28th Annual Report of the

PACIFIC MARINE FISHERIES COMMISSION

FOR THE YEAR 1975

TO THE CONGRESS OF THE UNITED STATES AND TO THE GOVERNORS AND LEGISLATURES OF WASHINGTON, OREGON, CALIFORNIA, IDAHO, AND ALASKA

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To the Congress of the United States and the Governors and Legislatures of the Five compacting States, Washington, Oregon, California, Idaho and Alaska, by the Commissioners of the Pacific Marine Fisheries Commission in Compliance with the State Enabling Acts Creating the Commission and Public Laws 232; 776; and 315 of the 80th; 87th; and 91st Congresses of the United States Assenting Thereto.

Respectfully submitted,
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The year 1975 climaxed for the Pacific Marine Fisheries Commission (PMFC) when the Commission held its Annual Meeting on November 1 1 through 1 3 at San Diego, California. Ancillary meetings were held on November 10 and 14. Details of the meetings will be presented in various sections of this report.

The general review of 1 975s fishery activities will be limited to matters of direct concern to PMFC and Pacific Coast fisheries, in contrast to the more cosmopolitan reviews of recent years. However, the review will be arranged according to the usual headings: "International," "National," and "PMFC and Local Events."

International

Law of the Sea discussions, bilateral fishery agreements, and activities of foreign distant-water fishing vessels off the west coast of North America continued to hold the attention of PMFC and its participants in 1 975. On the National Level these resulted 'i efforts by Congress to extend U.S. fishery jurisdiction to 200 miles offshore until such time as a satisfactory Law of the Sea agreement is reached and to establish regional councils for the management of fishery resources within "the«scope of extended U.S. jurisdiction. Needless to say, developments in these matters were followed closely by fishery interested persons at local as well as at national and international levels.

During the First Session of the 94th Congress in 1975, the Senate let the House of Representatives take the lead in drafting legislation to axtend U.S. fishery jurisdiction, because in the 93rd Congress the House failed to act on similar legislation that had been drafted and passed by the Senate. In the First Session over 17 bills to extend U.S."fishery jurisdiction were introduced and nearly one third of the members of Congress were sponsors of one or more of these bills. From these the House selected H.R. 200, The Marine Fisheries Conservation Act of 1975, sponsored by Congressmen Studds, et al., as its vehicle for extending U.S. fishery jurisdiction to 200 miles offshore and for managing the fishery resources within the 200-mile zone.

On October 9, the House passed H.R. 200 by a vote of 208 for and 101 against, with more than 100 members absent or not voting. An effective date of July 1, 1976 was selected in view of the possibility that the third session of United Nations' w of the Sea Conference, scheduled for March 1976 in New fork, might agree on an international solution to fishery jurisdiction which would make unilateral action by the United States unnecessary.

The Senate Committee on Commerce selected S. 961 and retitled it (in recognition of Senator Magnuson's long-standing leadership) the "Magnuson Fisheries Management and Conservation Act," as the Senate's vehicle for bringing order, at least off the United States, to the international anarchy that exists in marine fisheries. On October 7, the Committee reported S. 961 favorably to the Senate which then routed the bill to its Armed Services and Foreign Affairs Committees. Subsequently, the Armed Services Committee reported the bill favorably with an amended effective date of January 1, 1 977, and the Foreign Relations Committee reported the bill adversely. On December 19, the First Session of the 94th Congress adjourned for the Christmas — New Year recess but before adjournment the Senate debated the bill and agreed not to vote on it until after the Second Session convened in 1976.

The Senate on January 28, 1976 amended the effective date of S. 961 to July 1, 1977 and passed it, as amended, by a vote of 77 for and 1 9 against. Subsequently a House-Senate Conference Committee resolved the differences between H.R. 200 and S. 961 and reported out a revised H.R. 200, the "Fishery Conservation and Management Act of 1 976," with an effective date of March 1, 1977. This conference bill passed in the Senate by a voice vote on March 29 and passed in the House on March 30 by a vote of 346 to 52. President Ford on April 13, 1976 signed the bill, making it P.L. 94-265, and thus ending nearly 10 years of effort to extend U.S. fishery jurisdiction beyond the 12-mile limit provided by the 9-mile contiguous fisheries zone established in late 1966 by PL. 89-658. The conference report acknowledged "the extraordinary efforts invested in the development of this legislation" by Senator Warren G. Magnuson and Representative Gerry E. Studds, its original sponsors; and by Senator Ted Stevens, Representatives Leonor K. Sullivan, Robert L. Leggett, and Edwin B. Forsythe, the other cosponsors of the legislation and the members of the committees involved.

The highlights of the "Fishery Conservation and Management Act of 1976" as presented by Representative Leggett are:

"1. The exclusive fisheries zone of the United States would be extended from 12 to 200 miles, effective March 1, 1977.

"2. Foreign fishing for all species of fish within the zone and for anadromous species and Continental Shelf species beyond the zone would be prohibited unless the vessels of such foreign nation have on board a permit issued pursuant to an international fisheries agreement.

"3. Existing fisheries treaties and existing bilateral fisheries agreements would not automatically be voided upon the coming into effect of this legislation; however, the Secretary of State would be directed to initiate negotiations to conform all such fisheries treaties to the policy, purposes and provisions of this Act. The Secretary would also be authorized to renew any bilateral agreements after they expire if they conform with the policy, purposes and provisions of this Act.

"4. Any new bilateral fisheries agreement authorizing foreign vessels to fish for fish over which the U.S. exercises management authority will not come into effect for a period of 60 days after a copy of such agreement is submitted to the Congress by the President for review. Passage of a joint resolution by both houses of Congress would be required to prevent such an agreement from taking effect.

"5. The Secretary of State is charged with the responsibility of conducting negotiations for the purpose of entering into international fishery agreements with other countries in order to allow vessels of the United States equitable access to fish over which such foreign nations assert exclusive management authority.

"6. If the Secretary of State is unable, within a reasonable time, to obtain agreements for American vessels to fish under the management authority of another nation under terms consistent with reasonable management and conservation practices, and makes an official determination to that effect, the Secretary of the Treasury would then be required to prohibit from being imported into the United States fish or fish products of like kind from that country and, if recommended by the Secretary of State, other fish or fish products from that Gauntly as well.

"7. Eight Regional Fisheries Management Councils — four on the Atlantic, one on the Gulf and three on the Pacific coast — would be required to be established within 1 20 days after the date of enactment of this Act and such Councils would be charged with the responsibility of preparing fishery conservation and management plans for each fishery over which the, United States exercises fisheries' management authority.

"8. National standards for fishery conservation and management would be required to be followed in any fishery conservation and management plan prepared either by the Councils or the Secretary (of Commerce) for a particular fishery.

"9. The Councils would be composed of various individuals throughout the country who are knowledgeable or experienced with regard to the management, conservation, recreational or commercial harvest of the fisheries resources of the United States.

"10. The Councils would be charged with determining the optimum yield and the total allowable level of fishing for each fishery. U.S. fishermen would have preferential harvesting rights to such fisheries, and excess stocks of such fish, if any, up to the optimum yield of each fishery, would be shared with foreign fishermen licensed by the Secretary of Commerce to fish for such stocks.

"11. Reasonable permit fees are authorized to be charged to both domestic and foreign fishermen. The level of fees for domestic fishermen could not exceed the administrative cost in issuing such permits; and in determining the level of foreign fees, consideration would be required to be given to the costs of the enforcement of this Act.

"12. Each Council would be required to establish scientific and statistical committees and such other advisory panels as are necessary to assist it in carrying out its functions under this Act.

"13. The Secretary of Commerce is charged with the implementation of all fishery management plans developed under this Act, and he is also charged with the general administration of the Act. The Coast Guard is charged with the enforcement of the Act.

"14. The Secretary of Commerce is required to approve of any fishery management plan prepared by a Council before it can be implemented; and in case a Council fails to act within a reasonable time after requested to do so, the Secretary could develop a plan for a certain fishery on his own initiative.

"15. The jurisdiction of a State over fisheries within its boundaries (3 miles) is neither extended nor diminished under this Act. However, the Secretary of Commerce would assume management responsibility for a fishery within a State's coastal waters — not its internal waters — if the Secretary finds that the State has taken any action or failed to take any action thereby substantially and adversely affecting the carrying out of a fishery^ management plan beyond its waters.

"16. Violators of the Act, of any regulations promulgated thereunder, and of any permits issued pursuant to any fishery management plan would be subject to civil and criminal penalties.

"And finally, appropriate provisions of the Fishermen's Protective Act are amended under this Act to provide for reimbursement to owners of American fishing vessels for any fines, fees and other direct charges paid in order to secure the prompt release of such vessels and their crews whenever such vessels are illegally seized, that is, such vessels are denied equitable access to such foreign nation's fisheries under conditions and restrictions similar to those that would be imposed on foreign vessels fishing or wishing to fish for stocks of fish over which the U.S. exercises exclusive management authority.

The national standards for fishery conservation and management are contained in Title III. Section 301, of the Act, which reads:

"(a) In General — Any fishery management plan prepared, and any regulation promulgated to implement any such plan, pursuant to this title shall be consistent with the following national standards for fishery conservation and management:

"(1) Conservation and management measures shall prevent^BI overfishing while achieving, on a continuing basis, the optimum yield from each fishery.

"(2) Conservation and management measures shall be based upon the best scientific information available.

"(3) To the extent practicable, an individual stock of fish Ishall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

"(4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation, and (C) carried out in such manner that no particular individual, corporation or other entity acquires an excessive share of such privileges.

"(5) Conservation and management measures shall, where practicable, promote efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

"(6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

"(7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

"(b) **Guidelines** — The Secretary shall establish guidelines, based on the national standards, to assist in the development of fishery management plans."

" Section 302 describes the eight Regional Fishery Management Councils. The descriptions of the three Councils in PMFC's area of concern are as follows:

"The Pacific Fishery Management Council shall consist of the States of California, Oregon, Washington and Idaho and shall have authority over the fisheries in the Pacific Ocean seaward of such States. The Pacific Council shall have 1 3 voting members, including 8 appointed by the Secretary" (of Commerce) . . . "(at least owe of whom shall be appointed from each such State)."

"The North Pacifie Fishery Management Council shall consist of the- States of Alaska, Washington, and Oregon and shall have authority over the fisherie&jn the Arctic Ocean, Bering Sea, and Pacific Ocean seaward of Alaska. The North Pacific Council shall have 11 voting members, including 7 appointed by the Secretary" . . ." (5 of whom shall be appointed from the State of Alaska and 2 of whom shall be appointed from the State of Washington)."

"The Western Pacific Fishery Management Council shall consist of the State of Hawaii, American Samoa, and Guam and shall have authority over the fisheries in the Pacific Ocean seaward of such States. The Western Pacific Council shall have 11 voting members, including 7 appointed by the Secretary" . . ." (at least one of whom shall be appointed from each such ^ State)."

This Section also says, "The voting members of each Council shall be:

"(A) The principal State official with marine fishery management responsibility and expertise in each constituent State, . . .

"(B) The regional director of the National Marine Fisheries Service for the geographic area concerned . . .

"(C) The members required to be appointed by the Secretary shall be appointed by the Secretary from a list of qualified individuals submitted by the Governor of each applicable constituent State. With respect to the initial such appointments, such Governors shall submit such lists to the Secretary as soon as practicable, not later than 45 days after the date of the enactment of this Act . . ."

Section 401 of the Act provides for a possible Law of the Sea (LOS) Treaty:

"If the United States ratifies a comprehensive treaty, which includes provisions with respect to fishery conservation and management jurisdiction, resulting from any United Nations Conference on the Law of the Sea, the Secretary" (of Commerce), "after consultation with the Secretary of State, may promulgate any amendment to the regulations promulgated under this Act if such amendment is necessary and appropriate to conform such regulations to the provisions of such treaty, in anticipation of the date when such treaty shall come into force and effect for, or otherwise be applicable to, the United States."

At this time it does not seem likely that a LOS Treaty will be negotiated in 1976. The 8-week session of the LOS Conference in Geneva, Switzerland from mid-March to May 10, 1975 did not fulfill its high expectations; not a single binding decision was reached. However, an "informal single negotiating text", consisting of some 260 articles was developed. This suggests the form of a forthcoming treaty, but the text has not been fully agreed to. The third session, which began on March 15, 1976 in New York, adjourned on May 7 without agreement on key issues; but Western negotiators claimed progress on the central issue of ocean floor mining. A fourth session from August 2 to September 17, 1976 in New York has been agreed to.

For nontechnical discussions of many of the complex problems contributing to the slow progress of the LOS Conference, the reader is referred to three short articles: two by Ronald Schiller, under the title "The Grab for the Oceans" in the November (p. 119-122) and December (p. 105-108) 1975 issues of the *Readers Digest;* and one by Deborah Shapley in *Science* (vol. 188, p. 918).

Parallel with Congress' efforts to pass legislation for the conservation and management of U.S. marine and anadromous fishery resources, and with the LOS Conference's efforts to solve international fishery problems, the U.S. Department of State with the advice of the National Marine Fisheries Service (NMFS) continued to negotiate bilateral fishery agreements with other nations.

In late December 1974 a bilateral agreement for 1975 and 1976 was concluded with Japan. The amounts of pollock, rockfish, other groundfish and king and tanner (snow) crab that

the Japanese were previously allowed to catch off the west coast of the United States were reduced. The reductions for Eastern Bering Sea and Bristol Bay king crab from 700,000 to 300,000 crabs and for tanner crab from 14 million to 1 1 million crabs caused cancellation by the Japanese of king crab fishing in 1975 and a reduction in the number of catcher vessels and workers on factory ships used in the tanner crab fishery. The length of the crab trips was also shortened to about 5 months from the previous 6-7 months.

In July 1 975, after efforts in February had failed, agreement was reached with the USSR which reduced its catch quotas on various fish stocks and also closed waters off Washington, Oregon and northern California between November 1 and April 25. Under terms of a bilateral agreement a Soviet research vessel in January and February, 1 975 operated off the Pacific Northwest. During part of its cruise with a U.S. observer aboard the vessel was allowed to operate to within 4 miles of shore. In the fall the Soviet research vessel *0G0N,* a 210-foot, 684-ton side trawler conducted hydroacoustic surveys to within 3 miles of the coast in cooperation with 4 U.S. vessels doing similar work to determine the size of stocks of hake and other bottom fishes and the possibility of identifying salmon from hake when they were indicated on echo sounding equipment. Larry Tornberg, a University of Washington graduate student, was the observer aboard the 0G0N which has a crew of 30 men and 4 women. It was reported that in 2'/2 months of research the *0G0N* caught only 23 salmon in its trawl. The vessel visited Vancouver, B.C., and Seattle in September and Portland from October 28 through 30. At Portland the vessel took on fuel and supplies and its crew was permitted to go ashore. The *OGON* visited Portland once before during a similar cruise in 1973.

Under date of September 18, 1-975, the National Marine Fisheries Service received advice from the Far Eastern Seas Fisheries Institute (TINRO) of Vladivostok, USSR that its research vessel *POSEIDON* would do research on hake and red dwarf (Pacific ocean perch?) in the California-Washington area from late December 1 975 to early May 1 976. U.S. fishery specialists or scientists were invited to participate from about mid-February on.

NMFS recently received from the Soviet Ministry of Fisheries final 1974 statistics and preliminary 1975 statistics for the catches made by Soviet vessels fishing off the Pacific coasts of Canada and the United States. These data in comparison with those for former years were received in the detailed format stipulated by the US-USSR Agreement on North Pacific Fisheries. The total 1974 catch was 701,383 m.t. and the total 1975 catch was 614,577 m.t.

In 1974 in Bering Sea and the Gulf of Alaska, pollock was the most significant species, amounting to almost 362,000 m.t. or 52% of the total. Off Northern California, Oregon and Washington hake was significant, amounting to 1 59,000 m.t. or 22% of the total Soviet catch off the U.S. Pacific coast. The 1975 preliminary catch statistics show the Soviet catches, in general, remained within the quotas of the US-USSR Agreement for 1 975 and 1 976. Overruns were recorded only for rockfish in the Gulf' of Alaska, and for composite fisheries for other species in the Gulf of Alaska and off the Aleutian Islands.

The *National Fisherman* in September, 1975 (p. 6A) reported that at least one company on the West Coast had contractedS with the Soviet Union to supply its mother ships with domestically caught fish. The fish would be processed by the Soviet ships then offloaded to U.S. transport vessels for landing in Washington and Oregon for marketing in the U.S. and abroad. This and similar suggested arrangements were being prompted by the possible extension of the U.S. fishing zone to 200 miles. These arrangements bring to mind all the problems and controversy surrounding the export of unprocessed timber to foreign countries.

The Soviets are continuing to upgrade their distant-water fishing capabilities. In 1 975 they launched the large combination factory-stern trawler *GORIZONT,* the first of a number of vessels with that class name which are being built serially. The *G0RI*-Z0A/r-class vessels can process 90 metric tons (m.t.) of fish in 24 hours and can store 2,000 m.t. in freezer holds compared to 50 m.t. processing and 1,500 m.t. frozen storage capacity of the preceding *ALTAI-c\ass* vessels. The new vessels are expected to require less shipyard maintenance and can fish two trawls alternately. As the first trawl is being retrieved, the second trawl can be set, thereby eliminating the loss of fishing time between retrieving and resetting a single net. The *Fishery Market News Report* S-153 (NMFS, Seattle, December 29, 1975) also mentioned that serial construction of two other classes of Soviet fishing vessels, *MERIDIAN* and *BARENTSEVO MORE* was in 1975.

The United States and Poland entered into an agreement for the period June 15-December 31, 1975 which will be renegotiable after NMFS has completed an assessment of Pacific hake stocks. The Poles agreed to a quota of 44,000 m.t. of hake, with not more than 1 1 widely dispersed vessels fishing simultaneously and for hake only. The agreement allows U.S. observers aboard the Polish fishing vessels and biologists Gary Hettman of the Oregon Department of Fish and Wildlife and Jim Beam of the Washington Department of Fisheries were the first observers to be welcomed aboard the 280-foot stern trawler *LYRA* for 15 days (July 28 through August 1 1) off Oregon and California. During their observations the biologists made estimates of catch composition on 34 tows which caught over 123 m.t. offish. Over 97% of the catch was Pacific hake, with rockfish being predominant in the incidental catch of other species. Five Chinook salmon, ranging from 8 to 1 2 pounds were observed in the catches. These were returned to the ocean along with most of the other incidentally caught species.

Shortly after these initial observations, a group of Polish scientists who had joined the Polish fleet invited U.S. fishery agencies to send scientists to the *ANDROMEDA* for a 1-day discussion of research projects. Jack G. Robinson, Program Leader for Groundfish and Shrimp Investigations, Oregon Department of Fish and Wildlife, and Alonzo T. Pruter, Tom Dark and H. A. Larkins from NMFS Northwest Fisheries Center spent July 20 aboard *the ANDROMEDA,* anchored off Coos Bay,

in discussion with Polish scientists. The Poles have been invited to visit the Northwest Fisheries Center in Seattle to learn more about current U.S. research. The discussion was cordial with general agreement on plans and methods. The Americans requested more precise records of incidental catches by area in the future. A newspaper item in mid-December indicated that Poland has agreed to refrain from fishing for herring and to reduce the number of its fishing vessels off the Pacific Northwest from 11 to 8.

Canada and the United States agreed on April 24, 1975 to extend for one year their 1 970 Agreement on Reciprocal Fishing Privileges as renegotiated in 1973. The agreement, among other things, provides for the nationals and vessels of each country to conduct commercial fishing for designated species on a reciprocal basis in certain defined areas in waters within each country's fishery jurisdiction. Some modifications may have been desirable at the time, but it was agreed that the existing arrangement should be maintained in view of the Law of the Sea discussions.

In addition to continuing the reciprocal fishing privileges, representatives of Canada and the United States met twice in 1975 to discuss Pacific salmon problems of mutual concern which have been the object of discussions for a number of years. The first 1975 meeting was in Seattle on August 26 and the second was in Vancouver on September 24. Additional meetings were postponed until 1976.

In April, Japan and the Soviet Union* after 44 days of negotiation agreed to the following quotas for Asiatic salmon caught in the Pacific in 1975: 87,000 tons for Japan and 10,000 tons for the Soviet Union. The results of these annual negotiations are important to the United States, for the more the Japanese highseas catch of Asiatic salmon is restricted, the greater is the tendency for the Japanese to increase their fishing efforts to the eastward in areas of the Pacific Ocean and its Bering Sea where Asiatic and North American salmon intermingle and only the Abstention Line of the International North Pacific Fisheries Convention prevents the Japanese from exploiting North American stocks east of 175° West Longitude.

While Congress, the*State Department and the LOS Conference sought solutions to fishery problems, the U.S. Coast Guard and NMFS continued and increased their joint surveillance of foreign fishing vessels off the Pacific Coast of the United States. Monthly surveillance reports indicate that 1 36 foreign fishing and support vessels operated off Alaska in January. By June the number had increased to the year's maximum of 631 when 10 high seas Japanese salmon fleets, including 332 salmon gillnet vessels were operating in the North Pacific and its Bering Sea. Subsequently, the number of foreign fishery vessels off Alaska decreased to 144 in December. In general, except for June and September, fewer foreign vessels were observed each month off Alaska in 1975 than in 1974. Countries represented by those vessels in 1975 in order of decreasing numbers of vessels and the months when each country's representation was greatest and least, were: Japan, June — 559, January — 60; USSR, February — 77, July - 42; South Korea, July - 12, November and December — each 1; Poland, January and February — 2 each, April through December — 0; Taiwan, its first vessel appeared off Alaska in January; during the remainder of 1 975, one Taiwanese vessel was present each month except there was none in March and August.

Monthly surveillance reports for the Pacific Northwest area listed the presence of 7 foreign fishing vessels off Washington, Oregon and California in January 1975. The numbers present increased to 1 14 by July, and then gradually decreased to 12 in November and 13 in December. Overall the numbers of foreign fishing vessels off Washington, Oregon and California in 1975 were greater than in 1974; only for the months of September, November and December were the numbers of vessels observed smaller than during the same months in 1 974. Foreign countries represented by vessels off these three States in 1975 in order of decreasing numbers of vessels and the months when each country's representation was greatest and was least were: USSR, May and June — each 88, December — 0; Poland, May and June — each 16, January, February and December — each 0; South Korea, July — 9, April — 0; Japan, July, September and December — each 4, March through May — each 0; East Germany, September and October — each 3, January through June — each 0; West Germany, February and April — each 2, January and June through December — each 0; Taiwan, December — 2, all other months — 0.

Included among the foreign vessels were trawl, longline, pot, crab, whale, Danish type seine, salmon gillnet, research, factory, support, and patrol vessels. Their principal targets off Alaska were Atka mackerel *(Hexagrammous stelleri,* a greenling), sole and flounder, herring. Pacific cod, Pacific ocean perch, Alaska pollock, sablefish, salmon and tanner (snow) crab. The principal target species off Washington, Oregon and California were hake, rockfish, sablefish, herring and whale. Frequent boardings of foreign fishing vessels by U.S. Coast Guard and NMFS surveillance personnel off Washington, Oregon and California were made during the year. These included both courtesy and. enforcement boardings. Due to intense foreign fishing and U.S. surveillance efforts a number of violations of U.S. fishing laws were detected and several vessels and their captains were arrested and fined.

The 292-foot Polish stern trawler *KALMAR* on May 1 7 was arrested for fishing 1.2 miles (some observers say more than 2 miles) inside the U.S. Contiguous Fisheries Zone off Ano Nuevo Island south of San Francisco. The vessel had aboard 462 tons of hake fillets, 1 87 tons of dressed hake, 1 39 tons of fish meal, and 132 pounds of Pacific ocean perch, but no salmon. An out-of-court settlement of $350,000 was paid for the release of vessel and crew.

The 1 80-foot Japanese stern trawler, *JIKYU MARU No. 1 7* was seized by the Coast Guard cutter /W/DGE7T after an all-night chase on June 5, for fishing within 3 miles of the island of Segula off Alaska. The Seto Gyogyo Company paid $400,000 for the release of the vessel, $40,000 for release of its catch, and $ 10,000 for release of its captain. This settlement exceeded by $100,000 the largest settlement for violation of U.S. fishery or territorial waters by a foreign fishing vessel.

The South Korean stern trawler *KUM KANG SAN* was detected fishing 7.9 miles offshore near Sanak Island in the western Gulf of Alaska by an aerial patrol on August 7. Aircraft in rotation maintained contact with the trawler until a Coast Guard cutter, also on fishery patrol, was able to seize the trawler the following day for violation of the U.S. Contiguous Fisheries Zone. On August 1 3, in Anchorage the master of the *KUM KANG SAN* was arraigned in U.S. District Court where he pleaded "not guilty". On September 24, a settlement of $407,000 was reached in lieu of a civil suit against the vessel, and its master was fined $8,000. This was the second violation by a South Korean vessel since South Koreans began fishing off Alaska in 1 967. Fines and penalties for the two violations total $ 505,000.

The Taiwanese longline vessel *TONG HONG No. 3* was detected on September 9 fishing 8.6 miles off Cape Edgecumbe, which marks the entrance to Baranof Islands Sitka Sound. A Coast Guard cutter was dispatched from Sitka to seize and escort the vessel to that port. The master of the *TONG HONG No. 3* was arraigned in U.S. District Court in Anchorage on September 15; he pleaded "not guilty". On October 20, the case was completed. The master was fined $5,000 and a $220,000 settlement of the civil suit against the vessel was reached.

