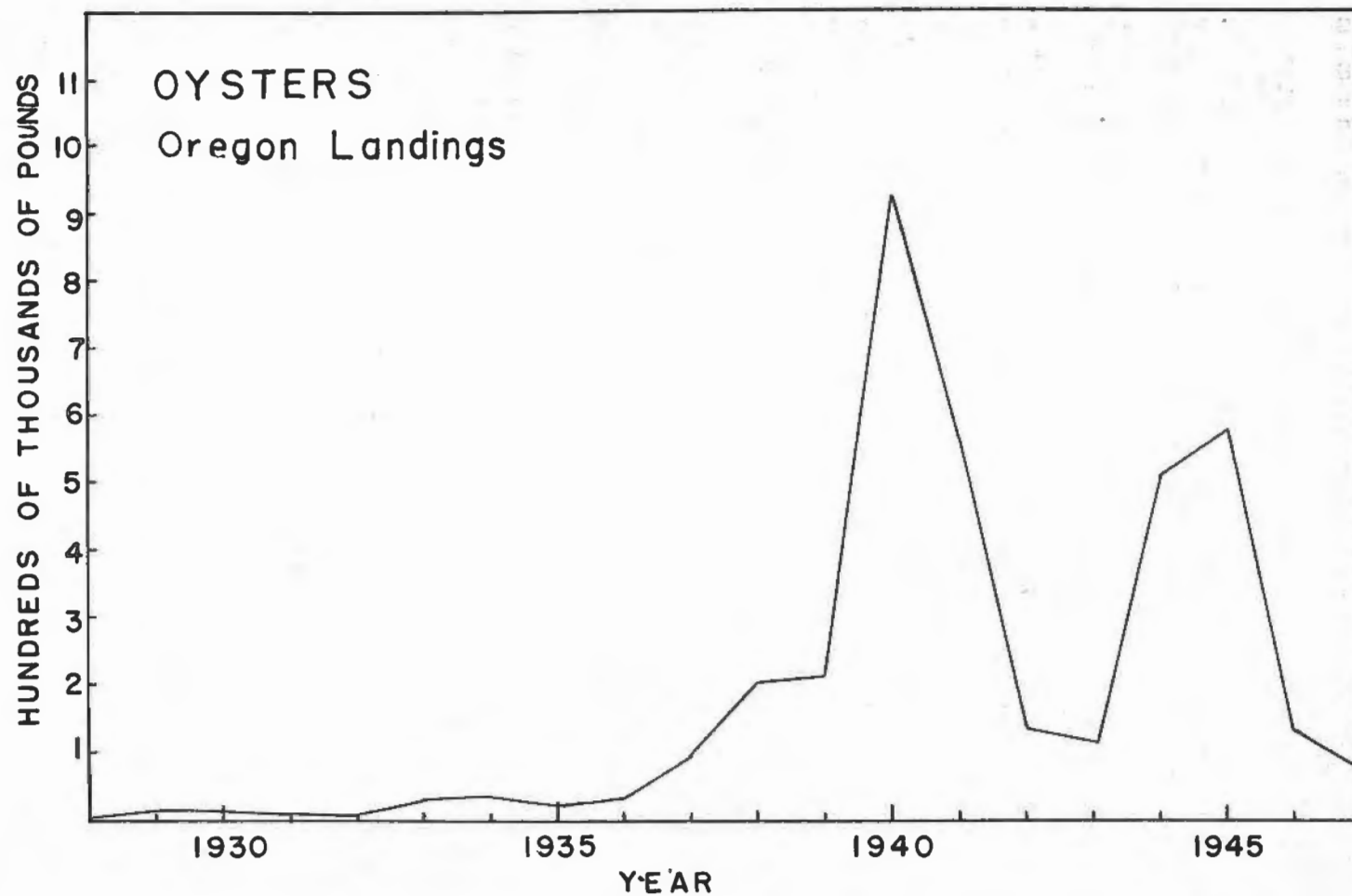


FIGURE 41. See Table I.

which are chiefly the Pacific oyster, *O. gigas*. The modest production prior to 1935 is indicative of the importance of the native oyster, *O. lurida*.

During the early years the oyster production was based entirely upon the native or Olympia oyster (*Ostrea lurida*). As these beds became depleted, they were supplanted later by the Pacific or Japanese oyster (*O. gigas*) which now provides almost the entire production. The stocks are now based upon seed oyster importations from Japan where the oyster larvae set upon shells placed to catch them. After being allowed to grow for about six months, the young oysters are carefully packed for shipment from Japan. The cases of seed are stowed on deck and kept damp with a hose during the voyage to the United States. Upon arrival here in late winter or early spring the cases are broken and the seed is distributed over the oyster flats. The quantity of oysters harvested is chiefly a reflection of the size of the plantings by the oyster growers.

The Pacific oyster industry of Oregon is growing. Expansion is particularly noticeable in Tillamook, Yaquina, and Coos Bays where the habitat is favorable for the growth of this bivalve. Importation of this oyster is necessary each year as the Pacific Coast water conditions are not favorable for successful spawning. War and restrictions prevented the importation of this oyster from 1941 until 1947 when 15,357 cases were shipped to Oregon. The large volume for this year was a direct result of new areas being planted and of old areas being restocked after the war years. The year 1948 saw a marked decrease in imports when only 5,955 cases were imported, and 1949 was even lower with 4,760 cases of seed. The following two years show an increase of importations. The above figures are presented in detail by year, area, and type of seed in Table 106. Regular Japanese oyster seed is available in two forms, broken and unbroken. In recent years seed has been made available for a new variety of Japanese oyster called the Kumamoto. The name is derived from the area of origin in Japan. This oyster is a small, deep-cupped cocktail variety and is of excellent taste. Shipments of this variety have been for experimental plantings.

REFERENCES

Anderson, A. W. and E. A. Power

- 1946 Fishery statistics of the United States 1942. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 11, pp. 1-248.
- 1947 Fishery statistics of the United States 1943. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 14, pp. 1-241.
- 1948 Fishery statistics of the United States 1944. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 16, pp. 1-283.
- 1949 Fishery statistics of the United States 1945. U. S. Dept. Int., Fish and Wildlife Service, pp. 1-372.
- 1950 Fishery statistics of the United States 1946. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 19, pp. 1-263.
- 1950 Fishery statistics of the United States 1947. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 21, pp. 1-285.

Cobb, John N.

- 1921 Pacific salmon fisheries. U. S. Dept. Comm., App. I to Report of the U. S. Comm. of Fish. for 1921. pp. 1-268, 48 figs. Bur. of Fish. Doc. 902.

Craig, J. A. and R. L. Hacker

- 1940 The history and development of the fisheries of the Columbia River. U. S. Dept. of Int., Bull. U. S. Bur. Fish. XLIX (32):133-216.

Fiedler, R. H.

- 1929 Fishery industries of the United States 1928. U. S. Dept. Comm., App. IX to Report of the Comm. of Fish. for 1929. pp. 401-625. Bur. of Fish. Doc. 1067.
- 1931 Fishery industries of the United States 1929. U. S. Dept. Comm., App. XIV to Report of the Comm. of Fish. for 1930. pp. 705-1068. Bur. of Fish. Doc. 1095.
- 1931 Fishery industries of the United States 1930. U. S. Dept. Comm., App. II to Report of the U. S. Comm. of Fish. for 1931. pp. 109-552. Bur. of Fish. Ad. Rept. No. 3.
- 1932 Fishery industries of the United States 1931. U. S. Dept. Comm., App. II to Report of the U. S. Comm. of Fish. for 1932. pp. 97-440. Bur. of Fish. Ad. Rept. No. 8.
- 1933 Fishery industries of the United States 1932. U. S. Dept. Comm., Bur. of Fish. for 1933. pp. 149-449. Ad. Rept. No. 13.
- 1935 Fishery industries of the United States 1934. U. S. Dept. Comm., App. II to Report of the U. S. Comm. of Fish. for 1935. pp. 75-330. Bur. of Fish.
- 1936 Fishery industries of the United States 1935. U. S. Dept. Comm., App. II to Report of the U. S. Comm. of Fish. for 1936. pp. 73-347. Bur. of Fish. Ad. Rept. No. 24.
- 1938 Fishery industries of the United States 1936. U. S. Dept. Comm., App. I to Report of the U. S. Comm. of Fish. for 1937. pp. 1-276. Bur. of Fish. Ad. Rept. No. 27.
- 1938 Fishery industries of the United States 1937. U. S. Dept. Comm., App. III to Report of the U. S. Comm. of Fish. for 1938. pp. 151-460. Bur. of Fish. Ad. Rept. No. 32.
- 1940 Fishery industries of the United States 1938. U. S. Dept. Comm., App. III to Report of the U. S. Comm. of Fish. for 1939. pp. 169-554. Bur. of Fish. Ad. Rept. No. 37.
- 1941 Fishery industries of the United States 1939. U. S. Dept. Int., App. III to Report of the U. S. Comm. of Fish. for 1940. pp. 185-554. Bur. of Fish. Ad. Rept. No. 41.
- 1942 Fishery statistics of the United States 1939. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 1, pp. 1-219.
- 1943 Fishery statistics of the United States 1940. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 4, pp. 1-225.
- 1945 Fishery statistics of the United States 1941. U. S. Dept. Int., Fish and Wildlife Service, Statistical Digest No. 7, pp. 1-174.

Fiedler, R. H., J. R. Manning and F. F. Johnson

- 1934 Fishery industries of the United States 1934. U. S. Dept. Comm., App. I to Report of the U. S. Comm. of Fish. for 1934. pp. 1-235. Bur. of Fish. Ad. Rept. No. 15.

Johnson, D. R., W. M. Chapman and R. W. Schoning

- 1948 The effects on salmon populations of the partial elimination of fixed fishing gear on the Columbia River in 1935. Oregon Fish Commission, Cont. No. 12, pp. 1-32.

Oregon Fish Commission

- 1944 Statistical bulletin; take or catch of commercial food fish Columbia River and major coastal streams 1928-1943. Oregon Fish Commission., pp. 3-48.

Sette, O. E. and R. H. Fiedler

- 1929 Fisheries industries of the United States 1927. U. S. Dept. Comm., App. IX to Report of the U. S. Comm. of Fish. for 1928. pp. 401-547. Bur. of Fish. Doc. 1050.

Smith, E. Victor

- 1920 The taking of immature salmon in the waters of the state of Washington. State of Wash. Dept. of Fish., pp. 1-34.

State of Washington

- 1937-49 Annual bulletin; State of Wash. Dept. of Fisheries.

U. S. Army Engineers

- 1949 Annual report passage of fish over Bonneville Dam; Columbia River, Oregon and Washington. Corps of Engineers, U. S. Army, Office of the district engineer, pp. 1-44, Portland, Oregon.

TABLE 1

Total Oregon Landings of Fish and Shellfish^①
1928-1949

Year	Albacore	Anchovy	Carp	Gray Cod	Hake	Halibut	Herring	Ling Cod	MACKEREL		Perch	Pilchard
									Jack	Pacific		
1928 ^②			12,500			425,610	190	62,210			3,120	190
1929	36	3,395			250	515,579	151,200	264,184			94,331	30,115
1930	3,166				265	412,644	138,756	187,510			42,405	.....
1931		209				242,897	45,144	119,986			31,714	.....
1932			10,000			307,983	16,968	105,663			8,344	.....
1933	1,980		8,500			410,442	30,038	213,502			15,322	7,090
1934	1,000		6,000			500,900	37,400	129,700			8,700	.....
1935	600		7,600			549,400	42,900	108,400			20,300	52,460,000
1936	27,600		600			277,300	23,100	168,700			11,400	28,400,000
1937	1,353,522		12,700			367,200	30,000	151,700			600	33,320,000
1938	8,000,000 ^③					409,300	25,500	270,300			4,200	34,040,000
1939	6,484,795					297,400	25,900	212,300			3,900	44,660,000
1940	9,286,261					737,700	56,300	416,100			14,800	6,320,000
1941	7,545,131			1,000	804	1,323,900	91,700	1,244,500			9,200	31,700,000
1942	10,942,956			28,812		765,541	76,221	1,007,585			23,694	3,766,000
1943	10,495,956			25,425		857,682	94,741	942,184		1,483	59,569	3,640,000
1944	22,492,025			26,134	66	651,255	73,761	1,208,667	2,107	114	66,952	.....
1945	12,178,371			69,138	.....	613,215	49,728	1,015,465		321	77,373	180,000
1946	3,950,804			253,998	8,604	816,854	69,937	1,157,399			23,820	7,920,000
1947	9,557,662		1,599	30,194	5,227	600,106	71,924	569,226			6,853	13,852,000
1948	8,004,327		62,356	29,303	2,090	472,810	117,955	809,871	174,200		10,292	10,664,000
1949	6,457,382		566	4,621	8,265	455,467	38,955	728,484			7,725	.....

① The following figures are from "Fisheries Industries of the United States": albacore, 1929-1936; anchovy, 1929-1932; carp, 1928-1934; gray cod, 1936-1941; hake, 1928-1930; halibut, 1928-1941; herring, 1928-1941; ling cod, 1928-1941; perch, 1928-1941; pilchard, 1928-1934; rockfish, 1928-1941; sablefish, 1928-1941; shark, 1940-1941; skate, 1940-1941; smelt, 1928-1930; sole and flounders, 1928-1941; striped bass, 1928-1930; tomcod, 1928-1930; clams, 1928-1929; crawfish, 1928-1942; crabs, 1928-1929; octopus, 1932; oysters, 1928-1947.

② Totals are for fiscal year April 1 to March 31.

③ Obtained by questionnaires to dealers.

TABLE 1—Continued

Total Oregon Landings of Fish and Shellfish
1928-1949

Year	SALMON										SHARK③		
	Porpoise	Rockfish④	Sablefish⑤	Blueback	Chinook	Chum	Silver	Steelhead	Scrapfish⑥	Shad	Dogfish	Southern	Misc.
1928		73,702	279,880	163,264	12,442,961	5,956,678	7,071,371	1,727,261		1,283,397			
1929		128,205	151,791	356,303	11,194,298	2,448,184	6,915,661	1,576,944		1,078,176			
1930		118,688	190,269	259,807	11,778,598	724,779	8,218,310	1,858,389		1,280,054			
1931		90,833	63,976	106,124	13,795,737	1,803,259	4,756,789	1,820,842		1,311,006			
1932		33,303	78,633	24,795	10,202,086	833,682	7,605,354	1,204,037		626,325			
1933		48,709	23,816	83,188	12,553,268	1,280,532	5,061,290	1,402,942		360,810			
1934		52,900	102,400	211,370	12,165,862	1,092,605	7,041,939	1,579,000		909,581			
1935		48,800	90,800	38,012	12,277,573	1,217,468	13,233,122	1,523,215		745,164			
1936		121,100	270,500	169,498	14,592,271	1,905,434	4,866,543	2,238,603		666,577			
1937		153,800	147,700	246,066	15,975,469	1,569,071	7,168,275	1,664,676		522,620			
1938		139,700	124,400	289,440	10,818,993	2,003,379	7,451,200	1,669,695		405,182			
1939		103,800	97,700	198,578	11,045,369	1,241,624	7,214,027	1,600,496		973,317			
1940		619,300	66,600	243,113	11,545,678	1,313,839	6,035,802	2,586,086		790,426			1,604,800
1941		1,301,400	261,100	348,508	19,134,115	4,594,728	4,560,044	2,337,822	14,014	860,431			6,896,500
1942	1,082	1,898,488	623,776	138,374	14,180,285	5,916,981	2,650,207	1,628,660	20,284	980,699	1,086,242	378,335	1,205
1943	318	6,923,325	1,116,081	115,255	9,308,428	924,449	1,874,873	1,259,587	165,353	685,709	1,601,368	1,237,849	15,634
1944	359	11,367,169	568,370	44,877	11,138,141	534,646	4,593,207	1,485,780	293,689	986,305	388,836	144,968	3,013
1945		17,458,309	418,233	5,806	11,565,311	1,171,754	4,966,966	1,679,457	29,758	1,535,011	40,554	57,246	1,961
1946		10,867,187	1,016,470	103,279	12,809,338	1,006,734	3,405,921	1,418,335	120,015	2,021,659	31,310	20,666	5,707
1947		6,798,941	288,204	563,496	14,793,087	749,387	4,256,238	1,433,811	375,103	1,565,321	102,392	6,904	5,610
1948		4,658,388	517,790	65,233	14,540,854	1,583,404	3,210,318	1,578,702	1,651,379	1,144,065	333,739	16,089	1,305
1949		4,737,478	424,867	12,592	9,421,207	724,257	2,660,188	771,431	1,619,696	1,391,379	503,614	28,284	608

④ Includes a small amount of dressed fish from the long-line fishery.

⑤ Landings of dressed and round fish not separable.

⑥ Consists of small food fish (sole) used as mink food.

TABLE 1—Continued

Total Oregon Landings of Fish and Shellfish
1928-1949

Year	Skate	SMELT ^⑦		SOLE AND FLOUNDER									Misc. ^⑧ Sole
		Col. R.	Bay and Surf	Flounder	Arrowtooth Sole	Dover Sole	English Sole	Petrals Sole	Rex Sole	Rock Sole	Sand Sole	Sand Dab	
1928		19,148											84
1929		50,061		8,835									24,586
1930		194,172		37,722									7,723
1931		435,306		37,276									7,845
1932		233,993		52,240									54,542
1933		520,418		32,406									34,412
1934		563,036		48,300									22,800
1935		132,773		23,500									45,600
1936		266,875		5,600									148,400
1937		210,433		261,500									650,400
1938		472,121		185,200									32,800
1939		528,254		288,500									1,994,000
1940		43,100		1,295,500									2,818,400
1941		457,500		886,200									3,709,500
1942		13,282	1,036,131	20,571	443,840	71,137	2,308,508	227,793	3,745,236	13,714	7,513	458	1,649,935
1943		11,174	608,919	24,041	857,982	2,831,013	6,431,666	898,639	3,805,094	569,737	33,826		1,738,670
1944		4,414	334,431	14,281	877,367	700,147	1,593,469	1,057,701	2,019,162	116,881	30,573	8,000	100,870
1945		734	1,827,751	9,920	1,024,288	169,507	2,704,216	1,096,601	1,574,143	69,637	37,120	4,938	131,054
1946		40	550,601	36,017	1,279,839	297,708	3,197,988	3,950,609	2,984,093	48,633	61,263		19,970
1947		18	223,977	3,123	667,347	723,497	2,031,905	1,883,438	1,443,936	14,845	79,393	1,276	52,727
1948		350	932,378	454	1,434,689	1,221,356	2,808,264	3,320,869	2,658,550	130,953	1,465	111,953	30,169
1949		1,000,181	1,518	272,042	1,723,963	3,003,574	1,092,493	1,514,762	223,667		8,491	7,557	67,627

^⑦ Includes November and December of preceding calendar year and January to April of the year designated.^⑧ Includes variable quantities of Dover, English, petrale, rex and arrowtooth soles.

TABLE 1—Continued

Total Oregon Landings of Fish and Shellfish
1928-1949

SHELLFISH									FISH LIVERS		
Year	Striped Bass	Sturgeon	Tomcod	Clams	Crawfish	Crabs [Ⓐ]	Octopus	Oysters [Ⓐ]	Dogfish Shark	Souppin Shark	Misc. [Ⓐ]
1928	12,897	105,236		110,471	158,200	492,811		432			
1929	11,619	112,451	235	56,600	146,000	705,364		9,000			
1930	15,664	96,522		163,370	176,800	547,125		8,177			
1931	18,050	78,882		143,159	123,000	512,975		5,993			
1932	17,594	42,902		131,530	80,000	863,425	33	2,476			
1933	21,198	48,867		127,635	99,000	1,529,050		29,750			
1934	25,774	51,012		224,270	143,600	1,812,525		32,300			
1935	27,598	59,848		469,445	79,300	2,134,125		18,800			
1936	29,254	102,918		447,509	86,900	3,176,950		36,800			
1937	32,832	82,364		471,615	84,200	4,911,650		97,100			
1938	42,501	65,488		664,297	93,700	5,988,350		203,800			
1939	65,238	70,335		607,985	98,900	5,749,850		215,300			
1940	75,390	84,301		658,564	100,400	6,716,000		924,800			
1941	73,919	81,051		338,371	51,900	6,918,875	345	560,800	220,331	100,574	59,272
1942	54,447	85,985		134,550	23,600	7,787,350		137,500	157,420	111,431	61,252
1943	64,053	118,793		278,398	26,128	10,958,325	264	114,970	283,817	272,580	68,300
1944	94,624	191,657		268,121	28,625	9,358,250	240	509,900	524,967	190,139	75,301
1945	250,573	228,493		384,134	26,568	6,078,750	169	575,500	266,402	70,472	67,736
1946	193,602	242,682	39,270	414,838	35,035	7,037,000	180	130,209	373,025	102,753	131,173
1947	91,762	289,602	800	333,542	52,722	7,896,650	206	78,800	338,826	80,101	47,220
1948	114,908	443,700		329,155	42,285	10,069,500	379		558,808	48,975	124,026
1949	24,781	264,469	200	339,716	53,750	9,326,250			410,744	64,595	51,771

[Ⓐ] Converted from dozens at 25 pounds per dozen 1943-1949, 21 pounds per dozen 1928-1942.[Ⓑ] Oysters are in gallons.[Ⓒ] Includes blue, thresher and mackerel sharks, sablefish, ling cod, skate, halibut, rockfish and hake livers.

TABLE 2
Oregon Albacore Landings in Pounds by Month and Area
1936-1949

PORT OF LANDING					
	Columbia River	Newport	Coos Bay	Unknown	Total
1937:①					
August					65,818
September					944,137
October					288,077
November					49,154
Unknown					6,336
Total					1,353,522
1938:②					
.....					8,000,000
1939:③					
July	6,346				6,346
August	2,739,358	31,595	64,660	328	2,835,941
September	2,200,589	419,782	291,399	932	2,912,702
October	369,214	223,205	137,387		729,806
Total	5,315,507	674,582	493,446	1,260	6,484,795
1940:					
July	1,611,656	959,418	18,333	98	2,589,505
August	3,493,334	1,558,669	180,819		5,232,822
September	1,172,825	101,679	45,203		1,319,707
October	142,599	57	1,571		144,227
Total	6,420,414	2,619,823	245,926	98	9,286,261
1941:					
July	517,208	257,974	3,708		778,890
August	4,745,732	867,487	39,330		5,652,549
September	769,501	253,412	41,058		1,063,971
October	44,315	122			44,437
November	5,284				5,284
Total	6,082,040	1,378,995	84,096		7,545,131
1942:					
July	1,524,184	521,289	16,101		2,061,574
August	3,676,812	1,243,461	127,307	152	5,047,732
September	2,355,536	396,165	123,610	969	2,876,280
October	950,982	6,388			957,370
Total	8,507,514	2,167,303	267,018	1,121	10,942,956
1943:					
July	1,359,870	377,382	15,103	257	1,752,612
August	3,011,925	1,023,375	46,533	1,350	4,083,183
September	2,695,999	580,805	169,335		3,446,139
October	1,082,826	127,556	3,640		1,214,022
Total	8,150,620	2,109,118	234,611	1,607	10,495,956

① Obtained by questionnaires to dealers.

② Estimated from dealers' records.

③ Totals shown include minor adjacent ports.

