NOAA HEAD VOWS TO PROTECT MARINE RESOURCES

"Our marine resources--poorly understood, managed hardly at all, threatened on all sides--are among our most priceless assets. We intend that what has happened to the whale shall not be repeated with other species if it lies within our power to prevent it." So ended a speech by Dr. Robert M. White, NOAA Administrator, at the inauguration of an auditorium of the New Bedford Whaling Museum in Massachusetts on April 23.

His inaugural lecture, titled "Whales and Men," limned the rise and fall of the whaling industry and the threat today to depleted species. Its latter part dealt with major problems facing men, marine resources, and the Nation. The lesson of the whale is relevant to the solution of these problems.

The following is excerpted from Dr. White's speech.

We must, in fact, conserve or suffer the consequences. Although it is not a popular thing to say, conservation must begin at home. The concept is not an easy one to accept in the face of the difficulties which today beset New England's fisheries and with the spectacle of foreign fleets gobbling up valuable--and perishable--stocks almost under our noses.

For more than 300 years, men from New England have fished the rich banks off New England for their livelihoods. During these centuries the fishing grounds, although located in international waters, were used almost exclusively by American fishermen. In the early 1960's, huge fleets from the USSR and other nations moved in, bringing modern technology, mass fishing, depletion and hardship. Haddock, cod, herring, the hakes, mackerel and other species have been, and continue to be, heavily exploited. This audience knows the impact better than all others. You suffer double jeopardy. You bear the brunt of the economic hardship that accompanies both bad conservation practices as well as the remedies of drastic quotas necessarytogive hope of restoration of resources on which you depend. I speak of the yellowtail flounder, one of the mainstays of New Bedford's fleet today. In recent years this species has declined alarmingly, with the hardships more than evident.

You are faced with a Hobson's choice -some of you think unfairly--to suffer the immediate hardship of quota regulations and to work with us to restore the resource on which the community depends, or suffer in the long run the catastrophe which will result from unregulated take and permanent destruction of the resource. You have a right to expect the support of your Government to assist you in these difficult times. You have the right to expect your Government to represent you and your interests forcefully in international negotiations, and you have the right to expect your Government to insist upon enforcement by all, of such agreements as are arrived at. I will be the first to admit that we have not always been successful. But it is not because we have not tried. And I pledge that we will not cease to exert our every effort.

We face a dilemma. It is a fact that fisheries on the high seas beyond 12 miles, are in international waters. Under present law, they are common property and are subject to exploitation by anybody and everybody. The only mechanism we now have to regulate the take is through the International Commission for the Northwest Atlantic Fisheries. It has not served our national interests adequately, but it is all we have. We are striving in that forum to push for adequate regulations. We seek to move toward national quotas as a means, at the present time, of insuring adequate fish for our fishermen. We have made a start with herring. More species must be brought under quotas soon.

This kind of regulation may save the stocks but not necessarily American fishermen, for those nations whose recent efforts have depleted the stocks still will be able to take a major share. In our view, the problem will not approach solution until the coastal nation has a much greater degree of control over coastal fishery stocks, and a preferential share of the yield of those stocks. We have expressed our views vigorously in support of coastal Nation control of coastal stocks at the most recent preparatory meeting for the United Nations Law of the Sea Conference to be held in Geneva in 1973. NOAA and its National Marine Fisheries Service are deeply involved in planning for the conference, and we are determined to seek a U.S. position which will bring an end to the systematic overexploitation of resources on which our people depend.

We are also deeply concerned about environmental deterioration and its effects upon the living things of the sea. The practice of dumping polluted materials in the ocean has had serious consequences. Clams, bay scallops, and oysters, limited essentially to coastal waters, are especially vulnerable and deserve the best protection we can offer them. Even more important is the continuing decline of water quality in our estuarine and coastal environments, and its effect upon their capacity to produce the things we need. Man has physically damaged these environments through thoughtless dredging, filling and bulkheading, thus removing vital nursery areas. I wish very developer along the United States coastline could be made somehow to realize that two-thirds of all our coastal species spend at least part of their lives in our bays and estuaries.