The Japanese stern trawler *EIKYU MARU No. 35* was observed fishing within the U.S. Contiguous Fishing Zone near Amlia Island on November 3, but evaded apprehension for 17 hours. The vessel was held at Kodiak while District Court proceedings were completed in Anchorage. On November 1 1, the master pleaded guilty and was fined $25,000, and a settlement of $575,000 was reached in the civil suit against the vessel. To date, five violations of U.S. fishery jurisdiction off Alaska had resulted in fines and settlements totalling $1,710,000 plus forfeiture of one Japanese longline vessel whose sale was still pending.

National

The Council of State Governments in July 1974 with financial assistance from NMFS established a National Task Force on Effective State Marine Fisheries Management Prograrrjs for the purpose of developing rnodel legislation that could be used by individual States. A suggested model entitled "Marine Fisheries Management Act" was presented at a National Conference on Effective Management of Marine Fisheries in June 1 975 at Hyannis, Massachusetts. This was followed in September by publication by the Council of State Governments of an 88-page book, *"To Stem the Tide,* "edited by Ralph J. Marcelli and Robert D. Matthews for the Task Force.

The book contains, in addition to the model act, a detailed analysis of specific sections of the act together with discussion of various problems and recommendations. For example the Task Force found: "A few state fisheries agencies have appropriate authority to regulate fisheries, but in most States the fisheries agency's authority to regulate ranges from none to limited authority in a few defined situations." "Extended jurisdiction will thus make it even more essential that state fisheries agencies have adequate authority to regulate fisheries," (Enactment on April 13, 1976 of the "Fishery Conservation and Management Act of 1976" with its extension of U.S. fishery jurisdiction to 200 miles as of March 1, 1977 and its establishment of Regional Fisheries Management Councils may have made the model and some of the Task Force's recommendations irrelevant now. Nevertheless, the Task Forces discussion and recommendations are valuable background for comprehending the complexities of fishery management. —Editor)

The NMFS in October prepared a "final draft" of an 81-page *NATIONAL PLAN FOR MARINE FISHERIES* and forwarded it via the National Oceanic and Atmospheric Administration (NOAA) to the Department of Commerce for approval. Active development of the Plan was begun in October 1973 in response to a recommendation by the National Advisory Committee on Oceans and Atmosphere that a Plan be developed. The "final draft" culminated a series of extensive reviews involving efforts by persons representing virtually every aspect of this Nation's fishery interests. It contains a set of five major recommendations on fishery conservation, preservation of fish habitat, marine recreational fishing, strengthening the fishing industry, and insuring a supply of fishery products for the U.S. consumer. The Executive Directors of the Atlantic, Gulf and Pacific states marine fisheries commissions were active in coordinating the review efforts (see *27th Annual Report of PMFC for 1974,* p. 6-7). Approval of the Plan by the Department of Commerce is pending resolution of policy matters and the implementation of extended fisheries jurisdiction legislation, but NOAA has released it as an interim document for use in the Eastland Fisheries Surveys.

The Eastland Fisheries Surveys are an outgrowth of Senate Concurrent Resolution 1 1, which was introduced by Senator James 0. Eastland in February and unanimously passed by Congress in December 1973. The Resolution proclaimed, "it is the policy of the Congress that our fishing industry be afforded all support necessary to have it strengthened, and all steps be taken to provide adequate protection for our coastal fisheries against excessive foreign fishing," . . . "The Congress also recognizes, encourages, and intends to support the key responsibilities of the several States for conservation and scientific management of fisheries resources within United States territorial waters; and in this context Congress particularly commends Federal programs designed to improve coordinated protection, enhancement, and scientific management of all United States fisheries, including coastal, anadromous and highly migratory species," . . .

Congress designated the Pacific, Atlantic and Gulf states marine fisheries commissions as its agents to reach the millions of Americans with interests in marine fisheries so they will have an opportunity to participate in formulation of a National Fisheries Policy. A special appropriation of $500,000 was passed in 1 975 to finance the Surveys which were begun in July and will extend for 18 months. Dr. W. Mason Lawrence, Consultant, Natural Resources Management, and past Chairman of the Council of State Governments is coordinating the Surveys in the Great Lakes area.

The National Plan for Marine Fisheries and the National Fisheries Policy have similar thrusts and are complimentary:

protection of U.S. marine fisheries and their environment, and promotion of U.S. commercial and recreational fisheries. However, the Plan was developed primarily as a guide for administrative action by NMFS and NOAA, and as such must be brought into conformity with established policies of the Department of Commerce and the Executive Branch of the Federal Government. The Eastland Fisheries Surveys will be more comprehensive in scope than were the field reviews for the Plan, and will have a broader coverage including the Great Lakes and outer island territories of the United States. Moreover, results of these Surveys will be transmitted directly to Congress which has the power to define and proclaim a National Fisheries Policy and to enact legislation to implement the Policy.

The World Mariculture Society held its sixth annual meeting in Seattle on January 27-31, 1975. The meeting was attended by about 400 persons representing 1 6 nations. Some of the world's biggest fish farmers were absent: China, No. 1; India, No. 2; and Russia, No. 3. Japan, a leader in fish culture had only one representative. The meeting included scientific papers and field trips to the NMFS' pilot salmon raising projects at Manchester and the handful of commercial mariculture ventures in the area. None of the latter has publicly announced it had made a profit selling pan-size salmon. Much interest was shown in the multi-species operation of the Lummi Indians near Bellingham, for which millions of dollars of federal money has been spent. According to the April issue of *National Fisherman* (p. 14A), during the discussion of federal matters much interest was shown in House of Representatives Bill H.R. 370, which would establish the "National Aquaculture Act of 1975 " under the administration of the Secretary of Commerce. Legislation is still before the House. On December 8, 1975, Congressman AuCoin introduced H.R. 11028 also-orj aquaculture. It was referred to the House Committee on Merchant Marine and Fisheries. Harold Webber of Groton, Massachusetts, is president-elect and one of the 1 8 founders of the Mariculture Society. He will succeed James A. Avault, Jr., of Louisiana State University who succeeded Wallace Klussman of Texas A & M in 1 975. The-same issue of *National Fisherman* carried an article, "Experts Differ on Ability of Fish Farming to Feed the World, " (p.1 5-1 6A).

Fish Expo '75 was held at Seattle's Coliseum and Center during October 9-12 for the third time in the 9-year history of National Fisherman Expositions, Inc. The other Expos in Seattle were in 1969 and 1972. The 1975 Expo broke all records for attendance, number of exhibitors and space used, and total sales. Attendance during the 4 days was 5,668 from 40 states, the District of Columbia, and 23 foreign countries. There were 188 exhibitors. At a breakfast meeting a large majority of the exhibitor delegates voted to limit future Fish Expos to Boston and Seattle where they have been most successful. Fish Expo '76 will be in Boston and Fish Expo '77 will be in Seattle.

Each morning of Fish Expo '75 was devoted to well attended seminars on the following subjects: Aquaculture and Fish Farming; Fishing Vessel Engineering; European Harvesting Technology; European Processing Technology; Gear and Methods; and Adjusting to a 200-Mile Limit. The newly established Highliner Awards for Master Fishermen were presented by David P. Jackson, publisher of *National Fisherman,* and president of National Fisherman Expositions, Inc., at the annual banquet on October 11 to Joe Easley (a trawler from Coos Bay, Oregon), S. A. (Spuds) Johnson (a purse seiner from Edmonds, Washington), and Nels Otness (a longliner from Petersburg, Alaska) in recognition of their fishing skills and contributions to fisheries.

The following were some of the federal personnel changes in 1975 that were of interest to West Coast fishery personnel. Rogers C. B. Morton was sworn in as Secretary of Commerce on May 1, 1975, replacing Frederick B. Dent. Mr. Morton had been Secretary of the Interior. Prior to the year's end Mr. Morton relinquished the Secretary of Commerce post to Elliot L. Richardson, U.S. Ambassador to Britain. Mr. Morton will be a political advisor to President Ford in his bid for election in 1976.

Stanley L. Hathaway was confirmed on June 11,1 975 as Mr. Morton's successor as Secretary of the Interior, but on July 25 Mr. Hathaway resigned "for reasons of personal health." Thomas S. Kleppe was confirmed as Secretary of the Interior on October 9.

Dr. Dixy Lee Ray in June announced her resignation as Assistant Secretary of State for International Environmental and Scientific Affairs. Dr. Ray is now a contender for the Democratic nomination for Governor of the State of Washington.

Rozanne L. Ridway effective September 23, 1975 became Deputy Assistant Secretary of State for Oceans and Fisheries Affairs in the Department of State, succeeding Dr. Thomas A. Clingan who had served in that capacity since October 1 4, 1 974. On January 20, 1976 the Senate received the nomination of Ms. Ridway to the rank of ambassador when negotiating fishery agreements. Another change, earlier in 1 975, was Ambassador Jack Stevenson's announcement that he would no longer lead the U.S. Delegation at the Law of the Sea Conference.

PMFC and Local Events

* PMFC's member agencies experienced a number of changes in leadership and organization during 1 975. On March 1, Donald W. Moos became Director of the Washington Department of Fisheries, succeeding Thor C. Tollefson who retired after holding that post for a record 10-year period. Mr. Moos appointed Frank Haw as his Deputy Director and the Department was substantially reorganized during the year.

In late March, E. Charles Fullerton formally became Director of the California Department of Fish and Game, succeeding G. Ray Arnett, who had resigned in late 1974 or early 1975. The Department's Research Branch was decentralized.

On July 1, 1975 the Fish Commission of Oregon and the Oregon Wildlife Commission were merged into the Oregon Fish and Wildlife Commission. The staffs of the two former commissions were merged into the Oregon Department of Fish and Wildlife to carry out the new Commission's policies and instructions. On August 15, John W. McKean, former Director of the Wildlife Commission, was named Director of the new Fish and Wildlife Department. He appointed Dr. Thomas E. Kruse, former Director of the Fish Commission, as his Deputy Director.

Castle & Cook, Inc., announced in June its acquisition of Pan-Alaska Fisheries, Inc., a major seafood processor in the States of Alaska and Washington. Pan-Alaska became part of Castle & Cooks Bumble Bee Seafoods.

The Bristol Bay Native Corporation announced on December 12, 1975 its purchase of Peter Pan Seafoods, Inc., a major processor in Alaska with operations or properties also in Washington and Oregon. Bristol Bay Native Corporation is one of 1 2 regional Alaska native corporations which are receiving in conjunction with village corporations and individual natives $962.5 million, plus more than 40 million acres of land from the Federal Government under terms of the Alaska Native Claims Settlement Act of 1971. Peter Pan is one of the few major processors in Alaska in which Japanese investors do not have a financial interest. Robert C. Bacon, General Manager of the Bristol Bay Native Corporation stated the Corporation intends to invest in nonfishery as well as other fishery enterprises. The Corporation appointed Jay S. Gage, President of Peter Pan. He was Executive Vice President and a Director of New England Fish Company. William G. Saletic in early 1976 was appointed area manager for Peter Pan in Southeast Alaska and Puget Sound. He was Executive Manager of the Seiners Association, based in Seattle, and is a member of the International Pacific Salmon Fisheries Commission and of PMFC's Advisory Committee.

Albacore and other tuna: The report, "Status of the 1 975 Pacific Coast Albacore Fishery," which was distributed and summarized verbally at PMFC's annual meeting has been updated and included in Appendix 2 of this report.

The Inter-American Tropical Tuna Commission on March 5 announced that unrestricted fishing for yellowfin would cease in its regulatory area (CYRA) in the eastern Pacific on March 13 as its quota of 195,000 metric tons of yellowfin would be reached during 1 975. In September, U.S. tuna crews and seiners remained in port for almost 3 weeks as a protest to foreign fishing for yellowfin in the CYRA while they were prohibited from catching yellowfin in that area. Nevertheless, the yellowfin catch reached 227,400 short tons but was below the 231,700 short tons caught in 1 974. ■ •

The total catch of all tunas by the eastern Pacific fleet in 1975 was the highest on record for the second consecutive year. The skipjack catch was 1 21,800 tons compared to 86,500 tons in 1 974, the bluefin catch was 1 0,000 tons compared to 6,000 tons in 1974, and the bonito catch was 19,200 tons compared to 8,800 tons in 1974.

Rapid expansion of the fleet continued in 1 975; the fleet's capacity increased to 168,370 tons in 1975 compared to 1 58,1 68 in 1 974. Soon the capacity will exceed the 1 50,000 to 200,000-ton maximum sustained yield of yellowfin. Panama added three large seiners to its fleet, Senegal entered the eastern Pacific fishery with two new U.S. built seiners of about 650-ton capacity each, and Venezuela acquired a new US built seiner of over 1,000-ton capacity. Venezuela had not participated in the fishery since 1973. Vessel construction in U.S. shipyards slowed considerably, but many vessels continued to be built in foreign shipyards in 1975.

The fact that the supply of yellowfin in the eastern Pacific is insufficient for the number of vessels fishing in the area is causing controversy regarding allocation of catch among participating countries. Rising prices for fuel, food, fishing licenses, etc., and decreasing prices received for tuna and decreasing catch of tuna per ton of vessel capacity have put many vessel owners in financial straits.

Anchovy: Landings of anchovies in California for reduction purposes during the 1975-76 season through January 1976 totalled 109,844 tons. Landings from the northern permit area were 4,91 7 tons compared to 5,839 tons for the corresponding portion of the previous season. Landings from the southern permit area were 104,927 tons compared to 39,331 tons for the corresponding portion of the previous season. The Peruvian anchovy catch in 1975 was 3.1 million metric tons. Meal production was 685,000 m.t. and exports of meal were 748,000 m.t. in 1 975.

Groundfish excluding halibut: A 72-page processed report dated November 1974 and entitled "Preliminary Results of an Industry-Government Venture on Alaska Groundfish" was released by the Northwest Fisheries Center of NMFS early in 1975. The venture included exploratory fishing by the 86-foot trawler *ANNA MARIE* from May to August 1974 on various grounds in the North Pacific and its Bering Sea. The 295-foot factory stern trawler *ROYAL SEA* processed part of the *ANNA MARIE s* catches and also fished on some of the same grounds explored by the latter vessel. Other parts of the *ANNA MARIE's* catches were processed ashore in Seward or were used for biological and additional technological studies. The results of the fishing and processing are discussed along with such other economic and biological considerations as operating costs, harvesting and marketing potentials, incidental catching of halibut and crabs, and maintaining fishery stocks and fishing intensity at optimum levels.

In March 1 975 the Northwest Fisheries Center announced that it had received the return of 1 0 tags from sablefish (blackcod) caught by Japanese fishermen just southwest of Sitka, Alaska: 8 were from fish tagged off Southeastern Alaska and 1 each was from fish tagged off Oregon and California. These returns were the first from the intensive Japanese fishery from about 30,000 sablefish tagged and released in the northeast Pacific Ocean in a cooperative program involving the Center, state fishery agencies and the USSR. Tag returns contribute to knowledge on sablefish migrations which will be presented in a joint Japan-U.S. report.

Although American fishermen have harvested very few Pacific hake this large resource, based on observations of Soviet and Polish fishing, may be showing signs of depletion. The estimated total annual catches have varied from about 1 55,000 m.t. in 1 973 to about 204,000 m.t. in 1 975. Meanwhile, during the 3-year period the fishing intensity has increased and the apparent catch per unit of effort has decreased; and fishing effort has been shifting to off California, where juvenile hake are vulnerable to the fishery, even though the larger adult northern hake are more desirable. See Appendix 2 of this report for "Status

of the 1975 Pacific Coast Groundfish Fishery" and "Status of the Pacific Halibut Fishery."

J\ Halibut:** 1975 may have been the year of turn around in the decreasing abundance of Pacific halibut. The 25 million-pound quota for areas 2 (south of Cape Spencer, Alaska) and 3 (the Gulf of Alaska north and west of Cape Spencer) was reached and the total catch from all areas was 26.7 million pounds. This was a 5.4 million-pound improvement over 1 974. The catch per unit of effort increased slightly for the first time since 1968. More precise information is contained in "Status of the Pacific Halibut fishery" in Appendix 2 of this report.

Japanese prohibition of trawling in a critical nursery area in Bering Sea in 1974 resulted in reducing the incidental trawl catch by nearly 2 million halibut. In 1975 Japan agreed to expand the closures. The abundance of juvenile halibut has improved in Bering Sea but has not yet improved in the Gulf of Alaska. The USSR in 1975 agreed for the first time to limit trawling during certain months in the Gulf of Alaska. Cooperative studies are underway to evaluate the relationship between trawling and halibut abundance.

Biologist William H. Hardman and Captain Arthur L. Hansen of the International Pacific Halibut Commission (IPHC) spent June and July aboard the Soviet research vessel *RAKITNIY* to tag halibut off the Soviet east coast and to obtain information on the extent of intermingling by halibut of the eastern and western Bering Sea. The project was the outgrowth of a proposal made by Soviet scientists during the 1974 Soviet-Canadians' American discussions on means of reducing the incidental catch of halibut by Soviet vessels. IPHC represented Canada and the United States in this joint project. The Soviets provided the vessel, crew, and trawl gear, and IPf-TO provided the tags and setline gear. Captain Hansen was responsible for the setline fishing and biologist Hardman supervised the tagging and data collecting. During the next 2 years, the Soviets will continue to tag halibut in the western Bering Sea and IPHC will tag in the eastern Bering Sea. The cruise covered 5,600 miles; halibut were'caught by trawl and setline, chiefly between Cape Olyutorski and Cape Navarin northeast of Kamchatka. Over 500 halibut were caught, of which 323 were tagged and released. As expected, the average size of trawtcaught halibut was smaller than those caught by setline, 79 cm compared to 102 cm (about 31 inches compared to 40 inches).

Japan under the auspicious of the International North Pacific Fisheries Commission has agreed to a research program to evaluate the effectiveness of "off-" and "on-bottom" trawls for catching pollock and reducing the incidental catching of halibut in Bering Sea. Canadian, Japanese and American observers will be aboard the vessels involved in the program. Knowledge gained could be applicable also to management of Canadian and American domestic trawl fisheries.

IPHC met in Seattle during January 20-22, 1976 and ^ recommended regulations for the 1976 Pacific halibut fisheries which were subsequently approved by the governments of Canada and the United States. The following are paraphrased versions of some of the regulations.

Comercial fishery:

1. Halibut may be taken only by hook and line, except that any halibut bearing an IPHC tag may be retained provided the fish with the tag still attached is made available for examination as soon as the fisherman lands his catch.
2. Possession of halibut less than 32 inches long is illegal.
3. Area 2 opens on May 8 and closes on September 8, or earlier if the quote of 1 3 million pounds is attained.
4. Area 3 opens on May 8 and closes on September 8, or earlier if the quota of 12 million pounds is attained.
5. Area 4 east of 1 75° W. longitude has two seasons — April 1 to 1 9 and September 1 5 to 30 except that subarea 4E (Bristol Bay and its approaches) is closed. Area 4 west of 175° W. longitude opens on April 1 and closes on November 1 5.

Sport fishery:

1. Halibut of any size may be taken by a hook attached to a handline or rod, or by spear.
2. The season opens March 1 and closes October 31.
3. The daily catch limit is 2 halibut per person.

IPHC will hold its next annual meeting at Vancouver, B.C., in January 1 977.

Herring: The total harvest of herring in the State of Washington in 1975 exceeded 8 million pounds. In the spring, over 7.4 million pounds were taken in the roe fishery, mostiy near Bellingham. Landing for bait herring totalled 33,000 pounds, for reduction to meal and oil totalled 390,000 pounds, and for animal food totalled 20,000 pounds.

The Canadian harvest of herring off British Columbia exceeded 11 7 million pounds in 1 975. The large harvests in recent years have been accompanied by lost lives and vessels and many persons connected with the roe fishery are searching for ways to dissuade fishermen from taking unnecessary chances during stormy weather on exposed waters.

Statistics are unavailable for Alaska's substantial herring fishery which totals about 40 million pounds annually. Foreign nations harvest additional amounts of herring off Alaska, especially in Bering Sea.

Salmon: The preliminary total commercial catch of salmon in Alaska during 1975 was 25.7 million fish and included 7.7 million from the Western region (includes Bristol Bay), 12.7 million from the Central region (includes Kodiak, Chignik and Prince William Sound, etc.), and 5.3 million from the Southeastern region. The canned pack in terms of 48 one-pound cans per case was 1,182,769 cases. This was a near record low for the period 1961-75; the pack in 1973 was slightly lower. Sockeye or red salmon contributed 505,254 cases and pink salmon contributed 543,596 cases to the 1975 pack. The Western and Central regions respectively contributed 282,841 and 211,652 cases of sockeye. The Central and Southeastern regions respectively contributed 366,138 and 177,458 cases of pink salmon.

The preliminary estimate for the total run of sockeye to Bristol Bay in 1975 was 23 million fish. This was better than the predicted run. The Japanese high seas fishery caught an estimated 900,000 sockeye and the U.S. inshore fishery caught an estimated 2 million, with the remainder escaping to the spawning streams.

The pink salmon runs to Prince William Sound (included in Central Alaska area) were better than expected; the estimated harvest was 4.5 million pinks. The chum run was poorer than expected; only about 101,000 chums were caught in the Sound. Other Prince William Sound salmon news included plans for at least two private hatcheries or aquaculture operations. The *Nerka* Corporation (formed by Anchorage residents, M.B. "Chick" Comstock and Reid Pfanmiller) is planning to establish on Perry Island (near Whittier) Alaska's first private salmon hatchery. Subsequently, Cordova fishermen and others formed "The Prince William Sound Aquaculture Corporation" and appointed Wallace H. Noerenberg, well known fishery biologist and former Commissioner of the Alaska Department of Fish and Game, as its Executive Director. PWSAC's first hatchery site for pink and chum salmon is tentatively the abandoned San Juan cannery. For further details see *The Fishermen's News,* July 1975 — Second Issue.

The pink and chum salmon runs to the Southeastern Alaska region, including the Yakutat area, were extremely poor in 1975. The estimated harvests were 3.8 million pinks and 628,000 chums. The canned pack of 1 77,458 cases of pink salmon was the lowest since 164,962 cases were packed in 1967; and the canned pack of 8,765 cases of chum salmon was the lowest in the past 24 years, only the 1969 pack of 32,887 cases was anywhere near that low.

Early in 1 975, the Canadian Minister of State for Fisheries, Romeo LeBlanc announced a $250 million to $300 million enhancement program for West Coast salmon. The objective is to double the stocks of Pacific salmon for the benefit of commercial, recreational and the Indian food fisheries by 1 990. A 2-year planning £tudy to develop a detailed construction and development program was to begin immediately, and implementation of the program would begin fn 1 977 upon the Canadian Cabinet's approval of the detailed program. The federal government is financing the study but the program will be cost-reimbursable. The details of reimbursement will be discussed with all concerned. An agreement between the federal and provincial governments, which will spell out commitments and responsibilities, is expected.

The canned pack for British Columbia was only 508,766 cases. During the past 14 years only the 624,1 53 cases in 1 969 approached this low. However, the low pack in 1 975 may have been partly the result of a strike by salmon net fishermen during the period July 24 to August 22.

The fortunes of salmon fisheries of southern British Columbia and the Puget Sound area of Washington are closely entwined. The International Pacific Salmon Fisheries Commission (IPSFC), which is charged by Canada and the United States with management of the sockeye runs to the Fraser River and the pink salmon runs to the Fraser and nearby streams in British Columbia and Washington, met 35 times during 1975, 31 of the times were during the period when the IPSFC was regulating the fisheries, and 1 of the 4 remaining times was IPSFC's annual meeting *Jm* on December 1 2 in Vancouver, B.C. At the latter meeting the status of the 1975 sockeye and pink salmon runs within the Convention (treaty) area, the factors that complicated management of those runs, and the predictions for 1 976 and proposed regulations were presented.

U.S. Federal Judge George Boldt on July 10, 1975, in contravention of the International Pacific Salmon Fisheries Convention between Canada and the United States, ordered that certain treaty Indians be allowed to carry on "mixed gear" fishing in northern waters of the State of Washington. This latest action added to the confusion and controversy caused by his order in 1974 that 21 tribes or groups of Indians in the State were entitled to harvest 50% of the allowable catch. The IPSFC by terms of the Convention is required to divide the harvest equally between American and Canadian fishermen, but feels it does not have authority to allocate the catch in either country on an ethnic basis.

In U.S. Convention Waters quite a number of actions by State of Washington and Federal authorities with respect to the Boldt decision caused IPSFC much concern. Part way through the fishing season, the United States Government in an unprecedented action withdrew its approval of those parts of IPSFC's regulations prescribing fishing time for various gears in U.S. Convention Waters. This resulted in conflict between a Federal £ District Court and a State Superior Court regarding regulations JR issued by the State Director of Fisheries with approval of the Federal Court. The State Court restrained the State Fisheries Director from implementing the new regulations. This resulted in transfer of enforcement of the regulations from the State to the National Marine Fisheries Service and there followed some unregulated fishing and much confusion.

Indian fisheries on the Fraser River also added to salmon management problems. From July 18 through August 9, the Fisheries Service of Canada withdrew its patrol officers from night duty in the lower canyon area of the Fraser River for safety reasons. This resulted in an estimated illegal catch of 100,000 sockeye in addition to the normal Indian food fishery. The catch by the food fishery was 253,000 sockeye, the largest catch on record and an increase of about 119,000 fish over that in 1971, the previous cycle year.