TABLE 2—Continued
Oregon Albacore Landings in Pounds by Month and Area
1936-1949

	PORT OF LANDING				
	Columbia River	Newport	Coos Bay	Unknown	Total
1944:					
July	1,014,699	566,748	4,993	1,477	1,587,917
August	6,469,478	2,422,291	86,277	938	8,978,984
September	7,729,721	989,619	59,108	.....	8,778,448
October	3,084,471	53,761	4,606	.....	3,142,838
November	710	.....	3,128	.....	3,838
Total	18,289,079	4,032,419	158,112	2,415	22,492,025
1945:					
July	1,155,227	291,090	5,438	2,376	1,454,131
August	6,392,881	1,479,396	30,123	100	7,902,500
September	2,327,959	213,186	46,630	1,987	2,589,762
October	231,978	.....	.....	.....	231,978
Total	10,108,045	1,983,672	82,191	4,463	12,178,371
1946:					
July	326,239	67,270	381	.....	393,890
August	1,771,475	577,229	22,335	.....	2,371,039
September	1,155,319	26,256	4,300	.....	1,185,875
Total	3,253,033	670,755	27,016	.....	3,950,804
1947:					
July	673,415	350,325	4,775	.....	1,028,515
August	2,045,605	542,231	61,765	955	2,650,556
September	1,836,242	1,380,107	1,598,509	300	4,815,158
October	815,137	151,105	97,191	.....	1,063,433
Total	5,370,399	2,423,768	1,762,240	1,255	9,557,662
1948:					
July	1,979,761	626,145	14,234	.....	2,620,140
August	2,774,102	749,736	182,074	1,420	3,707,332
September	956,701	71,985	343,312	128	1,372,126
October	33,053	104,384	37,935	.....	175,372
November	66,587	62,064	706	.....	129,357
Total	5,810,204	1,614,314	578,261	1,548	8,004,327
1949:					
July	528,830	99,610	2,516	648	631,604
August	1,664,763	252,626	262,644	463	2,180,496
September	1,265,621	337,581	579,213	6,385	2,188,800
October	1,201,830	195,880	28,210	.....	1,425,920
November	28,976	.....	1,361	.....	30,337
December .....	.....	.....	225	.....	225
Total	4,690,020	885,697	874,169	7,496	6,457,382

TABLE 3
Oregon Lamprey Catch in Pounds^①
1943-1949

Year	Pounds	Year	Pounds
1943	207,090	1947	360,165
1944	72,708	1948	231,480
1945	248,956	1949	114,685
1946	397,260		

^① Includes Willamette River fishery only; data unavailable prior to 1943.

TABLE 4

Oregon Ling Cod Landings in Pounds by Months
June 1941-December 1949^①

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941						160,068	85,992	54,054	58,028	70,925	61,325	5,418
1942	9,269	34,607	27,019	82,113	150,953	174,794	267,827	124,987	42,062	27,254	31,567	16,690
1943	30,587	46,390	103,139	68,847	138,421	119,163	137,099	75,996	78,067	43,280	46,184	47,705
1944	17,627	24,664	90,589	145,276	137,766	174,643	206,433	229,958	87,858	39,489	15,723	38,335
1945	14,650	18,773	10,732	89,792	139,535	117,025	92,918	156,419	89,930	167,404	23,573	44,464
1946	12,345	13,319	32,819	121,041	160,841	134,634	262,163	108,378	142,688	56,999	74,986	30,610
1947	26,245	39,040	62,577	74,236	66,700	31,433	88,366	38,034	85,970	5,673	30,397	20,550
1948	52,584	16,420	44,370	110,058	165,727	124,989	58,974	89,683	48,748	51,998	22,432	23,888
1949	92,713	15,775	88,349	96,236	54,625	59,926	65,472	105,160	53,168	47,846	34,484	14,730

^① Statistics not collected before June 13, 1941.

TABLE 5
Oregon Pilchard Landings in Tons by Months^①
1935-1949

Year	June	July	August	September	October	November
1935	424	6,826	15,817	2,099	619	445
1936		4,150	10,050	.....	.....	.....
1937		3,766	6,273	5,662	959	.....
1938		231	12,291	4,498	.....	.....
1939		6,835	15,495	.....	.....	.....
1940			3,160	.....	.....	.....
1941	119	3,470	12,193	68	.....	.....
1942		1,610	273	.....	.....	.....
1943		1,658	172	.....	.....	.....
1944						
1945			90	.....	.....	.....
1946		109	2,574	1,277	.....	.....
1947		1,610	4,506	810	.....	.....
1948		1,552	2,504	1,276	.....	.....
1949 ^①						

^① No landings were made in 1949.

TABLE 6

Oregon Rockfish Landings in Pounds by Months
June 1941—December 1949^①

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941						61,509	99,063	51,937	79,004	131,396	157,195	19,441
1942	22,284	194,172	94,216	194,603	528,822	121,408	182,900	162,280	181,942	103,655	60,307	51,899
1943	64,835	135,630	355,597	1,445,570	838,760	277,631	464,261	511,013	254,908	270,106	2,123,091	181,923
1944	55,621	155,201	1,335,820	1,746,301	1,018,563	2,340,589	2,175,472	901,944	495,340	948,921	58,503	134,894
1945	118,298	324,736	223,639	2,709,520	3,608,312	5,197,692	2,932,916	218,320	192,216	665,013	314,285	953,362
1946	197,096	207,266	677,520	1,371,223	464,449	1,319,228	3,336,084	379,639	892,637	1,011,810	773,302	226,933
1947	506,523	1,160,596	427,596	1,008,461	975,705	1,114,673	895,854	59,366	98,446	41,324	340,288	171,109
1948	436,318	222,102	569,334	1,112,677	791,593	204,976	231,096	323,073	164,374	284,400	125,329	193,116
1949	853,173	47,928	399,680	533,890	299,152	273,926	380,647	560,685	488,315	340,817	491,427	67,838

① Statistics were not collected before June 13, 1941.

TABLE 7

Oregon Sablefish Landings in Pounds by Months^①
June 1941—December 1949^②

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941						10,870	23,262	19,465	45,189	79,316	3,737	322
1942			712	1,719	7,575	57,693	151,925	339,289	24,257	39,388	1,218	.....
1943			44	1,041	53,382	150,940	570,537	304,779	24,069	6,436	2,481	2,372
1944	672	2,151	16,536	12,762	12,090	126,738	295,930	52,973	32,389	15,596	411	122
1945			200	4,249	11,407	132,002	84,581	4,444	37,414	69,046	29,176	45,714
1946	39	5	8	558	27,181	180,144	174,225	32,275	153,394	259,405	184,126	5,110
1947	2,992	114,432	370	188	16,936	17,171	39,657	17,023	36,613	22,643	19,682	497
1948	18,451	17,339	18	215	14,515	58,010	50,080	108,134	104,791	63,207	23,009	21
1949	397	.....	67	584	14,115	24,967	35,957	85,543	128,171	92,156	3,409	23,362

① Includes both dressed and round fish.

② Statistics were not collected before June 13, 1941.

TABLE 8
Yearly Totals of All Fish Passing Bonneville Dam^①
1938-1949

Year	Chinook	Steelhead	Blueback	Silver	Chum	Humpback	Total Salmon	Other Fish ^②	Total Species
1938	271,799	107,003	75,040	15,185	2,117	.....	471,144	614,897	1,086,041
1939	286,236	121,922	73,382	14,383	1,168	.....	497,091	464,684	961,775
1940	391,573	185,161	148,805	11,870	1,729	.....	739,138	364,210	1,103,348
1941	461,443	118,087	65,741	17,911	5,269	4	668,455	269,820	938,275
1942	401,998	151,345	55,464	12,401	1,865	11	623,084	245,029	868,113
1943	313,123	92,131	39,845	2,547	790	.....	448,436	187,277	635,713
1944	240,763	100,521	15,071	4,207	954	1	361,517	230,277	591,794
1945	297,488	120,144	9,501	791	727	1	428,652	309,139	737,791
1946	445,743	142,548	74,354	3,897	1,176	2	667,720	364,707	1,032,427
1947	480,377	135,444	171,139	11,174	199	3	798,336	408,297	1,206,633
1948	419,555	139,062	131,541	4,081	3,636	2	697,877	383,970	1,081,847
1949	277,697	119,285	51,444	1,004	2,028	6	451,464	444,151	895,615
	4,287,795	1,532,653	911,327	99,451	21,658	30	6,852,914	4,286,458	11,139,372

① Table taken from Report of U.S.A. Engineers 1949.

② Squawfish, dace, trout perch, miscellaneous trout, etc.

TABLE 9
Total Columbia River Salmon Catch in Pounds by Species^①
Oregon and Washington Combined
1866-1949

Year	Blueback	Chinook	Chum	Silver	Steelhead
1866		272,000			
1867		1,224,000			
1868		1,904,000			
1869		6,800,000			
1870		10,200,000			
1871		13,600,000			
1872		17,000,000			
1873		17,000,000			
1874		23,800,000			
1875		25,500,000			
1876		30,600,000			
1877		25,840,000			
1878		31,280,000			
1879		32,640,000			
1880		36,040,000			
1881		37,400,000			
1882		36,808,400			
1883		42,789,200			
1884		42,160,000			
1885		37,658,400			
1886		30,498,000			
1887		24,208,000			
1888		25,328,436			
1889	1,210,196	18,135,396			1,726,588
1890	3,899,460	22,821,072			2,912,100
1891	1,052,776	24,065,676			2,010,352
1892	4,525,196	23,410,156		283,968	4,919,664
1893	2,071,212	19,636,564	157,148	1,979,276	4,435,368
1894	2,979,352	23,875,208		2,907,544	3,564,696
1895	1,225,020	30,253,812	1,529,524	6,772,868	3,378,104
1896	1,154,844	25,224,124		2,989,344	3,377,084
1897	882,096	29,867,204		4,137,800	3,137,928
1898	4,533,560	23,180,488		4,449,308	1,786,836
1899	1,629,892	18,771,032	773,772	2,013,344	815,592
1900	895,016	19,245,156	1,203,328	3,054,900	1,400,596
1901					
1902	1,158,516	23,033,740	707,268	716,176	584,324
1903	570,044	27,917,316	680,000	828,308	493,068
1904	877,948	31,782,504	1,407,124	2,125,272	671,024
1905	528,224	33,028,708	1,751,068	1,824,168	667,896
1906	531,488	29,970,712	1,890,536	2,818,328	442,000
1907	374,272	24,250,444	1,533,808	2,159,476	402,628

① The data for the years 1866 to 1934 were taken from Craig and Hacker 1940; these figures include troll caught fish but do not include fish sold for fresh consumption.

TABLE 9—Continued

Year	Blueback	Chinook	Chum	Silver	Steelhead
1908	583,508	19,742,528	1,148,112	2,137,376	729,368
1909	1,704,216	17,118,908	1,668,856	2,868,104	1,175,244
1910	423,912	25,325,580	4,524,584	4,686,696	369,648
1911	407,184	36,602,116	3,636,028	5,400,288	584,392
1912	558,280	21,387,956	1,271,532	2,165,256	2,147,174
1913	758,336	19,384,488	904,604	2,785,892	2,167,852
1914	2,401,148	25,409,052	3,351,380	4,744,292	1,907,597
1915	371,212	32,126,848	5,884,040	2,266,848	2,690,165
1916	257,720	31,992,888	5,288,088	3,541,712	1,580,932
1917	541,824	29,521,916	3,648,812	4,372,332	2,233,102
1918	2,572,644	29,249,136	2,029,528	6,673,860	3,022,608
1919	494,224	30,325,300	5,133,524	6,169,504	1,899,945
1920	177,956	31,094,256	1,277,856	1,837,632	1,165,860
1921	411,060	21,551,676	327,828	2,337,908	1,021,075
1922	2,090,524	17,914,740	601,392	6,149,716	2,162,785
1923	2,605,012	21,578,348	1,734,544	6,965,072	2,684,274
1924	500,888	22,365,188	3,926,864	7,796,444	3,192,817
1925	384,200	26,660,012	3,795,216	7,936,592	2,907,160
1926	1,478,048	21,241,036	2,234,004	6,605,656	3,843,063
1927	468,316	24,010,728	4,654,532	5,209,472	3,147,251
1928	327,352	18,149,272	8,496,804	3,722,948	2,160,150
1929	684,896	18,151,084	3,714,092	6,701,112	2,870,097
1930	667,964	20,078,628	773,228	7,736,940	2,404,117
1931	280,500	21,378,364	239,224	2,714,224	2,126,028
1932	190,060	16,000,948	1,173,748	4,096,456	1,431,771
1933	470,628	19,528,376	1,659,064	2,701,640	1,958,303
1934	467,092	18,787,524	1,662,940	4,774,704	1,919,184
1935 ①	45,633	15,206,377	810,247	2,683,972	1,763,968
1936	302,399	15,960,379	1,141,535	1,738,873	2,303,771
1937	335,666	18,653,645	1,909,802	1,841,580	1,933,410
1938	424,583	12,418,480	1,915,375	2,310,973	1,764,429
1939	269,818	13,498,816	1,174,392	1,529,720	1,438,499
1940	361,867	13,516,133	1,253,472	1,373,191	2,825,372
1941	505,692	23,238,468	4,149,821	1,045,034	2,663,736
1942	192,423	18,689,071	5,191,131	644,501	1,839,114
1943	146,084	11,426,482	959,923	706,258	1,514,466
1944	54,754	14,059,641	275,371	1,533,294	1,720,062
1945	8,693	12,972,680	589,416	1,835,533	1,963,507
1946	128,515	14,277,809	886,615	1,059,577	1,725,629
1947	718,334	17,309,762	496,194	1,498,201	1,649,085
1948	95,854	17,352,323	1,044,848	1,173,182	1,579,023
1949	23,975	10,768,540	545,001	899,217	814,045

① Washington statistics for 1935-1937 from Annual Bulletins, Washington Department of Fisheries. Statistics for 1938-1949 prepared by Washington Department of Fisheries.

TABLE 10
Columbia River Salmon Landings in Pounds
Total Annual Catch by States^①
1938-1949

Year	BLUEBACK			CHINOOK			CHUM			SILVER			STEELHEAD		
	Oregon	Wash.	Total	Oregon	Wash.	Total	Oregon	Wash.	Total	Oregon	Wash.	Total	Oregon	Wash.	Total
1938	289,440	135,143	424,583	9,131,543	3,286,937	12,418,480	1,127,482	787,893	1,915,375	1,521,527	789,446	2,310,973	1,419,731	344,698	1,764,429
1939	198,578	71,240	269,818	9,515,410	3,983,406	13,498,816	703,055	471,337	1,174,392	1,088,395	441,325	1,529,720	1,398,861	39,638	1,438,499
1940	243,113	118,754	361,867	9,699,474	3,816,659	13,516,133	707,079	546,393	1,253,472	999,447	373,744	1,373,191	2,328,487	496,885	2,825,372
1941	348,508	157,184	505,692	16,754,973	6,483,495	23,238,468	2,473,910	1,675,911	4,149,821	780,432	264,602	1,045,034	2,196,789	466,947	2,663,736
1942	138,374	54,049	192,423	12,809,523	5,879,548	18,689,071	3,062,015	2,129,116	5,191,131	472,837	171,664	644,501	1,449,936	389,178	1,839,114
1943	115,255	30,829	146,084	8,253,142	3,173,340	11,426,482	523,496	436,427	959,923	511,859	194,399	706,258	1,186,514	327,952	1,514,466
1944	44,877	9,877	54,754	9,299,732	4,759,909	14,059,641	150,996	124,375	275,371	1,127,571	405,723	1,533,294	1,340,356	379,706	1,720,062
1945	5,806	2,887	8,693	8,947,197	4,025,483	12,972,680	356,977	232,439	589,416	1,323,736	511,797	1,835,533	1,596,593	366,914	1,963,507
1946	103,279	25,236	128,515	9,883,301	4,394,508	14,277,809	464,975	421,640	886,615	742,133	317,444	1,059,577	1,365,994	359,635	1,725,629
1947	563,496	154,838	718,334	11,821,423	5,468,339	17,309,762	305,475	190,719	496,194	1,093,542	404,659	1,498,201	1,366,033	283,052	1,649,085
1948	65,233	30,621	95,854	12,678,434	4,673,889	17,352,323	660,060	384,782	1,044,848	889,477	283,705	1,173,182	1,486,923	92,100	1,579,023
1949	12,592	11,383	23,975	7,721,040	3,053,753	10,775,393	279,253	265,748	545,001	655,583	243,634	899,217	760,548	53,497	814,045

① Washington statistics prepared by Washington Department of Fisheries.

TABLE 11
Columbia River Blueback Landings in Pounds by Zones
Oregon and Washington Combined ①
1938-1949

Year	ZONE						Total
	1	2	3	4	5	6	
1938	55,193	175,863	36,972	23,079	34,391	99,085	424,583
1939	33,717	80,431	34,644	11,014	20,172	89,840	269,818
1940	22,204	56,889	50,596	11,183	24,204	196,791	361,867
1941	60,062	165,917	75,423	38,297	38,018	127,975	505,692
1942	18,633	61,324	38,276	7,566	10,691	55,993	192,423
1943	21,401	57,796	24,131	10,509	3,898	28,349	146,084
1944	12,102	13,310	5,972	1,458	534	21,378	54,754
1945	2,143	2,127	260	260	.....	3,873	8,693
1946	16,035	52,454	6,533	18,099	200	35,194	128,515
1947	90,592	327,904	87,629	38,076	30,512	143,621	718,334
1948	5,828	7,363	4,391	10,216	13,038	55,018	95,854
1949	1,023	1,988	600	751	.....	19,613	23,975

① Washington statistics prepared by Washington Department of Fisheries.

TABLE 12
Columbia River Chinook Landings in Pounds by Zones
Oregon and Washington Combined ①
1938-1949

Year	ZONE						Total
	1	2	3	4	5	6	
1938	5,887,559	3,264,569	987,236	332,321	276,120	1,670,675	12,418,480
1939	6,971,330	3,179,765	1,282,484	318,272	253,000	1,493,965	13,498,816
1940	6,119,513	3,287,441	1,135,448	410,356	207,110	2,356,265	13,516,133
1941	10,073,807	5,551,002	2,281,683	504,565	486,916	4,340,495	23,238,468
1942	8,910,539	4,117,638	1,478,075	371,586	227,408	3,573,825	18,679,071
1943	4,343,119	3,108,473	1,103,752	696,696	121,631	2,052,811	11,426,482
1944	7,543,200	3,087,966	853,203	695,041	17,688	1,862,539	14,059,637
1945	7,222,558	2,809,439	835,230	703,628	23,166	1,378,068	12,972,089
1946	6,487,936	3,209,122	676,875	1,090,662	142,660	2,670,554	14,277,809
1947	7,945,079	3,561,438	1,343,619	857,714	182,081	3,412,730	17,302,661
1948	7,272,559	3,817,954	1,220,595	1,101,441	291,586	3,648,188	17,352,323
1949	5,316,425	2,228,582	974,456	459,263	141,162	1,608,652	10,768,540

① Washington statistics prepared by Washington Department of Fisheries.

TABLE 13
Columbia River Chum Landings in Pounds by Zones
Oregon and Washington Combined ①
1938-1949

Year	ZONE						Total
	1	2	3	4	5	6	
1938	378,864	1,248,766	237,291	31,197	13,211	6,046	1,915,375
1939	223,073	710,096	190,446	30,536	.....	20,241	1,174,392
1940	224,406	827,105	185,535	15,676	.....	750	1,253,472
1941	853,503	2,775,579	462,844	57,895	.....	.....	4,149,821
1942	885,562	3,601,241	649,172	29,922	24,195	1,039	5,191,131
1943	39,925	719,489	182,960	17,549	.....	.....	959,923
1944	25,052	191,470	42,688	13,199	2,962	.....	275,371
1945	84,464	414,741	73,366	16,254	.....	.....	588,825
1946	166,082	617,370	90,731	12,432	.....	.....	886,615
1947	84,892	354,500	55,221	1,181	.....	.....	496,194
1948	145,636	762,580	122,148	13,873	611	.....	1,044,848
1949	79,781	384,858	64,907	11,590	429	3,436	545,001

① Washington statistics prepared by Washington Department of Fisheries.

TABLE 14

Columbia River Silver Landings in Pounds by Zones
Oregon and Washington Combined ①
1938-1949

Year	ZONE						Total
	1	2	3	4	5	6	
1938	806,543	1,153,584	301,956	46,385	1,382	1,123	2,310,973
1939	350,046	858,268	297,899	21,692	442	1,373	1,529,720
1940	308,703	876,300	181,551	5,777	41	819	1,373,191
1941	175,771	688,177	149,878	7,129	1,513	22,566	1,045,034
1942	104,745	459,182	75,606	2,892	260	1,816	644,501
1943	123,786	461,679	107,674	11,616	809	694	706,258
1944	227,728	1,011,304	262,396	27,958	305	3,603	1,533,294
1945	433,545	1,129,832	224,783	46,144	.....	1,229	1,835,533
1946	206,190	698,093	121,084	33,017	.....	1,193	1,059,577
1947	338,347	965,178	159,432	20,249	1,592	13,315	1,498,113
1948	224,232	791,539	144,501	12,910	133	1,363	1,174,678
1949	236,797	529,336	116,679	12,570	2,330	1,505	899,217

① Washington statistics prepared by Washington Department of Fisheries.

TABLE 15

Columbia River Steelhead Catch in Pounds by Zones
Oregon and Washington Combined ①
1938-1949

Year	ZONE						Total
	1	2	3	4	5	6	
1938	400,312	766,893	162,675	54,450	30,937	349,162	1,764,429
1939	346,223	651,417	173,686	8,970	24,534	233,669	1,438,499
1940	610,296	1,239,721	361,360	90,674	40,661	472,660	2,815,372
1941	538,542	1,124,988	335,130	88,443	90,199	486,434	2,663,736
1942	365,466	738,470	233,188	75,034	50,581	376,375	1,839,114
1943	313,128	646,183	158,708	88,407	24,763	283,277	1,514,466
1944	277,681	734,734	184,418	141,896	5,282	376,051	1,720,062
1945	375,888	904,569	180,974	154,276	303	347,497	1,963,507
1946	347,207	671,816	120,714	172,693	226	412,973	1,725,629
1947	319,067	617,316	182,985	156,383	23,301	349,674	1,648,726
1948	291,336	559,297	215,234	102,974	21,770	388,412	1,579,023
1949	122,189	214,867	91,164	50,566	6,817	328,410	814,013

① Washington statistics prepared by Washington Department of Fisheries.

TABLE 16

**Columbia River Blueback Landings in Pounds by Months
Oregon and Washington Combined^①
1938-1949**

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938					9	209,377	213,034	1,834				6
1939	5	8			183	187,461	101,094	987	80			
1940					81	153,908	201,691	6,003	184			
1941		29		13	989	251,087	249,542	3,249	10			
1942					142	102,806	87,655	1,057		4		
1943					4	61,108	84,028	906	38			
1944	174		9			27,793	26,437	341				
1945		42	6	4	108	4,507	3,430	347	161			88
1946					11	57,938	69,214	1,352				
1947					25	418,535	294,551	5,121	86	16		
1948						325	89,936	3,300	2,293			
1949					3	370	22,439	1,153	10			

^① Washington statistics prepared by Washington Department of Fisheries.

TABLE 17

**Columbia River Chinook Landings in Pounds by Months
Oregon and Washington Combined^①
1938-1949**

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938	6,306	20,099			1,708,022	662,732	1,534,392	5,730,079	2,501,912	241,543	18,660	128
1939	6,771	65,353			1,556,961	1,065,179	2,337,436	6,022,890	2,294,092	141,801	8,034	221
1940	5,538	146,279			640,337	605,893	1,262,344	5,208,046	5,409,768	227,743	8,883	1,302
1941	22,450	405,978		194,698	845,755	876,821	1,068,089	6,175,116	13,016,140	578,246	45,228	2,092
1942	2,932	207,355	3,188	18	896,421	575,324	876,570	5,848,409	9,833,647	398,646	16,643	783
1943	2,668	45,329	2,832	139,794	1,142,390	318,130	569,759	4,295,832	4,676,126	212,932	19,099	1,591
1944	2,471	34,214	406,243	16,289	620,099	270,654	894,087	3,292,786	3,405,099	124,731	9,589	860
1945	547	143,883	577,603	26,099	818,272	111,182	403,093	6,891,978	3,696,511	287,767	14,193	587
1946	8,231	119,771	10,633	7,120	1,089,454	164,228	292,134	6,904,759	5,375,880	309,613	11,087	1,293
1947	527	124,140	21,614	58,500	1,069,213	481,900	507,799	9,217,994	5,523,093	278,417	20,030	4,402
1948	101	136,150	12,047	135,270	1,697,248	282,140	346,669	7,538,997	6,824,115	255,445	11,796	345
1949		36,787	9,018	5,500	1,653,330	158,345	141,654	5,591,583	3,052,346	120,967	7,876	20

^① Washington statistics prepared by Washington Department of Fisheries.