Nevertheless, there are hopeful signs. Officialdom, at least, is becoming painfully aware of the fact that the coastal zone has a multiplicity of use, and one of the most important is as a habitat for valuable commercial fisheries and a source of recreation. It is becoming quite clear that coastal zone management mechanisms must be found and put into practice to properly balance the uses to which we put this vital area.

When NOAA was created in October, 1970, President Nixon charged us with a major environmental mission. Chief among our tasks are the exploration and description of the oceans, their basins, and their life forms and resources, achieving a better understanding of their processes, and supporting the technological advances necessary to effective and protective use of the seas.

Our marine resources--poorly understood, managed hardly at all, threatened on all sides--are among our most priceless assets. We intend that what has happened to the whale shall not be repeated with other species if it lies within our power to prevent it.

FOOD PRICES MAY RISE 4½% IN 1972

"Food prices in 1972 may average $4\frac{1}{2}\%$ higher than in 1971, up from the 3% increase last year," predicts the U.S. Department of Agriculture. Contributing most of this increase will be the continued large increases in disposable income and a leveling of food supplies.

The prices of food for the home "will rise close to 4% compared with the $2\frac{1}{2}\%$ boost in 1971."

Fishery Products Situation

Supplies of fishery products generally have beentight at the markets during the past few years. The situation continued in 1971. The dock strikes in late 1971 made things worse. They disorganized normal distribution and discouraged exports by foreign suppliers. Revaluation of foreign currencies favors shipment of available world supplies to overseas markets. This may cut even more the availability of seafoods in the U.S. So, percapita consumption, down in 1971, "may do well to hold steady in 1972."

Because prices soared to records in 1971, the value of per-capita sales continued strong. This was true especially for shellfish, particularly shrimp, lobster, lobster tails, crab, and scallops. Scallops remained popular at retail and institutional levels. The only major weakness was in retail sales of such basic fish commodities as fillets, steaks, and breaded fish sticks and portions.

Demand Strong

Another large rise in prices is indicated in 1972 because the continued strength in demand will keep ahead of supplies. However, due partly to Phase II of the government's economic policy, "the increase probably will be smaller than in 1971."

The institutional market, too, remains strong. Fast growth is expected in fish sandwiches, fish and chips, and similar items used mainly by food-service operations.

Supplies Tight

Supplies will remain tight. At the start of 1972, inventories of frozen fishery products were below a year earlier. In the early months of the year, domestic production is seasonally low; imports are expected to run below a year ago.

FDA PROPOSES NUTRITIONAL VALUES BE PUT ON PACKAGED FOOD LABELS

U.S. consumers will be able to determine from packaged-food labels the nutritional values of the contents, including vitamins, minerals, proteins, and calories, under a proposal made March 29, 1972, by the Food and Drug Administration (FDA). It appeared in the Federal Register the next day.

The FDA Commissioner said that if industry adopted and carried out the new program, it "could provide one of the most fundamental changes in the history of food labeling in this country. . .In the past, labeling emphasis has been on identifying the product and its ingredients. The new program encourages labeling emphasis on the identity of nutrient values." The FDA program is voluntary.

Type of Information

The proposal outlines the format and type of nutrient information manufacturers must make available (and position on the label) if they want to join the labeling program. Tests showed that consumers want and will use better information on nutrients.

Recommended Daily Allowance

The Recommended Daily Allowance (RDA) will serve as the standard for nutrient values on the labels. The RDAs are amounts of nutrients recommended by the Food and Nutrition Board of the National Research Council. They are considered adequate to maintain good nutrition in healthy persons in the U.S. The allowances are revised as newer knowledge of nutritional needs accumulates.