The total run of sockeye to the Fraser was 3.7 million salmon, the lowest total run on any of the quadrennial-cycle years since 1955. The catch was 2.2 million sockeye. The Canadian share of the catch was only about 644,500 fish because by the end of the Canadian strike on August 22 most of the sockeye had escaped up the Fraser River beyond the commercial fishery and equal division of the catch between American and Canadian fishermen was impossible. The escapement of slightly more than one million sockeye to the spawning areas was good. AH)

The pink salmon runs to the Fraser River and nearby streams in British Columbia and Washington totalled about 5 million fish.

Canadian fishermen caught about 1,255,900 pinks from the run and American fishermen caught about 1,246,700. The escapements were about 1,367,000 pinks to the Fraser River, 170,000 to nearby streams in British Columbia and 295,000 to nearby streams in Washington. Larger escapements were desired.

Other information presented at IPSFC's annual meeting included:

1. Failure to implement IPSFC's 1971 enhancement pro gram for sockeye and pink salmon has deprived resource users of estimated benefits exceeding $24 million annually at 1974 prices.

2. Existing artificial spawning channels for sockeye are producing at a rate 6 to 1 0 times better than are adjacent natural spawning areas.

3. The 2 channels for pink salmon at Seton Creek are producing at a rate about 4.3 times better than all the natural pink salmon grounds.

4. The returns from investments in spawning channels are good.

5. The status of pollution studies, dredging problems, gravel cleaning methods, attempts to introduce even-year pink salmon, attempts to reestablish sockeye in the lower Horsefly and upper Adams rivers, and acoustical surveys of juvenile sockeye in Shuswap Lake were discussed.

The 1 975 canned pack of salmon in the State of Washington, excluding the Columbia River area, was only 1 56,858 cases and was the smallest pack since 130,329 cases were canned in 1 964. Sockeye and pink salmon are the principal species canned. Sockeye contributed 72,552 cases in 1975, which was the smallest contribution among the last*4 cycle years (1963, 1967, 1971 and 1975) for sockeye. Pink salmon contributed 74,870 cases in 1975 which was a slight improvement from the 64,786 cases packed in 1973, but was much below the better years of 1971 (146,930 cases) and 1967 (263,546 cases). Severe flooding in late 1 973 while the pink salmon spawn was in the gravel is blamed for the poor runs in 1975. It is feared that severe flooding in December 1975 will again result in poor runs in 1 977.

In June 1 975 the Ninth U.S. cfrcuit Court of Appeals upheld Judge Boldt's decision that Washington Indians are entitled to catch 50% of the migratory fish harvest, with one exception. Indians may not get extra compensatory fish for salmon headed for Washington waters but caught by non-Washington citizens, such as Canadians. Both non-Indian commercial and recreational fishermen declared their intentions of appealing the Ninth Circuit Court's ruling to the U.S. Supreme Court. Two articles, "Northwest Problems Worsen; Violence Beginning to Show ' and "Wash. Salmon Season Ends With Bitterness On All Sides," in the December 1 975 and January 1 976 issues of the *National Fisherman,* respectively, describe the confusion, bitterness and tension that the Indian fishing problem engendered in 1975. The latter article also makes mention of Washington's implementation of its "limited entry" program.

The Washington Department of Game in an effort to facilitate management of the Indian and sport fisheries for steelhead trout, changed its steelhead fishing permit (a punch card for anglers to record their catches on) from a calendar-year to a May 1 through April 30 basis, effective in 1976. The purpose of the change is to provide timely steelhead angling statistics on a run or season rather than a calendar-year basis.

Washington and Oregon gillnet fishermen participate in a very limited commercial fishery for chinook and coho salmon in the Columbia River between its mouth and Bonneville Dam. Indian fisheries exist above the Dam. The 1975 total canned* pack of 7,031 cases (6,344 chinook, 587 coho, and 100 cases of pink and chum salmon) was the smallest pack during the years 1961 through 1974. All the salmon canned were not necessarily caught in the Columbia River, as some troll caught salmon and salmon transported from other areas are sometimes canned. Furthermore, the annual'canned pack has become an increasingly inaccurate index of the abundance of Columbia River salmon, as increasing proportions of the catches in the River have been going to the fresh and frozen fish markets.

U.S. District Court Judge Robert C. Belloni on August 29, 1975 took a cue from the 1974 Boldt decision and enjoined the fishery agencies of the States of Oregon and Washington to assure upriver Indian fisheries in the Columbia River 50% of the harvestable salmon. The state fishery agencies in response closed the Columbia River commercial fishery downstream from Bonneville Dam on August 22, the earliest fall closure on record. The Indian commercial fishery above the Dam remained open until October 10, except for weekend closures that varied from 72 hours to 48 hours. Judge Belloni issued an injunction requiring the state agencies to develop a formula which would guarantee the Warm Springs, Yakima, Umatilla and Nez Perce tribes an opportunity to catch a maximum of 50% of the chinook and coho harvest, including those landed in Oregon and Washington from ocean fisheries.

Idaho's interest in Columbia River salmon and steelhead fisheries stems from the runs of chinook salmon and steelhead produced in the Snake River and its tributaries in Idaho, and from the sport fishery in Idaho for those species. Escapements of chinook and steelhead to Idaho streams in recent years have been declining at an alarming rate, especially since construction of four dams in the lower Snake River during the years 1962 to 1975. The 1975 escapements were very poor and the Idaho Department of Fish and Game prohibited all salmon angling; and prohibited steelhead angling, except for "catch and release " fishing during October and November 1 975. The fish and wildlife agencies of Oregon and Washington also severely restricted angling for chinook and steelhead in the Columbia and Snake rivers. In response to concern regarding the Snake River salmon and steelhead runs, the federal and state fishery agencies in conjunction with the Corps of Engineers devised a lower Snake River fisheries compensation plan (see page 18 for Resolution No. 9 adopted by PMFC in support of the plan).

Aside from the Columbia River gillnet fisheries, Oregon's only other commercial fishery for salmon is the ocean troll fishery. In 1974, Oregon instituted a regulation requiring inspection to

certify that trolling vessels landing salmon in Oregon did not have coho salmon aboard prior to the start of the coho trolling season on June 15. This regulation, was applied to vessels 26 feet long or longer, or to those with freezing capability in 1 974, but was cancelled before the start of the 1975 season.

Oregon Aqua-Seafoods, Inc., which has a salmon farming or ranching operation on the Yaquina River estuary at Newport, became a wholly owned Weyerhaeuser Corporation subsidiary on August 15, 1975. The previous principal stock holder of the salmon farming organization was Fisher Mills, Inc., of Seattle. Dr. John Donaldson, a professor at Oregon State University, was President; and his well known father, Dr. Lauren R. Donaldson from the University of Washington was Vice President. John Donaldson continued to manage the seafood farm for Weyerhaeuser during 1975.

The numbers of chum salmon returning in 1975 to spawn at Oregon State University's Whiskey Creek (Netarts Bay) and Keta Corporation's Sandlake, Oregon fish culture facilities were below normal and there were no surplus eggs for transfer to other areas. However, returns to the facilities were better than the returns from natural spawning in any of the 10 years preceding establishment of the facilities, often referred to as fish ranches. In Oregon, 10 permits have been granted to sea ranch Pacific salmon: 6 for chum, 2 for coho, and 2 for chinook. Granting of another 9 permits was pending.

California's only commercial fishery for salmon is the ocean troll fishery. The trolling season for king or chinook salmon opens on April 15, as it did for silver or coho salmon prior to 1973. In 1973, California by legislative act adopted the following opening dates and a minimum legal size of 22 inches total length for silver salmon as a part of a 4-year experiment to determine the best opening date for management of the silver salmon troll fishery: 1973 and 1974 seasons opened May 15; 1975 and 1976 seasons were to open June 1. However, the Legislature in early 1975 passed a law which the governor signed on May 14 which permanently changed the opening date for silver salmon trolling to May 15, effective in 1975, and retained the minimum size limit.

For "Status of the 1975 Pacific Coast Troll Salmon Fishery" and "Status of 1974 Salmon and Steelhead Sport Catches in the Pacific Coast States" see Appendix 2 of this report.

Shellfish: The fishing seasons for U.S. king crab fishermen in 1975 in various areas off Alaska opened in August, but fishing was delayed by price disputes. Processors had large inventories of king crabs and did not wish to pay 1974 prices to the fishermen. However, in spite of the delay and price problems, the U.S. fleet caught most of the estimated 52 million-pound total in 1975, compared to nearly 50 million pounds in 1974.

The peak catch of king crabs off Alaska occurred in 1964 when the Japanese, Soviets and Americans caught 59 million pounds. Subsequently, the 1958 Geneva Convention on the Continental Shelf was ratified, and the United States declared king and tanner crabs to be creatures of its continental shelf and began negotiating bilateral agreements with Japan and the Union of Soviet Socialist Republics which set forth the conditions (gear and quotas) under which their nationals may fish for those crabs off Alaska. Other nations agreed to refrain from the crab fisheries. Foreign catches were gradually reduced and tangle nets were replaced by pots. By 1971, because of quotas and lowered abundance the total king crab catch had declined to 1 9 million pounds.

The Soviets have not fished king crabs off Alaska since 1971, as they did not wish to switch to fishing with pots. The Japanese in recent years have concentrated on tanner crabs and have depended on incidental catches of king crabs to fill the quotas for that species. In 1974 the Japanese took 475,000 king crabs but in 1975 because of economic conditions they did not fish for them and they indicate they will not fish for them in 1976.

In the meantime: The U.S. king crab fleet has increased from 20 vessels in 1967 to over 100 in 1974; The abundance of king crabs has improved under the management of the Alaska Department of Fish and Game; A U.S. fishery for another species of king crab, the previously unutilized blue king crab *(Paralithodes platypus)* in the vicinity of the Pribilof Islands has developed; And the annual catch is approaching the 59 million-pound peak total. For a more detailed discussion of the king and tanner crab resources and their biology see "Bering Sea Crab Abundance Promising" by J. E. Reeves and D. E. Phinney *(The Fishermen's News,* Pacific Fisheries Review issue, February 1976).

Tanner crab catches prior to 1 967 were small, and the U.S. catch prior to 1974 was incidental. The highest total Japanese and Soviet catches totalled 24 million crabs (about 50 million pounds) each year in 1969 and 1970. Direct effort by the U.S. fleet in the late winter of 1 974 and the spring of 1975 harvested about 5 and 7 million pounds, respectively. Substantial numbers of tanner crabs are caught incidentally in foreign trawls in the eastern Bering Sea. Estimates by U.S. observers aboard Japanese trawlers indicate an annual incidental catch of in excess of 100 million crabs, averaging about one-half pound each. These are routinely returned to the sea, but not without some injury or mortality.

Dungeness crabs compared to king and tanner crabs are unimportant in Alaska, but in more southerly Pacific Coast regions Dungeness crabs are important. However, they are subject to fluctuations in annual abundance. From a low of 26.6 million pounds for the entire Pacific Coast, including British Columbia, for the 1 962-63 season, the total catch gradually rose to 60.3 million pounds for the 1969-70 season and then precipitously fell to a record low of 15.2 million pounds for the 1973-74 season. Now Dungeness crabs appear to be increasing in abundance. Off Washington the month of December 1975 of the 1975-76 season was the best opening month in the past four seasons; an estimated 3 million pounds of Dungeness crabs of good quality with hard shells for which the fishermen received 55C to 650 per pound were landed. See Appendix 2 of this report for "Status of the 1974-75 Pacific Coast Dungeness Crab Fishery."

The total harvest of shrimp in 1975 from the various regions of the Pacific Coast was down slightly from the harvests of 1 973 and 1974, but was good nevertheless. The decrease in part

appears to have been due to strikes over prices and to poor market conditions resulting from the worldwide economic recession. For further details see "Status of the 1975 Pacific Coast Shrimp Fishery" in Appendix 2.

Miscellaneous: Passage of the "Hells Canyon National Recreation Area" Act (PL. 94-199) in 1975 climaxed 15 years of effort "by PMFC and others to preserve the Middle Snake River as a free-flowing stream for optimal protection of irreplaceable fishery and recreational resources" (see *26th Annual Report of the Pacific Marine Fisheries Commission for the Year 1973,* Resolution 4, p. 1 8). The Act converts 101 miles of river upstream from Lewiston, Idaho to Hells Canyon Dam into a system of federal wilderness, recreation and scenic rivers areas; and it deauthorizes the proposed Asotin Dam.

PMFC greatly appreciates the untiring efforts of Senators Frank Church and Bob Packwood and Congressman Al Ullman in securing preservation of this last free-flowing stretch of the Snake River. However, the four dams (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite) that were built between 1962 and 1975 on the lower Snake River downstream from Lewiston are having a severe impact on the anadromous fish runs to the Snake River and its Idaho and Oregon tributaries above Lewiston. Attention was called previously, in this report during the discussion on salmon, to PMFC's Resolution No. 9 urging Congress to pass legislation authorizing the funding of the lower Snake River fisheries compensation plan.

Canadian Minister of Education Eileen Dailly announced early in 1975 that a marine training college would be built in British Columbia. Present facilities are badly scattered and in some cases are out of date. It has been recommended that all marine training in B.C., such as emergency duties and fishing, should be centered at one location.

ACTIONS AT THE ANNUAL MEETING

The registrants at PM FC's annual meeting at the Bahia Motor Hotel on San Diego's Mission Bay, November 11-13, numbered 1 57. Minutes of the Annual Meeting were sent to all registrants. A.letter of welcome from the Honorable Pete Wilson, Mayor of San Diego, was read and copies were distributed to attendants at the first plenary session on November 1 2. At the same session the Honorable Claire T. Dedrick, Secretary for Resources, State of California, addressed the meeting in a candid and informal manner. The following is a summarized and paraphrased version of her remarks. Governor Brown and his Administration are concerned that the level of government closest to the people, which can functionally do the job, should be the one to do it.

This is a problem we are all facing in the 200-mile limit and extended jurisdiction problem. Just because the Federal Government is likely to get into the management of fisheries in a much more detailed way than has occurred in the past, I hope you will not just assume, therefore, that the States have no voice, have no rights, and have no responsibilities. That would be a serious mistake. We need to look to a joint management situation. The level of government that does the best job; that is closest to the people, really should be a goal.

You have an organization whose purpose is joint management of a resource that crosses all your boundaries. You have a level of expertise that is probably unexcelled in the world. You represent the people from your own States, the people whose lives and fortunes depend on that marine resource. It's your responsibility to deal with the whole problem and to avoid parochialism (the interest of individual States or groups). If you work together and try to solve the whole problem among yourselves, the management of that resource is far more likely to stay where it belongs, with the people who live and work and rely on the fortunes of that resource.

There are times when the Federal Government has a very definite role to play in a variety of things. But it should not be left the exclusive arbiter of the fate of any resource. In some areas, only the Federal Government can help us. The problems with Mexico are serious or can become very serious soon. Perhaps the declaration of the 200-mile limit may pursuade or convince those who have the authority to negotiate — that the day for that negotiation to be carried out seriously has come. My feeling is, and I'm not expert in this, that in international discussions, the fate of the fisheries has been relegated to a pretty minor position. That is a serious mistake. That is another area where you can make your joint efforts pay off; your joint concerns be heard, as in the question of treaty negotiations with Mexico. It is a pretty serious situation (I've been out with the anchovy fleet and heard about this, so I know something about it). Clearly, most boundaries are not boundaries that are going to be respected by the resource itself and joint management is absolutely critical. There is reason to be concerned about the loss of the voice of the States to carry out the wishes of the public in the management of marine resources, especially in an area like the Pacific Coast where there are only four States excluding Hawaii that border on it, where all of the States have long coastlines and some of them are enormous.

In California we have a very serious problem with the Bureau of Reclamation. It has reached pretty close to crisis proportions. The Bureau has pretty much unilaterally, without regard to the position of the State of California, determined the management of a good deal of California's water. Now this is a large State and you can't manage that resource, the water resource, piecemeal. The result is that the management has been very poor. The cost to fisheries has been very high. In the case of the Friant Dam, which was one of the earlier projects, half of the total salmon run of the San Joaquin-Sacramento System was lost. At present, there is no way we have yet been able to figure out how to restore that major natural resource that the country and California very seriously need. On the Trinity River, because of federal water management, we have lost the entire steelhead run. Again, this is a place where we have not been able, regardless of years of effort in negotiation, to do those things which could restore that steelhead run. The recent court decision by Judge McBride in the New Melones case, unless we can in some way reverse that, in some way regain some measure of control over one-third of California's water, means that we will lose the salmon-steelhead runs in the Stanislaus. It also means that there will be severe damage downstream. What we are trying to do now in California is to face those things, those

areas where we really have lost control over the management of the resource.

The way things are now, the elected representatives of the people cannot change, cannot carry out the wishes of the public. The decisions are being made by people difficult to identify. I was going to say by some unknown bureaucrat in the laberynthine halls of Washington, D.C. But really, that's true. There really is no way that the people of California, all the people of California, could influence at this point the management of California's waters. Our Administration is speaking with one voice on this issue. The Governor, myself, the Director of the Department of Water Resources, the Chairman of the Water Resources Control Board and the Director of the Department of Agriculture, are all united, and have been since the beginning of the Administration, in insisting that the management of water in California meet federal water quality standards and that the State's wishes be respected. And yet as recently as last week, the Director of the Bureau of Reclamation said again, "Who speaks for California, California can't get its act together". That is a very insensitive way to run government. And its the kind of thing that raises grave concern in my mind about giving any further California land to the Federal Government; giving away any further the voice that California has in the management of its own resources and a voice in its own destiny. I caution you sincerely from experience, the right level of authority is the level that should be exercised. The one that is closest to the people that can still do the job. It is incumbent upon you, on this group to be very sure that the actions and directions you take will not leave you and leave all of us on the Pacific Coast with no control over our major resources.

THe fisheries resource is an extreme+y. important one. It has been very badly underrated. As a protein source fish are hard to beat, but for some reason cattle have turned out to be more important even though they take a lot more nitrogen to feed. I think the importance of the fisheries resource has got to be clearly demonstrated and its future has to be stressed. In California ancTin many other parts of the West, land-use practices have done serious damage to that resource. And oddly enough it is difficult to get the data to demonstrate which land-use practices do the most damage. Look at the streams of Northern California! You can see that the anadromous fisheries resource there has been depleted by at least 50%. You can see that timber operations have reduced the cover of massive areas, but you can't demonstrate that land-use practice was responsible for loss of 50% of the fisheries. Why should that be the case? Why should we be unable to demonstrate that? Primarily because studies, to find out exactly how much damage which kind of land use does to a resource like fisheries, have not been done. The reason they have not been done, 1 think, is because not enough emphasis has been put on the importance of the resource. That is another thing that we would hope to change.

I urge all of you again, as people who manage the part of the fisheries resource that gets out of California waters, and the part that crosses the boundaries that we don't know about, and the part that comes into California waters, that this is another area where I think you could be very effective. Look at the damage that has occurred on land to the basis of fisheries industry in rivers, in estuaries, and in the whole food chain situation! Look at it seriously and figure out what you can do, how you can have a united voice to bring about changes in those areas, so we can reverse this desperate loss of this resource, which in many ways has not been improved at all by management in the last few years. Land-use practices, filling of marshes with the loss of the base of the food chain, may reverse all of the good management practices that you have helped get into being in terms of the fishing industry itself. I think you have to address these problems too.

I did end up making a speech but I didn't mean to. 1 want you to know that as long as I have anything to say about it, the fisheries and the wildlife resources will be of major importance to the Resources Agency of California. I consider the Department of Fish and Game the bottom-line in environmental departments. If you can retain wildlife habitat for the general public's good, if you can retain and restore the fisheries habitat, you cant really degrade the environment too much. I think it is an extremely important area and I'm really grateful that Charlie (Fullerton) has taken such good care of it before I got here, so I have something to work with from here on.

Following Secretary Dedrick's talk, the Honorable Vincent Thomas, Member, State of California Assembly, and a PMFC Commissioner, spoke briefly on "Long-Range View of Issues of Pacific Marine Fisheries Concern." A transcription of his talk was distributed as Attachment B to the minutes of the Meeting. He introduced the legislation that made California a member of PMFC in 1947 and he was appointed a Commissioner in 1953. He mentioned that concern about the possibility that President Truman's Proclamation No. 2668, which established offshore management policy for the United States in certain areas of the high seas and could lead to federal preemption of fisheries management by the States, was largely responsible for the establishment of PMFC.

Today we are faced with similar concerns regarding the effects federal activities under extended jurisdiction will have on our state fishery agencies and on the future need for PMFC. "Hopefully our discussions will enable us to obtain an understanding of the critical issues involved and assist in the development of wise policy which will affect the future of PMFC, our coastal resources and the citizens of our States." • • •

The next action at the Annual Meeting was a symposium on "Fisheries Management Alternatives under Extended Jurisdiction, " and subsequently PMFC unanimously adopted Resolution No. 1, "Management Authority under Extended Jurisdiction." Both of these actions seemed quite timely because of the probability that the extension of U.S. fishery jurisdiction would come about either by legislative action within the United States or by agreement at a Law of the Sea Conference. Concurrent with either of those happenings would come new procedures and agencies for conserving and managing fishery resources. Transcriptions of the talks at the Symposium were published in PMFC Newsletter No. 24, April 1976. The text of Resolution No. 1 follows under "Resolutions Adopted and Actions to Date."

Resolutions Adopted and Actions to Date

A total of 1 2 proposals were presented to PMFC for adoption as resolutions. The Advisory Committee and Scientific and Management Staff conducted final reviews on 8 of these and made recommendations to the Commission before it voted on adoption of each as a resolution. The Committee and Staff did not make recommendations on proposals nos. 3, 4, 5 and 6 as PMFC's Executive Committee approved requests from the originating States to withdraw them. The Commission incorporated part of proposal no. 2 in proposal no. 1, rejected proposal no. 8, and adopted the remaining 6 proposals as resolutions. The adopted Resolutions were widely distributed by publication in *Pacific Marine Fisheries Commission Newsletter* No. 23, December 1975. In addition individual Resolutions were sent to pertinent addressees by letter, explaining in detail PMFC's concern about the subject matter of each particular Resolution and asking the recipients for action in support of the Resolution. The following are the texts of the adopted Resolutions together with summaries of the other actions taken to date on each. **1. Management Authority under Extended Jurisdiction**

WHEREAS, there is considerable worldwide and national support for extending fisheries jurisdiction soon; and

WHEREAS, fishery resources require supervised use (management) for their continued prosperity; and

WHEREAS, management of the fisheries in the economic zone would be the responsibility of the United States even though, internally, responsibility for managing has not been apportioned between State and Federal Governments; and p

WHEREAS, the wide ranging nature of many species of fish makes them of interest to several States, but primarily of regional rather than national concern; and

WHEREAS, the Federal Government represents the national interest in the fisheries resource within the U.S. economic zone and has the only authority to negotiate with foreign countries; and

WHEREAS, the PMFC endorses a regional management authority concept with maximum participation by the ,States;

NOWTHEREFORE*BE IT RESOLVED, that the Pacific Marine Fisheries Commission urges the establishment of adequately funded regional councils that incorporate the principles of local management authority with strong state leadership; and

BE IT FURTHER RESOLVED, that in the event of the formation of the regional councils, full consideration be given to its membership in that appointed members have qualifications equal to those of members of Pacific Marine Fisheries Commission because of their proximity to and awareness of problems of Pacific Coast fisheries and their history of representation of the States involved.

Adopted unanimously by the five Compact States, Alaska, California, Idaho, Oregon, and Washington.

In addition to publication in *PMFC Newsletter* No. 23, copies this Resolution were sent by letters to approximately 1 25 addressees (Chairmen and members of pertinent Congressional Committees; Congressional Delegates from PMFC member States; Directors of PMFC member fishery agencies and the Washington Department of Game; Directors of National Marine Fisheries Service, Atlantic States Marine Fisheries Commission, Gulf States Marine Fisheries Commission; etc.) explaining PMFC's concern that regional councils should be strong and well financed and composed of persons experienced, sensitive and dedicated to local fishery management, and that intervention by the Secretary of Commerce in management by a regional council should be a last resort only when the regional council had demonstrated inability to act effectively. These initial letters resulted in replies from many of the recipients and further communications.

PMFC at its Annual Meeting instructed its Executive Director to go to Washington, D.C., to work with Congressional Committees on legislation regarding fisheries management under extended jurisdiction and to present PMFC's position. The Executive Director on January 22, 1976 explained to staff members of the House Committee on Merchant Marine and Fisheries at their invitation, PMFC's positions regarding the pending legislation (H.R. 200 and S. 961). He also discussed, with the staff members, compromises that might be considered in combining the two bills. At the suggestion of the staff members, he drafted a consolidation of the two bills which he forwarded to the Staff Counsels of the Senate Commerce Committee and the House Merchant Marine and Fisheries Committee for discussion. Copies of the draft were sent to other pertinent addressees. While in Washington, DC, from January 21 through 23, the Executive Director also discussed this matter with leaders from NOAA and NMFS and with members of Congress or their staffs.