TABLE 18

Columbia River Chum Landings in Pounds by Months
Oregon and Washington Combined^①
1938-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938							9		665		1,292,514	39,128
1939	253	22							3,189	426,933	721,417	22,578
1940	52								1,516	694,216	541,478	16,220
1941	2,471	24							2,121	1,745,127	2,385,677	14,411
1942	12							8	2,703	1,715,823	3,430,213	42,372
1943	272							9	385	260,830	690,662	8,365
1944									148	143,201	129,607	2,415
1945	160							108	69	259,369	321,832	7,447
1946									128	424,938	423,152	19,649
1947									16	155,654	317,682	4,683
1948									116	380,522	652,500	11,710
1949									3,772	256,174	283,335	1,720

^① Washington statistics prepared by Washington Department of Fisheries.

TABLE 19

Columbia River Silver Landings in Pounds by Months
Oregon and Washington Combined^①
1938-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938	870					166	5	44,137	452,919	1,221,428	494,655	96,530
1939	2,719	118			12	378	3,161	9,284	443,742	546,728	370,099	153,479
1940	1,093	594			5	24	2,722	5,282	532,181	553,236	201,641	76,413
1941	4,385	4,428			10	59	82	11,341	362,956	410,320	225,930	25,464
1942	830	349			29	9	77	6,249	174,896	262,258	187,743	12,061
1943	107	37					12	37,571	263,799	266,220	130,799	7,713
1944					317	6	187	22,602	501,690	755,738	229,930	22,824
1945		31				30	69	34,792	362,074	755,526	601,009	49,099
1946		97					136	49,145	315,461	486,955	146,920	51,297
1947							104	12,588	312,202	773,518	338,412	51,644
1948	1,352	42				216	16	3,339	280,232	398,105	414,131	77,245
1949		381			17		6	26,690	401,635	300,574	166,169	3,745

^① Washington statistics prepared by Washington Department of Fisheries.

TABLE 20

Columbia River Steelhead Landings in Pounds by Months
Oregon and Washington Combined^①
1938-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938	10,283	14,712			32,964	95,070	603,139	484,207	366,908	53,049	43,998	59,536
1939	66,751	113,048			25,090	126,553	478,884	327,625	237,790	36,017	12,022	14,719
1940	22,482	99,832			13,034	197,499	941,921	793,146	628,412	54,531	32,937	41,578
1941	44,872	120,224		2,751	25,387	115,101	745,470	613,466	857,295	116,114	14,913	7,717
1942	18,604	88,840	1,509	53	29,761	81,334	497,461	330,746	711,421	46,807	14,688	15,838
1943	7,877	79,791	6,120	2,409	30,721	30,096	312,469	327,944	640,976	62,104	11,837	2,122
1944	745	35,803	48,925	1,905	21,337	71,002	551,168	388,180	470,572	78,599	27,395	24,431
1945	1,176	98,076	110,425	828	14,594	53,579	653,108	473,068	472,302	60,634	15,683	9,797
1946	5,897	55,755	2,886	65	21,713	31,220	288,585	579,991	592,850	66,244	37,602	42,765
1947	6,034	93,559	6,016	180	15,143	35,939	436,306	463,822	507,226	50,418	18,921	15,528
1948	888	87,005	5,874	255	22,865	9,265	301,445	525,222	411,461	47,610	81,345	85,788
1949		48,292	7,477	51	11,854	3,136	105,125	292,922	290,452	35,171	18,157	1,380

^① Washington statistics prepared by Washington Department of Fisheries.

TABLE 21

Alsea River Chinook Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923						25,706			2,901	3,015	603	.....	32,225
1924					6,116	29,053			13,616	13,747	584	.....	63,116
1925					7,381	18,651	11,000		12,222	16,438	2,782	20	68,494
1926					1,158	8,651	8,012		2,090	6,527	1,481	94	28,013
1927					198	11,928	18,787		4,918	4,014	499	.....	40,404
1928	60				403	9,385	13,032		1,551	3,247	2,500	27	31,571
1929		1,426			1,119	10,912	7,686		4,616	4,893	167	.....	36,317
1930		6,924			2,362	6,587	4,037		3,142	6,488	168	.....	24,945
1931		2,161				2,407	5,149		4,183	5,139	54	.....	19,066
1932		2,134			2,622	16,740	21,115	132	3,979	5,872	1,035	.....	54,076
1933		2,581			3,742	18,859	52,665	1,728	6,454	10,829	2,222	52	97,530
1934	979				12,440	23,425	52,769	29,101	6,160	8,780	374	93	137,304
1935	4,162				1,681	10,808	32,691	27,954	8,802	7,359	1,049	176	92,255
1936	1,735				1,358	7,933	32,839	27,771	17,679	20,191	4,143	.....	112,211
1937	297				33	3,128	12,632	12,001	8,139	25,231	1,032	.....	62,261
1938	65				382	4,819	11,033	18,103	10,329	7,031	1,270	111	53,256
1939	178				1,347	4,697	13,420	19,476	14,194	10,415	579	.....	64,156
1940	28				756	4,761	15,804	27,590	11,793	6,956	340	399	68,870
1941	471				805	6,558	15,576	21,329	12,844	13,238	640	795	71,985
1942	200				172	256	8,010	13,400	14,654	18,436	9,907	.....	65,078
1943	243					274	2,290	7,351	16,332	9,823	359	.....	38,015
1944	1,586						561	1,848	10,142	5,013	704	.....	18,288
1945							634	1,243	10,089	8,317	2,131	.....	22,414
1946							16	735	9,506	10,683	293	.....	21,233
1947							430	6,719	16,653	15,193	505	.....	39,500
1948									29,750	12,121	624	.....	42,495
1949									24,294	12,802	906	.....	38,002

① Includes January, February and March of following year.

TABLE 22

Alsea River Chum Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923									61	1,728	9,007	3,617	20,665
1924	4,850	1,257	145						1,272	3,453	3,525	1,008	9,258
1925									364	2,727	23,634	513	27,544
1926	207	99							53	541	1,283		1,877
1927									39	560	583		1,481
1928	233	66					22		24	394	1,591	284	2,315
1929									96	990	5,407	2,250	8,743
1930										700			1,324
1931	600	24											161
1932		161											2,933
1933	65	2,868											240
1934	240								176	1,021	647		2,444
1935	600								1,126		3,989	2,509	8,463
1936	839									2,439		10,795	13,309
1937	75								1,751	1,411	3,100	110	6,372
1938									704	4,625	20,998	303	27,265
1939	635								911	1,298	16,519	8,501	27,649
1940	420								2,101	2,608	2,616	509	7,834
1941									1,135	4,644	9,919	384	16,200
1942	118										5,918	313	6,241
1943	10								110	24	75		242
1944	33										195	991	1,371
1945	185										8		8
1946											127		127
1947										38	594		632
1948									7	722	3,021		3,750
1949									20	458	377		855

① Includes January, February and March of following year.

TABLE 23
Alsea River Silver Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923									13,519	84,277	109,851	6,835	215,773
1924	1,202	89							61,793	234,806	18,183	504	315,414
1925	128								17,537	50,737	86,505	7,880	162,822
1926	153								21,330	96,961	16,032	565	134,935
1927	47								29,202	70,444	17,792	353	117,818
1928	27								9,795	89,160	26,249	1,006	129,099
1929	96	2,793							19,747	127,979	15,321	19,662	192,753
1930		10,044					246 ^②		16,997	60,584	24,702	1,119	111,751
1931	5,969	2,134							26,873	55,273	14,812		111,255
1932	510	13,787					6,829 ^③	93	28,720	144,112	75,415	1,286	272,123
1933	484	15,184							61,103	150,587	17,602	4,961	239,589
1934	5,336								10,336	132,531	19,319	6,537	172,792
1935	4,069						23 ^③		51,009	253,116	269,686	10,479	543,331
1936	19,018								27,112	191,352	58,824	19,185	299,640
1937	3,167								13,540	233,840	56,945	42	304,657
1938	290								43,509	272,855	90,815	532	408,530
1939	819								68,078	280,204	107,434	19,033	487,656
1940	12,907								75,362	158,777	10,025	7,427	252,211
1941	620								56,512	168,701	44,247	3,470	275,799
1942	2,869								39,062	66,838	19,132	58	125,615
1943	525								24,420	65,579	6,888	62	99,726
1944	2,777								95,638	271,877	49,480	1,320	419,622
1945	1,307								23,732	183,960	79,379	8,041	295,153
1946	41								33,341	113,108	14,369		160,818
1947									24,571	178,655	7,771		210,997
1948									19,725	110,256	33,755		163,736
1949									19,663	58,742	11,245		89,650

① Includes January, February of following year.

② Probably ocean-caught troll fish.

TABLE 24

Alsea River Steelhead Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923											598	7,329	18,672
1924	9,489	1,056	200								215	10,567	23,702
1925	7,959	4,035	926								691	14,012	34,986
1926	17,079	2,698	506								1,043	19,522	33,351
1927	8,848	3,938									1,227	12,041	21,082
1928	5,868	1,946								299	3,978	20,385	31,917
1929	5,911	1,344									1,389	14,989	25,586
1930	5,988	3,220								1,245	7,912	21,374	41,319
1931	9,823	965								47	7,420	17,421	35,420
1932	5,393	5,139					109		69		990	14,124	25,156
1933	6,785	3,079									12,379	27,668	46,853
1934	6,806										1,595	13,785	21,133
1935	5,753									502		17,504	34,855
1936	16,649											31,370	46,405
1937	15,035											1,751	4,877
1938	3,126										4,716	10,743	21,426
1939	5,967											14,410	20,246
1940	5,836						24				7,927	22,290	38,747
1941	8,506										53	6,068	18,600
1942	12,479										1,939	14,502	25,458
1943	9,017											1,039	4,565
1944	3,526										3,178	14,574	26,102
1945	8,350									4	925	3,236	6,237
1946	2,072										2,699		2,699
1947											312		312
1948										136	9,246		9,382
1949										87	109		196

① Includes January, February and March of following year.

TABLE 25

Coos Bay Chinook Catch in Pounds by Months
1923-1946^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923								85,058	174,365	6,533	843		286,799
1924							16,091	46,499	165,872	92,045	36,033		356,565
1925	25					177	10,847	103,711	113,613	56,992	6,330	423	292,183
1926	90					509	2,365	14,348	57,269	54,554	3,036	75	133,193
1927	1,037					68	2,670	13,408	52,642	24,581	5,710	68	99,147
1928					11,046	689	5,201	40,269	49,653	32,632	44,349	821	184,678
1929	18				59	330	705	6,881	37,017	21,807	642	1,114	68,655
1930				52	671	130		4,653	11,031	31,751	3,467	20	51,775
1931					116		1,341	6,843	8,561	56,287	29,091	50	105,487
1932	799	621	1,778		1,411	288	994	5,308	13,782	31,649	743	59	54,244
1933			10		2,447	156	2,640	2,714	4,708	5,786	1,761		21,495
1934		1,283			31	47	1,933	4,151	3,810	1,730	151		13,542
1935			1,689		1,444	1,259	1,246	6,349	10,038	1,815	213	55	24,281
1936			1,862		32	16	198	3,287	16,362	8,898	301		31,506
1937	48		1,664		61	51	135	2,117	6,814	7,451	3,101	5	20,773
1938			1,038	8	180	169	150	5,184	10,853	4,988	1,424	52	24,947
1939		780	1,159	224	78	81		2,975	5,309	4,426	2,175		15,280
1940		12		29	23		160	107	815	1,109	132		2,826
1941			451				211		51	455	28		745
1942									331	3,759	132		4,372
1943			150		18			1,002	368	982	136		2,656
1944			150										28
1945	28			51				25		20			96
1946					38				855				893

^① Closed to commercial salmon fishing after 1946.^② Includes January, February and March of following year.

TABLE 26

Coos Bay Chum Catch in Pounds by Months
1928-1946 ① ②

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total③
1928										282	3,586	1,678	5,894
1929	348									193	51		272
1930	28							180	228	90	562	902	1,962
1931									1,015				1,015
1932													
1933											20	117	137
1934											118		118
1935										66	1,028	1,942	3,231
1936	37		158							386	87	923	1,408
1937		12							48	756	529	32	1,365
1938											101	24	138
1939	13									8	136	58	212
1940	10									12	53		65
1941										244	205		449
1942										151	153		389
1943	85									14			14
1944										12	13		25
1945											7		7
1946													

① No landings recorded prior to 1928.

② Closed to commercial salmon fishing after 1946.

③ Includes January, February and March of following year.

TABLE 27

Coos Bay Silver Catch in Pounds by Months
1923-1946^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923								1,217 ^③	64,812	195,408	85,854	12,727	361,081
1924	999	64						48	107,026	380,340	22,313	2,033	513,050
1925	1,290							964	251,843	223,848	91,572	8,529	577,156
1926	400							13,256 ^③	40,483	133,172	12,445	1,088	200,783
1927	339							219	112,023	135,228	48,374	1,123	297,339
1928	347	25				2,702 ^③	20,900 ^③	143,709 ^③	110,497 ^③	159,895	22,372	2,547	462,763
1929	141						970 ^③	735 ^③	6,287	28,559	6,824	6,352	50,063
1930	336							189	8,941	33,924	25,212	284	69,507
1931	175	202	580				2,474 ^③	3,890 ^③	12,404	58,993	6,174	84	85,335
1932	123	210	983		55 ^③	131 ^③	342 ^③	653 ^③	17,182	62,315	11,484	568	93,140
1933	42	82	286		300 ^③		121 ^③	48	3,378	23,741	20,413	403	49,113
1934	57	51	601					396	4,237	32,098	22,342	369	60,392
1935			950					222	23,051	110,999	56,191	10,694	202,402
1936	441		804			36 ^③		655	1,592	34,708	31,758	4,745	74,171
1937	117		560					587	6,187	53,223	15,595	301	76,225
1938		10	322			71 ^③		125	5,467	45,406	13,702	1,357	67,547
1939	138	279	1,002				12 ^③	1,573	1,277	9,785	14,242	1,495	28,829
1940	51	99	295						4,803	23,556	7,820	489	37,201
1941	21	452	60			31 ^③		166	655	5,977	4,675		11,582
1942		78							814	9,842	6,186	111	17,206
1943		253						405	835	5,459	1,686	6,599	32,585
1944	15,830	229	1,542							1,433	1,161	162	6,834
1945	4,078									212	7,484	148	8,278
1946		434							17	2,674	1,471		4,162

^① Closed to commercial salmon fishing after 1946.^② Includes January, February and March of following year.^③ Probably includes ocean-caught troll fish.

TABLE 28

Coos Bay Steelhead Catch in Pounds by Months
1923-1946^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923								171		465		51,407	85,660
1924	26,951	1,474	4,986								1,555	44,550	103,232
1925	48,460	8,191	476								869	26,375	70,794
1926	36,102	3,596	3,852				10	1,863	1,826			24,751	80,168
1927	32,057	9,356	10,305		20	183					940	13,944	29,016
1928	9,336	3,962	631		20		123		21	29	7,469	20,960	47,957
1929	12,852	4,865	1,618								328	12,015	26,910
1930	10,136	3,037	1,394	8	84	4			9	181	4,547	32,124	61,293
1931	20,307	3,230	799		21		118			10,937	378	1,118	16,264
1932	832	199	2,661	47	66	41		4	8	3,563	1,248	2,128	10,800
1933	485	182	3,028	27	7				6		1,037	4,802	13,244
1934	4,859	2,275	231	116	69	9	17	12			1,096	4,444	9,525
1935	3,172	518	72		18		250		8		43	7,433	19,074
1936	9,380	1,130	812		47						66	15,793	24,274
1937	6,499	1,826	43							8	29	2,435	4,187
1938	1,578	117	20					306			981	5,409	13,794
1939	6,820	51	225							6	52	4,965	10,664
1940	5,072	455	114	62						19	1,435	5,701	9,561
1941	2,255	73	16	15	11						15	74	339
1942	197	9	18		33						517	497	1,816
1943	769									17	97	199	467
1944	154										59	1,487	2,427
1945	736	110	35	45	4			9	4		11	61	382
1946	153	30	65	31					859				890

^① Closed to commercial salmon fishing after 1946.^② Includes January, February and March of following year.

TABLE 29

Coquille River Chinook Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923							4,950	13,000	12,000	29,886	4,950		64,786
1924							39,342	118,307	60,748	161,693	37,993	217	418,882
1925	83	191	308			1,010	20,587	20,602	73,274	39,264	4,835	5,151	170,528
1926	5,751		54				6,576	7,451	24,532	25,765	9,176	223	73,974
1927	251						4,597	6,621	14,449	23,298	933	8	50,361
1928	245		140			226	2,584	12,276	13,453	70,158	5,185	1,994	106,466
1929	590							3,308	17,638	9,630	8,517		39,093
1930								2,490	6,017	5,283	4,031		17,821
1931						420		2,884	12,550	5,438	987	2,127	28,204
1932	1,930	1,868				250	2,629		10,444	10,665	2,549		27,138
1933	41	560					791	4,033	9,686	6,289	128	931	22,058
1934	200					143	225	1,629	11,658	12,197	2,709	137	29,016
1935	318				48	134	1,559	4,030	24,861	9,099	2,073	63	42,413
1936	546				15	550	1,922	11,002	23,334	20,637	3,626	143	61,553
1937	354						431	6,453	23,986	31,744	1,669	6	64,689
1938	400				39	43	1,138	8,584	36,868	21,071	2,767	496	71,093
1939	87				66	472	729	4,786	17,965	20,186	5,841	576	50,993
1940	372		17	17	17	3,842	5,374	7,376	17,045	13,718	2,179		49,789
1941	221				49	2,383	4,329	8,829	16,302	15,112	3,040	228	50,353
1942	81				62	90	1,264	9,087	24,087	14,242	3,262	780	53,169
1943	295					25	21	3,052	9,914	5,509	1,107	61	19,854
1944	165				18	20	85	1,910	8,400	6,265	1,198		17,896
1945								1,456	12,318	7,690	3,321	39	24,824
1946						7		348	8,424	4,726	16	92	13,613
1947					6		667	369	7,586	1,720	242		10,650
1948					23	13			13,790	4,377	131		18,334
1949									4,749	4,170			8,919

① Includes January, February and March of following year.

TABLE 30

Coquille River Chum Catch in Pounds by Months
1928-1949①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total②
1928										105	374	13	3,638
1929	803	775	1,538							27	24		51
1930													
1931												323	323
1932													
1933													
1934													
1935												38	38
1936													
1937										24	19		43
1938											10		10
1939													
1940													
1941											23	7	30
1942													
1943													
1944													
1945										8	14		22
1946													
1947													
1948											16		16
1949													

① No Chum catch recorded prior to 1928.

② Includes January, February and March of following year.

TABLE 31
Coquille River Silver Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923									438,532	217,467	15,424	1,313	672,987
1924	251							41	281,158	129,858	16,037	6,137	433,557
1925	326							462	45,853	62,322	12,625	1,055	122,317
1926								864	209,785	393,658	22,502	279	627,902
1927	814							1,446	94,422	193,694	21,982	1,317	327,050
1928	1,932	1,892	10,365			1,211②	4,690②	44,440②	97,852	111,230	9,662	2,827	272,172
1929	200		60					12	74,277	121,174	15,232		210,695
1930								689	47,724	66,945	17,115		132,473
1931								155	90,060	43,370	6,211	1,122	142,999
1932	1,617	464					113②		70,362	174,559	19,487	523	266,055
1933		1,011						300	73,495	74,161	7,828	40	155,824
1934						7②		345	87,064	214,760	15,482	202	318,306
1935	446							45	108,377	182,617	27,285	2,253	320,668
1936	391								18,894	101,818	5,664	650	127,026
1937								169	70,546	344,261	10,735	202	425,913
1938							138②	834	131,223	169,368	11,982	376	314,833
1939	912						9②	184	114,170	334,002	46,972	1,856	497,376
1940	183							119	153,930	88,858	5,028	285	248,356
1941	136					10②	6②	587	125,030	80,161	9,143	69	215,856
1942	850							380	76,176	61,762	5,425	33	144,678
1943	902							167	60,461	49,129	1,282	119	111,620
1944	462							33	33,327	77,888	3,094	72	114,414
1945								220	26,874	32,485	14,945		74,524
1946								69	70,947	83,448	2,641	250	157,355
1947									28,967	129,693	13,947		172,607
1948									16,165	51,246	11,709		79,120
1949									57,097	74,771			131,868

① Includes January, February and March of following year.

② Probably includes ocean troll fish.

TABLE 32

Coquille River Steelhead Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923											750	7,291	31,084
1924	21,894		1,129								4,164	23,174	75,618
1925	24,245	16,295	7,740							50	158	36,442	64,485
1926	12,579	10,711	4,545							570	201	36,091	71,460
1927	20,975	8,859	4,764				183				3,440	19,321	74,489
1928	31,348	7,641	12,556							10	9,033	34,954	89,012
1929	26,622	6,658	11,735							55	2,359		2,414
1930											5,785		5,785
1931											10,371	18,806	38,545
1932	7,421	1,947							49	223	6,226	10,222	24,424
1933	6,718	986									5,817	19,929	39,088
1934	13,342									1,427	11,036	32,787	57,423
1935	12,173					7					2,512	33,050	57,439
1936	21,863				7					278	3,632	13,666	32,574
1937	14,991										136	13,623	22,389
1938	8,630										10,451	17,406	28,575
1939	10,718									24	1,477	39,659	61,478
1940	20,318			7				10	28	701	15,249	22,827	62,012
1941	23,190									48	1,177	20,040	41,642
1942	20,377										7,980	26,364	48,043
1943	13,699				9					34	828	12,829	23,457
1944	9,757									35	6,628	16,723	37,610
1945	14,224						45	10			3,441	11,783	25,863
1946	10,584										4,520	6,101	10,621
1947										6	4,735		4,741
1948					15				41	12	5,193		5,261
1949										697			697

① Includes January, February and March of following year.

TABLE 33

Nehalem River Chinook Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923								92,590	109,504	33,405	1,144		236,643
1924								109,630	112,128	29,477	878	35	252,155
1925	7						1,487	78,477	76,035	43,558	3,027		202,584
1926								65,505	53,189	23,494	3,116	28	145,332
1927								64,493	62,090	12,057	614		139,254
1928								60,243	52,857	24,245	2,990		140,435
1929								49,167	48,602	18,681	2,513	54	119,117
1930		100						31,521	39,809	26,966	597		100,650
1931		1,757						31,119	40,156	35,160	514		108,542
1932		1,593						50,254	54,708	29,484	5,950		140,920
1933		524							39,514	16,304	4,113		61,081
1934		1,150						53,916	39,395	18,890	320		112,890
1935		369					11,114	24,898	39,176	18,350	627		94,551
1936	12	374					17,431	19,425	77,849	39,086	1,899	17	155,808
1937		101					10,544	27,899	51,848	65,526	1,509		157,866
1938		540					5,729	24,137	47,780	53,049	3,566		134,646
1939		385					5,239	11,236	32,746	52,989	2,574	66	105,030
1940	180					472	14,510	23,210	41,483	31,618	861		112,154
1941							11,939	20,779	28,249	11,913	625		73,653
1942		148					226	7,875	35,704	29,223	1,521		74,549
1943							674	5,537	23,771	23,218	261		54,974
1944		1,513					164	2,582	28,544	23,083	1,235		55,683
1945		75					22	1,994	40,452	45,881	7,464	78	96,839
1946		948					196	2,383	27,567	29,862	1,591		81,599
1947								3,919	26,544	23,693	1,092		55,248
1948									17,973	14,489	1,002		33,455
1949									11,605	6,909	832		19,346

^① Includes January, February and March of following year.