Subsequently as mentioned on page 3 of this report the House and Senate appointed a conference committee which combined H.R. 200 and S. 961 into a revised H.R. 200. Congress passed the compromise H.R. 200 and the President signed it, making it Public Law 94-265. The new law does not completely quiet the fears of PMFC and its member States regarding potential preemption by the Federal Government of the right of State Governments to manage marine fisheries. However, the manner in which the regional councils are established and how well they function can determine the future course of fisheries management. **7. Improve Marine Weather Forecasting Capability**

WHEREAS, commercial fishermen, recreational fishermen, and boaters who ply the ocean waters of California, Oregon, Washington, and Alaska are dependent upon timely and accurate marine weather forecasts for the safe operation of their vessels; and

WHEREAS, the United States Coast Guard is decommissioning lightships and lighthouses which heretofore have provided valuable weather information to the National Weather Service; and

WHEREAS, the result of this loss of data has contributed to inadequate weather forecasting at times; and

WHEREAS, the marine boating community has suffered loss of life and property from unexpected storms such as on August 16, 1972 at Crescent City, California, and Brookings, Oregon, which claimed the lives of 13 persons;

NOW BE ITTHEREFORE RESOLVED, that the Pacific Marine Fisheries Commission petition the Congress of the United States to appropriate immediately adequate funds to the National Oceanic and Atmospheric Administration to upgrade and improve its marine weather forecasting reporting capability through all physical and technical means available such as restoring weather stations on lightships, lighthouses and offshore islands and providing 24-hour reporting.

Adopted unanimously by the five Compact States PMFC learned from the correspondence that was generated by distribution of Resolution No. 7 that NOAA had repro-grammed or redirected $197,000 of fiscal year 1976 funds to enhance its marine weather services program in the Northeast Pacific Ocean, including: modest expansion of the U.S. Maritime Administration — Sea Use Council project, begun in Seattle, so a total of three people are specifically assigned to that activity; initiation of an ocean forecaster program in the Northwest; and modest augmentation of NOAA marine data acquisition program nationally to support these activities. The Secretary of the SEA USE Council, which is located in Seattle, and PMFC's Executive Director plan to collaborate further on implementation of this Resolution.

9. Authorize and Fund Lower Snake River Compensation Plan

WHEREAS, the United States Army Corps of Engineers completed four dams on the lower Snake River between 1962 and 1975; and

WHEREAS, the completion of each of these dams has caused increasingly serious mortalities to salmon and steelhead runs which originate above said dams; and

WHEREAS, as a consequence of these' mortailites, the runs produced in the Snake River have seriously declined and most are no longer reproducing themselves; and

WHEREAS, the major portion of the Columbia River spring and summer chinook and summer steelhead runs are produced above these lower Snake River projects; and

WHEREAS, the doubling of the number of turbines at each of the dams before the end of the decade will compound the existing problem; and

WHEREAS, this decline can only be reversed by simultaneously pursuing two major programs (1) reduction of the mortalities and (2) attainment of hatchery compensation for the remaining sizable mortalities that cannot be eliminated; and

WHEREAS, progress is being made on the program to reduce mortalities, but no hatchery compensation has been received to date for the losses that have accumulated during the long period of dam construction; and

WHEREAS, the Columbia River runs of fish have great economic, recreational and social value, the benefits of which accrue to the sport, commercial and Indian fisheries in Oregon, Washington, Idaho and the Pacific Coast area from California to Alaska; and

WHEREAS, a plan for hatchery production to compensate for such losses has been devised by federal and state fishery agencies in conjunction with the Corps of Engineers; and

WHEREAS, authorization and funding through the Corps of Engineers for hatchery design, construction and operation will be sought in early 1976;

NOW BE ITTHEREFORE RESOLVED, that the Pacific Marine Fisheries Commission urges Congress to pass legislation to authorize and fund the lower Snake River fisheries compensation plan; and further that this resolution be provided to appropriate members of the United States Congress.

Adopted unanimously by the five Compact States Action following distribution of Resolution No. 9 resulted in announcement on May 7, 1976 that the U.S. Army Corps of Engineers is submitting to Congress a $45.7 million plan to restore fish and wildlife lost from construction of lower Snake River dams. It should be mentioned that 1 975s Resolution No. 9 was similar to 1 974's Resolution No. 8, except that only three of the four dams had been completed by 1 974. The Corps admits that Ice Harbor, Lower Monumental, Little Goose and Lower Granite dams "are causing fish and wildlife resource losses." The plan includes fish hatcheries, game bird stocking, wildlife habitat development and access for hunters and fishermen.

10. Support of Coastal States Organization Environmental Assessments Principles

WHEREAS, the Coastal States Organization (CSO) is an alliance of coastal States formed under the auspices of the National Governors Conference to voice common views of the coastal States on national marine and coastal resource policies; and

WHEREAS, the CSO supports expedient development of oil and gas resources on the Outer Continental Shelf and urges coastal States to become actively involved in the planning process for Outer Continental Shelf leasing; and

WHEREAS, the CSO includes coastal States that are members of the Pacific Marine Fisheries Commission; and

WHEREAS, the States affected by oil and gas development should receive financial assistance to help offset the costs of providing support services; and

WHEREAS, these support services should include research into the effect of oil and gas lease development on fishery and environmental resources;

NOW BE ITTHEREFORE RESOLVED, that the Pacific Marine Fisheries Commission endorses the general principles and efforts of CSO to maintain coastal States involvement in oil and gas development plans with particular emphasis on fishery and environmental assessments; and

BE IT FURTHER RESOLVED, that copies of this resolution be sent to the Governors of the coastal States and to the Chairman, CSO.

Adopted unanimously by the five Compact States Replies from Governors of coastal States generally supported the thrust of Resolution 10. On March 11, 1976, the House

of Representatives amended and passed S. 586, the "Coastal Zone Management Act Amendments of 1 976" in lieu of its own companion bill, H.R. 3981. The Senate disagreed with the amendments and asked for establishment of a Conference Committee to compromise the differences between the House and Senate. PMFC does not have more recent information on the status of S. 586. According to background information attached to a memorandum of March, 3, 1976 from the Chairman of the Coastal States Organization to "CSO Delegates and Other State Coastal Interests," the House's legislation would assist coastal States in establishing energy facility planning and would provide funding assistance for negative impacts of Outer Continental Shelf and other coastal-related energy activities. It would also establish federal and state coastal research and training programs and beach access and beach protection measures.

11. Amend the Marine Mammal Protection Act

WHEREAS, the Marine Mammal Protection Act was enacted because of Congressional concern for the status of certain species of marine mammals; and

WHEREAS, the wording of Section 109 of the Marine Mammal Act does not require expeditious review and disposition of management programs submitted by the States to the Federal Government; and

WHEREAS, procedures developed under the framework of the Act do not permit any state marine mammal program to be implemented, in the absence of statutory authority to protect all marine mammals; and

WHEREAS, the "moratorium" on taking of marine mammals as defined in Section 101 prohibits consideration of the total ecosystem in the utilization and wise management of fishery resources; and

WHEREAS, the definition of some terms including "take (harass)", "moratorium", and "depletion" provide unrealistic restrictions on responsible management of the nations living marine resources including marine mammals; and

WHEREAS, the Act should provide for more realistic consid eration of the incidental take of marine mammals in commercial fishing operations to avert the collapse of major U.S. fisheries; and

WHEREAS, all the foregoing provisions will assist in the furtherance of the objectives of the Act;

NOW BE IT THEREFORE RESOLVED, that the Pacific Marine Fisheries Commission urges Congress to amend the Marine Mammal Protection Act to require that programs submitted by States to manage their marine mammals be acted upon within 120 days in a manner consistent with requirements of Section 6 of the Endangered Species Act of 1973, so that the Act encourages the return of management responsibility to the States; and

BE IT FURTHER RESOLVED, that the terms "depletion", IV ' "moratorium", and "take (harassment)" be redefined so that state and federal agencies can consider all animals in the marine ecosystem when managing the ocean's fishery resources; and

BE IT FURTHER RESOLVED, that the Act be amended to permit States to submit management programs for any individual marine mammal species for which they have statutory responsibility;

BE IT LASTLY RESOLVED, that the Marine Mammal Protection Act be amended so that the goal of reducing mammal mortaility incidental to commercial fishing be defined in more practicable and realistic terms.

Adopted unanimously by the five Compact States

Distribution of Resolution No. 1 1 did not result directly in legislation to amend the Marine Mammal Protection Act. However, a lawsuit by 14 conservation organizations, asserting that the government had acted illegally under the Marine Mammal Protection Act by not protecting porpoise from "commercial exploitation," resulted in an order by the U.S. District Court of the District of Columbia on May 11, 1976, voiding the current NMFS regulations which allow incidental taking of marine mammals during commercial fishing. On May 18, Congressmen Robert L. Leggettand Edwin B. Forsythe introduced H.R. 13865 in the House of Representatives, to amend the Marine Mammal Protection Act of 1 972 with respect to taking marine mammals incidental to the course of commercial fishing. The House Committee on Merchant Marine and Fisheries on May 20, 1 976 held hearings on H.R. 13865.

The court ban would severely restrict purse-seining for yellowfin tuna whose presence is frequently indicated by schools of porpoise that accompany the tuna. Some of the porpoise, that are surrounded by the net, die of suffocation or shock before they can be separated from the tuna and set free. The government on June 11 announced that the court order had been stayed pending appeal, and that it would ban purse seining for the remainder of 1976 if the number of porpoise killed by tuna fishermen reached 78,000. An estimated 134,000 porpoises were killed in 1975 during tuna fishing in the Pacific, and in 1976 through mid-April an estimated 24,000 were killed. It hgs been estimated that modifications to gear and methods used in purse-seining cut porpoise deaths 27% in 1975 and 67% through mid-April in 1976, compared to the same 3'/2-month period in 1 975. Tuna fishermen feel that they could stay within the 78,000 annual limit. Fishery scientists have estimated that as many as 1 95,000 porpoises per year could be killed without significant change in porpoise populations. Just what effects these developments will have on court and legislative proceedings are unpredictable.

12. Bumping Lake Enlargement, Yakima Project, Washington

WHEREAS, the present condition of the salmon resource in the upper Columbia River tributaries is at a crisis level; and

WHEREAS, state and federal fisheries agencies are facing severe odds in an effort to maintain this valuable national resource; and

WHEREAS, the 1975 upriver spring chinook run to the Columbia River was the lowest on record, and no commercial fishing in the river was permitted; and

WHEREAS, the summer chinook run continues to decline even though no commercial fishing has been permitted for this species since 1 964; and

WHEREAS, protection and enhancement of the anadromous and resident fish resources in the Yakima River and tributaries would result in substantial benefits; and

WHEREAS, the Fish and Wildlife Service and Bureau of Reclamation joint proposal for Bumping Lake Enlargement would significantly enhance salmon runs and be a positive step in helping to maintain the irreplaceable resources of the nation lost because of reclamation and power projects;

NOW BE IT THEREFORE RESOLVED, that the Pacific Marine Fisheries Commission urges Congress to enact legislation to authorize construction of, and the funding of such projects as the Bumping Lake Enlargement Project; further, that this resolution be provided to the President of the United States, to appropriate members of the United States Congress, to the Secretary of the Interior, and to the Commissioner of the Bureau of Reclamation.

Adopted unanimously by the five Compact States The Bureau of Reclamation in February 1 976 thanked PMFC for its support of the Bumping Lake Project and said a joint feasibility report by the Bureau of Reclamation and the Fish and Wildlife Service had been reviewed and was being revised before transmittal to Congress with a request for project authorization.

Executive Committee Actions

The Committee met on June 3, 1 975 at Renton, Washington and took the following significant actions:

1. Approved an increase in PMFC's budget for fiscal year July 1, 1975 to June 30, 1976, (This resul*e_djn revision of the budget for the biennium July 1, 1975 to June 30, 1977, but did not revise the annual contributions by the member States. See biennial budget on page 31).

2. Reviewed PMFC's external contracts;

3. Commended the secretariats of the three interstate merine fisheries commissions for their vigorous and effective support of restoration by Congress of grant-in-aid funds (PL. 88-309 and P. L. 89-304) which had been imp'ounded by the Executive Branch;

4. Agreed that each PMFC State should develop a backlog of strong proposals for grant-in-aid funding, these to demon strate continuing need for augmentation of funding;

5. Reviewed the status of changes by the California Legislature in 1975 to the laws governing trolling for coho salmon off California;

6. Received a review, by the Executive Director, of PMFC's proposed project for participation under the Eastland Resolu tion for establishment of a National Fisheries Policy, and authorized him to proceed to recruit an Assistant Executive Director;

7. Instructed the Executive Director to explore further with State of Washington officials the procedures or actions that would be required to make the Washington Department of Game a member agency in PMFC, and to report the results at the next Executive Committee meeting; and

8. Decided that each State should present on pending legislation its own position regarding acceptable management regimes under proposed extension of U.S. fisheries jurisdiction. (The Director of each state fishery agency should keep PMFC's Executive Director advised of that State's position so PMFC may reply when necessary to requests for information.)

A second Executive Committee Meeting in 1975 was held in San Diego on November 11 in conjunction with the Annual Meeting. The Committee took the following actions:

1. Amended the "Rules and Regulations of the Pacific Marine Fisheries Commission" by insertion of the following third paragraph in Rule XV, *"Resolution Procedure":*
"Following formal submission and circulation, a proposal may be withdrawn only by action of the submitting state. This withdrawal requires the consent of the other states, any one of whom has the right to insist on consideration of the issue involved. Withdrawal action should be initiated at the earliest possible date to facilitate Commission business. "

2. Approved the State of Washington's motion to withdraw from consideration by the Commission as Resolutions: Proposal 3, "Investigate Ways to Permit Canadian Participation in the Pacific Marine Fisheries Commission," and Proposal 4, "Im prove Reciprocal Port Privileges between the United States and Canada."

3. Approved for consideration by the Commission as Resolutions: Emergency Proposal 10, "Support of Coastal States Organi zation Environmental Assessment Principles;' Emergency Proposal 11, "Amend the Marine Mammal Protection Act," and Emergency Proposal 12, "Bumping Lake Enlargement, Yakima Project, Washington."

4. Recommended for confirmation by the Commission new Advisors James Burris, Knute Johnson, Bruce Lewis, Charles H. Meacham and Jack Phillips from Alaska; Berger C. Benson and Anthony V. Nizetich from California; W. H. (Wilt) Godfrey from Idaho; Johnny 0. Brown, Theodore T. Bugas and Don Christenson from Oregon; and Les Clark and Jim Dart from Washington.

5. Approved the Research Directors/Coordinators Group's rec ommendation that the Group be restructured to include only a single coordinator from each member State, with Research Directors being asked to attend meetings of the Coordinators Group when their attendance was needed.

6. Approved reports by the Treasurer and Executive Director and directed the Executive Director to present to Congressional Committees the views of PMFC's States regarding fisheries

management under extended jurisdiction as proposed in pending legislation (H.R.200 and S.961).

The Commission at the 1 975 annual meeting approved the actions of the Executive Committee since the 1974 annual meeting.

Actions by PMFC Working Committees

The Research Director or the PMFC Coordinator or both from each PMFC member state agency assigns scientists from their staffs to serve on one of the four working committees: albacore, groundfish, salmon-steelhead, and shellfish. The purpose of these committees and the Research Directors arid Coordinators Group is to assist PMFC in the management, development and utilization of fisheries of concern to two or more States. In addition to the four PMFC working committees named above, ad hoc committees or groups involving non-state personnel as well as state personnel are organized as necessary to accomplish particular objectives, such as coastwide data collection and management of Dungeness crab fisheries. PMFC's Executive Director assists the committees and groups and provides liaison between the scientists and the Commission.

Research Directors and Coordinators Group: John Radovich, California Department of Fish and Game, as Chairman of this Group reported that it had met twice in 1975. The first time on July 23 and 24 and the second time at the Annual Meeting on November 11. Seven recommendations were developed at the first meeting and adopted at the second .meeting, including the following three significant recommendations:

1. The Research Directors and Coordinators Group will be named the Coordinators Group and will include a Coordinator from each member State. Research Directors will be asked to attend meetings of the Coordinators Group when their attendance is necessary. The Executive Committee approved this.

2. Reference to Scientific Staff or Research Staff in PMFC's Rule^ and Regulations, in the Advisory Committee Rules and Operating Procedures, or in the Research Policy and,Procedure of PMFC, etc., will be* changed to Scientific and Management Staff. The Executive Committee approved this.

3. The Coordinators at the Annual Meeting will designate which proposals have scientific implications and need to be referred to the Scientific and Management Staff. All proposals will be referred to the Advisory Committee and the Working Teams. Those proposals that do not have significant scientific implications will be reported by the Coordinators Group to the Advisory Committee and Commission with "No Comment" from the Scientific and Management Staff. This will accelerate the Staff's consideration of proposals and will limit the Staff's distraction from scientific issues by local sociological and political issues.

Albacore Committee: Rich Lincoln, Washington Department of Fisheries, verbally summarized the "Status of the 1 975 Pacific Coast Albacore Fishery" (see Appendix 2 for updated written report) and told of Washington's experience in a test project to collect catch and effort data from fish landing tickets. Each fisherman when he unloaded his trip catch was requested to supply the buyer with: 1) Area where most of the catch was made; 2) Gear used (whether it was jig or bait); 3) Number of days actually fished; and 4) Number of albacore caught on the trip. Preliminary analysis of the first year's data indicated good fisherman and buyer cooperation, and good accuracy. Washington will continue to refine the collection system during a second year and will then evaluate the system for its possible use coastwide.

Committee Chairman Charles W. Hooker, California Department of Fish and Game, reported on the use by California, Oregon and Washington of a uniform logbook for albacore fishing since 1973. Previously each State used a different logbook and the variations in data recorded in them were difficult to use for management purposes. The uniform logbook provides a description of individual vessel, experience of *ccevj,* type of equipment, etc. That information is used to standardize the effort. The logbook also provides a daily record of the number of hours fished, gear used, number of poles or jigs fished, weather conditions, number and estimated size of albacore caught, and general location fished. These data are used in analyses of population dynamics. Biologists and seasonal aids collect the data from the fishermen when they land their catches. Each state fishery agency edits preliminarily the log data collected by its personnel before forwarding the data to the California Department of Fish and Game where the data are completely edited before they are passed to keypunchers who put the data on computer cards. The computer cards are edited and then the data are transferred to computer tape. The results are information on the activities of each boat for the entire season, total catch for all boats and catch in numbers and pounds of fish within each area for 2-week periods which can be compared with the federal 2-week ocean temperature charts, and estimates of the fishing effort in each area and for the entire coast. These results aj'e relayed to the state agencies who relay them to their fishermen.

Coastwide Data System (CWDS) Task Group: Task Group Chairman Clemens B. Bribitzer, NMFS; and Project Investigator, Robert J. Williams, PMFC, reported on the history and status of the CWDS project. It was started about three years ago after a meeting of the ad hoc Albacore Coordinating Committee which expressed concern about the inadequate data base for evaluation of West Coast fisheries. The inadequacy falls into three categories: 1) The data collected by the agencies are sometimes incompatible in terms of definition, type and time period. 2) The data presently cannot be retrieved efficiently. The state agencies collect huge amounts of data which require application of modern technology to facilitate their retrieval and compilation for analysis on a timely basis. 3) The data are overlapping or duplicating. Fishermen and vessels are frequently involved in more than one fishery and land their catches in more than one State during the year. For example, if one were to sum the number of boats that landed albacore in California, Oregon and Washington during a year without adjustment for boats that

landed in more than one State, the sum would be greater than the actual number of boats. The Task Group advises the fishery directors (the Council) how these inadequacies can be eliminated.

During the past three years PMFC's Project Investigator has worked with representatives of the state and federal fishery agencies in developing and proposing a set of alternatives for implementing a Coastwide Data System (CWDS). Alternatives involve degree of modification of each state system, and cost to each state agency to provide computer manageable data for a CWDS. A 3-month subcontract was given Sea-Scan International, computer consulting firm, to evaluate the feasibility, to furnish cost estimates, and to recommend procedures for implementing a CWDS. Late in 1 974 Sea-Scan developed a simulated CWDS based on fish ticket and vessel registration or gear licensing procedures. Landing and license data are commonly collected by all PMFC member States. To test the simulated CWDS, Sea-Scan International was given a second 3-month contract to test the system with Dungeness crab data from the past three seasons. A Dungeness Crab Study Team is evaluating the test. Copies of Sea-Scan's report (test) can be obtained from PMFC's Portland office.

Other actions during 1975 have involved efforts to determine priority ,need for the various data elements collected by the States for commercial and sport fisheries. Federal and state fishery scientists concerned with management have participated. At the requests of some state agencies, the Task Group has met with individual agencies to explain how the CWDS might apply to their needs as well as to entire West Coast. As the result of a meeting in June with the Washington Department of Fisheries, that Department has agreed to cooperate with other Pacific Coast fishery agencies to develop a coastwide multi-species data base for commercial and recreational fisheries, provided that 1) the goals for data compilation are clearly defined; 2) the required data elements, their coding and format are agreed to by the Department's data managers; and 3) all States agree to the implementation plan.

On November 10 at this meeting site, the Task Group repqrted briefly to the PMFC Coordinating Council (composed of state fishery and NMFS regional directors) on plans fo* 1 976. The Coordinating Council instructed the Task Group to continue its work, accepted the estimate that implementation of the CWDS was at least a year away, and asked "\hat reports on the CWDS be sent directly to the Council members. The Task Group will make recommendations relative to the computer software and hardware needed for a CWDS. The expenditures for these will be fairly significant if the CWDS is to be implemented.

Groundfish Committee: Committee Chairman Tom Jow, California Department of Fish and Game, reported that his committee has been concerned for some time about the compatibility of groundfish data collected by the state agencies and the Canadian Fisheries and Marine Service in British Columbia. The rapid growth of the groundfishery has resulted now in a tremendous volume of data. Each agency has a trawl data system containing essentially similar basic data, but the different procedures for processing and organizing these data by computers have generated data that are not entirely compatible. With the assistance of NORFISH at the University of Washington we will test some computer processing innovations and we hope to have compatible data systems in operation in 1976.

Chairman Jow followed these remarks with a verbal summarization of "Status of the 1975 Pacific Coast Groundfish Fishery" and Richard J. Myhre, International Pacific Halibut Commission, verbally report the "Status of the Pacific Halibut Fishery." Both of these reports have been updated and printed in Appendix 2.

Salmon-Steelhead Committee: David Ortmann, Idaho Department of Fish and Game, verbally summarized the "Status of the 1 975 Pacific Coast Troll Salmon Fishery" and the "Status of 1 974 Salmon and Steelhead Sport Catches in the Pacific Coast States. " See Appendix 2 for updated versions of these.

Committee Chairman Pat O'Brien, California Department of Fish and Game, summarized the Committees activities in 1 975 and the activities planned for 1976. The Committee met three times in 1975: February 3 in Portland; March 1 at Sun River, Oregon; and November 10 and 11 at the San Diego annual meeting site. At Portland and Sun River the following actions occurred: 1) Support and direction were given to the Committee for Coordination of Anadromous Fish Marking and the Mark Recovery Center at the Clackamas Laboratory of the Oregon Department of Fish and Wildlife; 2) Two subcommittees were established, one on fin marking and the other on coded-wire tagging, to improve communications between all state agency salmon-steelhead personnel and to expedite policy decisions by the Salmon-Steelhead Committee, Research Directors and PMFC

Coordinators regarding marking and tagging; and 3) Objectives for a proposed study, under sponsorship of the State-Federal Fisheries Management Program (SFFMP), of ocean salmon fisheries were selected. The objectives are:

a) Definition of ocean salmon fishery management objec tives, and concurrent evaluation of existing regulations relative to those objectives;
b) Establishment of a coastwide salmon data base; and
c) Economic evaluation of ocean salmon fisheries.

At San Diego, the Salmon-Steelhead Committee prepared and submitted to PMFC's Executive Committee and Research Directors, for approval and forwarding to NMFS for funding, a proposal for a SFFMP project to study management of ocean fisheries for salmon. The proposals main thrust was coded-wire tagging and tag recovery to provide improved information on the ocean distribution and harvest of salmon stocks from various rivers. The Executive Committee and Research Directors rejected the proposal on the grounds it would not qualify for funding under the SFFMP, and instructed the Salmon-Steelhead Committee to rewrite the proposal and redirect its thrust. The Salmon-Steelhead Committee also met with PMFC's staff, specifically with Project Investigator Williams, to discuss requirements of a coastwide data base for salmon. The Committee assigned high priority to data collection.

Plans for 1 976 include: 1) Revision of proposal for SFFMP funding of a study of management of ocean fisheries for salmon; *2)* Assessment of salmon stocks; and 3) Development and refinement of salmon population models for use in management

of ocean salmon resources. The Committee is strongly committed to development and application of models as tools for management of West Coast ocean salmon fisheries.

Shellfish Committee: Jack G. Robinson, Oregon Department of Fish and Wildlife, verbally summarized the "Status of the 1974-75 Pacific Coast Dungeness Crab Fishery." The updated written report appears in Appendix 2. Melvin (Mel) Odemar, California Department of Fish and Game, who succeeded James D. Messersmith effective June 3, 1975 as Project Manager of the SFFMP Dungeness Crab Project, reported as follows regarding the project's status. Phase II of the Dungeness Crab SFFMP Project began in October 1 974 and will expire on May 31,1 976. (The project subsequently was extended from June 1 to December 31, 1976 for reviewing, editing and publishing results from Phases I and II. The extension also requires evaluation of costs of implementing and administering management plans and preparation of an informational paper listing data on hand and data needed for a comprehensive plan. — Editor)

Phase II objectives were development of a management program to enhance the net benefits from the fishery and to promote an orderly fishery. The Study Team established in 1 973 under Phase I, produced as a first step in Phase II a December 1974 working paper "Objectives of Management: the Dungeness Crab Fishery." The paper discussed traditional objectives of resource management and proposed appropriate objectives for the Dungeness crab fishery. A Dungeness Crab Subcouncil (composed of California, Oregon and Washington state fishery directors and NMFS Northwest and Southwest regional directors) previewed the paper and instructed the Study Team to develop methods for measuring net benefits from selected management plans designed for economic efficiency, and for predicting the probable distribution of benefits from each plan.