TABLE 34

Nehalem River Chum Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923											63,140		63,140
1924									10	20,324	72,257	776	93,548
1925	181									24,120	105,445	983	130,599
1926	43									12,611	17,639	309	30,641
1927	74	8							30	50,261	231,657	903	283,664
1928	213								23,229	283,337		2,197	308,839
1929	76								643	5,791	51,732	13,410	71,657
1930	72	9							27	4,188	18,342	423	22,980
1931										36,365	173,484	513	210,389
1932	27							9		90			99
1933										17,390	83,009	1,135	101,534
1934										9,839	66,381	2,132	78,352
1935										18,497	103,509	2,558	124,858
1936	134	160								3,300	47,077	24,043	74,420
1937									1,070	10,814	39,430	671	52,126
1938		141							166	7,775	77,479	1,306	86,741
1939	15								189	8,054	71,485	2,402	82,140
1940	10								210	36,367	93,371	730	130,701
1941	23								20	19,434	281,620	888	302,074
1942	12	100							425	19,623	149,013	1,129	170,190
1943								15	24	1,558	14,259	56	15,927
1944		15							14	2,623	7,040	163	10,031
1945	191									2,742	24,763	317	27,938
1946	44	72								5,336	30,029		35,365
1947										2,122	16,978		19,100
1948										1,127	22,215		23,342
1949										697	6,220		6,917

① Includes January, February and March of following year.

TABLE 35
Nehalem River Silver Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923								19	234,876	392,760	61,904	6,885	697,552
1924	1,061	47						1,321	333,181	320,034	35,694	3,781	694,420
1925	409							227	240,193	203,858	92,770	3,316	540,445
1926	81							145	206,755	231,152	49,527	4,477	492,376
1927	320							208	190,685	170,139	24,800	1,403	387,290
1928	47	8							110,889	268,640	86,981	3,183	469,807
1929	114							61	112,474	389,447	82,272	17,820	602,228
1930	54	100						155	177,907	466,830	83,441	4,756	733,223
1931	49	85							102,994	193,629	11,172	288	310,071
1932	18	1,970						4,839	163,408	284,175	117,710	4,097	574,791
1933	95	467							231,251	148,226	65,511	1,868	447,441
1934	30	555						299	198,452	407,699	11,393	135	618,721
1935		743							238,829	512,334	124,139	6,694	884,798
1936	1,512	1,290							74,498	267,478	77,732	73,611	493,632
1937		313						327	47,519	395,934	22,076	307	466,163
1938								3,161	210,290	403,297	31,319	1,390	649,637
1939	10	170						173	87,190	398,415	63,898	3,600	553,619
1940	9	334							154,957	241,723	14,577	536	412,074
1941	31	250						473	90,814	92,452	25,687	503	210,172
1942		243						234	76,997	171,477	35,478	74	284,260
1943								15	32,339	64,826	1,820	18	100,262
1944		1,244						2,190	205,165	296,894	27,334	269	531,973
1945	43	78						271	119,243	531,905	108,139	823	762,229
1946		1,848						208	101,514	202,958	7,787		312,467
1947									53,006	291,464	13,431		357,901
1948									110,630	167,329	29,441		307,400
1949									59,005	94,599	15,053		168,557

① Includes January, February and March of following year.

TABLE 36

Nehalem River Steelhead Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923											756	14,883	48,029
1924	17,662	14,728									2,773	19,960	68,062
1925	30,369	14,960									855	11,482	34,398
1926	14,146	7,315	600								1,054	23,028	64,312
1927	23,392	16,305	533								916	7,952	36,970
1928	15,474	12,628									4,722	22,592	51,484
1929	14,742	9,428						115			1,343	8,347	30,733
1930	9,519	11,409								1,609	6,787	26,151	56,083
1931	13,558	7,978								1,160	6,755	14,360	38,960
1932	9,880	6,805							22	10	1,364	12,475	36,686
1933	10,638	12,177									5,146	19,511	50,669
1934	17,759	8,253								115	4,775	29,644	64,979
1935	17,728	12,717									508	7,722	39,730
1936	23,079	8,421									4,650	21,410	47,298
1937	12,495	8,743									547	4,796	15,696
1938	8,880	1,473									5,862	17,792	39,555
1939	10,738	5,163								12	1,355	11,887	29,529
1940	7,839	8,436								124	6,177	13,755	32,882
1941	7,913	4,913								42	311	2,383	12,676
1942	6,007	3,933								175	1,397	8,685	18,390
1943	5,164	2,969								9	27	498	2,084
1944	970	580							17	9	2,877	11,113	21,664
1945	6,309	1,339							8	31	661	2,019	10,692
1946	4,092	3,881								74	3,882		3,956
1947										6	1,314		1,320
1948										83	9,483		9,566
1949										21	954		975

^① Includes January, February and March of following year.

TABLE 37

Nestucca River Chinook Catch in Pounds by Months
1923-1927^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923								31,106	88,152	52,056	350	61	171,725
1924								52,892	118,581	88,499	2,438	299	262,709
1925						1,324	66,018	16,037	99,585	80,407	15,705	115	279,191
1926							29,422	11,930	43,651	70,833	8,281	33	164,150

^① Closed to commercial fishing after March 1927.

^② Includes January, February and March of following year.

TABLE 38

Nestucca River Chum Catch in Pounds by Months
1923-1927^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923										20	15,492	420	15,932
1924									307	3,602	11,349	5,353	20,948
1925	337								277	3,377	24,678	1,365	29,843
1926	146								88	2,075	2,556	296	5,088
1927	73												

^① Closed to commercial fishing after March 1927.

^② Includes January, February and March of following year.

TABLE 39

Nestucca River Silver Catch in Pounds by Months
1923-1927^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923								481	44,979	77,293	29,264	13,973	166,439
1924	449							45	69,224	175,406	23,433	3,430	271,637
1925	99							540	26,817	107,121	115,175	2,819	252,513
1926	41							1,551	67,709	88,368	13,873	924	172,547
1927	122												

^① Closed to commercial fishing after March 1927.

^② Includes January, February and March of following year.

TABLE 40

Nestucca River Steelhead Catch in Pounds by Months

1923-1927^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923										489	2,984	30,463	64,687
1924	20,296	10,455							5		6,182	28,900	66,443
1925	21,669	9,200	487								3,976	19,146	44,031
1926	14,138	6,344	427							12	5,895	19,306	44,078
1927	18,755	110											

^① Closed to commercial fishing after March 1927.^② Includes January, February and March of following year.

TABLE 41

Rogue River Chinook Catch in Pounds by Months

1923-1935^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923					202,002	474,594	140,105	8,972	17,961	7,784	26,022		877,440
1924					94,447	161,472	108,596	528,086	191,680		2,862		1,087,143
1925					21,698	135,616	233,326	766,327	274,391				1,431,358
1926					42,684	143,423	245,330	436,897	226,982			465	1,095,781
1927					50,124	121,778	175,239	63,735	224,853	37			635,766
1928					90,964	39,522	30,585	43,351	56,201				260,623
1929					25,620	30,893	22,912	70,747	61,393				211,565
1930					15,486	26,400	28,294	70,781	53,138				194,099
1931					46,246	63,085	61,485	92,485	4,465				267,766
1932					88,005	162,766	130,674	132,337	14,602				528,384
1933					120,885	102,259	41,228	54,323	28,467				347,162
1934					53,458	54,763	20,907	24,276	20,602				174,006
1935					42,092	12,953							55,045

^① Closed to commercial fishing after spring of 1935 except for hook and line gear from 1936 to 1938.^② Includes January, February and March of following year.

TABLE 42

Rogue River Silver Catch in Pounds by Months
1924-1933^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1924								34					34
1925									17,494				17,494
1926								5,600	3,927				9,527
1927									13,278	1,165			14,443
1928									14,514				14,636
1929		122						38	42,568				42,606
1930							167 ^③	47	20,027				20,241
1931													
1932									623				623
1933							689 ^③		8,644				9,333
1934									5,130				5,130

^① Closed to commercial fishing after spring of 1935.^② Includes January, February and March of following year.^③ Probably includes ocean troll fish.

TABLE 43

Rogue River Steelhead Catch in Pounds by Months
1923-1929^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923													580
1924		580				214							884
1925		670											
1926							621						621
1927													
1928													716
1929	716												

^① Closed to commercial fishing after spring of 1935.^② Includes January, February and March of following year.

TABLE 44

Salmon River Chinook Catch in Pounds by Months
1923-1946^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923								1,575		208			1,783
1924										395			395
1925									5,591	7,277	556		13,424
1926								628	2,544	1,911	909		5,992
1927									552	1,695	25		2,272
1928									2,232	2,499	901		5,632
1929										2,871	545		3,416
1930													
1931													
1932													
1933									1,195		164		1,359
1934									2,162	1,176			3,338
1935							148	272	1,308				1,726
1936											985		985
1937 ^③													1,326
1938													4,388
1939													3,725
1940													9,549
1941													11,936
1942													16,014
1943													8,010
1944													4,198
1945													2,596
1946													5,713

① Closed to commercial fishing after 1946.

② Includes January, February and March of following year.

③ Monthly catch unavailable after 1936.

TABLE 45

Salmon River Chum Catch in Pounds by Months
1923-1946①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total②
1923													
1924												438	554
1925	116								130	1,335	1,052	77	2,630
1926	26	10							8	980	696		1,684
1927									11	777	1,151		1,939
1928									7	724	3,832	297	4,931
1929	71									711	1,539		2,250
1930													
1931													
1932													
1933													
1934										95			95
1935													
1936													
1937③													280
1938													430
1939													1,266
1940													5,980
1941													8,866
1942													4,373
1943													133
1944													820
1945													518
1946													767

① Closed to commercial fishing after 1946.

② Includes January, February and March of following year.

③ Monthly catch unavailable after 1936.

TABLE 46

Salmon River Silver Catch in Pounds by Months
1923-1946^①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^②
1923										2,717	3,377		6,094
1924										843		185	1,042
1925	14								819	7,150	4,502	53	12,524
1926								26	1,809	11,797	4,345	36	18,088
1927	75								380	8,090	568		9,038
1928									230	6,805	7,608	234	14,892
1929	15									7,953	6,109		14,062
1930													
1931													
1932													
1933									13		6		19
1934										4,791			4,791
1935									2,620				2,620
1936											4,368		4,368
1937 ^③													1,562
1938													2,516
1939													25,982
1940													20,046
1941													19,316
1942													6,804
1943													7,591
1944													26,013
1945													13,734
1946													10,314

① Closed to commercial fishing after 1946.

② Includes January, February and March of following year.

③ Monthly catch unavailable after 1936.

TABLE 47

Salmon River Steelhead Catch in Pounds by Months
1923-1946①

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total②
1923												950	950
1924												3,188	8,338
1925	2,782	567	1,799									327	2,286
1926	1,258	701									97	2,536	4,232
1927	1,020	200	379										1,542
1928	511	1,031									247	1,230	4,752
1929	1,403	820	1,052								129		348
1930		219											
1931													
1932													
1933													
1934													
1935													
1936													
1937③													671
1938													1,200
1939													
1940													393
1941													
1942													36
1943													
1944													44
1945													
1946													1,279

① Closed to commercial fishing after 1946.

② Includes January, February and March of following year.

③ Monthly catch unavailable after 1936.

TABLE 48

Siletz River Chinook Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923							29,683	91,792	80,549	25,659	1,091	.....	228,774
1924							27,079	79,671	97,339	50,292	636	.....	255,060
1925	43						20,074	36,589	98,291	55,202	22,680	137	233,803
1926			830				2,948	20,296	44,364	30,102	5,157	.....	102,905
1927	38						4,035	32,077	35,573	14,418	1,664	.....	87,767
1928							7,088	24,571	30,624	19,481	1,062	.....	82,952
1929		81	45				9,884	17,938	52,896	22,271	1,928	37	104,954
1930							4,744	12,037	37,340	23,787	177	.....	78,085
1931							2,266	8,492	31,927	13,049	.....	580	62,686
1932		442	5,930				8,776	26,285	29,865	15,712	124	56	83,655
1933			2,837				15,957	26,403	18,482	11,158	78	29	77,536
1934			5,429				19,791	16,355	16,497	9,464	74	.....	62,705
1935		396	128				1,848	7,055	11,234	4,666	447	.....	25,352
1936		40	62				2,417	6,903	14,762	11,063	2,449	572	38,461
1937			295				2,436	12,043	19,391	27,748	584	.....	63,148
1938		870	76				1,574	7,284	22,785	12,198	1,407	.....	46,306
1939	100	564	394				2,348	3,906	12,150	8,896	1,176	.....	29,183
1940		482	225				2,577	8,167	14,847	9,806	614	121	36,210
1941		78					2,055	9,055	7,971	7,513	537	.....	27,703
1942		572					166	5,826	17,240	13,483	1,619	.....	39,137
1943		603	200					1,652	6,271	5,015	1,104	.....	16,634
1944		2,074	518					401	8,884	8,941	238	.....	18,464
1945		1,156							14,049	10,896	1,199	.....	27,048
1946		231	673			63	2,189	11,072	7,104	198	.....	.....	20,626
1947							389	11,470	6,361	2,035	.....	.....	20,255
1948								815	14,079	8,794	502	.....	24,190
1949								850	19,219	11,170	25	.....	31,264

^① Includes January, February and March of following year.

TABLE 49

Siletz River Chum Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923								25	211	7,226	17,495		24,957
1924									1,016	18,523	3,417		22,956
1925									104	7,517	12,169	1,675	21,688
1926	216	7							122	2,652	1,761		4,586
1927	26	5	20					9	46	6,365	4,391	276	11,452
1928	336	18	11					113	70	4,860	9,432	1,674	16,221
1929	72								14	5,592	11,374	5,912	23,234
1930	201	132	9					14	171	819	1,197		2,201
1931									23	328		779	1,207
1932	43	34							62	1,917	1,985	243	4,213
1933	6								1,134	3,094	2,775	1,056	9,077
1934	416	121	481						92	1,081	2,029	453	3,875
1935	69	151							41	1,142	11,238	5,000	17,976
1936	541		14						12	2,234	5,288	3,378	11,156
1937	175	25	44					26	885	5,267	5,220	171	11,613
1938	34	10							830	5,653	4,285	779	12,057
1939	510								267	2,362	4,337	551	7,525
1940	8								32	4,877	4,748	369	10,152
1941	126									6,807	20,034	143	27,104
1942	120							16	20	8,850	12,600	190	21,751
1943	58	17							74	2,068	841	16	3,092
1944	93									2,207	1,527	387	5,713
1945	1,585	7							25	1,176	2,424	137	3,762
1946									28	3,543	4,253		7,824
1947									49	509			558
1948										201			201
1949									121	832			953

① Includes January, February and March of following year.

TABLE 50

Siletz River Silver Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923							10	164	20,660	132,599	64,192	5,063	222,827
1924	239							228	94,169	286,173	12,746	1,272	395,274
1925	686						10	28	58,783	153,651	145,609	7,513	366,115
1926	515	6						156	65,065	75,649	18,550	284	159,841
1927	129	8						88	33,514	79,186	11,526	347	124,770
1928	109							22	42,053	121,854	50,932	1,318	216,249
1929	56	14					71	32	30,250	162,327	27,991	14,715	235,569
1930	121	62					253 ^②	2,005 ^②	32,892	82,237	17,238	1,045	136,069
1931	319		80					334	36,171	75,981	9,227	13,070	138,063
1932	385	2,138	757				360 ^②	605 ^②	21,165	146,924	20,010	1,280	191,013
1933	47		622					125	29,316	31,422	2,966	628	65,568
1934	8		1,103					2,049 ^②	18,706	71,589	4,314	63	104,328
1935			7,607						23,378	110,926	100,371	7,518	259,477
1936	1,381	454	15,449					559	7,015	44,957	28,249	5,765	87,152
1937	33	83	491					36	4,967	76,245	7,774	186	90,710
1938	12	1,446	44					9	35,564	125,721	11,802	88	175,247
1939	438	1,293	332					27	53,991	100,110	24,510	1,396	181,006
1940	169	497	306					13	21,993	56,897	5,039	3,770	88,014
1941	26	150	126				116 ^②	380	14,896	31,220	10,808	42	57,851
1942	39	350							7,022	21,589	4,441	20	33,322
1943		200	50					8	3,741	9,470	2,110		15,395
1944	27	39						17	20,520	79,550	15,202	676	117,179
1945	16	1,188							11,805	60,229	19,033	177	91,976
1946	14	9	709					157	24,800	43,236	2,707		70,900
1947									2,725	17,150	1,823		21,698
1948									3,792	16,386	171		20,349
1949								27	3,229	17,229	7,021		27,506

^① Includes January, February and March of following year.^② Probably includes ocean troll fish.

TABLE 51

Siletz River Steelhead Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923												21,932	45,465
1924	15,932	7,601									2,069	31,493	82,601
1925	35,160	10,165	3,723								1,138	22,440	56,847
1926	21,617	8,352	3,302							61	4,368	23,567	55,195
1927	18,116	6,760	2,323							98	2,201	7,139	31,210
1928	11,668	6,703	3,401							628	6,537	13,152	30,635
1929	6,828	1,958	1,532								305	16,621	31,869
1930	9,109	4,698	1,136							43	3,700	16,307	27,377
1931	3,828	2,052	1,447							53	8	14,415	26,517
1932	9,761	2,360					18				410	5,088	12,422
1933	5,832	199	875							116	1,524	8,291	20,804
1934	7,030	2,882	961								2,648	17,248	33,434
1935	5,397	6,274	1,867								727	15,265	38,351
1936	15,937	4,596	1,826							20	1,829	16,786	30,449
1937	6,997	4,088	729							48	125	3,899	9,639
1938	4,516	590	461							14	443	4,098	10,319
1939	4,023	1,097	644								21	6,685	12,472
1940	3,227	1,552	987						14		3,170	5,545	14,792
1941	3,483	1,853	727				9			8	145	1,989	9,582
1942	4,600	1,715	1,116							36	154	7,070	15,265
1943	5,910	1,637	458							44	67	3,101	7,359
1944	3,350	738	59								320	8,950	16,576
1945	5,915	1,391								7	223	4,429	11,035
1946	4,256	1,448	672				52	26		21	2,322		2,421
1947													
1948									9				9
1949								17		13			30

^① Includes January, February and March of following year.

TABLE 52

Siuslaw River Chinook Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923					2,484	13,004	9,542	18,430	36,668	10,047	8,230	.....	98,405
1924					2,994	11,631	28,151	24,507	58,227	15,801	20,441	.....	162,654
1925		902			1,338	3,976	5,757	9,456	47,804	27,841	2,264	.....	98,436
1926					196	3,871	1,897	10,084	30,563	25,666	970	49	73,296
1927					273	1,622	4,359	12,865	27,902	20,547	427	.....	67,995
1928						390	2,286	6,936	13,665	38,202	789	.....	63,314
1929		1,046				443		1,281	39,566	26,716	468	.....	68,508
1930		34				652		5,982	7,925	26,637	373	.....	41,652
1931	83							7,142	8,285	20,070	214	.....	36,548
1932			837		156	5,698	4,232	5,738	24,978	10,086	116	.....	51,894
1933			890		100	.....	33,125	.....	32,883	25,405	264	6	89,783
1934				20	2,485	14,617	5,262	7,216	390	23	2,629	.....	32,642
1935						1,202	9,478	10,494	17,227	8,704	309	585	47,999
1936						262	6,559	6,329	15,300	16,368	312	455	45,585
1937					445	.....	5,461	14,445	17,698	30,409	1,789	.....	70,247
1938				20	351		3,841	17,356	31,926	13,241	2,350	53	69,138
1939				27	381		1,962	6,287	28,214	21,522	2,098	.....	60,491
1940				61	294		7,471	15,624	16,751	8,858	323	.....	49,382
1941				76	1,761		8,868	14,304	11,773	9,645	1,063	.....	47,490
1942						105	1,784	8,793	16,857	11,916	2,773	.....	42,228
1943						62	412	3,217	10,406	5,526	1,034	.....	20,657
1944							426	2,484	6,131	3,539	191	.....	12,771
1945						191	169	1,433	7,532	4,510	1,040	.....	14,875
1946				22				406	4,060	3,109	470	.....	8,067
1947				12	19			392	7,437	4,393	206	.....	12,459
1948				32					12,436	6,820	100	.....	19,388
1949				25					5,092	2,651	25	.....	7,793

① Includes January, February and March of following year.

TABLE 53
Siuslaw River Chum Catch in Pounds by Months
1923-1943

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923								540	353	1,054	1,951	2,225	7,069
1924	872	74									65		433
1925	334	34									205	115	339
1926	19								31		316	257	604
1927								54	118	86	85		343
1928								113		189	6,380		6,855
1929		173								35			35
1930											20		20
1931										1,359			1,359
1932										392	304	53	774
1933	25							64					64
1934										437	907	230	1,574
1935										175	3,148	433	3,756
1936									231	1,770	2,544	8,636	13,181
1937											8	56	64
1938										31	1,905	632	2,568
1939										174			174
1940										31	8		39
1941													
1942													
1943 ^②									11				11

① Includes January, February and March of following year.

② No chums landed 1944-1949.

TABLE 54
Siuslaw River Silver Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923								1,578	33,060	152,055	89,229	20,938	299,402
1924	2,144	398					347 ^②	13		187,184	172,718	2,414	362,895
1925	219							25	83,809	104,323	92,049	19,377	300,116
1926	533							206	57,396	141,347	13,628	985	213,591
1927	29							21	65,482	182,545	23,960	236	272,254
1928							6,085 ^②	5,383 ^②	9,740	162,539	3,688		203,981
1929		16,545							114,983	102,445	2,112	4,006	223,796
1930		250						35	15,020	168,648	36,795	14,771	247,774
1931	2,989	8,941	575						22,617	201,616	32,132	229	256,879
1932			285					2,035	13,092	86,445	49,566	1,305	153,144
1933	341		360					325	39,464	132,401	24,841	1,933	198,964
1934									1,073	72,750	21,821	1,189	69,833
1935								8	53,922	198,577	180,241	7,866	440,614
1936									4,276	82,949	18,970	16,620	122,815
1937									7,549	221,151	31,806	316	260,822
1938								101	59,385	249,097	23,215	601	332,409
1939							59 ^②	92	76,631	254,302	31,497		362,581
1940					5 ^②			33	94,632	96,073	7,735		198,478
1941						6 ^②		321	40,557	71,497	24,126		136,507
1942								9	29,088	54,101	16,458		99,654
1943									23,638	45,892	3,894		73,424
1944									46,086	108,191	30,389		184,666
1945									30,649	141,925	65,465		238,039
1946									59,212	72,635	6,584		138,431
1947									17,895	95,820	2,232		115,947
1948									23,345	71,542	16,336		111,223
1949									17,868	44,562	7,021		69,451

① Includes January, February and March of following year.

② Probably includes ocean troll fish.

TABLE 55

Siuslaw River Steelhead Catch in Pounds by Months
1923-1948

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923									15			19,570	35,794
1924	13,386	2,463	360						14			9,212	23,429
1925	11,238	2,723	242								43	2,681	8,937
1926	3,684	1,808	721								345	13,076	21,774
1927	7,463	890			7						269	5,212	13,472
1928	5,965	1,245	774							73	417		9,808
1929		9,318							2,683	105		2,861	6,201
1930	552					63					71	14,723	16,775
1931	320	1,598								743	131	4,256	10,026
1932	1,868		3,028								271	3,662	7,919
1933	3,576	410									9,082	15,531	24,613
1934										6	1,406	5,986	7,398
1935											823	6,015	6,838
1936								6			3,049	11,567	14,622
1937											17	1,559	1,576
1938										10	6,248	10,711	16,969
1939						9					80		89
1940					6			9			2,212		2,227
1941													
1942						9					99		108
1943					17						142		159
1944											973		973
1945											178		178
1946										6	567		573
1947											93		93
1948 ^②											52		52

① Includes January, February and March of following year.

② No landings in 1949.

TABLE 56

Tillamook Bay and Tributaries Chinook Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923						33,886	61,747	58,725	171,005	134,365	20,853	230	477,874
1924	63					64,663	118,066	105,348	219,964	174,379	11,789	515	697,967
1925	59		3,244			69,577	40,362	42,722	217,231	240,626	23,417	1,226	635,196
1926	35					36,730	36,271	21,260	134,037	155,280	27,386	1,012	412,170
1927	98	86			5,730	52,669	46,743	33,618	99,231	111,504	12,975	331	362,829
1928	28				12,310	54,958	43,357	24,650	50,518	102,297	14,575	526	304,137
1929	492	454			57,365	95,889	36,243	18,122	71,926	46,462	13,223	1,016	340,265
1930		19			82,866	93,750	26,645	8,937	71,901	79,798	7,293	323	373,727
1931	1,130	1,084			13,653	28,740	12,659	8,543	151,596	144,444	14,049	1,558	379,489
1932	4,247				27,309	45,683	28,108	16,648	113,750	140,061	12,563	844	386,213
1933		1,247			25,927	79,355	88,174	30,284	42,227	65,790	6,597	144	341,896
1934	3,398				20,669	86,160	49,597	30,207	43,696	56,145	3,818	141	292,810
1935	2,177				24,798	60,935	48,828	23,286	65,013	69,907	10,349	358	365,717
1936	24	2,219			15,896	31,221	16,398	15,403	50,627	158,670	10,570	760	299,775
1937		230			8,017	24,544	12,678	14,445	105,962	161,532	7,133	330	335,004
1938	32	331			2,809	27,486	14,315	12,800	83,471	138,130	18,699	611	298,942
1939	116	505			26,218	52,451	22,769	9,869	85,086	169,686	30,742	919	389,200
1940	60	1,400			30,036	42,587	25,315	18,315	117,156	137,156	9,977	424	382,332
1941	148	1,178			28,922	38,460	18,508	16,357	125,727	108,003	12,527	164	349,169
1942	277	224			10,879	15,488	5,131	8,709	20,555	185,763	18,381	653	267,924
1943	23	2,342			15,637	16,711	3,357	3,050	91,438	201,854	17,700	2,648	353,602
1944		1,107			11,963	9,240	6,665	4,590	97,188	171,172	19,154	1,401	322,513
1945	34	1,106			5,208	3,242	4,032	7,312	109,712	222,160	26,781	1,146	384,793
1946	5,072	158			2,989	2,085	2,243	4,393	69,490	202,605	32,506	1,682	318,003
1947					2,769	1,668	671	1,197	67,623	120,852	18,286	1,136	214,202
1948								2,838	55,168	92,748	24,172	1,065	176,041
1949								3,175	46,983	124,804	23,971	756	199,689

① Includes January, February and March of following year.

TABLE 57

Tillamook Bay and Tributaries Chum Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923										16,521	627,372	.....	643,893
1924									44	144,708	680,309	29,200	854,297
1925	36								107	324,481	579,774	26,469	930,961
1926	130								99	56,214	180,640	6,222	244,147
1927	837	117	18							258,534	1,495,992	9,513	1,784,426
1928	387						9	235	360	136,758	2,579,925	86,916	2,804,414
1929	211							27	162	19,539	1,110,610	39,915	1,170,679
1930	54	372						9	171	36,344	187,470	7,614	233,981
1931	1,323	1,050								30,738	905,922	8,801	946,811
1932	1,350									85,977	280	.....	88,757
1933	1,250	1,250							2,178	36,336	502,745	8,239	551,959
1934	2,461									14,373	302,684	15,822	336,132
1935	3,253								81	51,151	511,430	8,208	571,621
1936		751							65	58,329	930,468	199,272	1,189,178
1937	477	567							18	46,450	372,761	17,667	438,246
1938	1,062	288							81	45,578	649,428	23,049	724,689
1939	647	5,906							81	13,180	395,837	14,388	426,719
1940	135	3,098							81	87,593	348,885	.....	438,923
1941	270	2,094							63	89,456	1,653,170	12,303	1,755,586
1942	63	531							20	111,203	2,508,554	29,825	2,651,164
1943	418	1,144						17	87	12,400	353,141	12,895	379,476
1944	38	898					8	16	93	22,314	332,348	5,749	360,976
1945	349	99							20	42,213	720,244	12,822	777,254
1946	1,042	913							20	10,931	451,047	19,922	481,920
1947									11	85,753	268,845	19,055	373,664
1948									8	16,535	822,611	55,855	895,009
1949										8,766	417,421	9,981	436,168

① Includes January, February and March of following year.

TABLE 58

Tillamook Bay and Tributaries Silver Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923								71	57,890	213,831	231,537	25,913	530,447
1924	1,158	47						17	67,231	446,479	160,484	20,585	695,135
1925	339							258	53,999	213,192	211,660	19,383	498,870
1926	370	8					18 ^②	1,946	68,747	145,444	112,784	19,021	348,489
1927	516	13						8,357	37,192	219,503	101,407	4,024	370,698
1928	210	5					316 ^②	713	33,988	214,148	118,830	17,330	386,194
1929	869							2,099	61,259	294,829	164,773	37,878	561,907
1930	638	431				69 ^②	107 ^②	340	59,489	339,340	129,215	7,857	538,874
1931	322	2,135					1,430 ^②	130	115,322	177,124	45,632	9,608	353,883
1932	4,637							1,187	41,345	199,062	38,657	10,014	290,326
1933	51	10				18 ^②	217 ^②	338	42,128	136,729	54,753	10,141	245,910
1934	1,586							95	57,716	438,398	75,536	1,703	574,625
1935	1,177							67,192	403,828	229,089	35,171	739,736	
1936	318	4,138					32 ^②	55	4,837	173,028	129,361	56,693	366,574
1937	143	2,425				14 ^②	57 ^②	43	18,519	385,167	76,192	3,026	483,331
1938	35	278						598	81,888	358,495	57,423	6,127	508,026
1939	464	3,031						258	40,474	309,649	115,808	23,504	491,109
1940	167	1,249						77	48,990	166,667	30,153	4,069	251,625
1941	81	1,588					21 ^②	23	40,233	70,699	67,373	3,604	182,766
1942	426	387						34	7,022	99,682	57,958	2,161	168,200
1943	26	1,817							12,185	68,543	11,108	1,973	94,600
1944	69	722					32 ^②	12	34,422	176,897	62,907	10,240	286,391
1945	1,411	470						207	11,546	217,544	113,034	8,142	355,161
1946	4,466	222						112	14,527	116,440	23,455	3,523	158,057
1947								2,041	9,565	131,668	49,118	2,693	195,085
1948								17	18,006	85,003	73,237	8,765	185,028
1949								378	28,379	88,920	39,370	1,210	158,257

^① Includes January, February and March of following year.^② Probably includes ocean troll fish.

TABLE 59

Tillamook Bay and Tributaries Steelhead Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923										5	1,750	21,083	87,643
1924	38,739	16,193	9,873								6,774	36,668	102,617
1925	29,129	14,614	15,432								2,370	19,278	66,808
1926	24,539	11,231	9,390				26				4,625	61,313	134,166
1927	35,272	21,102	11,828							15	7,300	39,055	104,808
1928	33,651	23,764	1,023							114	18,584	66,502	137,926
1929	35,171	17,555								293	10,611	26,217	72,820
1930	23,042	12,657				84				265	22,671	72,965	136,719
1931	23,991	16,743							7	2,706	19,898	38,948	67,407
1932	5,848				8		119				1,420	15,612	32,850
1933	7,360	8,331							398	123	15,476	18,859	44,859
1934	10,003				17					40	3,917	30,629	51,089
1935	16,486									8	2,060	18,225	79,815
1936	30,731	28,791								363	15,400	34,730	104,579
1937	34,119	19,967								10	587	17,332	51,482
1938	27,427	6,126								43	18,876	39,029	89,565
1939	21,069	10,548			11						5,248	23,987	65,399
1940	21,732	14,411								125	17,129	31,608	86,008
1941	20,248	16,898			17				7	11	1,950	11,449	55,595
1942	28,716	13,445								46	5,293	27,113	66,466
1943	20,703	13,311								9	1,466	11,191	33,460
1944	11,533	9,281						16	10	88	11,981	33,033	66,791
1945	14,214	7,449			21			22		38	2,593	5,338	23,034
1946	9,219	5,803					12			31	10,548	5,583	16,174
1947										1,610	5,409	5,016	12,035
1948										338	39,757	25,663	65,758
1949									65	162	4,034	4,745	9,006

^① Includes January, February and March of following year.

TABLE 60

Umpqua River Chinook Catch in Pounds by Months
1923-1947

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923			(	151,168			31,188	(	89,259				281,615
1924		(	222,575			11,831	(	187,183					421,589
1925			(11,436	35,260	26,911	13,110)	7,138	52,378	193,262	50,241	1,495	854	392,085
1926		(921	17,864	36,659	22,395	27,486)	23,788	38,488	99,557	55,921	3,879	94	327,452
1927		(562	6,286	16,536	15,275	31,576)	28,739	44,889	86,364	26,983	2,196	11	259,417
1928				(26,800	14,716	21,309)	16,186	32,374	91,900	34,368	4,386		242,039
1929			(10,374	18,915	11,269	3,640)	4,091	13,226	34,911	20,057	318		116,801
1930				13,724	13,937	6,708	2,107	15,447	52,238	20,018	991	34	125,204
1931				4,527	10,817	6,473	9,556	28,108	60,341	3,234	1,393	1,677	126,123
1932				20,831	50,333	29,026	29,157	43,018	55,892	47,370	337		275,964
1933				13,415	32,652	28,768	18,501	4,219	40,419	18,815	283	5,107	162,179
1934				268	13,057	17,340	13,674	35,497	47,191	12,940	582	323	140,872
1935				10,345	7,137	4,762	4,056	24,075	45,839	13,653	322	362	110,551
1936				14,569	22,535	6,922	12,564	54,580	168,830	61,699	4,943		346,642
1937				30,540	26,526	31,672	22,185	45,213	85,914	55,599	2,352		300,001
1938				10,963	1,951	13,546	13,451	49,769	78,821	27,585	2,727		198,813
1939				8,772	6,176	11,093	10,842	21,923	39,036	33,166	2,262		133,270
1940				4,183	10,680	20,682	21,665	33,077	32,776	11,879	743		135,685
1941				7,024	19,787	8,193	10,267	24,866	30,073	15,827	592		116,629
1942				7,229	25,399	9,881	1,587	10,255	41,843	16,275	1,268		113,737
1943				4,756	4,502	2,925	284	1,847	8,220	3,914	388		26,836
1944				5,271	1,239	249	189	318	3,744	2,661	207		13,878
1945				85	748	116	70	376	14,764	3,895	367		20,421
1946				788	1,135	241	956	635	1,609	2,537	334		8,235
1947 ^②					316	249			188	625	106		1,484

① Includes January, February and March of following year except for chinook in the years 1923-1929 when spring chinook are shown in parenthesis and are included in the totals of the year in which they occur.

② Closed to salmon fishing after 1946.

TABLE 61

Umpqua River Chum Catch in Pounds by Months
1923-1946

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923										3,153	7,153	7,206	36,314
1924	17,170	1,632							93	517		6,830	9,663
1925	2,025	198							2,993	4,853	1,331		10,465
1926	1,268	20						19	45	764	1,074		1,954
1927	8	44							8	624	474		1,106
1928								32	41	648	2,928	2,772	6,578
1929	157									162	481	78	721
1930										91	870	250	1,211
1931											758	11	769
1932											1,270		1,270
1933									689				689
1934									600				600
1935											275		275
1936											37	21	58
1937											6	347	353
1938										33	50		83
1939											24		24
1940										11	10		21
1941										19	10		29
1942										11	139		150
1943													
1944									7				7
1945													
1946 ^②											8		8

① Includes January, February and March of following year.

② Closed to salmon fishing after 1946.

TABLE 62
Umpqua River Silver Catch in Pounds by Months
1923-1948

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923									1,396,293				1,408,707
1924	11,449	965					14,377 ^②	57,395 ^③	614,734	1,555,053	211,835	99	2,456,239
1925	2,683	63				171 ^②	46,436 ^②	21,397 ^②	247,064	456,269	232,032	58,474	1,063,649
1926	797	9					10,597 ^②	27,055 ^②	73,780	533,738	47,727	1,544	694,528
1927	87					537 ^②	29,247 ^②	31,726 ^②	67,275	546,959	82,740	4,029	772,513
1928						779 ^②	5,232 ^②	8,430 ^②	61,815	366,363	33,395	2,423	498,622
1929	185						148 ^②	8,756 ^②	9,789	256,860	28,076	5,147	308,776
1930					15 ^②	18 ^②	2,872 ^②	12,611 ^②	56,350	493,711	331,441	7,694	904,712
1931						9,565 ^②	25,487 ^②	41,858 ^②	175,582	450,368	103,311	1,547	807,728
1932						245 ^②	5,761 ^②	917 ^②	46,609	980,294	71,173	4,265	1,089,354
1933					58 ^②		300 ^②	100,978 ^②	371,758	96,372	2,195		571,661
1934								27	42,414	339,809	191,148	1,240	574,638
1935								118	120,380	983,879	693,454	5,610	1,813,441
1936								38	39,776	457,434	134,527	6,704	638,479
1937								14	35,032	758,337	164,035		957,418
1938								22	179,101	368,140	18,199		585,462
1939						65 ^②	8 ^②		37,023	319,053	39,225		395,374
1940								22	125,915	223,997	12,289		362,233
1941									17,483	94,563	8,890		120,936
1942									30,972	121,547	30,369		182,888
1943									20,043	89,563	2,951		112,557
1944								7	33,078	141,905	16,034		191,024
1945						10 ^②			45,697	260,678	153,049		459,434
1946							24 ^②	28	75,566	121,083	12,562		209,233
1947 ^③									4,124	43,788	3,111	1,766	53,922
1948	1,135												

① Includes January, February and March of following year.

② Probably includes ocean troll fish.

③ Closed to salmon fishing after 1946.

TABLE 63

Umpqua River Steelhead Catch in Pounds by Months
1923-1948

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923				55		113	86	53		58	4,838	54,703	143,482
1924	59,065	21,056	3,455	1,484	549	2,980	1,163	1,634	337	532	17,799	2,796	92,873
1925	51,368	8,105	4,126	343	1,392	1,291	332	251	249	447	6,386	73,089	140,389
1926	34,883	13,216	8,510	1,062	589	5,003	4,251	3,911	2,737	1,334	9,204	64,722	140,125
1927	27,596	15,322	4,394	213	2,884	2,692	1,094	3,554	942	588	13,048	36,336	94,389
1928	24,144	6,380	2,514	376	666	1,318	3,660	4,006	2,246	1,247	38,379	63,785	185,455
1929	27,849	5,985	15,938	251	1,438	429	422	6	13	240	13,375	4,325	20,499
1930				314	1,622	699	567	1,458	126	18	41,984	12,765	50,553
1931				526	546	456	226	233			73,899	10,914	86,800
1932					10	136	33	46		39	12,056	5,080	17,400
1933					14	42	59	64	21		33,909	12,059	46,168
1934				34	282	754	500	340	419	56	21,740	10,061	34,186
1935				19	171	198	113	222	404	9	8,241	5,726	15,103
1936				56	410	343	502	898	591	70	15,725	14,012	32,607
1937				49	538	117	18	8			28		758
1938				8	477			110	116	1,432	14,464		16,607
1939				7	238	348		16	13	138	774		1,534
1940				7	74	144	5	21	45	208	8,891		9,395
1941					137	691	35	25	14	9			911
1942				107	307	1,011	76	7	12		1,574		3,094
1943				12	330	361	5		121	272	381		1,482
1944				22	356	395	19	20	41	752	3,077		4,682
1945					714	220			92	498	3,722		5,246
1946				7	864	446	9		136	1,019	10,569		13,050
1947					43	60	4			301	25,016	12,906	49,096
1948②	8,003	2,637	126										

① Includes January, February and March of following year.

② Closed to salmon fishing after 1946.

TABLE 64

Yaquina River Chinook Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923								825	125,531	23,981	1,496	54	151,887
1924								2,808	62,804	5,332		41	70,985
1925									16,293	3,890			20,183
1926						86		55	13,551	12,932	61		26,685
1927								2,546	15,491	5,861	60		23,958
1928							115	13,667	23,636	6,668	120	17	44,823
1929								5,023	33,564	6,796	147		45,530
1930					9			5,174	22,854	5,045	50	13	33,145
1931							1,617	11,433	52,923	19,257	181		87,183
1932		1,310	462			791		42,547	75,608	3,291			123,653
1933		1,416				323	1,745	1,538	26,993	3,200	217	350	34,366
1934								3,101	13,578	1,972	16		20,039
1935		714	658			339	159	22,539	3,179	227			27,339
1936		767	129			258		7,821	83,528	22,897	841		115,616
1937		50	221					4,410	40,033	28,716	211		73,370
1938								3,417	52,981	22,110	2,443		80,951
1939								2,912	36,961	16,235	1,446		57,554
1940								6,012	33,053	10,798	1,141		51,004
1941							350	21,517	31,478	17,378	635		71,358
1942								2,915	33,296	22,202	954		59,367
1943				27		36		3,147	18,150	7,869	1,606		30,925
1944						308		1,208	9,225	3,636	401		14,778
1945									17,372	12,261	456		30,089
1946								1,407	9,906	9,677	1,871		22,861
1947								2,715	21,935	26,172	1,096		51,918
1948									22,189	14,587	930		37,706
1949									15,523	15,675	1,585		32,983

① Includes January, February and March of following year.

TABLE 65

Yaquina River Chum Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923										1,373	6,538	1,251	9,162
1924										1,910	756	450	3,116
1925										825	9,051	.....	9,876
1926									8	162	573	216	959
1927										1,200	1,422	.....	2,622
1928								10		1,521	2,363	1,346	5,320
1929	73	7								754	2,390	4,162	7,306
1930										927	594	609	2,130
1931										1,244	3,723	1,321	6,995
1932	339	368								30	343	.....	390
1933	17								159	1,532	1,415	.....	3,106
1934										1,499	5,537	.....	7,036
1935										4,000	7,283	6,694	19,728
1936		36	1,715							3,046	9,060	3,191	15,297
1937										3,667	6,050	.....	9,717
1938										2,121	3,271	.....	5,392
1939										326	1,024	.....	1,350
1940								15	18	1,948	1,690	.....	3,671
1941										5,871	8,727	.....	14,598
1942										383	3,299	.....	3,682
1943									11	28	460	.....	499
1944										8	24	.....	32
1945										10	12	.....	22
1946										30	2,676	.....	2,706
1947								10		8	844	.....	862
1948											1,026	.....	1,026
1949									15	84	12	.....	111

^① Includes January, February and March of following year.

TABLE 66

Yaquina River Silver Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total ^①
1923									90,944	124,458	36,525	16,633	269,003
1924	443								279,403 ^②	213,262	8,499	2,486	503,821
1925	171								16,535	76,885	42,454	412	136,345
1926	59								25,349	110,403	19,297	696	156,190
1927		445							34,731	91,916	14,461	115	141,223
1928							2,496 ^②	74,669 ^②	56,997	141,226	13,869	1,373	290,669
1929	39							3,476	115,211	19,107	7,565		145,359
1930								428	12,104	58,034	20,970	1,380	93,226
1931		310							138,169 ^②	90,917	29,846	1,977	264,167
1932	44	1,805	1,409					40	72,428	100,168	49,524	1,003	225,786
1933	27	2,596							38,202	47,745	12,671	140	98,776
1934	18							240	2,646	80,144	17,553	279	102,190
1935		642	686						11,650	130,148	64,207	4,913	223,270
1936	1,759	730	9,863					7	4,409	97,512	21,969	2,501	127,892
1937	1,066	249	179					40	3,548	134,737	20,687		159,012
1938								255	23,553	176,012	19,035		218,855
1939									36,944	180,914	33,740		251,598
1940								8	35,973	86,025	12,761		134,767
1941								303	29,454	60,519	19,091		109,367
1942								11	23,896	44,381	9,747		78,035
1943									18,130	36,601	5,777		60,508
1944								228	35,073	104,610	23,258		163,169
1945									18,230	85,909	38,887		143,026
1946									35,938	71,916	11,553		119,407
1947									7,886	101,043	15,536		124,465
1948									18,369	78,225	24,776		121,370
1949									13,713	43,300	12,376		69,389

^① Includes January, February and March of following year.^② Probably includes ocean troll fish.

TABLE 67
Yaquina River Steelhead Catch in Pounds by Months
1923-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total①
1923												7,068	18,622
1924	7,688	3,666									419	4,376	8,092
1925	2,830	467									63	3,839	6,465
1926	2,419	144										3,298	3,414
1927		116							54		208	318	580
1928								173		41	104	6,321	8,407
1929	1,411	357						69			48	2,015	2,132
1930											40	6,978	7,026
1931		8				240				12	2,758	10,480	26,180
1932	5,144	6,857	689								110	2,342	2,790
1933	315	23									1,430	1,186	2,669
1934	53										18	2,182	3,288
1935	994		94									959	2,502
1936	548	937	58							12	73	3,691	4,466
1937	50	448	192								13		13
1938										15	1,430		1,445
1939										7	180		187
1940									7	21	1,068		1,086
1941									11		1,645		1,656
1942											33		33
1943											8		8
1944										12	268		280
1945										6	191		197
1946									20	13	645		678
1947										10	171		181
1948										15	1,736		1,751
1949										21			21

① Includes January, February and March of following year.

TABLE 68

Gill Net Licenses Issued on Oregon Coastal Rivers and Bays
1923-1949

Year	Alsea		Coos		Coquille		Nehalem		Nestucca		Netarts		Rogue		Salmon		Sandlake		Siletz		Siuslaw		Tillamook		Umpqua		Yaquina	
	①DN	②SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN
1923	25	82	23	67	37	46	56	129	41	69	0	—	71	0	0	17	0	6	11	80	18	105	50	192	67	212	24	21
1924	21	96	42	86	73	86	57	171	51	77	0	2	100	0	0	55	0	11	14	113	23	135	66	259	117	259	25	27
1925	16	92	50	84	69	75	58	200	51	99	0	3	96	0	3	57	0	13	31	182	38	128	84	182	134	337	30	34
1926	7	112	39	72	84	53	58	197	43	73	0	2	57	0	3	60	0	7	17	150	29	90	81	151	137	316	24	30
1927	15	117	36	102	101	57	62	173	Closed		0	2	63	0	1	45	0	11	20	146	32	78	77	196	118	273	24	20
1928	10	103	34	72	86	58	58	200	.....		0	4	52	0	0	24	0	11	21	115	32	88	76	220	100	228	28	32
1929	6	112	35	106	72	27	64	255	.....		0	4	56	0	0	32	0	11	24	155	40	103	126	284	95	54	24	28
1930	4	124	25	93	51	17	68	227	.....		0	1	68	0	0	36	0	5	24	140	25	73	90	152	94	16	30	39
1931	7	92	22	53	54	2	56	36	.....		0	—	57	0	0	20	0	—	12	89	31	75	71	173	97	50	20	18
1932 ^③	.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....		.....	
1933	21	136	16	28	52	29	64	159	.....		0	—	64	0	0	18	0	—	16	81	56	100	66	167	98	16	19	9
1934	44	138	19	32	57	58	68	131	.....		0	0	51	0	1	15	0	0	21	147	46	81	70	157	94	14	13	6
1935	44	145	24	34	62	69	59	130	.....		0	9	26	0	0	12	0	0	15	114	37	85	94	211	106	31	11	11
1936	45	168	28	65	54	56	72	135	.....		0	5	Closed		0	18	0	0	14	107	32	92	79	197	109	48	19	20
1937	41	181	25	73	53	53	68	143	.....		0	5	.....		0	23	0	0	10	97	27	104	65	166	104	58	20	1
1938	41	159	32	65	59	77	68	129	.....		0	3	.....		0	20	0	0	4	85	32	89	70	156	108	55	23	5
1939	48	162	27	79	60	83	75	126	.....		0	5	.....		1	19	0	7	6	97	41	47	70	172	108	74	21	5
1940	59	165	30	89	67	90	69	132	.....		0	4	.....		1	24	0	4	6	116	53	52	72	166	112	81	31	6
1941	49	166	21	73	60	69	69	116	.....		0	6	.....		0	20	0	5	7	101	48	36	62	174	75	62	22	1
1942	37	160	19	61	50	79	55	110	.....		0	6	.....		0	14	0	6	5	77	31	18	59	201	64	73	24	3
1943	41	165	35	74	44	65	48	108	.....		0	6	.....		1	18	0	5	3	72	30	21	73	207	59	81	25	1
1944	34	160	37	102	38	55	49	125	.....		0	4	.....		1	18	0	2	3	81	31	30	71	208	53	79	21	2
1945	41	163	56	161	28	43	52	115	.....		0	4	.....		2	19	0	5	4	117	32	50	82	207	61	86	23	3
1946	48	153	60	275	29	45	60	127	.....		0	4	.....		1	27	0	5	5	100	35	78	90	216	86	79	25	4
1947	77	0	34	245	47	13	71	0	.....		0	6	.....		Closed		0	12	35	0	43	64	113	123	85	99	24	0
1948	90	0	21	179	53	11	71	0	.....		0	8	.....		.....		0	10	39	0	51	58	106	145	57	80	30	0
1949	69	0	10	140	39	8	62	0	.....		0	9	.....		.....		0	10	33	0	30	40	97	159	40	79	31	0

① Drift net.