A second paper, "Preliminary'EValuation of Alternative Limited Entry Schemes," was produced in early 1975. It was a first attempt to evaluate various alternatives for limiting fishing effort. The relative benefits and shortcomings of each scheme based on license limits, user fees or taxes, and quotas were discussed. Following this, the Team collected and analyzed biological, catch and effort data from the three States to determine: 1) the relationship between catch and effort in the Dungeness crab fishery; and 2) whether there was excess effort, and if so, how excessive is it. This resulted in a third working paper, "The Relationship Between Effort and Yield in the Dungeness Crab Fishery."

Analysis of effort and yield data during peak harvest years off northern California indicated that the effort needed to harvest the maximum sustained yield (MSY), *if all years were peak years,* would be only slightly greater than recent effort. MSY curves for central California were unobtainable as the crab population in that area has been declining steadily for nearly two decades. The Study Team concluded there has been and probably will continue to be more effort applied in the crab fishery than is required to harvest the available crabs. Whether it would be desirable to reduce effort, depends on economic and equity l_c factors now being considered.

Studies are in progress to determine the extent of overcapitalization and to evaluate problems of equity (fairness). Factors included in the study are consumer demand, reasons for fluctuations in effort, and cost of harvest. It has been determined that the average annual cost of fishing pots is $50 per pot. This $50 per pot-year figure indicates that each pot in excess of the number required to take the yield represents an overcapitalization of $50. To date we have been unable to agree on estimates of the total excess pots in the fishery, but if one applies the $50 figure to his own estimate of the number of excess pots in the California, Oregon and Washington fisheries he would become aware that the total overcapitalization could be very substantial.

The Team is continuing its study of capitalization and analyses of alternative plans to manage the Dungeness crab fishery and effort in it. The study will include evaluations of the costs of implementing and administering the plans and their effects on facets of the industry from fisherman to consumer. The final report which is due at the project's expiration will contain recommendations regarding the value of managing effort and of pursuing other management objectives. Also included would be recommendations on the kinds of information needed to extend or imporve the biological and economic studies from Phases I and II.

Donald E. Kauffman (Washington Department of Fisheries), Chairman, Scientific Committee, SFFMP Dungeness Crab Project, mentioned that the Committee was composed of fishery scientists and economists from the States of California, Oregon and Washington and the Northwest and Southwest Regions of NMFS. Representatives from Alaska participate as observers. The Scientific Committee furnishes guidance to the Study Team and advice to the Dungeness Crab Subcouncil in its efforts to achieve good management of the crab resource.

Following inception of the project and its Phase I in June 1973, the Scientific Committee and Study Team tried to devise the best season possible, hopefully a uniform season for the entire Coast. Based on that work, the Committee recommended a January 1 opening for the crab season off Washington, Oregon and northern California, but a uniform opening date is still nonexistent. Dr. Kruse will discuss the Dungeness Crab Subcouncil's action on the recommendation. The Scientific Committee and Study Team were not instructed to address the season-opening problem further; but it is indirectly related to Phase II that Mel Odemar discussed, since alternatives for management of effort in the fishery can involve opening dates. The Study Team in the time available may find a feasible scheme or combination of schemes which would contribute to solution of the season-opening problem.

In relation to the season problem, the Scientific Committee also developed uniform criteria for defining crab condition and sampling crabs for marketable condition as a guide in possible manipulation of the season in years when crab condition in respect to meat yield is poor. Recommendations for employment of these definitions and criteria when weighing changes (delays) in season-openings were given the Dungeness Crab Subcouncil on November 1 1 , 1 975.

The Committee recommended to the Subcouncil for adoption a 4%-inch-minimum diameter for escape ports in crab pots.

At this time, this has not been adopted coastwide, but adoption is in progress and will be achieved after a reasonable phase-in period.

The Committee developed a project with the NMFS' staff to evaluate the effect of lost pots on crab mortality. This work generated a recommendation for incorporation of a destruct mechanism in pots whereby lost pots in time would be rendered incapable of holding crabs captive. The high incidence of lost pots indicates a considerable reduction in crab mortality could be made with such a device. Criteria for the destruct mechanism were developed by this Committee and were given to the Study Team. The Team is preparing a research proposal for use with individuals or organizations who may wish to contract to develop a destruct mechanism.

A critical lack of good data on population dynamics, economics, and even biology of Dungeness crab has hampered the Study Team and Scientific Committee in the accomplishment of goals. This lack also makes questionable some of our recommendations and conclusions. However, the study will point out weaknesses and will allow us to correct them in the future.

Dr. T. E. Kruse (Oregon Department of Fish and Wildlife), Chairman, SFFMP Dungeness Crab Subcouncil, reviewed the State-Federal Fisheries Management Program and the status of its Dungeness Crab Project. Federal funds are provided for support of a PMFC Coordinating Council[1] to administer and monitor SFFMP activities in the PMFC area, and for support of specific projects under the SFFMP such as the one on Dungeness crab. The Coordinating Council is composed of Directors of state fishery agencies and NMFS Northwest and Southwest regions. Because the funds available were limited, the Council restricted its efforts to Dungeness crab. Through evolution the Council developed a "Subcouncil" to oversee the Dungeness crab project as it involves only the fishery off Washington, Oregon and California, and Alaska's fishery is only involved indirectly. The composition of the Subcouncil is similar to that of the Council except that Alaska participates as an observer only and Idaho is not represented. To assist the Subcouncil and supervise a Study Team the shellfish program leaders from the California, Oregon and Washington state fisnery agencies were directed to establish the Scientific Committee which Don Kauffman has described. Because a very strong effort was needed in the preparation and evaluation of economic data and in recommending action to the Scientific Committee and Subcouncil, two economists and one biologist were hired with federal funds as a Study Team.

The chairmanships of the Coordinating Council and Subcouncil are rotated between the federal and state representatives. At the time of PMFC's annual meeting Dr. Kruse was Chairman of both groups. The Council met several times during the year including once just prior to PMFC's meeting. The Council evaluated its efforts and need to expand to other species and agreed that salmon were the highest priority. Council recognizes the complexity of the issues and problems, and that limited available funds will not go very far. A first action was instruction to appropriate agency staff members to develop a plan for attacking the salmon problems and to refer it to Council for review and appropriate action. A

When the SFFMP was first funded the fishery agencies were reluctant to commit large amounts of staff time and money to an effort that might be unproductive. This new Program was an attempt to coordinate management of single fisheries (or species) on a coastwide basis. Similar efforts in the past via PM FC and other groups resulted in much dialog but little adoption of joint management plans. Because of this background and the following reasoning, the Council selected Dungeness crab as the first species to work on. 1) The biology of Dungeness crab was reasonably well known, and it appeared that a lot of time and effort to collect additional biological information would be unnecessary. 2) The agencies have felt for a considerable time, that this particular fishery was overcapitalized and that this was an opportunity to consider reducing the capitalization. 3) The fishery was not beset by strong social and political user-interest conflicts, such as in salmon fisheries. 4) Council could, in a reasonably short period, determine if the agencies could face up to and could collectively take unified action on the issues, e.g., restrict effort in this fishery if it were concluded to be necessary. Dungeness crab had an additional attraction for Washington. That State desired a common date for the season opening in the Oregon-Washington border area.

It was Dr. Kruse's opinion that the state directors view the results of the Dungeness Crab Project in a more positive light _ than do their federal counterparts. The state directors recognized *W"* that the establishment and involvement of a group of advisors in the project was necessary and that those actions were decidedly beneficial in increasing rapport between the agencies and fishermen. California specifically commented several times, that if no other benefits stem from the project, it has provided a strong tie between California's staff and its advisors. This helped California not only in regard to crab, but in other areas in which the California Department of Fish and Game faced issues which it wanted resolved by legislation. The biologic and economic evaluations produced during the project are valuable contributions to management of Dungeness crab and are prerequisite to future decisions on the fishery. Another positive accomplishment is the adoption of a minimum size for escape ports. Each State has now established the necessary regulation. This shows that the state agencies can get somethings done. Even though escape ports were not very controversial they had been discussed for a long time without any action to implement a standard minimum size. In summary, regardless of whether the Subcouncil is able or willing to provide restrictive regulations, it is at least developing data which will be needed by a regional fishery management council before it could act in a responsible manner. However, the members of the Subcouncil are still intent on making the decisions instead of waiting for a regional council to act under a national framework.

Don Kauffman spoke of different season openings and the y, j movement of fishing fleets across boundaries between States.

'In June 1976. the Council changed its name to Pacific Fisheries Directors to avoid confusion with the regional fishery management councils to be established by the Fishery Conservation and Management Act of 1976 (PL. 94-265).

This is a problem of great concern to crab fishermen and the Subcouncil The Subcouncil tried to solve this by approving a compromise season-opening date. Traditionally the season opens ;,, about December 1 off northern California, but off Washington .>' a January 1 opening would be preferred because crabs attain good condition (hard shells) later there than in more southern areas. Off Oregon, during the last 12 seasons the season has opened on December 1. This is far too early in Washington's opinion and causes sociological problems in its fishery. The Subcouncil's compromise was a December 15 opening, but it was not acceptable to the Subcouncil's advisors to whom a promise of involvement in all decisions had been made. The California advisors rejected the December 1 5 opening date and the opening dates remain as they were in the past. This failure of the state agencies to "bite the bullet" disturbed their federal counterparts. Reevaluation by the Subcouncil of the entire SFFMP resulted in a conclusion that progress had been made, and in a decision to continue effort to improve management of the Dungeness crab fishery. During the economic evaluations, one option considered was staggered seasons for different areas of the coast. This coupled possibly with area licensing or some other procedure could redirect management toward realization of the maximum economic yield from the resource and could resolve the season differences between Oregon and Washington. Dr Kruse said in conclusion that one of the severest confrontations he could foresee between state managers and users would result from some form of restriction on effort to harvest Dungeness crab or any other fishery resource in the Oregon-Cali-'┬fomia area. Nevertheless, conditions in the crab fishery point '[T]to the need for serious consideration of a "restricted effort-program and the staff has been instructed to collect information for such a program. The state directors *a*te committed to:

1. Assembling data for evaluation of overcapitalization;
2. Reviewing the advantages and disadvantages of various "restricted effort" alternatives and assessing the impact of these on fishermen and industry; and
3. Pursuing legislative authority to implement "restricted effort" programs *if* the evaluations convincingly indicate such programs are needed.

The directors at all Subcouncil meetings have stressed that action will only be taken after thorough djscussion and concurrence of the industry in a course of action. Without the cooperation of the fishing industry, no program will succeed.

Special Committee Responsibilities and Service Activities

PMFC's secretariat and members of its working committees are frequently required to serve on additional committees and task groups. PMFC's Executive Director, Dr. John P. Harville, serves as the U.S. member; and Mr. R.G. Mclndoe, Environment Canada, Fisheries and Marine Service, serves as the Canadian member of the International Groundfish Committee, which was established by the Second Conference on Coordination of Fish-eries Regulations Between Canada and the United States in 1959.

The International Groundfish Committee is assisted by a Technical Subcommittee which monitors the Pacific Coast groundfisheries and advises the parent committee regarding trends and status of those fisheries. The U.S. Section of the Technical Subcommittee is composed of state agency members from PMFC's Groundfish Committee plus representatives from the Northwest Fisheries Center of NMFS. The Canadian Section of the Subcommittee is composed of representatives from the Pacific Region Office and Pacific Biological Station of Environment Canada, Fisheries and Marine Service. The Technical Subcommittee held its 16th annual meeting in Vancouver, B.C., on June 25-27, 1 975 and met with the International Groundfish Committee in San Diego on November 14. G. S. DiDonato, Washington Department of Fisheries, was Chairman of the Technical Subcommittee and R.G. Mclndoe was Chairman of the International Groundfish Committee in 1975.

PMFC's Executive Director serves as an advisor at United States-Canada salmon negotiations. He also serves along with NMFS Northwest Regional Director Donald R. Johnson on the U.S. Section of the Informal Committee on Chinook and Coho. Their Canadian counterparts are Pacific Biological Station Director Dr. W. E. Johnson and Pacific Region Director W. R. Hourston, both of Environment Canada, Fisheries and Marine Service. This Committee is assisted by a Technical Working Group, composed of Dr. Kenneth A. Henry, NMFS, and Harold Godfrey, Fisheries and Marine Service, as American and Canadian Group members, respectively. They are assisted by other American and Canadian scientists, including those on PMFC's Salmon-Steelhead Committee. The Technical Working Group held its 13th meeting on March 26-27, 1975 in Seattle, under the Chairmanship of Dr. Henry.

Treasurer's and Executive Director's Reports

Treasurer Gerald L. Fisher verbally presented the highlights of his Treasurer's Report. All claims presented for payment through September 30, 1975 had been paid. The cash balance was $104,844.31 and accounts receivable totalled $34,327.10 as of September 30. The annual audit for the year ended June 30, 1975 found PMFC's financial records in satisfactory condition. See Appendix 1 — Financial and Audit Report for details.

Executive Director Harville reported verbally that future reporting would be streamlined and that his report would be informal and selective, with details being presented in the Commission's printed Annual Report. Minutes of the Annual Meeting would be restricted to significant actions, with lengthy reviews, panel discussions, etc., being reserved for inclusion in the Commission's Annual Report or Newsletter.

Restorations of fisheries Grant-in-Aid and Eastland Resolution funds for FY 1975 and 1976 budgets: Joint action with the Atlantic and Gulf States Marine Fisheries Commissions resulted in restoration by the Congress of $ 1.9 million in fisheries funds which had been recommended for deletion by the President and the Office of Management and Budget.

An intensive campaign on behalf of the States was begun in February. It resulted in restoration of $600,000 Grant-in-Aid

funds for the States via the Anadromous Fish Conservation Act and Commercial Fisheries Research and Development Act. A 14% cut had been recommended by the President for FY 1975 but the House Appropriations Committee overrode that recommendation. Funds thus reinstated for use by Pacific Coast States totalled $229,770: $52,000 for California, $51,179 for Oregon, $58,891 for Washington, and $67,700 for Alaska. But in April the three interstate Commissions were forced to go back to Congress for further action to protect Grant-in-Aid funding for FY 1976. This time the Senate Appropriations Committee took the lead and restored $800,000 that otherwise would have been lost — this after the three Commissions appeared as a panel to argue the merits of restoration before the House Appropriations Committee. We had strong help from House and Senate delegations from Pacific States, including Congressmen Leggett, Burke, AuCoin, Pritchard, and in fact the entire State of Washington Congressional delegation. On the Senate side, Senators Hatfield, Packwood, Magnuson, Jackson, Stevens, and Gravel gave solid support. Senator Mark Hatfield read our testimony in support of fisheries funding into the *Congressional Record.* The three interstate Commissions also jointly met with Bob Schoning (Director, NMFS) and top NOAA officials to argue the case for full funding of fisheries Grant-in-Aid programs.

Congress also refused to agree with the President's cut of funds which had been appropriated to implement the Eastland Resolution and thus restored $500,000 for use by interstate fisheries commissions for grassroots assessments of needs for development of a U.S. fisheries policy and for Congressional legislation toward that objective.

Protection of state fishery agency prerogatives under P.L. 89-304: Early in 1975 the NMFS proposed changes to the administrative procedures for allocation df funds under one of the Grant-in Aid programs, the Anadromous Fish Conservation Act (P.L. 89-304). PMFC expressed concern about the change regarding coordination with States and alerted its member States. Subsequently, NMFS modified the proposed change to read: "Section 401.5 Coordination with States. The Secretary will approve Application for Federal Assistance only after he has coordinated the application with and solicited recommendations from those State and other non-Federal entities which have management authority over the resource to be affected."

Regional reviews of the National Plan for Marine Fisheries: Immediately after the 1 974 annual meeting in Anchorage, PMFC undertook a series of local and regional reviews of the National Plan for Marine Fisheries in cooperation with the Pacific States (including Hawaii), the National Marine Fisheries Service, and the Sea Grant universities of the Pacific States. The Marine Advisory Programs for those universities took the lead in organizing what eventually totalled some 31 port-by-port meetings along the Pacific Coast (Alaska to California and Hawaii) to secure fisherman and industry input to the National Plan. Climaxing these local meetings PMFC planned and administered four regional review conferences in December 1974 and January 1 975 in San Francisco, Seattle, Juneau, and Anchorage. At these conferences nearly 200 delegates, representing the participants at the port-by-port meetings and a wide array of others interested in fisheries, developed specific review documents on the National Plan for submission to Washington DC, via the three NMFS Regional Directors on the Pacific Coast. Subsequently in April PMFC convened three review meetings to evaluate the new Draft of the National Plan for Marine Fisheries. The participants at the latter meetings were gratified to find that most Pacific coast recommendations in earlier meetings had been accepted and incorporated into the revised Plan.

Implementation of Eastland Resolution: In June 1 975 PMFC was notified officially of the award of funds for a grassroots survey of fisheries issues, needs and problems as basis for development of a national policy for United States fisheries. This survey is in implementation of S. Con. Res. 1 1 which was approved without dissent by both Houses of the Congress, thus establishing the sense of the Congress that the United States must have a viable and productive fishing industry and that all steps necessary must be undertaken to protect U.S. fisheries, both commercial and recreational. During 1976 PMFC will work closely with its sister Commissions of the Atlantic and Gulf States on the gathering of views from all segments of U.S. fisheries and the interested public; the outcome to be a national conference on U.S. fisheries policy which will produce recommendations to the Congress for necessary implementing legislation. The National Plan for Marine Fisheries provides an information and staffing base for the beginning of these new field reviews to be undertaken on a fishery-by-fishery basis.

Review of alternatives for fisheries management under extended jurisdiction: At the 1974'annual meeting in Anchorage, the Commission instructed its secretariat to work with the States and Federal Government to analyze possible alternatives for shared jurisdiction over fisheries resources, with particular reference to those fisheries subject to extended jurisdiction. The Commission instructed that these analyses be organized into a series of alternate plans for achieving rational management which would adequately support state and regional prerogatives and at the same time would be consistent with national needs and international problems; further, that these alternatives be presented for review by the States as promptly as possible. In March 1 975 The Executive Director developed for review by the States a discussion draft of preliminary analyses of alternative institutional arrangements for management of shared fishery resources. This identified certain principles and guidelines as follows:

1. National policies should establish broad objectives and guidelines for conservation and management of fisheries resources; however, implementation of these policies must be regional both in concept and operation.
2. Fisheries management programs must be developed on a fishery-by-fishery basis, and must provide for unified management authority throughout the geographic range of the fishery being managed.
3. Fisheries management decisions must be supported by the best scientific information available. This requires adequate funding, staffing, and direction, *plus* management decision-making processes truly responsive to scientific advice.

4. Fisheries management goals must focus on optimum utilization of the resources for the long-term best interests of the region and the nation.

The discussion draft went on to analyze state and federal prerogatives and responsibilities, and then to offer and analyze a series of alternative regional management arrangements in the context of the guideline premises and state and federal prerogatives.

In June 1975 the Executive Committee directed that this 1975 annual meeting be keyed primarily to this most important topic, and in the past three days we have devoted major attention to it, culminating in yesterday's symposium and consideration of Proposals 1 and 2. In preparation for these discussions, a series of four in-state discussion meetings were held in October at Sacramento, Portland, Olympia, and Juneau. These involved top management scientists of our Pacific States in an analysis of alternatives for properly staffing the regional councils proposed under pending Congressional legislation. These meetings and these efforts have been extraordinarily productive, enabling the Pacific coast to maintain a significant initiative in influencing the structure of future management organization.

Support for committee activities and other fishery-oriented functions: As always, a major function of PMFC's office is assistance with and support for the work of PMFC's working committees. Bob Williams of the PMFC staff has concentrated his efforts on the complex task of working with all the committees to ascertain coastwide needs for improved data management . toward the objective of a coastwide data system that can produce *f* rmanagement-oriented statistics for the entire coast on something more nearly approaching a real-time basis. Leon Verhoeven has continued to work toward improvement of PMFC's publications, including the existing data series. All" of the staff have devoted major attention to those fisheries for which PMFC has special externally funded research and management responsibilities: the albacore logbook and port sampling program under Sea Grant support; the very important State/Federal Fisheries Management Program for Dungeness crab; the efforts by our groundfish scientists to develop a compatible logbook system, with important computer and technical advice from the University of Washington's NORFISH program; and the complex and difficult problems concerning management of ocean salmon fisheries. The Executive Director requested the meeting attendants to pay careful attention to the reports of the working committees, in his view the real backbone of PMFC's appointed role.

Election of Officers

The following were elected officers for 1976:

Chairman — Donald W. Moos, Director, Washington Department of Fisheries 1st Vice Chairman — John W. McKeanr Director, Oregon Department of Fish and Wildlife

2nd Vice Chairman — Joseph C. Greenley, Director, Idaho Department of Fish and Game

3rd Vice Chairman — James W. Brooks, Commissioner, Alaska Department of Fish and Game

Secretary — EC. Fullerton, Director, California Department of Fish and Game

Steering Group and Advisory Committee:

Overall Chairman — Earl E. Engman, Washington
Deputy Chairman — William G. Saletic, Washington
Sectional Chairman — Arthur Paquet, Oregon
Sectional Chairman — John H. Hemingway, Idaho
Sectional Chairman — Andy Mathisen, Alaska
Sectional Chairman — Earl Carpenter, California

1976 Annual Meeting

Incoming Chairman Don Moos announced that the 1976 annual meeting would be held at the Sheraton-Renton Inn near the Seattle-Tacoma Airport, November 16 through 18.

ADMINISTRATION AND OTHER ACTIONS IN 1975

Action on 1974's Resolutions

PMFC by vote of its five Compact States adopted nine resolutions (nos. 1, 3, 4, 5, 8, 9, 10, 12 and 13) at its October 1974 annual meeting. The missing numbers were those of similarly numbered proposals that were rejected, tabled, or combined at the time the proposals were being voted on for adoption as resolutions at the 1 974 meeting. The complete texts of the resolutions were published in the December 1974 Newsletter No. 22, and subsequently in PMFC's 27th Annual Report. Resolutions having national implications were sent to the Congressional Delegates of PMFC's States along with covering letters emphasizing major concerns. Individual resolutions were called also to the attention of other pertinent persons and agencies. The following is a summary of progress made in attainment of the goal of each resolution.

- **Resolution 1, In Support of Legislation Implementing the U.S. Fisheries Position on Law of the Sea:** Enactment of the "Fishery Conservation and Management Act of 1976" into law on April 13, 1976 attained a principal goal of this Resolution, the extension of U.S. fisheries jurisdiction to 200 miles offshore. The Act is also related to Resolution 3 of 1974 which follows and to Resolution 1 of 1975 (see page 17).

Resolution 3, Recommend Federal Cooperation with and Support of State Fisheries Research and Management Beyond Limits of the Territorial Sea and Inclusion within the National Fisheries Plan: PMFC's Executive Committee and secretariat, throughout 1975 and continuing into 1976, strove to protect state management of fisheries resources by inclusion of adequate provisions in pending federal legislation and the *National Plan for Marine Fisheries.* For the Executive Director's report on those efforts see pages 26-27, "Review of alternatives for fisheries management under extended jurisdiction. "

Resolution 4, Support H.R. 16043 to Extend Incidental Take of Marine Mammals for Two Years: This Resolution is related to Resolution 11 of 1975 (see page 19 for action to date on the latter).

Resolution 5, Opposition to Proposed Federal Regulations under the Lacey Act Concerning Importation of Injurious Wildlife: This Resolution stemmed from concern on this Coast regarding the inadequacy of proposed federal regulations to provide for supervised importation of oyster seed and to protect against transplantation of diseased fish and shellfish from one section of the United States to another. Breeders of fish for aquariums and others had similar concerns. As a result the proposed regulations were withdrawn and the federal agencies appear to be committed to collaborating with the States in any future drafting of regulations on this subject.

Resolution 8, Expedite Lower Snake River Compensation Plan: A "Special Report, Lower Snake River Fish and Wildlife Compensation Plan" was prepared by the U.S. Army Engineer District, Walla Walla, Washington in June 1975. The Columbia Basin Fishery Technical Committee, composed of scientists from state and federal fish and wildlife agencies collaborated with the Army Engineers in drafting the plan and the Governors of the States of Idaho, Oregon and Washington via the Pacific Northwest Regional Commission endorsed the plan. A similar Resolution was adopted by PMFC in 1975, see No. 9 on page 18. The completion date of the final review process for the plan is July 27, 1976. It will then be submitted to Congress for authorization to fund.

Resolution 9, Renegotiate Indian Treaties: There is little favorable action on this Resolution to report. Pages 1 8 and 1 9 of PMFC's 27th Annual Report and page 12 of this report describe some of the chaos in Pacific Northwest fisheries that has resulted from the various court decisions regarding Indian fishing rights. Congress has not aggressively examined the problem of Indian treaty rights and the interpretations of them by the courts. Congress in 1 974 created an Indian Policy Review Commission with a mandate to study the entire federal role in Indian affairs. Oregon's Senator Hatfield and Washington's Congressman Lloyd Meeds plus four other members of Congress and five Indians serve on the Commission. In early 1 976 a task force of the Commission was holding hearings in the Pacific Northwest. All the while the questions about Indian fishing rights and fisheries management have gotten more confusiiKj.