② Set net.

③ No records exist for 1932.

TABLE 69

Landings of Troll-Caught Chinook Salmon in Oregon
and on the Columbia River^①

COLUMBIA RIVER						
	Oregon	Washington	Total	Newport	Coos Bay	Total
1925:						
May	1,347	.....	.....	.....	.....	.....
June	15,266	.....	.....	105	738	.....
July	103,279	.....	.....	46,289	78,338	.....
August	123,958	.....	.....	86,109	.....	.....
September	29,833	.....	.....	27,838	9,077	.....
October	6,931	.....	.....	34	.....	.....
Total	280,614	728,249	1,008,863	160,375	88,153	1,257,391
1926:						
May	14	.....	.....	.....	297	.....
June	33,949	.....	.....	.....	380	.....
July	163,233	.....	.....	21,927	54,048	.....
August	248,485	.....	.....	9,205	17,259	.....
September	9,313	.....	.....	300	13,963	.....
October	1,610	.....	.....	23	559	.....
Total	454,604	393,969	848,573	31,455	86,506	966,534
1927:						
May	52,336	.....	.....	.....	.....	.....
June	86,791	.....	.....	4,462	7,781	.....
July	440,521	.....	.....	12,740	31,084	.....
August	452,472	.....	.....	14,230	74,943	.....
September	70,943	.....	.....	1,308	8,577	.....
October	9,927	.....	.....	512	1,206	.....
November	967	.....	.....	.....	.....	.....
Total	1,113,957	269,086	1,383,043	33,252	123,591	1,539,886
1928:						
May	15,390	.....	.....	.....	103,058	.....
June	40,048	.....	.....	1,462	4,438	.....
July	140,132	.....	.....	5,192	17,340	.....
August	357,602	.....	.....	11,009	86,004	.....
September	148,884	.....	.....	2,452	7,377	.....
October	4,171	.....	.....	1,208	1,139	.....
November	241	.....	.....	350	444	.....
Total	706,468	231,819	938,287	21,673	219,800	1,179,760
1929:						
April	806	.....	.....	.....	.....	.....
May	259,010	.....	.....	.....	31,558	.....
June	177,978	.....	.....	2,087	949	.....
July	99,680	.....	.....	73,695	171,837	.....
August	299,102	.....	.....	26,177	148,903	.....
September	61,587	.....	.....	30,196	24,047	.....
October	2,372	.....	.....	408	4,806	.....
November	80	.....	.....	.....	.....	.....
Total	900,615	310,106	1,210,721	132,563	382,100	1,725,384
1930:						
March	9,352	.....	.....	.....	.....	.....
April	77,502	.....	.....	.....	.....	.....
May	63,692	.....	.....	.....	.....	.....
June	124,931	.....	.....	1,321	54,782	.....
July	91,306	.....	.....	38,366	48,296	.....
August	204,649	.....	.....	57,128	64,257	.....
September	28,147	.....	.....	8,651	7,345	.....
October	149	.....	.....	41	1,504	.....
November	142	.....	.....	.....	.....	.....
Total	599,870	385,302	985,172	105,507	176,184	1,266,863

^① Washington figures for 1925 to 1934 from Craig & Hacker (1940); for 1935 to 1949 from records of Washington Department of Fisheries.

TABLE 69—Continued

COLUMBIA RIVER

	Oregon	Washington	Total	Newport	Coos Bay	Total
1931:						
April	2,492					
May	37,783			1,480	5,858	
June	10,583			9,067	9,230	
July	13,137			17,173	23,961	
August	56,732			8,480	16,597	
September	17,305			241	946	
October	3,356				2,080	
Total	141,388	60,637	202,025	36,441	58,672	297,138
1932:						
April	17,136					
May	10,304					
June	38,209			4,261	1,826	
July	14,900			14,807	5,841	
August	51,116			34,751	7,185	
September	26,271			1,102	3,504	
October	27,982					
Total	185,918	21,274	207,192	54,921	18,356	280,469
1933:						
April	12,274					
May						
June	219,650			798	7,476	
July	562,151			106,161	67,796	
August	510,860			84,618	53,591	
September	6,967			7,878	13,159	
October	3,443			526	23,266	
November	969					
Total	1,316,314	27,273	1,343,587	199,981	165,288	1,708,856
1934:						
May	254				22	
June	458			2,003	2,695	
July	206,003			80,760	32,643	
August	224,442			45,908	8,427	
September	40,020			15,146	10,182	
October	26,563			107	2,417	
Total	498,140	30,200	528,340	143,924	56,386	728,650
1935:						
March	135		135			135
April	17,102		17,102			17,102
May	445		445	960		1,405
June	38,909	232	39,141	7,956	441	47,538
July	69,994	3,634	73,628	82,616	65,134	221,378
August	52,768	26,492	79,260	29,671	59,495	168,426
September	14,449	6,014	20,463	4,770	29,463	54,696
October	8,672	4,171	12,843	213	1,199	14,255
November	207	852	1,059		12	1,071
December	14		14			14
Total	202,695	41,395	244,090	126,186	155,744	526,020
1936:						
February	895	157	1,052			1,052
March	4,039	503	4,542			4,542
April	133,337	13,002	146,339			146,339
May	2,680	163	2,843		278	3,121
June	2,778	2,471	5,249	858	1,758	7,865
July	62	15,815	15,877	12,055	33,049	60,981
August	203,565	241,069	444,634	99,474	134,908	679,016
September	206,418	37,177	243,595	135,679	186,477	565,751
October	87,990	16,953	104,943	102,675	57,756	265,374
November	6,591	4,348	10,939	2,351	13,087	26,377
December	60		60	552		612
Total	648,415	331,658	980,073	353,644	427,313	1,761,030

TABLE 69—Continued

COLUMBIA RIVER						
	Oregon	Washington	Total	Newport	Coos Bay	Total
1937:						
April	39		39			39
May	14,500	1,073	15,573		214	15,787
June	14,691	2,172	16,863	3,236	11,838	31,937
July	58,277	13,874	72,151	454,140	17,588	543,879
August	197,767	119,459	317,226	350,879	120,255	788,360
September	40,534	34,585	75,119	33,246	60,528	168,893
October	29,714	26,623	56,337	21,735	7,146	85,218
November	906	104	1,010	22		1,032
Total	356,428	197,890	554,318	863,258	217,569	1,635,145
1938:						
March	107		107			107
April	69,089	2,256	71,345		843	72,188
May	228	70	298		405	703
June	25,267	6,682	31,949	97,762	11,036	140,747
July	21,540	27,011	48,551	141,559	133,958	324,068
August	39,547	56,579	96,126	45,990	74,741	216,857
September	10,103	21,417	31,520	14,964	16,096	62,580
October	2,521	2,711	5,232	461	1,934	7,627
November	7		7			7
December						
Total	168,409	116,726	285,135	300,736	239,013	824,884
1939:						
March	18,245		18,245			18,245
April	75,575		75,575		80	75,655
May	1,847	102,699	104,546		178	104,724
June	779	12,466	13,245	148,521	15,145	176,911
July	24,760	4,567	29,327	145,539	37,160	212,026
August	63,533	54,237	117,770	23,018	11,469	152,257
September	8,622	3,519	12,141	16,158	11,086	39,385
October	4,754	2,518	7,272	2,871	5,362	15,505
November	100	255	355			355
Total	198,215	180,261	378,476	336,107	80,480	795,063
1940:						
March	7,622	147	7,769			7,769
April	58,613	3,023	61,636		264	61,900
May	24,861	16,734	41,595	1,930	236	43,761
June	88,342	96,783	185,125	5,125	6,423	196,673
July	42,975	34,569	77,544	124,823	191,533	393,900
August	86,074	86,916	172,990	58,510	131,953	363,453
September	26,776	16,298	43,074	36,037	58,051	137,162
October	6,012	658	6,670	1,071	328	8,069
November		43	43			43
Total	341,275	255,171	596,446	227,496	388,788	1,212,730
1941:						
February	125	637	762			762
March	93,315	21,284	114,599			114,599
April	56,762	6,305	63,067			63,067
May	66,353	7,994	74,347	363	46	74,756
June	167,518	162,032	329,550	51,734	14,502	395,786
July	18,344	4,264	22,608	157,455	103,731	283,794
August	136,634	73,696	210,330	325,367	54,715	590,412
September	294,461	138,671	433,132	3,484	16,910	453,526
October	628	733	1,361	202	7,225	8,788
November	89	78	167			167
December	71	71			23	94
Total	834,300	415,694	1,249,994	538,605	197,152	1,985,751

TABLE 69—Continued

COLUMBIA RIVER						
	Oregon	Washington	Total	Newport	Coos Bay	Total
1942:						
February	71		71		23	94
March	7,507		7,507			7,507
April	91,733	30,563	122,296			122,296
May	124,294	54,853	179,147	712	1,030	180,889
June	19,946	12,752	32,698	38,662	31,976	102,736
July	3,926	30,222	34,148	59,632	107,723	201,503
August	59,782	184,408	244,190	2,548	23,351	270,089
September	24,560	75,941	100,501	9,441	43,004	152,946
October	192	360	552	287	500	1,339
November				146	578	724
December	124		124		17	141
Total	332,135	389,099	721,234	110,828	208,202	1,040,264
1943:						
January	41		41		21	62
February	108		108	23		131
March	51,577		51,577	46		51,623
April	83,722	17,577	101,299	13		101,312
May	31,393	12,698	44,091	67		44,158
June	42,117	35,557	77,674	4,010	9,340	91,024
July	3,875	3,071	6,946	35,493	59,745	102,184
August	25,432	46,037	71,469	15,948	85,801	173,218
September	3,268	6,022	9,290	3,077	23,022	35,389
October	114	464	578	112	7,590	8,280
November	53		53		3,669	3,722
December	20		20		1,436	1,456
Total	241,720	121,426	363,146	58,789	190,624	612,559
1944:						
January					16	16
February	288		288			288
March	58,085	3,033	61,118			61,118
April	141,734	25,878	167,562	1,274		168,836
May	85,648	27,615	113,263	158	313	113,734
June	120,116	54,025	174,141	30,429	79,610	284,180
July	39,024	35,056	74,080	44,406	69,892	188,378
August	64,615	123,804	188,419	40,461	301,120	530,000
September	7,310	13,888	21,198	19,678	194,122	234,998
October	3,529	6,643	10,172	2,498	26,790	39,460
November				5	145	150
December	66		66		10	76
Total	520,415	289,892	810,307	138,909	672,018	1,621,234
1945:						
February	9,734		9,734	100	36	9,870
March	14,669	195	14,864			14,864
April	390,437	30,357	420,794	118	1,283	422,195
May	392,599	101,564	494,163	14,330	2,892	511,385
June	79,316	26,573	105,889	6,699	57,283	169,871
July	14,641	4,931	19,572	5,512	18,725	43,809
August	59,071	102,188	161,259	142,445	257,316	561,020
September	48,574	35,029	83,603	176,893	209,085	469,581
October	17,960	19,507	37,467	39,774	28,021	105,262
November	472	1,121	1,593	4,468	3,317	9,378
December	877		877	52	16	945
Total	1,028,350	321,465	1,349,815	390,391	577,974	2,318,180
1946:						
January				23		23
February	12,723		12,723	57		12,780
March	185,735	9,002	194,737	14		194,751
April	408,334	53,204	458,538	920	177	459,635
May	170,628	137,987	308,615	74,404	37,192	420,211
June	28,975	28,615	57,590	52,820	81,724	192,134
July	32,120	20,944	53,064	56,928	155,922	265,914
August	121,192	224,379	345,571	321,572	277,565	944,708
September	125,590	80,948	206,538	202,986	58,219	467,743
October	8,097	23,405	31,502	28,043	10,379	69,924
November	108	34	142	25		167
December	156		156			156
Total	1,090,658	578,518	1,669,176	737,792	621,178	3,028,146

TABLE 69—Continued

	COLUMBIA RIVER					
	Oregon	Washington	Total	Newport	Coos Bay	Total
1947:						
January	41		41			41
February	28,275	12,788	41,063	225	2,685	43,973
March	12,752	141	12,893	270	2,791	15,954
April	34,495	14,977	49,472	132,874	80,336	262,682
May	108,727	35,834	144,561	160,419	93,712	398,692
June	25,047	35,094	60,141	53,220	43,993	157,354
July	40,604	31,982	72,586	388,762	223,089	684,437
August	313,242	324,738	637,980	377,546	109,167	1,124,693
September	79,320	29,024	108,344	197,134	37,340	342,818
October	3,287	4,249	7,536	13,174	2,712	23,422
November	25	220	245	139	317	701
December	219		219	9		228
Total	646,034	489,047	1,135,081	1,323,772	596,142	3,054,995
1948:						
January	3,317	74	3,391			3,391
February	916		916			916
March	2,369	257	2,626			2,626
April	66,721	39,518	106,239	1,911	928	109,078
May	200,601	67,821	268,422	24,499	7,053	299,974
June	63,641	28,087	91,728	5,755	13,649	111,132
July	36,328	29,268	65,596	67,729	134,808	268,133
August	129,504	208,813	338,317	237,928	285,508	861,751
September	45,697	57,090	102,787	123,654	44,502	270,943
October	1,566	3,732	5,298	5,919	5,944	17,161
November	366	41	407			407
Total	551,026	434,701	985,727	467,395	492,390	1,945,512
1949:						
February						177
March	1,726	250	1,976			2,069
April	33,772	37,520	71,292			128,091
May	28,142	10,720	38,862			71,709
June	24,415	17,693	42,108			151,192
July	41,337	70,007	111,344			452,479
August	81,948	320,044	401,992			919,421
September	11,533	38,809	50,342			118,854
October	2,025	5,508	7,533			17,694
November	18		18			436
Total	224,916	500,551	725,467			1,862,122

TABLE 70

Landings of Troll-Caught Silver Salmon in Oregon
and on the Columbia River^①

	COLUMBIA RIVER					
	Oregon	Washington	Total	Newport	Coos Bay	Total
1925:						
May	819	.....	.....	.....	.....	.....
June	12,183	.....	.....	145	742	.....
July	100,847	.....	.....	87,162	81,935	.....
August	949,310	.....	.....	708,984	.....	.....
September	590,746	.....	.....	332,276	105,368	.....
October	194,572	.....	.....	7,764	1,402	.....
November	21,533	.....	.....	.....	.....	.....
Total	1,870,010	1,611,633	3,481,643	1,136,331	189,447	4,807,421
1926:						
May	192	.....	.....	.....	207	.....
June	18,325	.....	.....	2,832	314	.....
July	217,644	.....	.....	103,261	128,091	.....
August	1,260,985	.....	.....	330,634	320,270	.....
September	344,993	.....	.....	58,283	88,421	.....
October	44,229	.....	.....	590	3,489	.....
November	2,576	.....	.....	.....	.....	.....
Total	1,888,944	1,482,345	3,371,289	495,600	540,792	4,407,681

① Washington figures for 1925 to 1934 from Craig & Hacker (1940); for 1935 to 1949 from records of Washington Department of Fisheries.

TABLE 70—Continued

COLUMBIA RIVER						
	Oregon	Washington	Total	Newport	Coos Bay	Total
1927:						
May	3,764					
June	50,018			33,842	98,290	
July	348,953			88,890	307,473	
August	480,828			277,410	292,821	
September	683,816			87,711	202,046	
October	102,149			45,977	59,284	
November	11,686					
Total	1,661,214	528,405	2,189,619	513,830	959,914	3,663,363
1928:						
May	153					
June	83,699			17,255	22,722	
July	308,234			79,433	78,334	
August	428,108			147,608	441,396	
September	184,585			95,020	123,325	
October	186,917			69,986	42,722	
November	19,358			15,226	442	
Total	1,211,054	591,554	1,802,608	424,538	708,941	2,936,087
1929:						
May	26,102					
June	176,555			62,745	35,365	
July	490,811			484,395	239,463	
August	273,631			140,641	135,459	
September	469,809			327,266	166,735	
October	172,234			46,849	35,624	
November	7,402					
Total	1,616,544	590,056	2,206,600	1,061,896	612,646	3,861,142
1930:						
March	1,101					
April	10					
May	6,594					
June	59,428			12,726	74,013	
July	199,001			418,097	242,748	
August	1,012,660			304,454	149,840	
September	1,326,770			141,715	137,084	
October	229,874			52,600	54,301	
November	22,570			3,246	1,074	
Total	2,858,008	1,594,381	4,452,389	932,838	659,060	6,044,287
1931:						
May	5,634				117	
June	155,332			28,861	38,713	
July	292,757			101,243	44,229	
August	363,113			67,467	27,630	
September	397,516			246,910	112,432	
October	77,967			29,165	20,631	
November	6,457			952	805	
December						
Total	1,298,776	514,911	1,813,687	474,598	244,557	2,532,842
1932:						
May	731					
June	70,067			45,619	5,574	
July	566,621			358,158	66,049	
August	837,002			606,442	141,616	
September	596,827			154,589	115,106	
October	507,934			38,469		
November	408			546		
Total	2,579,890	176,984	2,756,874	1,203,823	328,345	4,289,042

TABLE 70—Continued

COLUMBIA RIVER						
	Oregon	Washington	Total	Newport	Coos Bay	Total
1933:						
June	40,501			3,082	11,400	
July	295,395			165,932	90,896	
August	667,894			256,544	57,604	
September	231,452			180,533	179,036	
October	109,107			28,857	107,962	
November	44,713			151		
Total	1,389,062	51,376	1,440,438	635,099	446,898	2,522,435
1934:						
May	242				47	
June	382			26,732	21,098	
July	506,413			419,198	93,019	
August	835,836			505,074	76,219	
September	463,168			330,325	127,863	
October	129,989			5,253	56,865	
November	199					
Total	1,936,229	103,200	2,039,429	1,286,582	375,111	3,701,122
1935:						
May	122	85	207			207
June	96,084	1,210	97,294	100,808	2,178	200,280
July	589,675	15,302	604,977	323,080	175,920	1,103,977
August	351,585	46,977	398,562	212,985	761,031	1,372,578
September	627,861	181,020	808,881	761,409	917,878	2,488,168
October	888,251	163,590	1,051,841	129,950	239,139	1,420,930
November	88,475	93,782	182,257		339	182,596
December	858		858			858
Total	2,642,911	501,966	3,144,877	1,528,232	2,096,485	6,769,594
1936:						
April	12		12			12
May						
June	86,592	2,856	89,448	6,687	18,871	115,006
July	1,911	81,386	83,297	15,036	12,184	110,517
August	208,428	239,279	447,707	159,598	125,150	732,455
September	254,214	105,185	359,399	178,159	145,194	682,752
October	172,177	109,953	282,130	208,184	60,856	551,170
November	64,766	61,791	126,557	1,316	5,152	133,025
December	291		291	684		975
Total	788,391	600,450	1,388,841	569,684	367,407	2,325,912
1937:						
May	97	14	111		172	283
June	22,150	2,246	24,396	10,084	17,584	52,064
July	280,993	83,795	364,788	394,943	68,772	828,503
August	428,457	84,723	513,180	520,411	173,348	1,206,939
September	132,297	52,847	185,144	208,046	148,541	541,731
October	171,940	181,927	353,867	292,409	166,275	812,551
November	15,780	2,200	17,980	552	298	18,830
Total	1,051,714	407,752	1,459,466	1,426,445	574,990	3,460,901
1938:						
May	71	18	89		418	507
June	73,303	23,119	96,422	35,599	5,131	137,152
July	168,984	84,887	253,871	244,697	127,536	626,104
August	616,083	342,920	959,003	240,329	239,936	1,439,268
September	359,089	288,625	647,714	266,295	109,743	1,023,752
October	137,700	128,515	266,215	26,152	13,004	305,371
November	2,352	1,945	4,297			4,297
December	189		189			189
Total	1,357,771	870,029	2,227,800	813,072	495,768	3,536,640

TABLE 70—Continued

COLUMBIA RIVER						
	Oregon	Washington	Total	Newport	Coos Bay	Total
1939:						
May		235	235		255	490
June	78,070	80,179	158,249	138,896	11,852	308,997
July	231,611	80,757	312,368	374,010	99,411	785,789
August	391,512	262,956	654,468	215,992	48,141	918,601
September	254,363	114,309	368,672	370,427	176,481	915,580
October	214,902	128,590	343,492	131,763	97,280	572,535
November	15,536	30,298	45,834			45,834
Total	1,185,994	697,324	1,883,318	1,231,088	433,420	3,547,826
1940:						
May	3,946	1,274	5,220	25,907	904	32,031
June	47,076	27,545	74,621	9,173	7,857	91,651
July	224,883	181,183	406,066	328,001	324,866	1,058,933
August	244,041	151,583	395,624	266,326	186,972	848,922
September	459,484	248,713	708,197	538,750	234,170	1,481,117
October	78,826	40,488	119,314	41,921	8,171	169,406
November	63	1,353	1,416		13	1,429
Total	1,058,319	652,139	1,710,458	1,210,078	762,953	3,683,489
1941:						
May	848	521	1,369	202	1,486	3,057
June	72,990	75,952	148,942	304,801	96,186	549,929
July	157,438	62,279	219,717	354,412	300,778	874,907
August	163,761	54,171	217,932	534,301	85,526	837,759
September	220,326	68,099	288,425	70,740	52,392	409,557
October	9,107	10,703	19,810	2,160	5,228	27,198
November	6,377	7,711	14,088		401	14,489
December		204	204			204
Total	630,847	277,640	908,487	1,266,616	541,997	2,717,100
1942:						
May	685	1,187	1,872	144	5,105	7,121
June	3,955	23,011	26,966	116,889	39,396	183,231
July	45,388	209,020	254,408	233,623	152,837	640,868
August	34,994	66,784	101,778	2,969	39,059	143,826
September	13,603	53,623	67,226	98,077	230,673	395,976
October	3,573	8,118	11,691	702	14,077	26,470
November	198		198	644	117	959
Total	102,396	361,743	464,139	453,048	481,264	1,398,451
1943:						
May	649	52	701	66		767
June	23,413	41,952	65,365	7,490	17,316	90,171
July	26,409	45,894	72,303	105,847	101,649	279,799
August	56,010	146,298	202,308	87,472	60,828	350,608
September	37,685	61,515	99,200	62,017	43,784	205,001
October	1,720	2,234	3,954	3,434	18,112	25,500
November	457		457		488	945
Total	146,343	297,945	444,288	266,326	242,177	952,791
1944:						
April	1,073	85	1,158			1,158
May	8,018	10,672	18,690	2,439	95	21,224
June	28,916	54,167	83,083	54,834	34,192	172,109
July	24,234	73,737	97,971	97,180	50,750	245,901
August	136,080	264,717	400,797	226,632	173,318	800,747
September	63,824	108,227	172,051	220,940	61,234	454,225
October	37,907	77,386	115,293	97,532	103,523	316,348
November					1,466	1,466
December	164		164			164
Total	300,216	588,991	889,207	699,557	424,578	2,013,342

TABLE 70—Continued

COLUMBIA RIVER						
	Oregon	Washington	Total	Newport	Coos Bay	Total
1945:						
April	857	5,948	6,805	.....	.....	6,805
May	1,014	1,117	2,131	201	665	2,997
June	5,501	7,083	12,584	2,186	3,808	18,578
July	5,143	10,621	15,764	10,137	21,115	47,016
August	59,626	123,776	183,402	291,572	110,176	585,150
September	118,343	112,028	230,371	337,609	103,906	671,886
October	54,865	103,008	157,873	53,983	13,008	224,864
November	1,661	14,742	16,403	5,625	195	22,223
December .....	.....	.....	.....	500	.....	500
Total	247,010	378,323	625,333	701,813	252,873	1,580,019
1946:						
April .....	.....	.....	.....	.....	.....	.....
May	133	.....	133	574	1,500	2,207
June	14,098	41,471	55,569	58,782	41,794	156,145
July	65,755	85,433	151,188	81,728	152,853	385,769
August	38,699	39,029	77,728	84,258	95,082	257,068
September	308,145	239,194	547,339	192,553	39,870	779,762
October	77,532	81,063	158,595	29,377	38,532	226,504
November	946	68	1,014	36	75	1,125
December	168	.....	168	.....	154	322
Total	505,476	486,258	991,734	447,308	369,860	1,808,902
1947:						
March	161	.....	161	.....	207	368
April	2,208	2,478	4,686	168	157	5,011
May	8,097	49,682	57,779	5,119	3,358	66,256
June	109,901	243,042	352,943	82,291	112,487	547,721
July	149,499	241,821	391,320	268,408	362,167	1,021,895
August	190,315	73,720	264,035	251,493	37,523	553,051
September	127,794	127,258	255,052	72,067	24,682	351,801
October	59,919	82,428	142,347	18,836	5,781	166,964
November	15,076	14,240	29,316	2,000	166	31,482
December	194	.....	194	.....	.....	194
Total	663,164	834,669	1,497,833	700,382	546,528	2,744,743
1948:						
April .....	.....	.....	.....	.....	.....	.....
May	92	.....	92	.....	.....	92
June	133	58,161	58,294	.....	302	58,596
July	167,248	414,797	582,045	318,013	157,271	1,057,329
August	146,917	282,177	429,094	192,048	70,422	691,564
September	122,079	211,137	333,216	70,156	20,622	423,994
October	25,209	81,865	107,074	14,629	25,421	147,124
November	357	4,666	5,023	1,518	61	6,602
December	117	.....	117	.....	.....	117
Total	462,152	1,052,803	1,514,955	596,364	274,099	2,385,418
1949:						
February .....	.....	.....	.....	.....	.....	.....
March .....	.....	.....	.....	.....	.....	.....
April .....	.....	.....	.....	.....	.....	.....
May .....	.....	.....	.....	.....	.....	.....
June	10,371	19,366	29,737	.....	.....	36,790
July	17,389	38,408	55,797	.....	.....	155,982
August	102,772	363,891	466,663	.....	.....	1,317,329
September	29,270	103,296	132,566	.....	.....	275,207
October	3,500	13,290	16,790	.....	.....	42,178
November	78	.....	78	.....	.....	592
December .....	.....	.....	.....	.....	.....	.....
Total	163,380	538,251	701,631	.....	.....	1,828,078

TABLE 71

Columbia River Shad Catch^①—Oregon and Washington Combined^②
1889-1949

Year	Pounds	Year	Pounds
1889	50,000	1920	
1890	85,030	1921	
1891	129,388	1922	
1892	211,250	1923	334,468
1893		1924	
1894		1925	665,137
1895		1926	1,379,922
1896	885,000	1927	1,111,196
1897	668,500	1928	1,151,886
1898	442,000	1929	1,268,722
1899	401,380	1930	1,314,541
1900	461,860	1931	785,474
1901		1932	330,089
1902	342,583	1933	214,917
1903	120,775	1934	663,390
1904	152,133	1935	420,345
1905	139,493	1936	306,867
1906	228,700	1937	279,539
1907	280,956	1938	169,697
1908	541,229	1939	353,363
1909	421,566	1940	364,480
1910	313,346	1941	381,134
1911		1942	518,886
1912		1943	323,633
1913		1944	593,184
1914		1945	910,039
1915	580,562	1946	1,442,626
1916		1947	1,297,319
1917		1948	395,413
1918		1949	436,893
1919			

① Data for years 1889-1934 from Craig and Hacker 1940.

② Washington landings 1935-1937 from Annual Bulletins Washington Department of Fisheries; for 1938-1949 from tables prepared by Washington Department of Fisheries.

TABLE 72

Oregon and Columbia River Shad Landings in Pounds by Rivers^①
1923-1949

Year	COLUMBIA RIVER			Coos Bay	Coquille River	Siuslaw River	Umpqua River	Other Rivers
	Oregon	Washington	Total					
1923	246,179	88,289	334,468	56,630	-----	12,100	113,397	-----
1924 ^②	-----	-----	-----	29,727	119	11,476	419,093	258
1925	410,527	254,610	665,137	68,490	416	20,173	517,452	26,759
1926	999,464	380,458	1,379,922	89,010	2,782	8,230	555,313	-----
1927	785,495	325,701	1,111,196	130,745	410	16,827	568,600	-----
1928	636,463	515,423	1,151,886	110,266	1,052	27,996	507,620	-----
1929	778,115	490,607	1,268,722	66,498	-----	23,083	208,183	2,297
1930	782,726	531,815	1,314,541	45,666	-----	25,637	424,561	1,464
1931	517,111	288,363	785,474	164,610	-----	51,021	578,017	1,147
1932	229,462	100,627	330,089	94,168	-----	37,219	264,213	1,263
1933	127,388	87,529	214,917	52,903	8,850	28,039	143,630	-----
1934	492,290	171,100	663,390	78,459	23,325	50,016	265,491	-----
1935	354,539	65,806	420,345	115,620	17,969	39,907	217,129	-----
1936	249,431	57,436	306,867	73,741	9,341	31,588	301,388	1,088
1937	241,933	37,606	279,539	42,251	270	20,690	217,476	-----
1938	116,963	52,734	169,697	50,168	10,445	30,012	197,587	7
1939	266,473	86,890	353,363	91,943	15,830	49,590	551,481	-----
1940	253,358	111,122	364,480	121,674	14,657	38,231	362,467	39
1941	278,383	102,751	381,134	114,022	8,816	52,954	406,256	-----
1942	324,666	194,220	518,886	182,459	20,233	31,051	422,278	12
1943	257,315	66,318	323,633	151,288	2,588	37,036	237,462	20
1944	388,773	204,411	593,184	216,259	3,968	41,836	335,405	64
1945	522,097	387,942	910,039	320,400	15,450	96,627	580,242	195
1946	658,760	783,866	1,442,626	373,064	2,280	127,516	856,685	3,354
1947	589,519	707,800	1,297,319	366,404	3,092	55,187	551,119	-----
1948	354,611	40,802	395,413	167,160	14,306	34,919	573,069	-----
1949	367,583	69,310	436,893	216,068	1,601	47,475	758,652	-----

① Oregon Columbia River catches for 1923-1927 and Washington catches from 1923-1934 from Fisheries Industries of the United States; Washington shad landings 1935-1949 from tables prepared by Washington Department of Fisheries.

② Columbia River catches for 1924 unavailable.

TABLE 73

Columbia River Shad Landings in Pounds by Zones
Oregon and Washington Combined
1938-1949^①

Year	ZONES						Total
	1	2	3	4	5	6	
1938	16,924	48,432	38,910	35,703	27,990	1,738	169,697
1939	20,891	107,740	117,426	53,159	48,849	2,649	350,714
1940	28,286	115,387	84,645	68,107	53,315	14,740	364,480
1941	38,415	121,919	97,930	64,229	53,637	5,004	381,134
1942	102,567	92,327	123,781	109,549	81,405	9,616	519,245
1943	66,095	70,921	114,781	56,377	13,243	2,243	323,660
1944	133,723	165,682	94,928	194,585	928	3,338	593,184
1945	175,266	165,595	114,125	422,845	-----	32,208	910,039
1946	103,281	346,130	196,823	782,431	-----	13,961	1,442,626
1947	65,115	239,817	228,440	556,984	200,882	6,081	1,297,319
1948	23,871	140,494	20,051	164,087	46,001	909	395,413
1949	13,339	155,359	152,032	101,984	-----	7,220	429,934

① Washington catch figures prepared by Washington Department of Fisheries.

TABLE 74

Total Columbia River Shad Landings in Pounds by Months
Oregon and Washington Combined^①
1938-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938	-----	-----	-----	-----	57,149	94,599	17,421	52	-----	6	-----	-----
1939	-----	-----	-----	-----	182,366	164,082	4,204	25	-----	18	19	-----
1940	-----	-----	-----	-----	204,054	151,260	9,074	82	-----	5	-----	5
1941	-----	222	-----	2,068	155,001	209,459	14,274	85	5	-----	-----	-----
1942	-----	-----	-----	-----	154,164	300,747	61,328	2,753	171	-----	-----	-----
1943	-----	-----	-----	1,884	66,974	137,522	99,604	15,390	2,286	-----	-----	-----
1944	-----	-----	335	29	131,163	356,193	101,503	3,353	5	577	26	-----
1945	-----	19	111	603	169,391	604,726	119,152	12,340	807	2,311	524	55
1946	-----	14	-----	436	306,055	964,971	154,207	7,214	3,038	6,555	114	22
1947	-----	22	-----	85	366,321	491,952	428,955	4,714	332	4,929	5	-----
1948	-----	10	-----	163	75,467	199,531	117,196	2,026	33	978	9	-----
1949	-----	-----	-----	-----	91,923	320,498	17,228	105	103	61	16	-----

^① Washington figures prepared by Washington Department of Fisheries.

TABLE 75

Coos Bay Shad Landings in Pounds by Months
1923-1949

Year	April	May	June	July	August
1923		5,400	51,230		
1924		11,804	17,923		
1925		47,964	20,526		
1926	2,297	68,768	17,945		
1927	754	102,580	27,411		
1928		69,785	40,481		
1929		56,413	9,477		608
1930	234	34,222	11,210		
1931	894	61,148	92,060	10,508	
1932	297	84,037	9,834		
1933	139	39,107	13,657		
1934	1,187	49,810	27,462		
1935		72,185	43,395	40	
1936	187	53,989	19,565		
1937	114	34,713	7,424		
1938		28,948	21,220		
1939	8,206	65,089	18,648		
1940	8,993	80,745	31,936		
1941	415	80,309	33,298		
1942	158	109,477	72,824		
1943	137	47,026	104,112	13	
1944	2,429	134,498	79,332		
1945	3,425	221,894	94,993	62	26
1946	13,265	270,752	89,047		
1947	22,456	284,245	59,703		
1948	361	120,791	46,008		
1949	885	153,967	61,216		

TABLE 76

Coquille River Shad Landings in Pounds by Months
1924-1949

Year	April	May	June	July
1924		119		
1925			416	
1926		2,673	109	
1927			410	
1928		738	314	
1929				
1930				
1931				
1932				
1933		4,964	3,886	
1934		365	22,960	
1935		6,239	11,730	
1936		1,071	8,270	
1937		181	89	
1938		2,689	7,756	
1939	22	8,877	6,931	
1940	300	11,243	3,114	
1941		4,354	4,462	
1942	4	6,696	13,533	
1943		653	1,923	12
1944		1,010	2,958	
1945	29	7,541	7,880	
1946		308	1,972	
1947	16	1,458	1,618	
1948		6,577	7,729	
1949			1,601	

TABLE 77

Siuslaw River Shad Landings in Pounds by Months
1923-1949

Year	May	June	July	August
1923	4,477	7,554	69	
1924	3,194	8,282		
1925	8,390	11,761	22	
1926	2,093	6,137		
1927	5,594	11,229	4	
1928	4,208	23,548	242	
1929		23,083		
1930		21,818	3,819	
1931	27,614	23,407		
1932	14,031	23,188		
1933	344	27,695		
1934	4,460	45,556		
1935	7,731	28,441	3,735	
1936	3,683	26,941	964	
1937	18,989		1,701	
1938	5,547	21,500	2,965	
1939	23,397	25,935	258	
1940	8,630	29,208	365	28
1941	9,418	41,630	1,906	
1942	1,405	28,282	1,364	
1943	4,348	32,049	639	
1944	5,506	36,330		
1945	16,544	80,083		
1946	28,989	97,353	1,174	
1947	20,556	34,631		
1948	7,867	27,052		
1949	6,996	40,479		

TABLE 78

Umpqua River Shad Landings in Pounds by Months
1923-1949

Year	April	May	June	July	August	September	October	November
1923		54,617	58,780					
1924		169,126	248,825	1,142				
1925		309,881	207,540	31				
1926	50	365,275	189,452	522	14			
1927		336,077	230,010	2,513				
1928		186,355	318,540	2,725				
1929		136,321	71,280	582				
1930		9,780	235,843	178,872	66			
1931	18,634	380,937	178,446					
1932	991	154,968	107,746	489	19			
1933	255	59,794	83,508	73				
1934	23	12,999	250,480	1,972	17			
1935	1,057	113,091	101,347	1,591	23	20		
1936	3,800	116,715	177,919	2,942	8	4		
1937	1,238	82,199	132,920	1,119				
1938		43,823	151,340	2,424				
1939	348	327,347	223,662	124				
1940	12,924	147,905	200,746	892				
1941	867	143,508	255,159	6,722				
1942	1,040	104,213	313,732	3,289				
1943	77	54,297	180,471	2,613				4
1944	46	79,307	231,639	24,349		48	16	
1945	209	169,543	410,490					
1946	83	257,792	594,966	3,844				
1947		234,387	316,653	79				
1948		214,701	358,228	140				
1949		260,405	496,743	1,504				

TABLE 79

Columbia River Smelt Catch^①—Oregon and Washington Combined^②
1895-1949

Year	Pounds	Year	Pounds
1895	282,250	1923	1,188,390
1896	1,354,700	1924 .....	.....
1897	1,021,480	1925	1,577,940
1898	737,000	1926	539,009
1899	560,920	1927	1,561,402
1900	487,600	1928	1,168,419
1901 .....	.....	1929	1,319,494
1902	572,454	1930	1,795,645
1903	402,000	1931	2,007,593
1904	440,460	1932	1,694,921
1905	483,015	1933	1,595,203
1906	503,000	1934	2,763,100
1907	509,804	1935 .....	.....
1908	602,022	1936	3,083,857
1909	559,608	1937	2,438,443
1910	447,478	1938	1,041,433
1911	349,639	1939	3,096,376
1912	520,336	1940	3,082,327
1913 .....	.....	1941	2,531,823
1914 .....	.....	1942	2,685,962
1915 .....	.....	1943	3,977,226
1916 .....	.....	1944	2,268,436
1917 .....	.....	1945	5,719,214
1918 .....	.....	1946	3,276,040
1919 .....	.....	1947	1,544,890
1920 .....	.....	1948	3,974,018
1921 .....	.....	1949	3,333,573
1922 .....	.....		

① Data for 1895-1934 from Craig and Hacker 1940.

② Data for Washington landings 1936-1949 from Annual Reports of Washington Department of Fisheries.

TABLE 80
Columbia River Smelt Catch by Area^①
1936-1949

Year	Sandy River Oregon	Main Colum- bia River Oregon	Total Oregon	Cowlitz River Washington	Grays River Washington	Kalama River Washington	Lewis River Washington	Main Colum- bia River Washington	Total Washington	Total
1936	134,102	122,691	256,793	2,583,525	27,200	.....	144,325	72,014	2,827,064	3,083,857
1937		213,711	213,711	1,999,030	7,350	.....	.....	218,352	2,224,732	2,438,443
1938		500,276	500,276	33,075	2,050	76,550	63,075	366,407	541,157	1,041,433
1939		535,668	535,668	996,355	35,700	.....	1,342,675	185,978	2,560,708	3,096,376
1940	127,520	436,877	564,397	736,770	53,650	2,950	1,341,250	383,310	2,517,930	3,082,327
1941	168,607	146,724	315,331	1,793,033	.....	.....	376,975	46,484	2,216,492	2,531,823
1942	760,308	269,689	1,029,997	1,555,315	51,750	.....	.....	48,900	1,655,965	2,685,962
1943	84,850	518,301	603,151	2,972,490	3,675	.....	273,210	124,700	3,374,075	3,977,226
1944		331,687	331,687	1,126,382	10,900	44,300	514,200	240,967	1,936,749	2,268,436
1945	1,393,098	434,653	1,827,751	2,048,438	59,160	32,462	1,552,770	198,633	3,891,463	5,719,214
1946	348,507	202,094	550,601	2,674,040	300	.....	.....	51,099	2,725,439	3,276,040
1947		223,977	223,977	1,192,633	.....	.....	.....	128,280	1,320,913	1,544,890
1948	212,855	719,523	932,378	2,197,810	.....	.....	547,590	296,240	3,041,640	3,974,018
1949	472,590	531,432	1,004,022	750	250	.....	1,940,850	387,701	2,329,551	3,333,573

^① Washington Statistics from Annual Bulletins; Washington State Department of Fisheries.

TABLE 81

Columbia River Smelt Catch in Pounds by Months
Oregon and Washington Combined^①
1936-1949

<i>Year</i>	<i>January</i>	<i>February</i>	<i>March</i>	<i>April</i>	<i>November</i>	<i>December</i>
1936	944,409	1,145,906	771,925	164,227	.....	92
1937	118	290,954	1,982,755	38,950	.....	3,804
1938	430,519	408,990	141,720	.....	891	59,313
1939	507,068	962,160	1,555,675	13,200	.....	58,273
1940	534,330	934,320	1,586,020	.....	.....	27,657
1941	406,645	1,259,625	677,307	149,725	.....	38,521
1942	358,027	801,965	1,515,308	.....	.....	10,662
1943	215,229	1,430,278	2,191,990	135,550	.....	4,344
1944	275,469	510,599	1,451,493	30,875	.....	.....
1945	1,162,813	1,419,933	190,600	2,945,868	.....	.....
1946	772,850	1,495,291	814,804	193,095	.....	.....
1947	15,837	878,542	650,311	.....	.....	.....
1948	529,990	473,795	2,809,008	161,225	.....	.....
1949 .....	.....	374,843	2,674,360	398,855	.....	541

^① Washington statistics from Annual Bulletins of Washington State Department of Fisheries.

TABLE 82

Oregon Arrowtooth Sole Landings in Pounds by Months
June 1941–December 1949^①

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941												
1942										62,715	8,422	
1943	78	19,204	68,448	141,397	617,499	718,901	574,593	458,023	158,785	61,873	12,212	
1944	984	9,761	142,031	338,158	88,432	.....	16,236	7,761	55,936	40,848		
1945			696	8,744	21,428	40,991	33,685	16,076	18,030	29,643	214	
1946		787	1,050	1,895	52,708	45,627	45,603	79,296	65,591	5,151		
1947			3,911	27,526	238,191	30,598	246,835	70,099	71,949	17,435	15,989	964
1948	4,403	398	72,648	22,983	321,879	138,738	198,010	173,681	146,185	142,431		
1949	382		1,455	4,281			144,684	747,145	449,695	376,321		

^① Statistics not collected before June 13, 1941.

TABLE 83

Oregon Dover Sole Landings in Pounds by Months
June 1941–December 1949^①

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941								13,104	3,480			
1942					77,467	554,752	595,358	228,860	651,841	200,230		
1943				34,066	1,338,975	2,930,774	1,096,658	677,633	217,474	126,490	9,596	
1944				14,361	111,348	1,071	832,153	99,199	306,456	228,881		
1945				1,969	36,107	139,089	806,435	214,028	1,075,664	378,412	52,512	
1946			855	3,638	321,594	821,318	714,411	637,142	675,677	21,620	1,733	
1947				3,069	40,932	429,687	758,741	229,271	412,256	149,102	8,847	
1948				186	161,559	344,150	1,137,777	453,847	392,665	314,693	3,387	
1949			7,419	590	65,419	161,483	574,265	1,093,873	863,333	203,318	33,874	

^① Statistics not collected before June 13, 1941.

TABLE 84

Oregon English Sole Landings in Pounds by Months
June 1941–December 1949^①

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941						42,299	175,212	209,646	188,416	61,910	17,547	1,227
1942	531	11,503	29,278	37,922	41,592	12,429	15,962	11,629	19,792	25,550	14,609	6,996
1943	14,317	25,144	98,757	118,383	58,932	49,265	77,484	85,348	118,848	120,205	54,311	77,645
1944	22,007	45,265	172,018	265,800	153,563	4,164	123,601	85,175	26,272	74,812	21,277	63,747
1945	14,045	32,231	45,311	72,078	118,034	76,286	37,756	85,545	121,057	153,689	83,990	256,579
1946	84,534	56,506	110,384	323,696	616,321	687,944	540,901	498,047	693,378	135,250	152,022	51,626
1947	89,793	74,740	91,760	227,694	218,706	125,896	325,077	285,446	221,960	28,275	122,864	71,227
1948	177,039	64,120	74,629	165,508	210,816	1,072,395	694,510	417,440	220,779	156,696	20,285	46,652
1949	135,052	12,757	63,947	94,627	53,948	84,471	103,416	247,266	158,452	69,689	48,059	20,809

^① Statistics not collected before June 13, 1941.

TABLE 85

Oregon Petrale Sole Landings in Pounds by Months
June 1941–December 1949^①

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941						103,876	463,526	262,937	90,661	39,151	34,573	5,405
1942	2,582	36,824	66,238	412,071	738,896	631,761	864,214	583,784	88,120	211,940	87,425	21,381
1943	19,967	110,932	137,052	206,787	628,390	899,195	596,921	821,535	247,921	53,960	50,691	31,743
1944	4,216	13,062	60,218	201,488	538,758	254,012	465,567	342,007	69,550	49,783	7,391	13,110
1945	9,905	14,200	23,557	97,171	254,300	379,278	211,680	138,287	71,156	222,896	27,938	123,775
1946	16,589	4,183	30,087	463,758	711,897	398,629	344,343	306,428	470,564	162,272	50,041	25,301
1947	29,778	35,042	78,952	144,462	297,964	87,079	504,805	58,765	99,034	24,724	52,601	30,730
1948	61,265	13,007	58,119	219,158	400,229	671,913	455,720	546,884	80,230	105,951	28,277	17,796
1949	68,056	8,735	106,556	262,672	70,819	145,579	270,596	228,038	185,709	113,877	27,140	28,985

^① Statistics not collected before June 13, 1941.

TABLE 86

Oregon Flounder Landings in Pounds by Months
June 1941-December 1949①

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941						75,089	76,830	45,926	30,636	83,977	127,315	17,086
1942	5,782	72,936	4,281	4,615	78,128	54,260	54,272	85,005	38,919	10,695	29,625	5,322
1943	4,779	32,356	25,166	28,788	46,235	18,710	14,123	35,493	106,782	96,656	111,855	337,039
1944	11,615	26,409	57,735	67,217	50,256	50,696	44,683	61,800	39,003	254,077	18,456	195,420
1945	6,707	30,075	58,667	18,001	148,624	40,610	27,552	71,384	106,294	167,306	10,589	338,479
1946	15,903	42,890	10,253	28,514	198,064	236,780	432,011	143,085	66,628	59,164	22,422	24,145
1947	8,126	77,033	22,183	86,781	110,283	29,365	5,336	66,855	105,417	30,760	75,933	49,275
1948	229,488	44,541	11,448	47,212	308,838	79,280	186,457	185,103	158,532	114,002	17,759	52,029
1949	16,139	12,567	12,880	10,760	68,685	36,105	7,445	2,567	29,204	26,425	26,794	22,471

① Statistics not collected before June 13, 1941.