In early 1 975 a citizens group, Citizens United for Resource Emergencies (CURE), was petitioning Congress as follows:

"We, the undersigned, concerned and aggrieved citizens of the State of Washington, petition and demand that you initiate and enact legislation and/or amend our Indian treaties now which will nullify the effect of the Judge Boldt decision by restoring and establishing equal fishing and hunting rights for all our citizens, Indian and non-Indian alike, without discrimination against either, and by returning exclusive management and control of our fish and game resources to the state, including the regulation of the fishing rights of its citizens."

Judge Boldt in March 1975 expanded his February 1974 decision to allow 7 Puget Sound Indian tribes an opportunity to catch 50% of the annual harvest of herring. On June 4, 1 975 the Ninth U.S. Circuit Court of Appeals upheld the right of Washington Indians to catch 50% of the migratory fish harvest. The Appeals Court affirmed all of Judge Boldt's decisions with one exception: Indians may not get extra compensatory fish for salmon headed for Washington waters but caught by non-Washington citizens, such as Canadians. On February 2, 1976 the Ninth U.S. Circuit Court of Appeals ruled there was nothing inequitable in Judge Belloni's May 1 974 ruling granting Ind up to 50% of the Columbia River spring chinook salmon harves This ruling was subsequently extended to Columbia River fall chinook. The U.S. Supreme Court on January 26, 1 976 declined to review an Indian fishing rights decision of the Ninth U.S. Circuit Court of Appeals.

The Marine Fisheries Advisory Committee (MAFAC) of NOAA in 1975 created an Ad Hoc Subcommittee on the Role of the National Oceanic and Atmospheric Administration in Implementation of U.S. v. Washington (better known as the Ad Hoc Subcommittee on the Boldt Decision). The Subcommittee held a public hearing in Seattle on December 16, 1975 to develop recommendations to MAFAC regarding the role for NOAA in implementing recent U.S. District Court decisions on Indian fishing treaty rights concerning Pacific Northwest anadromous fishes.

Resolution 10, Management of Columbia River Fisheries: A working team of fishery scientists was established in 1 974 to study Columbia River fishery problems and potentials and make recommendations for future action. Specifically the team was charged with planning an evaluation study for consideration by the Governors of the States of Idaho, Oregon and Washington through the Pacific Northwest Regional Commission. This Resolution was sent to pertinent addressees, including the working team, as tangible evidence of coastwide support for action by the Governor to initiate the study. The study begun in January 1 975 and a report is scheduled for relea in September 1976.

Other developments were: 1) A suit by the State of Idaho against the States of Oregon and Washington to admit the State of Idaho to the Columbia River Compact and for an allocation of salmon and steelhead to the Snake River and its tributaries in Idaho. The U.S. Supreme Court has agreed to hear the suit but has not set a date for the hearing. 2) The Legislatures of th*e three States in 1975 considered legislation to make Idaho a member of the Compact. Idaho passed the legislation, Oregon amended the legislation but the amendment was unacceptable to Idaho, and Washington rejected the legislation. The Governors of the three States are in favor of Idaho's membership and the Pacific Northwest Regional Commission is drafting revised legislation for consideration by the State Legislatures in 1977.

Resolution 12, Non-Discriminatory Fees for Resident and Non-Resident Commercial Fishermen: This was similar to a Resolution 8 adopted in 1973. As a result of these two resolutions a 14-page report, "Comparison of License Fees and Fish Taxes by PMFC States" was presented to PMFC's Commissioners, Advisors, Coordinators, and Scientific and Management Staff at the 1974 annual meeting. Subsequently, a 6-page revision (October 16, 1974), including 4 appendices, to the report was sent to those same individuals. At this time there is nothing further to report except that implementation of the Fishery Conservation and Management Act of 1976 (PL. 94, 265) will cause the Pacific Fishery Management Council ; the North Pacific Fishery Management Council and their state members to consider this subject.

Resolution 13, Supportive Landing Laws Between West Coast States: The state fishery agencies with encouragement from PMFC are discussing needs for specific fisheries. In some | 'nstances an individual State has taken positive action to prohibit ihe landing within its boundaries of fish and shellfish that are taken off another State when the latter's residents are prohibited from fishing. Establishment of Regional Fishery Management Councils will expedite supportive action.

Conference and Meetings

The Executive Director and/or other members of the staff as representatives of PMFC attended many conferences and meetings in 1975 in the implementation and support of Commission policies and objectives. The most significant of these conferences and meetings are listed below according to area of concern.

International Affairs

Technical Subcommittee of International Groundfish Committee, annual meeting, Vancouver, B.C., June 25-27;

International Groundfish Committee, annual meeting, San Diego, November 14;

U.S. — Canada Negotiations, U.S. Section only, Seattle, September 18 and October 6;

(Albacore) Population Dynamics Workshop, sponsored by NMFS, Hawaii, December 10-12.

National Affairs

Marine Fisheries Advisory Committee, NOAA, U.S. Department of Commerce, meetings — MAFAC XI, La Jolla, 'r February 4-6; and MAFAC XII, Washington, D.C., September 3-5;

Joint meetings of Executive Directors of the Atlantic, Gulf and Pacific interstate marin'e fisheries commissions with personnel of NOAA and NMFS in Washington, DC. -

February 10-11, Grant-in-Aid funding and NFP; May 19-21, Grant-in-Aid programs, discussion with U.S. Fish and Wildlife Service personnel regarding inclusion of Great Lakes Region in Eastland fisheries Surveys, and integration of interstate fishery commission-NMFS activities in implementation of the Eastland Resolution;

July 31-August 1, state-federal relations;
November 1 7, state-federal relations; and
December 5, Eastland Resolution;

Second annual joint meeting of directors of state fish and wildlife agencies and interstate marine fisheries commissions with personnel of NOAA and NMFS in Washington, D.C., February 12-13, regarding review of federal fishery programs and discussions of (a) fisheries management under extended jurisdiction, (b) recreational fisheries management, and (c) environmental protection;

Council of State Governments Conference on Effective State °c Management of Coastal Fisheries, Hyannis, Massachusetts, June 24-25; (Executive Director presented a paper on the collection of statistics.)

(Fishing Industry's) Third National Fisheries Policy Conference, Washington, D.C., July 29-31;

International Association of Game, Fish and Conservation Commissioners, Las Vegas, September 8-10;

26th Tuna Conference, Lake Arrowhead, California, September 28-October 1;

National Conference on Marine Recreation sponsored by NOAA and University of Southern California Sea Grant Program, Newport Beach, California, October 2-4.

Regional, Relative to State-Federal Fisheries Management Program (SFFMP) and National Fisheries Plan (NFP)

NFP Regional Reviews: San Francisco, January 7-9, and April 16-17; Anchorage, January 15-17; Bellevue, Washington, April 21-22; and Juneau, April 30-May 1 ;

SFFMP meetings:

PMFC Coordinating Council and Dungeness Crab Subcouncil—
Bellevue, Washington, April 22-23;
Renton, Washington, June 2-3;
Las Vegas, September 10;
San Diego, November 10-11;

Dungeness Crab Scientific Committee and Study Team—
Portland, January 21-22;
Bellevue, April 23-24;
Renton, June 3;
San Diego, November 1 0-11.

Other Regional and Local Meetings

American Fisheries Society (California-Nevada Chapter) and The Wildlife Society (Western Section) joint meeting, Sacramento, January 25; (Executive Director participated in a discussion of Law of the Sea.)

American Fisheries Society and The Wildlife Society, Oregon Chapters, joint meeting, Salishan Lodge, January 30-31; (Executive Director spoke on the National Fisheries Plan.)

NMFS Ad Hoc Committee on Surveillance (of foreign fishing), Seattle, March 1 2;

Pacific Fishery Biologists, Annual Meeting, Sunriver, Oregon, April 2-4; (Executive Director spoke on NFP.)

Western Association of State Game and Fish Commissioners, Seattle, July 13-16; (Executive Director presented a paper on NFP.)

1 3th Pacific Science Congress, University of British Columbia, Vancouver, August 18-29;

26th Tuna Conference, Lake Arrowhead, California, September 29-October 1.

Publications in 1975

The 27th Annual Report for the year 1974 was published in July. Newsletter No. 23 was issued in December. An 82-page "1975 Mark List" was distributed on March 31. This list contained a record of all living groups of salmon and some groups of steelhead, primarily only steelhead from the Columbia River system, that had been marked by excision of one or more fins before they were released to migrate to the ocean plus those groups of juveniles that would be marked and released in 1 975. Allocation of the fin marks for use in 1975 was accomplished at the annual meeting of the Committee for Coordination of Anadromous Fish Marking which was convened by PMFC in Portland on February 5. Revised and supplementary pages containing 1974 catch statistics for the Dungeness Crab and Shrimp Section and for the Groundfish Section of PMFC's Data Series were distributed in August to persons and organizations possessing copies of those Sections.

Personnel

The following served as Commissioners in 1975:

Alaska

James W. Brooks, Juneau, Secretary Richard I. Eliason, Sitka (successor to T. E. Thompson) Charles A. Powell, Kodiak (successor to Edward G. Barber effective September 26)

California

Harold F. Cary, San Diego E. Charles Fullerton, Sacramento, Chairman (successor to G. Ray Arnett effective April)

Vincent Thomas, San Pedro **Idaho**

H. Jack Alvord, Pocatello Wynne Blake, Lewiston (successor to Paul C. Keeton effective April 6)

Joseph C. Greenley, Boise, Third Vice-Chairman

Oregon

Allan Kelly, Portland

Thomas E. Kruse, Portland

John W. McKean, Portland, Second Vice-Chairman

Washington

Harold E. Lokken, Seattle

John Martinis, Everett (si*ccessor to Ted G. Peterson effective June 1 2)

Donald W. Moos, Olympia, First Vice-Chairman (successor to Thor C. Tollefson effective March 1) The Advisory Committee functioned under the "ADVISORY COMMITTEE RULES AND PROCEDURES" of November 1971. Its members in keeping with Article X of PMFC's Rules and Regulations were reappointed for 2-year terms beginning January 1, 1 975 or were appointed subsequently for the unexpired remainders of 2-year terms as vacancies occurred. The Advisors during 1 975 were:

Alaska

James Burris, Sitka (successor to Richard I. Eliason)

Jack B. Cotant, Ketchikan

Knute Johnson, Cordova (successor to Lewis Hasbrouck)

Bruce Lewis, Juneau (successor to Charles A. Powell)

Andy Mathisen, Petersburg, Section Chairman

Charles H. Meacham, Juneau (successor to Bill Ray)

Jack Phillips, Pelican (successor to Ben Engdal)

California*

Berger C. Benson, San Mateo (successor to Peter T. Fletcher)

Earl Carpenter, Bodega Bay

John P. Gilchrist, Sacramento

Paul McKeehan, Santa Clara, Overall Chairman

John P. Mulligan, Terminal Island

Anthony V. Nizetich, Terminal Island (successor to Robert Hetzler)

Oliver A. Schulz, San Francisco

Idaho

W. H. (Will) Godfrey, Boise (successor to John Eaton)

John H. (Jack) Hemingway, Sun Valley, Section Chairman

E. G. (Pete) Thompson, Sand Point (successor to Robert G. Thomas)

Oregon

Johnny 0. Brown, Charleston (successor to Thomas A. Peterson) Theodore T. Bugas, Astoria (successor to John Y. Lansing, Jr.) Don Christenson, Newport (successor to David B. Charlton)

Charles S. Collins, Roseburg, Section Chairman

Ross F. Lindstrom, Astoria Arthur Paquet, Astoria

Phillip W. Schneider, Portland

Washington

Les Clark, Chinook (successor to Ted A. Smits) Jim Dart, Jr., Grayland (successor to Bjarne Nilsen) Earl E. Engman, Tacoma, Section Chairman Michael E. Luft, Port Angeles Jesse M. Orme, Seattle John N. Plancich, Anacortes William G. Saletic, Seattle

The permanent staff comprised:

John P. Harville, Executive Director

Gerald L. Fisher, Treasurer

Kathleen J. Scorgie, Administrative Assistant

Beverly A. Shinn, Office Secretary

Robert J. Williams, Project Leader

They were assisted part-time by Leon A. Verhoeven, Consultant and Editor. Consultant Alphonse Kemmerich resigned in mid year after 1 5 years of service to PMFC, as Executive Director from September 12, 1960 to August 31, 1962, and subsequently as Consultant. In the latter capacity Al was of great assistance to succeeding Executive Directors and to the Executive and the Advisory committees. Temporary clerical employees were utilized as needed.

*"The Advisors from the host State elect on overall Chairman and Deputy for the Advisory Committee. However, in 1975 due to changes in the composition of the California Section the Deputy post was left vacant.

Appendix 1 — Financial and Audit Reports

Financial Support, 1975

The Commission receives its financial support from legislative appropriations made in accordance with Article X of the interstate Compact in which the signatory States have agreed to make available annual funds for the support of the Commission as follows: eighty percent (80%) of the annual budget is shared equally by those member States having as a boundary the Pacific Ocean; and five per cent (5%) of the annual budget is contributed by each other member State; the balance of the annual budget is shared by those member States, having as a boundary the Pacific Ocean, in proportion to the primary market value of the products of their commercial fisheries on the basis of the latest 5-year catch records.

TREASURERS REPORT OF RECEIPTS AND DISBURSEMENTS
September 1, 1974 to October 1, 1975

CASH BALANCE, Aug. 31, 1974 (October 1974 Treasurers Report)			$78,9T7.14
RECEIPTS:			
Contributions by Member States:			
Alaska FY's 1975 & 1976	$37,900.00		
California FY 1976	21,600.00		
Idaho FY 1976	4,300.00		
Oregon FY 1976	18,200.00		
Washington FY 1976	18,800.00		$100,800.00
Refunds:			
National Marine Fisheries Service	231,339.12		
Washington Dept. Fisheries	58,409.72		
Miscellaneous	382.51		290,131.35
Interest on Saving Certificates			3,766.09
DISBURSEMENTS:			
Annual Meeting, October 1974, Anchorage:			
Commissioners	4,446.86		
Advisory Committee	7,037.42		
Admin. & Scientific Staffs	8,229.03		
Tape Recording & Room Rental	334.15	$20,047.46	
Scientific & Management Meetings		2,989.63	
Salaries & Wages		49,967.24	
Retirement & Social Security		3,921.54	
Prepaid Retirement Premiums		624.21	
Medical Insurance		607.80	
Travel Expenses, unclassified		520.77	
Office Supplies & Maintenance		4,592.41	
Telephone & Telegraph		3,955.47	
Postage, Freight, Express		2,237.41	
Rent, headquarters space		4,466.90	
Printing & Publications		2,084.31	
Bond & Accident Insurance Premiums		656.81	
Library Supplies		149.15	
Capital Outlay		505.70	
Independent Audit		786.75	
Professional Services		353.95	
Cooperative Research:			
Coho Season Evaluation	6,737.15		
Otolith Reader Project	2,672.27	9,409.42	
Reimburseable Expenditures:			
Eastland Resolution	354.66		
State — Federal Relations Contracts	13,807.50		
Sea Grant Albacore Tuna Contract	48,388.06		
Federal Share of Otolith Reader	8,016.95		
Federal Share of Coho Season Evaluation	15,749.87		
NMFS Dungeness Crab Contract	93,156.81		
NMFS National Fisheries Plan	31,831.07		
Washington Coast & Puget Sound Sampling	49,554.42	$260,859.34	
Other		34.00	
Total Disbursements		368,770.27	
CASH BALANCE, September 30, 1975		104,844.31	
		$473,614.58	$473,614.58

Revised Biennial Budget, 1975-77

The Executive Committee at its June 3, 1975 meeting increased the 1 975-77 biennial budget by $29,804. This revision was occasioned by price increases and additional costs generated by increased office work load due to external contracts beyond those anticipated when the budget was adopted in 1 974. However, the revision did not change the biennial contributions by the member States as shown on page 35 of the Annual Report for 1 974. The Commission in sustaining the Executive Committee's actions during 1 975 in effect approved this revised budget.

PACIFIC MARINE FISHERIES COMMISSION
Revised Biennial Budget, July 1, 1975 to June 30, 1977

ALASKA, CALIFORNIA, IDAHO, OREGON & WASHINGTON

Salaries and Wages	$100,260
Fringe Benefits:	
Social Security	4,119
Retirement Annuity	8,445
Medical and Hospital Insurance	1,840
Indust'l Accident Insurance	492
Unemployment Compensation	4,000
Miscellaneous	400
General Operations and Maintenance:	
Office Supplies	10,020
Telephone & Telegraph	7,300
Postage, Freight & Express	4,600
Rent, Office	8,446
Treasurer's Bond	600
Audit Fees	1,600
Private Car Mileage	800
Fares, Plane, R.R., Bus, Other	4,600
Meals and Lodging	2,600
Library Supplies	230

Annual Commission & Ancillary Meetings:	
Advisory Committee, Travel, etc.	18,969
Commissioners, Travel, etc.	8,758
Scientific & Management, Travel, etc.	13,705
Administrative Staff, Travel expense	3,024
Meeting Rooms, Steno, Sound & Record	900
In-State Pre-meeting Caucuses	2,250
Spring and Special Meetings:	
Executive Committee, Travel, etc.	1,500
Special Scientific & Management, Travel, etc.	9,000
Publications:	
Annual Reports Nos. 28 and 29	5,000
Bulletins	3,400
Data Series	900
Cooperative Research & Management	12,700
Capital Outlay:	
Office Furniture & Equipment	3,000
Total Estimate	$243,458
Source of Financing:	
Savings from Previous Biennium	29,969
Interest Income	6,000
Returned Pension Plan Contribution	2,105
External Contract Income	37,225
State Contributions	170,000
Total Available	$245,299

Audit Report

ADAMS, CAHALL & CO.
Certified Public Accountants
Portland, Oregon
October 6, 1975

The Board of Commissioners Pacific
Marine Fisheries Commission State
Office Building Portland, Oregon
97201

Gentlemen:

We have examined the balance sheet of Pacific Marine Fisheries Commission as of June 30, 1975, and the related statements of revenues and expenditures, fund balances, and changes in cash position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of Pacific Marine Fisheries Commission at June 30, 1 975, and the results of its operations and the changes in its cash position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Yours truly,
ADAMS, CAHALL & CO.

Balance Sheet, June 30, 1975

ASSETS:	General Fund	Property Fund
Cash		
Cash of Hand and in Bank	$16,452.42	
Certificate of Deposit	42,000.00	
Receivables		
Accrued Interest Income	94.01	
Due from Washington Department of Fisheries — Otolith Project	1,877.33	
Due from U.S. Dept., Commerce — National Marine Fisheries Service:		
#03-4-208-157	66.36	
#03-5-208-82	3,500.00	
#03-5-208-302	4,101.74	
#04-5-208-27	3,605.03	
#03-4-208-293	5,362.00	
Due from Washington Dept., Fisheries — Ocean Salmon Catches	6,497.58	
Office Furniture & Equipment		$7,495.76
Total Assets	$83,556.47	$7,495.76
LIABILITIES:		
Accrued Liabilities & Commitments	7,190.10	
Unexpended Grant Funds		
Sea Grant — Albacore Research	3,832.41	
National Marine Fisheries Service:		
#03-3-208-293	500.00	
#03-4-208-264	36,026.73	
Total Liabilities	$47,549.24	
FUND BALANCES:		
Unappropriated Surplus, June 30, 1975	36,007.23	
Investment in Fixed Assets, June 30, 1975		$7,495.76
Total Liabilities & Fund Balances	$83,556.47	$7,495.76

Appendix 2 — Status Reports

Status of the 1975 Pacific Coast Albacore Fishery

Pacific albacore make annual trans-ocean migrations which subject them to 3 major fisheries on both sides of the north Pacific. It is generally accepted that all 3 fisheries are exploiting a single stock of 6 or 7 year-class groups having extremely complex and not well-understood migration patterns. The total harvest from the 3 fisheries approximates 1 60,000,000 pounds annually and represents more than 35% of the world albacore catch. The U.S. catch of Pacific albacore averages 44,450,000 pounds annually, and the preliminary 1975 U.S. catch is 44,919,000 pounds (Table 1).

Development of the summer and fall fishery off the Pacific Coast of the United States and Canada varies each year according to fluctuations in the northerly migrations of the fish. During years of restricted northerly migrations the fishery occurs mainly off Baja and southern California. In years of more extensive migrations commercially significant catches are made as far north as British Columbia, with resultant shortened seasons and small total catches in the southern extent of the fishery.

Albacore movement northward along the Pacific Coast correlates well with shifting of the 58°-66°F isotherms. Forecasting the duration and stability of these "optimum" water conditions in the eastern and southern portions of the range is used to predict the nature of the upcoming season. However, short and long-term meteorologic and oceanographic phenomena may produce situations counter to established trends, thereby causing the less well understood annual fluctuations in the range and character of the fishery.

California

California's inshore fishery began on June 14 with the first sport fish being caught on the Sixty Mile Bank south of San Diego. Some commercial fishing occurred south of San Diego and out to Guadalupe Island during the remainder of June. However, a price disagreement existed and some major,canners hinted that they would not buy albacore. Thus, many boats did not leave port and landings for June were only 1 7,094 pounds.

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A price settlement of $675 per ton on July 8, considerably below the 1974 price of $830 per ton, resulted in increased fishing effort. Commercial fishing was scattered along most of the West Coast with best success south of San Diego, west of Morro Bay, and offshore from Point Arena. Sport catches were consistently good during July south of San Diego, with some surprisingly good catches made within 5 miles of shore near major population centers. Landings for July were 950,000 pounds.

Most commercial boats moved to the Pacific Northwest in August but began to return south by the end of the month due to storms and scattered fish concentrations. California effort was centered off Point Arena and Point Sur. Sport catches continued good south of San Diego. Commercial landings for August totalled slightly more than 1,000,000 pounds.

During September poor weather in the Pacific Northwest drove the remainder of the southern jig fleet to central California, where fishing was good between weather fronts. Landings for September were 4,500,000 pounds. Sportfishing continued good south of San Diego and offshore from Morro Bay.

October catches were centered mostly south of San Diego and off central California. Sportfishing remained good but with reduced effort. October landings were 3,546,683 pounds. Steady fishing off Baja California continued into November and December with some boats still in the Guadalupe Island area in January. This late development brought the 1975 season catch to a figure higher than previous estimates. November landings went over 1,000,000 pounds and December landings nearly reached the 500,000-pound mark. Season totals for 1975 should reach 12,000,000 pounds, still 17,000,000 pounds short of the 24-year average of 29,000,000 pounds (Table 1).

Oregon

Scattered small catches were reported off Oregon during the first week of July, but most boats did not fish until the price settlement on July 8. Fishing effort increased rapidly during the middle of July and good fishing was reported all along the coast from Cape Blanco, Oregon to Cape Flattery, Washington. Catches ranged up to 500 fish per day for some boats, with averages of 100 to 150 fish per boat day. During the last week of July fishing improved particularly off Washington around the Willapa fingers and off Cape Flattery, with catches averaging 200 to 300 fish per boat day. July landings amounted to 1,327,394 pounds.

During early August, fishing success decreased in the northern areas with catches dropping to 100 to 1 50 fish per boat day* and becoming scattered, especially north of the Columbia River. Success south of the river remained more consistent, averaging around 200 fish per boat day. A vigorous mid-August storm off the Pacific Northwest cooled water temperatures and scattered fish even further. By month's end jig scores dropped and fishing was very spotty. The landings during August totalled 12,232,921 pounds.

During September most jig boats went south to California. Bait boats did moderately well during the month with catches up to 11 tons per boat day. Weather progressively worsened by month's end and September landings totalled 2,799,000 pounds. Boats fishing off California and unloading in Oregon at the conclusion of their season brought combined landing totals for October and November to 789,801 pounds. Thus, the 1 975 season's total for landings in Oregon was 1 7,149,000 pounds, about 5 million pounds greater than the 24-year average (Table 1).

TABLE 1. Albacore landings in California, Oregon, and Washington (in 1,000's of lb.)

Year	California	Oregon	Washington	Total
1951	30,915	2,917	625	34,457
1952	49,804	2,586	177	52,567
1953	33,836	776	89	34,701
1954	26,107	469	421	26,997
1955	29,002	503	233	29,738
1956	37,055	3,654	630	41,339
1957	43,525	2,702	433	46,660
1958	27,188	9,754	1,503	38,445
1959	32,740	10,582	2,961	46,283
1960	35,113	4,563	526	40,202
1961	29,123	3,251	456	32,830
1962	36,622	8,936	365	45,923
1963	48,860	11,413	527	60,800
1964	42,551	4,452	1,055	48,058
1965	23,218	12,122	2,048	37,388
1966	18,189	18,041	1,101	37,331
1967	17,858	29,243	1,240	48,341
1968	15,077	37,752	3,050	55,879
1969	14,722	29,828	3,561	48,111
1970	29,932	21,779	4,390	56,101
1971	36,082	8,420	5,250	49,752
1972	21,001	23,560	16,239	60,800
1973	8,458	16,350	14,446	39,254
1974	11,700	25,225	17,983	54,908
Average	29,112	12,037	3,305	44,454
1975*	11,473*	17,149	16,297	44,919

* Preliminary

Washington

Most effort off the Washington coast began in mid-July, with some fishing occurring as far north as Vancouver Island. By the end of July most boats were fishing from the Columbia River north to Cape Flattery. July landings were 1,538,365 pounds.