TABLE 87

Coos Bay Striped Bass Catch in Pounds by Months
1931-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1931				1,676	8,879	729		13	179	6,574			18,050
1932			103	899	9,559	6,331			49	653			17,594
1933	31			2,614	2,029	9,984	943	2,905	1,414	450	639	189	21,198
1934	426	346	2,077	3,110	10,373	1,416	1,178	1,511	2,087	2,505	134	549	25,712
1935	490	215	3,782		12,883	5,683	45	705	1,397	1,372	194	832	27,598
1936	266	31	710	5,286	11,184	6,338	222	746	1,765	2,676		30	29,254
1937		584	235	2,670	7,208	15,449	1,859	2,720	981	243	397	433	32,779
1938	1,289	348	465	7,782	18,146	4,342	3,258	2,304	2,098	890	740	819	42,481
1939	222	244	3,223	14,237	20,512	11,601	1,567	1,115	1,767	9,518	499	636	65,131
1940	100	3,935	11,653	8,462	39,973	1,408	858	75	4,173	3,718	885	59	75,299
1941	383	2,101	6,918	11,763	26,068	12,181	407	1,108	1,890	2,606	531	134	66,090
1942	88	239	305	5,352	17,026	18,379	1,918	2,531	1,024	3,023	649		50,534
1943		239	1,447	9,969	26,625	6,566	4,300	5,028	3,417	1,998	63	567	60,219
1944	973	1,203	1,300	21,002	18,054	12,430	11,732	12,454	5,212	3,096	2,085	35	89,576
1945	724	1,607	4,127	27,043	36,287	88,425	23,012	16,911	13,270	6,764	7,626	5,422	231,218
1946	12,477	11,724	14,242	15,097	39,600	20,566	15,020	15,353	15,897	10,718	4,560	1,168	176,422
1947	4,977	4,552	7,699	7,793	29,136	20,813	365	476	2,037	2,400	7,161		87,414
1948	1,067	175	1,681	513	28,180	38,005	1,050	423	1,943	5,072	11,583	4,756	94,448
1949	44		276	2,105	8,256	12,732							23,413

TABLE 88

Coquille River Striped Bass Catch in Pounds by Months
1940-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1940								13	13	65			91
1941					4	120	51	983	1,105	294	44	28	2,629
1942				115	64	102	44	851	556	163			1,895
1943					27	71	76	611	423	57	17		1,282
1944	18				100	318		136	227	88	156		1,043
1945					80	343	25	72	205		38		763
1946					143	242	43	27	187	196	12		850
1947				59	91	27	291	54	196	780	14		1,512
1948					6,577	7,729							14,306
1949						97			98	74			269

TABLE 89

Umpqua River Striped Bass Catch in Pounds by Months
1934-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1934						62							62
1937									53				53
1938									20				20
1939							39	20		48			107
1941								316	2,590	2,277	17		5,200
1942						18		78	1,358	544			1,998
1943					25	177	206	883	934	308	7		2,540
1944						367	1,606	21	151	660	1,199		4,004
1945				129	6	3,372	3,374	3,303	8,121	287			18,592
1946				40	86	716	2,068	11,225	1,084	1,064	27		16,310
1947					74	348	776	760	744	126	8		2,836
1948					135	492	3,307	2,167					6,101
1949					166	507	394						1,067

TABLE 90

Green Sturgeon Catch in Pounds by Rivers
1923-1949

Year	COLUMBIA RIVER			Coos Bay	Tillamook Bay	Umpqua River	Yaquina Bay	Other Rivers①
	Oregon	Washington	Total					
1923				478		3,050	52	
1924				1,609	18	2,765	83	975
1925				1,553	30	2,690		94
1926				1,638	41	3,562	67	230
1927				75		1,843		14
1928	13,686			302		1,760	99	145
1929	18,338			638		1,226		481
1930	14,333			1,270	48	2,726		35
1931	10,362			1,159		628	25	
1932	6,985			539		2,042	341	47
1933	14,570			164		1,173		252
1934	6,618			271		470		15
1935	5,903			277		476		241
1936	10,540			1,117		1,019		22
1937	7,197			587		540	343	168
1938	6,097	4,680	10,777	1,465		997	137	
1939	10,455	5,640	16,095	195	22	929	268	29
1940	11,012	4,312	15,324	104	184	433	87	
1941	6,645	3,486	10,131	87	18	197	243	140
1942	3,935	1,553	5,488	177	21	696	323	17
1943	3,993	2,104	6,097	464	39	1,220	505	93
1944	6,258	4,831	11,089	95	24	875	147	17
1945	10,321	8,686	19,007	178		837	175	27
1946	9,666	7,223	16,889	1,957	72	505	140	
1947	6,891	5,123	11,814	379				
1948	7,171	4,090	11,261	70	150		29	
1949	12,595	6,342	18,937	395	50			34

① Includes Alsea, Coquille, Nehalem, Rogue and Siuslaw Rivers.

TABLE 91
Columbia River Green Sturgeon Catch in Pounds by Months^①
Oregon and Washington Combined
1938-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938					1,085	2,577	5,751	1,020	187	109	48	
1939					1,935	2,928	4,952	5,654	437	231	22	
1940	219	81			2,994	4,111	4,182	1,228	377	1,102	1,030	
1941		264		169	2,522	979	1,171	1,434	2,458	1,072	62	
1942		91			505	817	672	1,495	1,780	131	17	
1943				122	268	559	637	3,299	1,195	17		
1944			143		339	1,555	3,921	4,110	941	80		
1945			21		243	1,001	7,996	7,967	1,183	504	92	
1946					1,216	1,991	2,343	9,706	1,067	523	43	
1947					2,601	3,153	1,298	2,561	2,107	51	20	23
1948					1,159	988	4,655	2,868	1,306	267	18	
1949					1,268	1,290	5,635	5,305	5,299	140		

① Washington data prepared by Washington Fisheries Department.

TABLE 92

Columbia River White Sturgeon Catch^①—Oregon and Washington Combined^②
1889-1949

Year		Year	
1889 ^③	1,746,736	1920	
1890	3,084,925	1921	
1891	3,561,998	1922	
1892	5,466,831	1923	182,856
1893		1924	
1894		1925	231,362
1895	4,704,469	1926	209,142
1896		1927	211,511
1897		1928	147,522
1898		1929	159,647
1899	73,295	1930	129,411
1900		1931	112,856
1901		1932	71,432
1902		1933	84,468
1903		1934	79,100
1904	137,663	1935	72,822
1905		1936	131,293
1906		1937	127,343
1907		1938	67,647
1908		1939	73,861
1909		1940	83,898
1910		1941	84,619
1911		1942	95,230
1912		1943	116,114
1913		1944	236,986
1914		1945	266,092
1915	134,873	1946	311,507
1916		1947	375,108
1917		1948	575,399
1918		1949	391,836
1919			

^① Data for 1889-1934 from Craig and Hacker 1940.^② Washington landings for 1935-1937 from Annual Bulletins Washington Department of Fisheries; 1938-1949 from tables prepared by Washington Department of Fisheries.^③ Figures from 1889 to 1934 include small amounts of green sturgeon.

TABLE 93

White Sturgeon Catch in Pounds by Rivers
1923-1949

Year	Alsea River	COLUMBIA RIVER ^①			Coos Bay	Tillamook Bay	Umpqua River	Yaquina River	Other Rivers ^②
		Oregon	Washington	Total					
1923		113,911	68,945	182,856	3,178		928	112	202
1924					306	85			565
1925		138,309	93,053	231,362	289	38	402		137
1926		132,262	76,880	209,142	183	160	88		
1927		130,835	80,676	211,511	202		124		
1928		88,977	61,266	147,522	23		142	60	42
1929	164	91,308	66,463	159,647	252				44
1930		77,931	54,660	129,241	105		57	17	
1931		66,330	43,990	112,856		63	80	56	176
1932		32,543	30,966	71,432	243	52	110		
1933		31,641	38,915	84,468	945			122	
1934	404	43,190	31,000	79,100			44		
1935	800	51,953	20,869	72,822		89	98		11
1936		90,146	41,147	131,293	34		40		
1937		73,118	54,225	127,343	29	30	195		157
1938		56,626	11,021	67,647	17	97	20		32
1939		58,338	15,523	73,861	76		23		
1940		72,326	11,572	83,898	155				
1941		72,921	11,698	84,619		31			
1942		72,174	23,056	95,230		74	70		
1943		88,814	27,300	116,114		106	35	280	28
1944		172,917	64,069	236,986	44		203	247	21
1945		198,363	67,729	266,092	66	27		59	
1946		212,925	98,582	311,507	38	81			
1947		271,617	103,491	375,108		24		490	
1948		427,479	147,920	575,399	34	23		623	
1949		250,903	140,933	391,836	26	27		439	

① Data for 1923 to 1927 for Oregon and 1923 to 1934 for Washington from *Fisheries Industries* include green sturgeon. Washington data 1935-1937 from Annual Bulletin Washington Department of Fisheries; 1938-1949 from tables prepared by Washington Department of Fisheries.

② Includes Coquille, Nehalem, Nestucca, Rogue, Salmon, Siletz and Siuslaw Rivers.

TABLE 94
Columbia River White Sturgeon Catch in Pounds by Zones^①
Oregon and Washington Combined
1938-1949

Year	ZONE					
	1	2	3	4	5	6
1938	5,349	6,034	4,228	6,635	6,290	39,114
1939	8,730	9,867	9,455	9,802	4,404	28,207
1940	19,168	8,996	9,539	11,954	4,502	29,739
1941	12,397	8,586	12,213	24,723	2,692	24,008
1942	12,616	7,583	10,732	16,652	10,973	36,674
1943	10,978	9,365	15,227	43,230	7,189	30,125
1944	13,623	14,410	19,760	112,590	18,108	58,495
1945	32,378	22,232	18,736	119,566	2,647	70,533
1946	29,770	21,418	21,881	132,241	6,600	99,597
1947	54,941	29,254	25,446	89,005	16,560	159,359
1948	137,621	47,140	33,513	88,821	81,038	187,266
1949	50,421	30,417	22,822	31,204	114,408	142,564

^① Washington data from tables prepared by Washington Department of Fisheries.

TABLE 95

Columbia River White Sturgeon Catch in Pounds by Months^①
Oregon and Washington Combined
1938-1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1938	215	735			12,683	5,064	12,313	11,341	13,456	6,820	3,978	1,042
1939	504	4,233			15,815	8,941	9,348	10,158	11,036	4,994	1,452	2,815
1940	6,028	7,788			17,353	7,359	11,840	8,752	12,054	8,917	2,434	1,373
1941	2,142	4,746		1,314	14,537	10,731	15,812	11,444	15,017	5,855	1,999	1,001
1942	1,599	6,456			16,664	8,193	10,734	14,613	21,512	12,092	2,371	782
1943	513	3,343	135	2,134	18,966	8,776	16,239	20,473	24,496	14,035	4,195	2,804
1944	448	8,810	17,861	1,322	39,007	15,978	42,760	38,805	37,739	25,006	8,427	823
1945	1,008	12,434	24,001	2,436	56,264	19,729	39,071	37,310	32,695	23,120	14,992	3,032
1946	414	6,219	959	35	52,012	28,142	64,955	67,180	54,610	23,573	10,170	2,984
1947	49	9,943	497	626	54,504	39,866	67,123	85,656	59,468	48,520	6,861	1,741
1948	521	16,181	1,018	7,210	90,799	34,156	148,348	120,766	68,027	52,196	32,869	3,308
1949		13,391	1,469		110,386	114,949	59,925	31,512	34,598	16,490	7,719	1,397

^① Washington data from tables prepared by Washington Department of Fisheries.

TABLE 96

Bay Clam Landings in Pounds by Species
1943-1949

	1943	1944	1945	1946	1947	1948	1949
Horseclams	82,472	110,468	181,472	151,868	85,792	36,227	18,926
Cockles	90,758	55,081	65,765	54,777	72,589	66,749	73,159
Softshells	21,806	34,533	41,376	52,274	42,964	31,786	49,474

TABLE 97

Tillamook Bay Clam Landings in Pounds by Species
1943-1949

	1943	1944	1945	1946	1947	1948	1949
Cockles	83,209	40,726	38,728	27,432	29,786	29,591	29,184
Horseclams	473	-----	-----	-----	-----	1,265	-----
Softshells	15,535	16,519	11,238	13,471	10,536	4,524	9,948

TABLE 98

Yaquina Bay Clam Landings in Pounds by Species
1943-1949

	1943	1944	1945	1946	1947	1948	1949
Cockles	7,549	14,355	27,037	27,345	42,803	37,158	35,917
Horseclams	30,560	27,558	11,718	7,431	2,238	-----	-----
Softshells	-----	-----	4,714	11,238	-----	356	-----

TABLE 99

Coos Bay Clam Landings in Pounds by Months
April 1943—December 1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1943				6,276	8,842	9,113	10,116	7,069	5,772	1,277	1,336	1,638	51,439
1944	3,124	10,677	12,154	4,101	4,484	7,589	12,871	10,650	9,553	4,638	1,053	2,016	82,910
1945	6,179	11,897	15,203	24,132	21,448	19,165	25,415	20,064	10,650	7,243	3,012	5,346	169,754
1946	7,957	12,236	17,088	23,814	23,198	17,677	3,786	8,232	9,641	6,878	6,309	7,621	144,437
1947	11,049	12,567	22,569	9,710	9,201	2,179	3,127	4,817	1,853	253	2,450	2,779	82,554
1948	5,117	3,987	7,454	4,550	3,951	898	1,821	1,980	1,761	688	183	2,572	34,962
1949	139		50	77	153	306	7,085	3,180	4,597	970	1,039	1,330	18,926

TABLE 100

Tillamook Bay Clam Landings in Pounds by Months
April 1943—December 1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1943				10,107	15,798	18,729	24,289	18,978	10,416	993	480	.....	99,790
1944	104	1,502	24,745	6,454	5,747	7,917	8,325	9,603	5,724	1,559	968	423	73,071
1945	416	786	1,028	5,247	6,383	12,181	12,633	5,348	2,639	3,071	863	127	50,722
1946	2,982	1,910	2,062	5,632	6,150	4,345	4,663	7,924	3,543	1,340	176	176	40,903
1947	176	1,128	2,177	4,358	7,122	5,696	8,168	5,696	4,585	853	219	146	40,324
1948	1,557	497	1,360	3,627	3,078	7,357	8,564	6,718	1,943	484	97	97	35,379
1949	452	348	1,172	2,467	5,904	3,294	10,971	7,531	4,493	1,355	510	634	39,131

TABLE 101

Yaquina Bay Clam Landings in Pounds by Months
April 1943—December 1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1943				5,374	7,890	6,936	9,116	5,092	2,059	621	471	547	38,106
1944	533	3,261	6,180	2,723	3,270	1,543	1,378	1,653	433	80			21,054
1945	200	565	188	6,237	6,457	8,667	7,037	4,525	3,170	878	925	857	39,706
1946	4,562	2,061	3,604	3,325	5,243	7,009	5,572	9,343	3,712	804	631	148	46,014
1947	922	1,259	3,566	4,381	6,518	6,957	7,951	8,350	4,336	1,005	439	357	46,041
1948	310	911	1,755	2,424	5,407	7,357	9,620	5,878	2,322	392	842	297	37,535
1949	1,061	2,998	3,814	2,893	5,001	5,542	4,957	4,735	2,763	598	967	588	35,917

TABLE 102

Clatsop Beach Razor Clam Production in Pounds by Months
April 1941—December 1949

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1941 ^①				9,976	20,569	41,493	26,458	15,190	4,018	541	5,597	92	123,934
1942 ^①	21	278	53	278	1,091	2,526	1,871	2,398	2,382	772	277	1,406	13,353
1943	5	76	812	972	2,428	5,743	3,385	1,198	357	453	241	27	15,697
1944		1,216	2,788	2,105	6,300	11,112	10,877	7,573	3,975	6,149	2,014	3,678	57,787
1945	2,708	3,058	4,899	7,219	13,074	10,893	17,269	6,559	6,027	3,093	2,805	4,190	81,794
1946	2,599	2,678	1,582	6,139	28,871	30,382	24,573	9,982	9,529	8,705	10,739	1,344	137,123
1947	8,352	6,970	5,891	19,080	41,842	26,015	39,453	6,280	1,599	655	6,234	5,498	167,869
1948	9,898	3,433	6,368	30,362	51,499	35,500	39,610	26,836	4,162	6,137	952	2,196	216,953
1949	8,918	318	345	14,098	57,439	26,200	16,500	10,800	5,900	34,800	21,900	2,500	199,718
Average													
44-49	5,413	2,812	3,646	13,167	33,171	23,350	24,714	11,338	5,199	9,923	7,461	3,234	

^① From dealer's records; estimated 90 percent complete.

TABLE 103

Oregon Crawfish Landings in Dozens^①
1943-1949

	1943	1944	1945	1946	1947	1948	1949
Dozens landed	10,451	11,450	10,627	14,014	21,089	16,914	21,500
No. fishermen	8	10	12	15	15	18	14
Catch per fisherman	1,306	1,145	886	934	1,406	940	1,536

① By fiscal year April 1 to March 31.

TABLE 104
Monthly Crab Landings in Dozens by Ports
April 1947—October 1948

Port	January	February	March	April	May	June	July	August	September	October	November	December
1947:												
Columbia				27,723	34,497	20,963	6,249	1,306	103	348	2,259	4,625
Coos ^①				8,767	11,081	7,229	4,180	1,615	448	45	2,081	4,282
Port Orford ^②				2,708	3,726	2,252	1,832	555	153	46	695	377
Tillamook ^③				3,984	5,692	5,382	3,160	1,876	1,466	1,665	871	1,337
Umpqua ^④				4,390	9,485	3,316	3,089	337	92	55	1,155	91
Yaquina ^⑤				4,980	10,088	6,795	1,207	774	748		1,282	1,589
Miscellaneous				472	859	819	493	1,316	629	1,055	886	640
1948:												
Columbia	17,847	21,262	36,326	36,263	49,271	14,768	3,525	1,129	1,226	1,049		
Coos ^①	8,182	8,062	10,895	17,094	15,207	7,245	2,058	969	180	417		
Port Orford ^②	1,595	1,327	1,854	3,326	3,817	1,070	350	181				
Tillamook ^③	1,167	958	1,962	5,570	8,856	5,776	3,793	3,286	1,900	1,635		
Umpqua ^④	1,425	1,391	3,056	8,899	7,878	3,835	1,605	1,044				
Yaquina ^⑤	3,060	5,011	7,391	17,334	10,506	2,795	235	7	354	675		
Miscellaneous	693	770	1,260	1,224	2,192	1,171	1,760	1,358	891			

① Includes Coquille Bay.

② Includes Rogue River.

③ Includes Nehalem Bay.

④ Includes Siuslaw Bay.

⑤ Includes Alsea and Depoe Bays.

TABLE 105

Oregon Crab Landings in Dozens by Months^①
January 1944—December 1949

	1944	1945	1946	1947	1948	1949
January	8,829	17,006	17,065	22,660	35,592	49,617
February	16,278	19,199	21,815	27,457	37,973	22,681
March	81,893	17,315	30,402	40,555	62,905	52,571
April	55,023	44,254	37,039	52,654	87,448	60,613
May	78,758	55,871	82,268	75,593	98,447	73,273
June	53,752	31,593	30,409	46,762	37,670	45,920
July	32,350	11,788	14,130	20,215	12,272	19,557
August	15,084	10,413	5,783	7,834	9,098	11,631
September	6,554	4,226	4,568	3,813	4,691	4,714
October	7,970	8,930	10,017	3,686	4,205	4,520
November	6,337	9,807	12,834	8,551	2,662	8,914
December	11,052	12,419	14,814	3,971	9,296	19,039

^① Convert to pounds by multiplying by 25.

TABLE 106
Oregon Seed Oyster Plantings^①

Area	Type ^②	1947	Total	1948	Total	1949	Total	1950	Total	1951	Total
		Type		Type		Type		Type		Type	
Tillamook Bay	U	700	.....	583	.....	500	.....	1,250	.....	660	.....
	B	6,457	7,157	400	1,005	2,000	2,500	2,300	3,575	613	1,273
	K	.....	.....	22	.....	.....	.....	25	.....	.....	.....
Yaquina Bay	U	.....	.....	1,140	.....	1,600	.....	1,000	.....	1,500	.....
	B	.....	.....	110	1,250	300	1,900	.....	1,000	.....	1,500
	K	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coos Bay	U	7,000	.....	3,000	.....	230	.....	4,100	.....	6,450	.....
	B	1,200	8,200	400	3,400	.....	230	300	4,400	300	6,750
	K	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alsea Bay	U	.....	.....	300	.....	130	.....	.....	.....	.....	.....
	B	.....	.....	.....	300	.....	130	.....	.....	.....	.....
	K	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	U	7,700	.....	5,023	.....	2,460	.....	6,350	.....	8,610	.....
	B	7,657	15,357	910	5,955	2,300	4,760	2,600	8,975	913	9,523
	K	.....	.....	22	.....	.....	.....	25	.....	.....	.....

① Data from Pacific Coast Oyster Growers Association.
② U=Unbroken; B=Broken; K=Kumamoto.

TABLE 107
Oregon Dogfish Liver Landings in Pounds by Months
June 1941—December 1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941	.....	.....	.....	.....	.....	6,744	10,491	5,469	19,453	70,092	96,627	8,493
1942	7,657	4,719	2,412	4,635	20,842	16,746	38,878	6,238	7,210	19,019	5,588	23,476
1943	6,929	3,337	4,588	5,893	12,589	9,105	22,889	13,179	22,540	102,316	52,447	28,005
1944	10,238	6,255	9,060	45,334	118,110	98,990	115,941	25,943	13,913	17,385	28,272	35,526
1945	14,431	4,558	20,040	10,153	13,097	34,698	26,266	45,900	13,031	22,592	1,312	60,324
1946	16,992	14,290	9,208	27,907	72,028	18,102	3,436	6,000	45,548	12,427	88,772	58,315
1947	55,336	13,653	37,819	27,900	5,541	8,826	7,885	2,870	19,017	16,504	35,277	108,198
1948	23,121	14,171	35,439	265,874	45,791	9,836	9,083	7,948	14,896	35,472	80,313	16,864
1949	49,261	3,400	52,506	179,603	36,279	1,966	349	1,512	136	2,439	13,680	70,213

TABLE 108

Oregon Soupfin Shark Liver Landings in Pounds by Months
June 1941—December 1949

Year	January	February	March	April	May	June	July	August	September	October	November	December
1941						385	382	901	15,070	30,728	46,872	3,609
1942	2,594	4,058	12,384	1,401	44	167	51	95	260	10,655	27,463	52,259
1943	21,901	50,327	10,370	12	11	560	13,215	37,394	36,363	35,252	60,186	6,989
1944	19,341	3,908	12,149	6	36	1,670	17,293	39,921	59,758	8,203	18,012	9,842
1945	10,054	1,465	2,150	795	28	1,982	8,993	9,312	3,972	8,160	1,314	22,247
1946		2,960	6,538	2,350	70	48,849	2,006	15,914	7,080	6,965	6,502	3,519
1947	10,195	13,943	5,160	270	21	615	3,396	9,097	10,778	7,993	10,840	7,793
1948	1,737	1,085	5,560	1,719	274	2,110	6,228	8,216	12,640	5,123	3,109	1,174
1949	7,764	5,104	1,268	728	4	35	2,656	1,819	1,538	5,016	37,393	1,270

INDEX

Page references to catch tables are italicized.

	Page
Albacore	9, 78, 82
Anchovy	9, 78
Carp	29, 78
Clams	64, 68, 81, 167
Crabs	71, 81, 171
Crawfish	73, 81, 170
Flounder	23, 80, 159
Ghost Shrimp	29
Gray Cod	13, 78
Hake	13, 78
Halibut	13, 78
Herring	29, 78
Lamprey	31, 83
Ling Cod	13, 78, 84
Livers, Dogfish	28, 81, 173
Livers, Soupfin	28, 81, 174
Mackerel, Jack	30, 78
Mackerel, Pacific	30, 78
Octopus	13, 81
Oysters	73, 81, 173
Perch	13, 78
Pilchard	31, 78, 85
Porpoise	79
Rockfish	15, 79, 86
Sablefish	16, 79, 86
Salmon, Coastal	42, 79, 96
Salmon, Columbia River	33, 79, 87, 88
Salmon, Troll	47, 79, 140
Sand Dab	28, 80
Scrap Fish	21, 79
Shad	53, 79, 149
Shark, Dogfish	17, 79
Shark, Soupfin	18, 79
Skate	22, 80

INDEX—Continued

	Page
Smelt, Columbia River	56, 80, 154
Smelt, Surf	59, 80
Sole	22, 80
Sole, Arrowtooth	25, 80, 157
Sole, Dover	26, 80, 157
Sole, English	26, 80, 158
Sole, Petrale	26, 80, 158
Sole, Rex	26, 80
Sole, Rock	28, 80
Sole, Sand	28, 80
Steelhead, Coastal	42, 79, 99
Steelhead, Columbia River	40, 79, 88, 92, 95
Striped Bass	59, 81, 159
Sturgeon	28, 61, 81, 161
Tomcod	28, 81