Catch rates decreased in early August and no fishery developed off Vancouver Island as in recent years due to cold water temperatures. Storms during the last half of August further scattered fish and reduced water temperatures, causing many jig boats to turn southward. Landings in Washington during August totalled 9,306,413 pounds.

During most of September, weather conditions permitted good success by the bait boat fleet centered in the Astoria Canyon and off Grays Harbor, while most northern based jig boats finished the season. Early October storms finally ended fishing off the Pacific Northwest. Landings totalled 4,726,701 pounds in September and 599,341 pounds in October. Late fishing off California brought November and December landings to a combined total of 125,928 pounds. The 1975 season total of 16,296,748 pounds was comparable to 3 previous years of# record landings in Washington and about 13,000,000 pounds above the 24-year average (Table 1).

Monitoring the Fishery

Coastwide logbook studies continued in 1975 along with port sampling in all three States; these were made possible largely through Sea Grant funds. Coincidental to collecting catch and effort information on a daily basis from logbooks Washington conducted an experimental program to collect catch and effort data on a trip basis using fish landing receipts. Five broad catch areas were developed on a trial basis, ranging from Mexico to Alaska. For each trip the fishermen were requested to provide the buyer with the following information: (1) catch area where most fish were caught; (2) gear on which most fish were caught (jig or bait); (3) number of days actually fished; and (4) total number offish caught. Preliminary analysis of this new monitoring system indicates good cooperation and accuracy of data. A second year of the experiment will be conducted to refine the system and evaluate its possible use on a coastwide basis to monitor albacore catch and effort on a timely basis.

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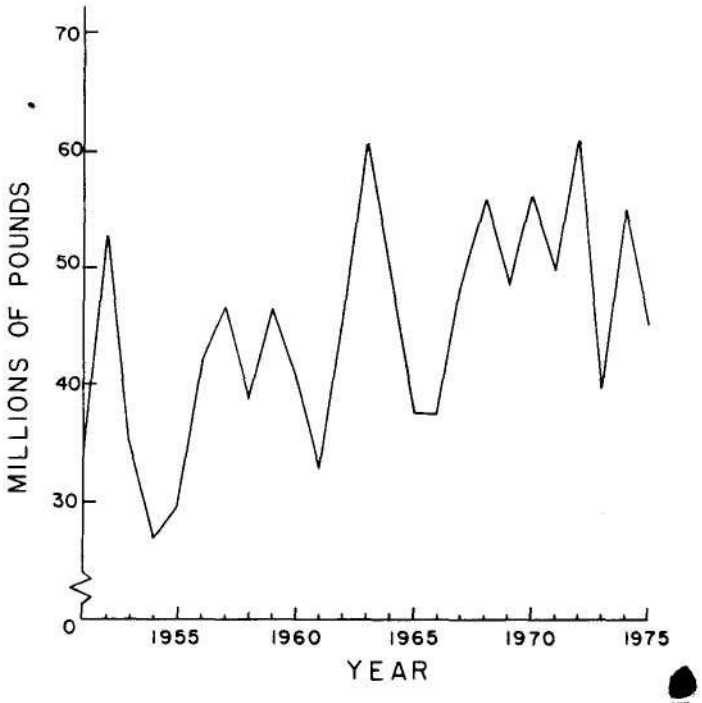

FIGURE 1. Combined annual landings of albacore in California, Oregon and Washington, 1951-1975.

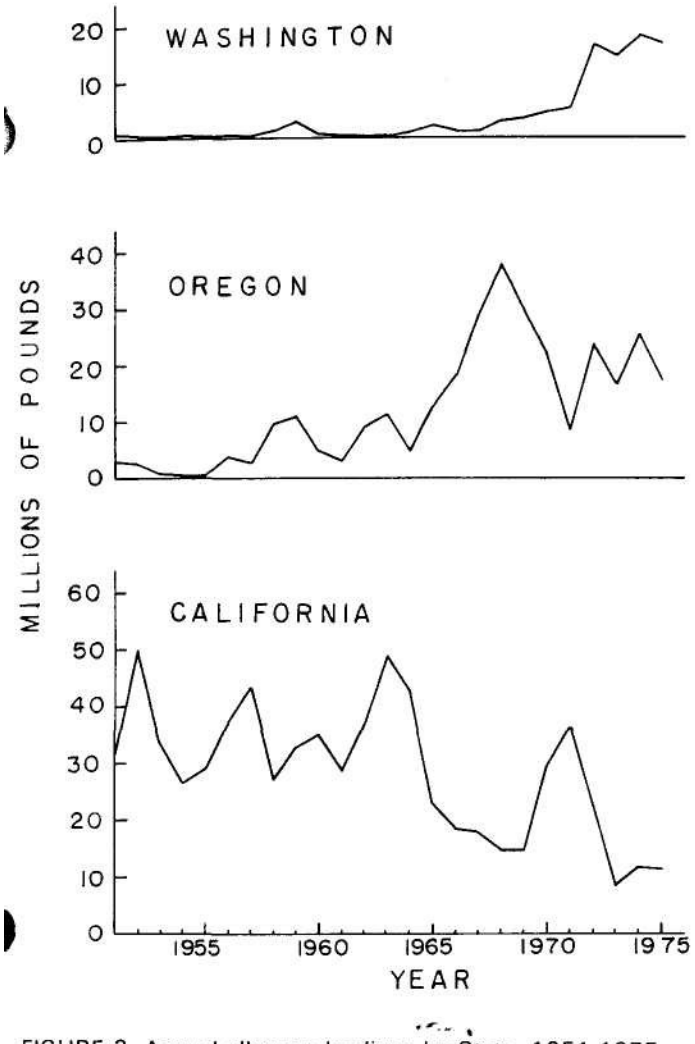

FIGURE 2. Annual albacore landings by State, 1951-1975.

Status of the Pacific Halibut Fishery

RICHARD J. MYHRE International Pacific Halibut Commission The 1 975 catch of Pacific halibut *(Hippoglossus steno/epis)* by Canadian and United States setline vessels was 26.7 million pounds, 5.4 million more than in 1974 but far below the 63 million pounds caught a decade ago. The catch in Area 2 (south of Cape Spencer, Alaska) was 13.2 million pounds, 200,000 pounds more than the quota. The catch in Area 3 (north and west of Cape Spencer, Alaska) was 13.0 million pounds, 1.0 million more than the quota. The Bering Sea (Area 4) catch was 500,000 pounds. Preliminary 1 975 halibut landings by regions of the coast are given in Table 1.

Table 1. Landings of halibut in 1975 by regions of the coast (preliminary data in thousands of pounds)

Region	Canada	United States	Total
Washington and Oregon	417	947	1,364
Southern British Columbia	2,197	0	2,197
Northern British Columbia	5,068	115	5,183
Southeastern Alaska	952	7,404	8,356
Central Alaska	2,048	7,585	9,633
Total	10,682	16,051	26,733

One of the highlights of the 1 975 season was the price, which averaged 890 a pound but exceeded $1.00 per pound during the latter part of the season and reached a record high of $1.35. The total value of the catch was $23 million, up $8 million from 1974.

The catch per unit effort (CPUE) increased slightly in 1975, reversing a decline from 1 968 to 1 974. The increase occurred in Areas 2 and 3, indicating that the change was widespread. Although restrictions on the North American setliners and the foreign trawlers in recent years undoubtedly contributed to the increase in CPUE; in part, the change may have been caused by an increased availability because of the earlier opening date in 1 975. Although the CPUE increase is encouraging, abundance remains low and the stocks, in general, are still in precarious condition. Their recovery is expected to be a slow process and larger catch quotas cannot be justified until substantially greater stock improvements are realized.

The annual survey of young halibut indicates that abundance of juveniles in the Bering Sea has increased somewhat since 1971, but abundance in the Gulf of Alaska has declined consistently from 1963 to 1975. On the positive side restrictive measures agreed to by other nations fishing in the North Pacific Ocean and the Bering Sea have significantly reduced the incidental catch of young halibut and improved long-term prospects for recovery of the stocks.

Petrale Sole *(Eopsetta jordani)*

Petrale sole landings in 1975 of 10.5 million pounds were 2% below 1 974 landings, but they exceeded the 10-year average 8.1 million pounds. Washington landings increased 13%, while landings in other areas decreased from 3 to 16% (Table 2).

English Sole *(Parophrys vetulus)*

The 1975 landings of English sole were 11.2 million pounds, 19% above both the 1974 landings and the 10-year average. Landings increased in all areas except Washington (Table 2).

TABLE 2. Trawl landings (1,000's of lb.) for food, 1974 and 1975 and 10-year means (1965-1974) by species and region

Species or group	Wash.	Ore.	Calif.	Total U.S.*	British Columbia	Total U.S. & Canada
Petrale sole						
1974	3,011	2,692	3,426	9,129	1,508	10,637
1975	3,403	2,616	3,193	9,212	1,263	10,475
% change '74-75	+13	−3	−7	+1	−16	−2
10-year mean	1,915	2,043	3,116	7,074	1,020	8,094
English sole						
1974	2,415	1,747	3,802	7,964	1,461	9,425
1975	1,787	2,092	4,033	7,912	3,317	11,229
% change '74-75	−26	+20	+6	−1	+127	+19
10-year mean	2,650	2,154	4,143	8,947	1,630	10,577
Dover sole						
1974	1,311	5,604	19,081	25,996	1,813	27,809
1975	1,363	4,759	19,785	25,907	3,418	29,325
% change '74-75	+4	−15	+4	—	+89	+5
10-year mean	1,419	4,761	14,275	20,455	1,438	21,893
Rock sole						
1974	833	4	8	845	2,083	2,928
1975	525	22	9	556	3,547	4,103
% change '74-75	−37	+450	+13	−34	+70	+40
10-year mean	950	24	4	978	4,360	5,338
Pacific cod						
1974	8,871	685	—	9,556	19,417	28,973
1975	10,024	588	—	10,612	20,437	31,049
% change '74-75	+13	−14	—	+11	+5	+7
10-year mean	7,126	445	—	7,571	16,257	23,828
Lingcod						
1974	2,526	1,937	3,249	7,712	3,322	11,034
1975	2,804	1,497	2,428	6,729	4,415	11,144
% change '74-75	+11	−23	−25	−13	+33	+1
10-year mean	3,576	1,303	1,563	6,442	3,765	10,207
Pacific ocean perch						
1974	5,318	831	123	6,272	3,370	9,642
1975	4,573	994	127	5,694	3,229	8,923
% change '74-75	−14	+20	+3	−9	−4	−7
10-year mean	11,045	2,768	64	13,887	3,356	17,233
Other rockfish						
1974	8,447	2,545	15,937	26,929	2,016	28,945
1975	8,363	2,937	16,536	27,836	1,667	29,503
% change '74-75	−1	+15	+4	+3	−17	+2
10-year mean	10,414	3,968	10,425	24,807	1,474	26,281

[1] Landings in Alaska have been insignificant.

Dover Sole *(Microstomus pacificus)*

In 1975, 29.3 million pounds of Dover sole were landed. This was 5% above the 1 974 total and 34% above the 10-year average. Oregon was the only region in which Dover sole landings decreased (Table 2).

Rock Sole *(Lepidopsetta bilineata)*

Landings of rock sole totalled 4.1 million pounds in 1975, an increase of 40% over 1974 but well below the 10-year average. Most rock sole are landed in British Columbia and Washington. British Columbia landings of 3.5 million pounds in 1975 were 70% greater than in 1974 but were less than the 10-year average. Washington landings of 525,000 pounds were 37% below 1974 landings and also below the 10-year average (Table 2).

Pacific Cod *(Gadus macrocephalus)*

The increasing trend in landings of Pacific cod continued and totalled 31 million pounds. This total was 7% above 1 974s and also above the 10-year average. Washington and British Columbia fishermen landed 10 and 20.4 million pounds, respectively. The remaining 588,000 pounds were taken by Oregon fishermen (Table 2).

Lingcod *(Ophiodon elongatus)*

Landings increased slightly to 11.1 million pounds in 1975. This was 1% above 1974 landings and was well above the 10-year average. Landings increased in British Columbia and Washington but declined in Oregon and California.

Pacific Ocean Perch *(Sebastes alutus)*

Pacific ocean perch landings in .19.75 totalled 8.9 million pounds, a decline of 7% from 1 974 and 48% below the 10-year average of 17.2 million pounds. Declines occurred off British Columbia and Washington while Oregon landings increased 20%. Landings in those areas were below the 10-year averages.

Other Rockfish *(Sebastes and Sebastolobus* species^

Above average, annual landings of 29.5 million, pounds occurred in 1975, exceeding the 1974 total by 2%. British Columbia and Washington landings in 1 975 were below 1 974s, while Oregon and California landings exceeded those of 1974. Landings in 1 975 in British Columbia and California were above but in Washington and Oregon they were below the respective 10-year averages.

LONGLINE LANDINGS

Longline landings of groundfish, excluding Pacific halibut, in 1 974 (the most current data available) were 7.3 million pounds (Table 3). American landings were 5.1 million pounds of which 3.4 million pounds were landed in California. The leading species in American line landings are rockfish, sablefish, and lingcod. Canadian landings of 2.2 million pounds were dominated by dogfish (1.6 million pounds). Line catches in 1974 declined greatly from those of 1 973, partly because of conversion from line to pot gear by Pacific coast fishermen.

TABLE 3. Longline landings by major species in 1974 (1,000's of lb.)

Region	Sable-fish	Lingcod	Rock-fish	Other species	Total
Alaska	Species breakdown unavailable				1,079
Washington	369	31	136	7	543
Oregon	—	—	—	tr.	1
California[1]	393	500	2,544	—	3,437
Total U.S.[3]	762	531	2,681	7	5,060
British Columbia	114	245	240	1,617[2]	2,216
U.S. & Canada[3]	876	776	2,921	1,624	7,276

[1] Includes handline and troll landings.
[2] Includes 1,605,000 lb. of dogfish.
[3] Species totals do not include Alaska landings.

POT LANDINGS

Groundfish landings by pot fishermen continued to increase in 1974 (latest data available) when 8.2 million pounds were landed. American fishermen landed 7.4 million pounds and Canadian fishermen landed 727,000 pounds. Sablefish comprised all but 50,000 pounds of the total and California was the leading area of catch with 6.3 million pounds of sablefish taken by pot gear (Table 4).

TABLE 4. Pot landings by major species in 1974 (1,000's of lb.)

Region	Sable-fish	Lingcod	Rock-fish	Other species	Total
Alaska	Species breakdown unavailable				638
Washington	459	—	—	18	477
Oregon	3	1	—	12	16
California	6,294	—	13	—	6,307
Total U.S.[1]	6,756	1	13	30	7,438
British Columbia	721	—	—	6	727
U.S. & Canada[1]	7,477	1	13	36	8,165

[1]Species totals do not include Alaska landings.

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Status of the 1975 Pacific Coast Shrimp Fishery

It, Pandalid shrimp landings for the West Coast of the United states and Canada totalled 1 39.2 million pounds in 1 975. This catch represents a decrease of over 3.8 million pounds from 1 974 and is far below the 1 973 record catch of 1 52.7 million pounds. Alaska landings reached 98.5 million pounds considerably below the 1973 and 1 974 record levels of 108.7 and 1 19.9 million pounds, respectively. Oregon landings were about 23.7 million pounds, only slightly below the 1973 record and 3.8 million pounds more than in 1974. Washington landings set a new record of 10.2 million pounds, surpassing the previous record of 9.3 million pounds in 1974. California landings also set a new record of 5.0 million pounds, more than 950,000 pounds above the former 1 970 record. British Columbia landings of over 1.7 million pounds were down 915,000 pounds from the 1974 record.

California

Ocean shrimp, *Pandalus jordani,* landings totalled 5.0 million pounds in 1975, double last year's total and surpassing the previous record of 4.0 million pounds in 1970.

Landings from Area A (Crescent City-Eureka; PMFC Area 92) totalled 3.4 million pounds, with an average catch per hour of over 800 pounds. The ex-vessel price started at 1 6 cents per pound but dropped by early June to 10 cents per pound, **^■shing** was good, averaging over 1,000 pounds per hour in the area between the Klamath River and Redding Rock. In July, the price rose to 13 cents and shrimp were found in good quantities from Point St. George to Patricks Point, with landings reaching 2.5 million pounds by mid-August. Nineteen vessels actively fished, including 4 double rigged. A 2-week strike in September resulted in a price increase to 1 4.75 cents per pound; those vessels remaining in the fishery found heavy concentrations of shrimp in 50 to 70 fathoms between Patrick's Point and Redding Rock. On August 1 5, the Fish and Game Commission increased the Area A guota from 3.2 to 4.7 million pounds. Shrimp of the strong 1973-year class dominated the catch as 2-year olds through June; from July through October the catch consisted of about equal numbers of 1 973- and 1 974-year class shrimp.

Area B-1 (Ft. Bragg; PMFC Area 94) landings reached 347,000 pounds compared to 517,000 pounds last season. Six vessels participated in the fishery which started about the middle of July. The catch per hour was 1,091 pounds, including effort by 3 double-rigged vessels. Most fishing occurred off Usal in 55 to 80 fathoms. The Fish and Game Commission increased the quota from 500,000 to 1,000,000 pounds on October 3.

Landings from Area B-2 (Bodega Bay; PMFC Area 96) totalled 1,189,000 pounds, the largest catch since 1957 when 450,000 pounds were landed. The increased harvest was made ible by the Department of Fish and Game extending the quota from 250,000 to 1,100,000 pounds. Fishing began on April 1 6 but effort was light until early May. The area was closed midnight, August 27, when the quota was reached. Catch per hour for the season was a high 2,420 pounds. A strong 1973-year class contributed the bulk of the landings. Most of the fishing took place off Salmon Creek and Mussel Point in 34 to 44 fathoms. During the last two weeks of fishing, shrimp were located off Ft. Ross in 39 to 45 fathoms.

Area C (Morro Bay-Avila; PMFC Area 98) landings totalled 61,000 pounds, the highest since 1970 when 66,000 pounds were landed. Two vessels fished until a price cut from 16 to 10 cents prompted one of the vessels to leave. Catch per hour for the season was 789 pounds. Most of the catches were made off Avila in about 95 to 105 fathoms.

Stock status in Area A appears to be good with the 1 974-year class contributing well to the fishery. This year class should have a good carry-over into 1 976. However, recruitment from the 1975-year class is also needed to help support the fishery at high harvest levels in 1976. Strong recruitment from the 1 975-year class is needed in the other areas to maintain present harvest levels.

Oregon

Oregon ocean shrimp landings totalled about 23.7 million pounds in 1975, the second highest on record and exceeding 1974 landings by 3.8 million pounds. Price negotiations at the start of the season kept the majority of the fleet in port for about 45 days. Despite the poor start, good production in May and excellent production from most areas in July and September resulted in a near record season. July production of 5.7 million pounds was a record for a 1-month period and was nearly surpassed by a surprising 5.6 million pounds landed in September. Catch per hour was good to excellent.

The major producing areas were off north-central Oregon (PMFC Area 84) at 9.5 million pounds and off Coos Bay (PMFC Area 86) which yielded 8.3 million pounds. Landings from both areas exceeded 1974 landings by 6.7 million pounds. Total landings from PMFC Area 82 were 632,000 pounds and Area 88 yielded 891,000 pounds. Preliminary Oregon landings reported from Area 92 off California were only 200 pounds.

Production off the Washington coast by Oregon vessels totalled 4.3 million pounds, down 1.8 million pounds from 1974. Areas 72 and 74, respectively, produced 246,000 and 2.8 million pounds. Only PMFC Area 75 off Willapa Bay, with 1.3 million pounds, exceeded last years total. No Oregon landings from Area 66, off British Columbia, were reported.

Washington

The ocean pink shrimp fishery began in January with about 100,000 pounds landed in South Bend. Weather precluded any appreciable fishing activity in February, but from early March through October the fleet produced good catches. Landings for 1975 were about 10.2 million pounds, exceeding the record catch of 9.3 million pounds in 1974.

The shrimp fleet of 20 vessels (16 double rigged) worked primarily in PMFC Area 72 (Destruction Island) and Area 74 (Grays Harbor). Smaller amounts of shrimp were taken from Area 66 (Vancouver Island), Area 75 (Willapa) and off Oregon.

Samples indicate that catches in January consisted of about 75% egg-bearing 3-year-old females and 25% 2-year-old males. These 1972- and 1973-year classes were well represented in catches throughout the duration of the fishery while the weak 1971-year class contributed minor amounts. By the end of March, spawning was essentially completed. Additionally in March, a few males from the 1974-year class appeared in samples. Subsequently, these 1-year-old shrimp showed increasingly and appeared to make up a particularly strong year class. Samples averaged 112 shrimp per pound for the season with a sample range of 80 to 178 per pound.

British Columbia

Pandalid shrimp landings (all species combined) totalled 1,729,000 pounds, a decrease of 91 5,000 pounds from 1 974. Part of the decrease in catch was due to a general strike in the fishing industry. Pot fishing for "prawns" or spot shrimp accounted for about 8% of the total catch. Several shrimp trawlers have now changed to double-rigged gear.

Alaska

Alaska pandalid shrimp landings, primarily *P. borealis* to talled about 98.5 million pounds in 1975. This represents a decline of about 10.2 million pounds from 1974 and is attribut able to the continued lower effort resulting from strikes, poor market conditions and a decrease in the ex-vessel price since January-February 1975. "*'" *

Chignik, Alaska Peninsula and Aleutian Islands (PMFC Area 55) landings were only 45.8 million pounds, about 7.2 million pounds less than 1 974. Alaska Peninsula landings totalled 1 9.3 million pounds, a decrease of 6.2 million pounds from the 1 974 record of 25.5 million pounds, due to lower effort. Chignik landings were 25.7 million pounds, about 3.9 milliq/i pounds more than 1974 and slightly above the 1973 record of 24.9 million pounds. This increase was in part due to effort by Kodiak-based vessels which landed about 7.4 million pounds from Chignik during June and July. In the Aleutian Islands; virtually the only fishing that has taken place since June 1 974, occurred in November and December 1975, with landings totalling 814,000 pounds. In the Chignik-Alaska Peninsula region, the ex-vessel price declined from 7.5 cents to 6.5 cents per pound after a strike settlement in July. The season opened April 1 5 and 58 vessels, including 38 double rigged, participated in this fishery. Catch per hour rates were comparable to 1 974s with the exception of Mitrofania Island which declined by 35 percent. Shrimp processing capability in this area increased in 1975 but will not affect production until 1976.

Kodiak landings (PMFC Area 54) were 46.9 million pounds, about 1.9 million pounds less than 1974. This lower calendar-year catch is due in part to the Alaska Board of Fish and Game's adoption of a harvest allocation plan which charges the Alaska Department of Fish and Game to provide in certain areas during January and February up to one-third of the allowable season catch (May through February). The catch for the (May through February) season is expected to closely approximate the 55 million-pound harvest guideline but will likely fall short of the May 1 974-February 1 975 season catch of 58.2 million pounds. A strike from May through July severely curtailed fishing in the Kodiak area. The final settlement resulted in an ex-vessel price of only 7 cents per pound, 2 cents less than the 1 974-7 5 season. About 41 otter trawlers, half of which were double rigged, and 5 beam trawlers fished. Catch rates for otter trawlers averageo/ 2,900 pounds per hour.

Cook Inlet landings (PMFC Area 53) reached 4.7 million pounds, close to the 5-million-pound harvest guideline established for Kachemak Bay, from which nearly the entire catch was taken. Kachemak Bay trawl landings and catch rates have remained very stable since full scale production began in 1 970. A pot shrimp fishery in Kachemak Bay is managed under a 600,000-pound quota but because of poor market conditions

TABLE 1. Annual shrimp landings, 1965-1975, and previous 10-year means in pounds by region

Year	Alaska	British Columbia	Washington	Oregon	California	Total
1965	16,818,941	1,755,000	23,468	1,748,000	1,425,875	21,771,284
1966	28,192,621	1,682,000	282,947	4,751,300	1,213,959	36,122,827
1967	41,812,552	1,696,000	1,028,744	10,373,956	1,404,821	56,316,073
1968	42,023,084	1,568,000	1,163,864	10,976,258	2,223,205	57,954,411
1969	47,850,560	2,118,700	1,425,286	10,477,945	2,951,800	64,824,291
1970	74,256,326	1,537,800	925,000	13,735,000	4,044,640	94,498,766
1971	94,891,304	735,000	678,000	9,291,000	3,074,000	108,669,304
1972	83,830,064	794,000	1,582,000	20,900,000	2,500,000	109,606,064
1973	119,963,729	1,729,000	5,271,000	24,500,000	1,239,000	152,702,729
1974	108,741,434	2,644,000	9,300,000	19,968,000	2,360,000	143,020,000
Mean	65,546,203	1,623,050	2,170,931	12,942,145	2,239,829	84,521,503
1975	98,535,031	1,729,000	10,200,000	23,700,000	4,997,000	139,161,031

it produced only 209,000 pounds compared to the record 682,000 pounds harvested in 1974.

Both Prince William Sound (PMFC Area 52) and Southeast-Urn Alaska (PMFC Area 51) landings in 1975 of 29,000 pounds and 1,023,000 pounds, respectively, were comparable to 1974's.

Stock status throughout Alaska appears to be generally good. Certain Southeastern Alaska stocks which have been historically exploited have continued since 1 974 to improve over what may have been natural lows in abundance since 1970. Cook Inlet stocks are still largely unexploited except those within Kachemak Bay which are considered to be in excellent shape. Kodiak stocks have apparently sustained their recovery from the overfishing which occurred in the 1971-72 season. Some concern, however, exists for the Twoheaded Island fishery where the abundance of 3+ and older age groups in successive year classes since 1967 has declined 43 percent. The fact that abundance of these year classes at 1 + and 2+ years of age remained stable suggests overfishing. Consequently, this fishery has and will continue to be managed with caution. Ugak Bay is the only major Kodiak area that has not recovered from overfishing in the 1971-72 season and continued stock assessment surveys show only slight improvement. Stock condition in most other Kodiak areas appears good. Consequently, production from these areas is expected to be within established harvest ranges. Chignik-Alaska Peninsula region stock abundance indices declined sharply, particularly in offshore areas, in 1975. This decline was apparent even in unfished areas which indicates the cause may be unrelated to fishing. Record effort is expected in the Chignik, Alaska Peninsula and Aleutian Island regions in 1976. Therefore, it is probable that certain major production areas will approach maximum harvest levels prior to the seasons end and fishing closures will be necessary to prevent overfishing and shifting of fleet effort to other areas.

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Status of the 1974-75 Pacific Coast Dungeness Crab Fishery

" The 1 974-75 Pacific Coast Dungeness crab catch, including Canada, totalled 1 5.9 million pounds, an increase of only 800,-000 pounds over 1973-74 (Figure J.). This is 21.8 million pounds less than the 20-year average (1955-74) of 37.7 million pounds and 23.7 million pounds less than the 10-year average (1965-74) of 39.6 million pounds. Landings for Washington (excluding Puget Sound), Oregon and California totalled 11 million pounds, which was an increase of 3.1 million pounds over 1,973-74.

Alaska

Landings of Dungeness crab in Alaska[1] totalled 2.4 million pounds in 1 975. This was 1.4 million pounds less than for 1 974 and 5.5 million pounds below the 10-year average of 7.9 million pounds. Abundance of legal male crabs and effort remain low in most areas.

British Columbia

Crab landings in British Columbia were 2.5 million pounds in 1975, a decrease of 16,000 pounds from 1974. Total landings in 1975 were not substantially affected by a general strike in the fishing industry.

Washington

f Washington crab landings for 1 974-75 totalled 5.9 million pounds, an increase of 1.4 million pounds over 1973-74.

' Alaska and British Columbia crab data are reported by calendar year.

Preseason sampling in October, 1 974, indicated that Dungeness crabs were in poor condition. However, it was predicted that condition would be excellent by mid-December so the season was opened December 1, 1974, to coincide with the opening of the Oregon season. The season closing date was extended 15 days to September 30, 1975. Good fishing in August and September resulted in landings of almost 1.0 million pounds.

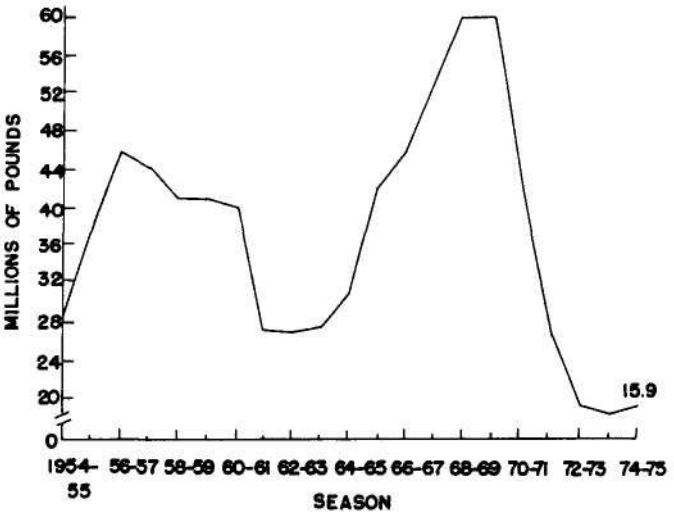

FIGURE 1. Pacific Coast Dungeness crab landings by season, including British Columbia.

The size of the fleet stabilized at about 1 20 boats. The Puget Sound season was rather poor; it contributed 700,000 pounds to the above total.

Oregon

Landings in Oregon during the 1 974-75 season totalled 3.3 million pounds. This was 200,000 pounds less than the 1 973-74 season, and 5.4 million pounds less than the 10-season average (1965-66 to 1974-75) of 8.7 million pounds. Crab condition was good and the price ranged from 60-80 cents per pound.

California

California Dungeness crab landings totalled 1.8 million pounds in 1 974-75, twice that of 1 973-74, but still a depressed level. Crab condition was excellent. San Francisco area landings totalled 21 7,000 pounds, a decrease of 1 86,000 pounds from 1973-74 and the lowest total on record. Prices ranged from 60 cents to $1.10 per pound coastwide.

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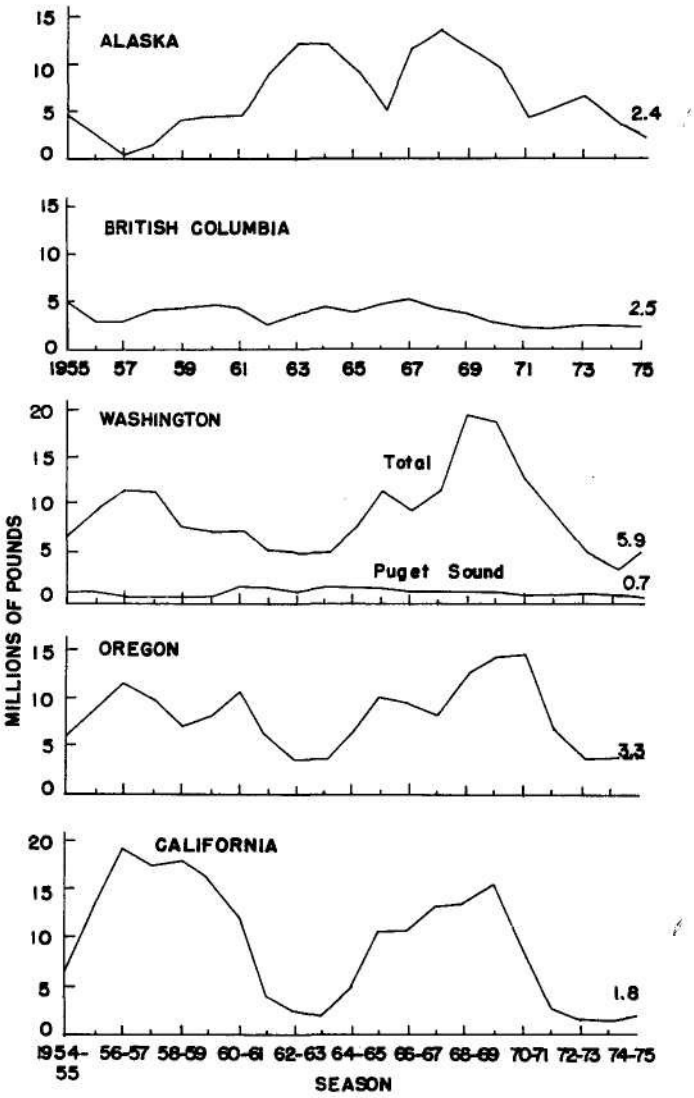

FIGURE 2. Dungeness crab landings by season, 1954-55 through 1974-75, except Alaska and British Columbia seasons are calendar years, i.e., 1954-55=1955.

Status of the 1975 Pacific Coast Troll Salmon Fishery

The troll catch of Chinook and coho salmon for Alaska, British Columbia, Washington, Oregon, and California for 1 975 totalled 49.4 million pounds compared to the 10-year average catch of 64 4 million pounds.' Chinook catches at 28.0 million pounds were better than the 10-year average of 26.9 million pounds Coho catches totalled 21.4 million pounds and were generally poor in most regions,

TABLE 1. Estimated landings of troll-caught chinook and coho salmon in 1975 and 10-year (1965-1974) averages (round weight in 1,000's of lb.)

	Chinook		Coho		Total	
Region	1975	10-year average	1975	10-Year average	1975	10-Year average
Alaska	3,600	4,500	1,200	4,100	4,800	8,600
British Columbia	12,200	11,800	9,100	18,400	21,300	30,200
Washington	2,600	2,500	5,100	5,600	7,700	8,100
Oregon	3,200	1,700	4,600	6,700	7,800	8,400
California	6,400	6,400	1,400	2,700	7,800	9,100
Total	28,000	26,900	21,400	37,500	49,400	64,400

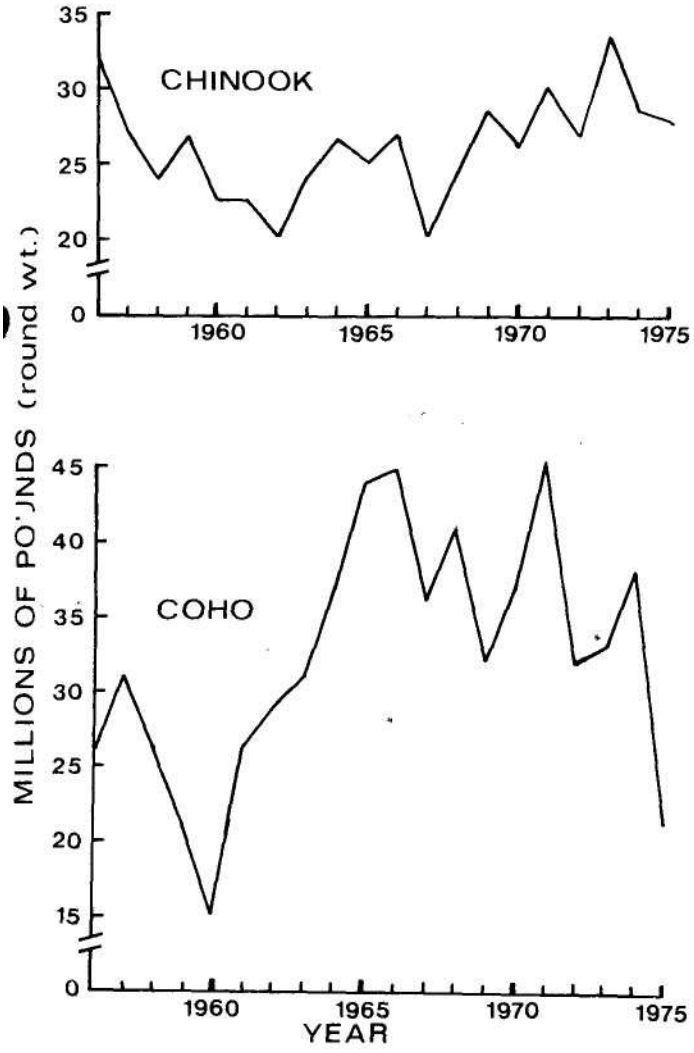

FIGURE 1. Pacific Coast annual landings of troll caught chinook 'and coho salmon, 1956-1975.

' All figures of weight reported are round weight. The period from 1965 through 1974 was used to compute 10-year averages.

Troll Chinook Fishery

Alaska troll-caught chinook landings were about 3.6 million pounds in 1 975. This total was lower than the 4.5 million pounds for 1974 and the 5.0 million pounds for 1973. The 10-year average is 4.5 million pounds.

The 1 975 chinook landings by British Columbia troll fishermen were 12.2 million pounds. This was down 1.3 million pounds from 1 974 but 400,000 pounds more than the 10-year average.

Washington 1975 troll chinook landings were 2.6 million pounds, 1.7 million pounds lower than 1974 but 100,000 pounds greater than the 10-year average.

Oregon troll chinook landings for 1975 were about 3.2 million pounds. This was about 600,000 pounds above the 1 974 landings and 1.5 million pounds larger than the 10-year average of 1.7 million pounds. The chinook fishing was good in all areas. May landings were good off the Columbia River. The Coos Bay are'a landings were excellent in July and August.

The preliminary estimate of 1975 California troll chinook landings is 6.4 million pounds. This equals the recent 10-year average. In 1 974 trollers landed 5.8 million pounds of chinook. The San Francisco-Monterey area had poor landings throughout the 1975 season. Final landings were only 2.4 million pounds, compared to 5.5 million pounds of chinook in 1 974. The North Coast area (Fort Bragg to Crescent City) had its best chinook catch in recent years with landings of 3.8 million pounds. Eureka had the best 1975 season among North Coast ports with landings of 1.7 million pounds.

Troll Coho Fishery

Alaska 1975 troll coho landings were 1.2 million pounds compared to 1974 landings of 4.2 million pounds. The 1975 landings were approximately 75 percent below the 10-year average of 4.1 million pounds.

British Columbia troll coho landings for 1975 were about 9.1 million pounds. This was 6.5 million pounds less than 1 974 landings of 1 5.6 million pounds and 9.3 million pounds or 50.5

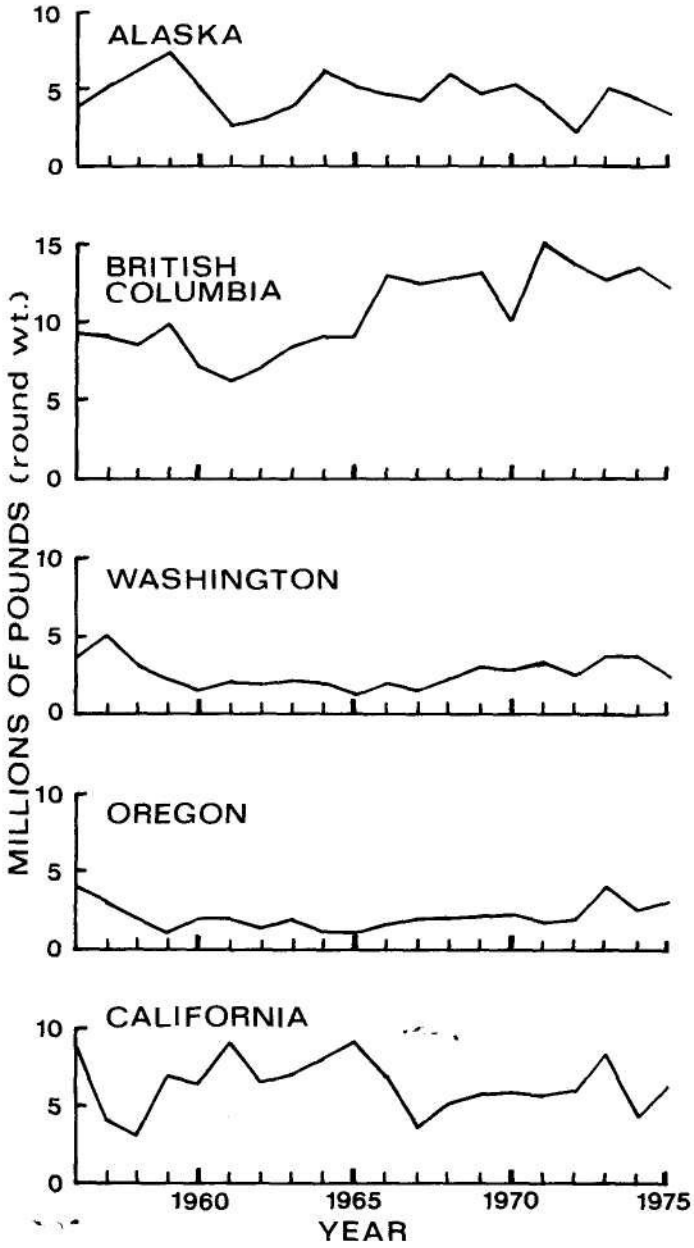

FIGURE 2. Annual troll shinook salmon landings by area, 1 956-1975.

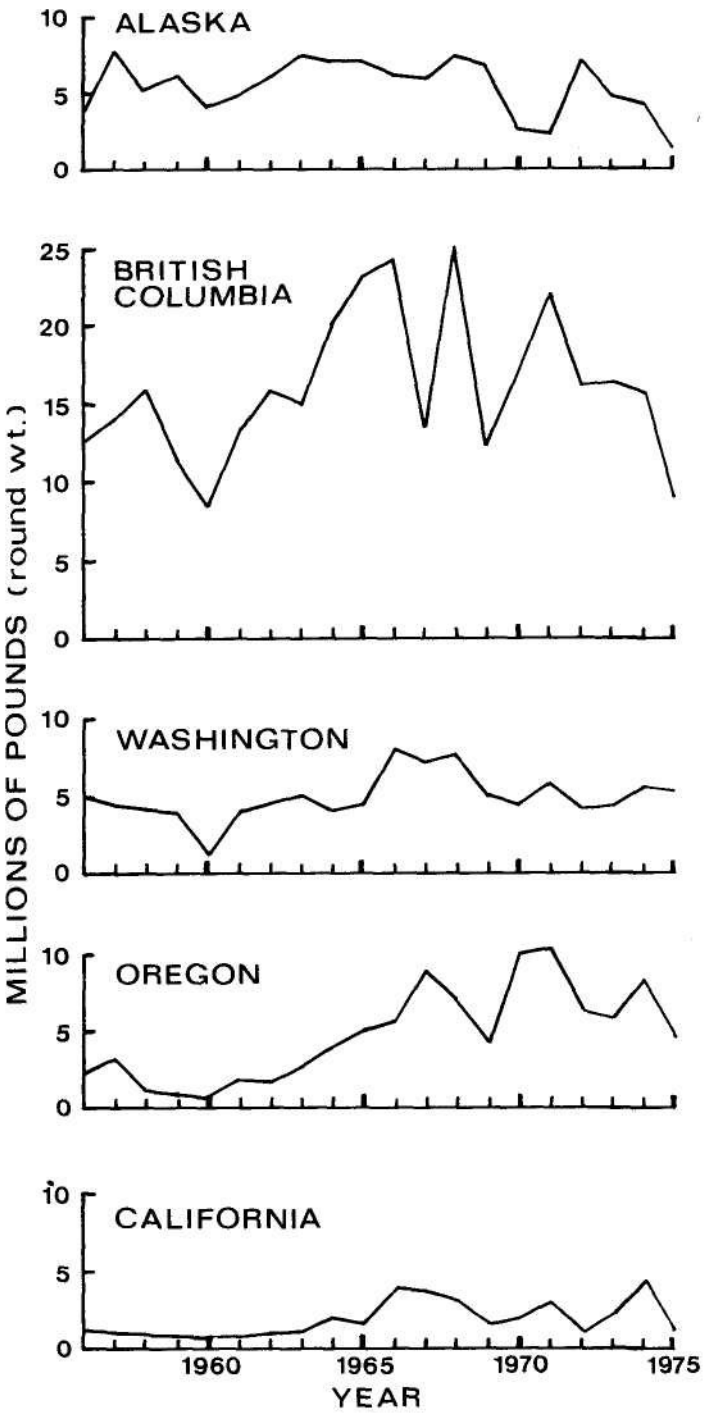

FIGURE 3. Annual troll coho salmon landings by area, 1956-1975.

percent less than the 10-year average of 18.4 million pounds.

Washington troll coho landings for 1 975 totalled 5.1 million pounds, approximately 500,000 pounds below the 10-year average.

Oregon troll coho landings for 1 975 were about 4.6 million pounds. This was 3.7 million pounds below the 1974 landings and 2.1 million pounds below the 10-year average of 6.7 million pounds. The coho fishing was generally poor along the Oregon coast. The only exceptions were at Pacific City where the dory fleet had its third best coho year on record and at Winchester Bay where the landings will be the fourth best on record.

California's preliminary estimate of troll coho landings is 1.4 million pounds, the second lowest in 10 years (1972 landings were 1.2 million pounds). This is well below 1974 record landings of 4.3 million pounds and also below the 10-year average of 2.7 million pounds. Crescent City was the leading port with 560,000 pounds, followed by Eureka and Fort Bragg with 540,000 and 220,000 pounds respectively. The greatest percentage decline, in coho landings when compared to 1974, occurred in the San Francisco-Monterey area, where 197F landings were only 100,000 pounds compared to more than one million pounds in 1974.

Troll Pink Fishery

The Alaska troll fishery landed 250,000 pounds of pink almon in 1975. This was approximately 100,000 pounds less han the 1974 landings. Landings of pink salmon in British Columbia totalled about 3.8 million pounds, an increase of 1.6 million pounds over 1 974 landings. This reflects the dominance of pinks in odd-numbered years in southern British Columbia and Washington. Washington landings were about 400,000 pounds and Oregon landings were about 1,000 pounds. Preliminary estimates of pink salmon landings in California total 20,000 pounds, which represents about average landings for an odd-numbered year.

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Status of 1974 Salmon and Steelhead Sport Catches in the Pacific Coast States

The estimated total sport catch of salmon and steelhead during 1974 in the States of Washington, Idaho, Oregon and California was 2,375,771 fish. This catch was composed of 2,021,022 salmon and 354,749 steelhead. Catch estimates for 1974 for Alaska are unavailable.

Alaska

The Alaska Department of Fish and Game in 1 974 sponsored a survey that provided catch estimates for 1973. The catch ► estimates were found to be much greater than those that had 'been previously provided for Pacific Marine Fisheries Commis sion reports. Therefore, the Alaska Department of Fish and Game desires to withhold catch estimates pending implementation in 1976 of improved catch surveys. *

Washington

Over one-half million salmon anglers (531,761) took to Washington waters in 1974 and harvested 1,320,420 salmon. This near record catch, exceeded only by 1971 (1,344,818), consisted of 1,232",372 from marine and 88,048 fr«m fresh waters. The breakdown of the marine catch by species was 469,964 chinook, 758,884 coho, 3,291 chum, 56 pinks, and 177 sockeye. The fresh-water caich was 21,070 chinook, 32,097 coho, 1,020 chum, 103 pinks, 8,686 sockeye and 25,072 chinook and coho jack salmon.

The number of salmon anglers consisted of 430,674 Washington residents, 95,025 other state residents, and 6,062 from Canada and other countries. Of the total number of salmon anglers it was estimated that 496,302 fished in marine waters and 35,459 fished in fresh water. The total number of salmon anglers decreased slightly from the high of 532,675 in 1973. However, the number of marine angler trips for 1974 was a record high of 1,732,156. This is 222,321 trips more than the previous high of 1,509,835 in 1 970. Salmon per trip values have ranged from 0.37 in 1964 to 0.85 in 1971. During the 11-year period, 1964 through 1974, the average catch was 0.66 salmon per trip. The 1 974 success rates were 0.71 salmon per trip and 2.48 salmon per fisherman per year.

A total of 151,000 steelhead anglers caught 184,950 steelhead in 1 974. The catch was composed of 1 37,061 winter-rur» fish and 47,889 summer-run fish.

Idaho

An estimated 5,031 anglers fished in Idaho for salmon in 1 974 and caught 1,557 fish. This was the lowest catch of record for any year in which fishing has been allowed. Steelhead anglers

TABLE 1. Salmon and steelhead sport catch in 1974'

State	Anglers	Chinook	Coho	Pink	Other salmon	Steelhead	Total catch	Fish/ angler per year
California²	unavailable	157,000	77,000	—	—	unavailable	234,000	—
Idaho	unavailable	1,557	—	—	—	3,010	4,567	—
Oregon	316,130	125,885	339,126	34	—	166,789	631,834	2.00
Washington	682,761	491,034	790,981	159	38,246³	184,950	1,505,370	2.20
Total	—	775,476	1,207,107	193	38,246	354,749	2,375,771	—

' Alaska catch data not available at this writing.
² Ocean fishery data only.
³ Includes 8,863 sockeye, 4,311 chum, and 25,072 chinook and coho jack salmon.

took an estimated 3,010 fish, which was the lowest catch of record. The steelhead fishing season was closed prematurely in October because of an extremely small run of fish to Idaho waters. Runs of both salmon and steelhead to Idaho in 1974 were severely damaged by hydroelectric dams on the Columbia and lower Snake rivers.

Oregon

The Oregon sport catch of salmon and steelhead in 1974 was estimated to be 631,834 fish, of which 465,045 were salmon and 1 66,789 were steelhead. The catch of both salmon and steelhead was more than in 1 973 and above the past 10-year average.

A total of 417,598 anglers received Oregon salmon and steelhead licenses in 1974. Of these, 24 percent (101,468) reported they did not fish. When only the 316,130 license holders who actually fished are considered, the average catch per angler year was 2.00 fish.

The Oregon offshore sport salmon fishery included 335,849 angler trips to harvest 351,264 salmon (31 7,778 coho, 33,452 chinook, and 34 pink) and 1,408 steelhead at a rate of 1.05 fish per angler trip. In coastal streams anglers caught 52,772 salmon and 122,538 steelhead, in the lower Columbia River and its Oregon tributaries the catches were 46,008 salmon and 21,881 steelhead, and in the upper Columbia River and its Oregon tributaries 2,657 salmon and 15,313 steelhead were caught. There was a catch from inland waters of 1 2,344 salmon and 5,649 steelhead not classified by area.

California

Final 1974 ocean salmon sport landings estimates show that ocean anglers landed 234,000 salmon, the third best ye; on record, exceeding 1973 landings of 230,000 salmon. Th recent 10-year (1964-73) average is 172,000 salmon.

Chinook landings in 1 974 were 1 57,000, the lowest landings since 1970 when 1 48,000 were landed. However, landings were above the 10-year average of 135,000 chinook. As usual the bulk of the chinook catch (83%) was landed by San Francisco Bay area fishermen.

The 1974 ocean sport coho catch of 7 7,000 fish was the best on record. This beat the previous record set in 1971 by 10,000 fish, and far exceeded 1973 sport landings of 32,000 coho. The 10-year average is 38,000 fish. The Eureka area as usual was the top coho salmon port where anglers landed a record 30,000 coho.

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