The declaration on the label must include this information according to the stated serving or portion:

- Caloric content to the nearest 5 calorie increment;
- 2. Number of grams of protein, fat, and available carbohydrates to the nearest gram;
- Vitamins and minerals expressed in 10% increments of the RDA (5% increments may be used up to 20%). The statement, "Contains no significant quantities of vitamins and minerals," may be used

if product contains less than 5% of any vitamins or minerals required to be listed; and

4. The listing must include Vitamin A, Vitamin C, Thiamin, Riboflavin, Niacin, Calcium, and Iron. Mention of other vitamins and minerals is optional.

NMFS NAMES CHIEF OF STATE-FEDERAL RELATIONS

NMFS has appointed Takashi Miyahara, 46, of Seattle, Wash., Chief of its Office of State-Federal Relationships (OSFR). He will plan and administer State-Federal cooperative efforts to develop and implement new concepts in managing commercial and recreational fisheries. He will direct the NMFS \$6.5 million grant-in-aid program.

NMFS Director Philip M. Roedel noted the long-established need for more rational systems to manage U.S. fishery resources. The new State-Federal Fisheries Management Program is intended to create and encourage such systems.

To develop programs and policies for solving management problems of mutal concern, Miyahara will represent NMFS in contacts with Congress; State and Federal officials, including State legislative bodies; officials of scientific organizations, and commercial and recreational fishing groups.

Background

Miyahara worked for the Bureau of Commercial Fisheries (now NMFS) from 1953 to 1962. He resigned to join Wakefield Fisheries of Alaska as general superintendent for about nine years. Wakefield was the pioneer and largest king-crab processor in the U.S. until its merger with Hunt-Wesson Foods. Frequently, he testified at fishery regulation hearings and participated in international negotiations.

After leaving Federal Service, he was asked to continue his association with scientists on the U.S. Section of the King Crab and Tanner Crab subcommittee of the International North Pacific Fisheries Commission. On several occasions he served as chairman and spokesman for the subcommittee. Also, he worked with the Alaska Department of Fish and Game and the Alaska Legislature on the State's king-crab program.

Miyaharaholds a B.S. degree in fisheries from the University of Washington, Seattle. He is a member of the American Institute of Fisheries Research Biologists.

U.S. AND CANADIAN LOBSTER RESEARCHERS MEET

U.S. and Canadian lobster researchers met at the NMFS Biological Laboratory in Woods Hole, Mass., March 28-29, to review both current research and progress since their last meeting in St. Andrews, New Brunswick, in 1970.

Researchers know that seawater temperature and available food are the primary factors affecting the growth rate of juveniles and young adults. They are seeking the information necessary to induce a greater ratio of internal growth with more frequent moulting. Also, they would like to increase the size increment resulting from each moulting. These aspects of lobster culture have direct application to the commercial rearing of lobsters.

Distinct Stocks of Lobsters

The study of lobster growth patterns is especially important in estimating productivity rates of lobster populations. The separation of the lobster resource into distinct stocks, each with a different growth rate, will help to clarify some aspects of the total productive capability of natural lobster populations. Understanding this capability is important in maintaining profitable commercial fishing operations.

The meeting was held at the NMFS Northeast Fisheries Center in Woods Hole, although the Center's lobster research is conducted at Boothbay Harbor, Maine. Boothbay Harbor scientists reported on the results of their lobster-tagging program. This program is important in "determining the extent, seasons, and areas of mixing between New England offshore and coastal lobster populations."

The coordinator of the workshop was Ernest D. McRae Jr.

GRAY-WHALE CENSUS SHOWS 15% DECLINE

The annual count of the southward-migrating gray whales, Dec. 18, 1971-Feb. 8, 1972, was conducted at Yankee Point near Monterey, Calif. Richard Fletcher and Ella Mae Zeman counted 2,740 whales passing between 7 am and 5 pm daily. Forty more whales were seen that already had passed the point by 7 am or had not reached it by 5 pm. Total population--including whales that passed at night or were missed by the observers during poor visibility--is estimated at about 9,000.

Possible Reasons for Decline

This year's count was about 15% below the previous 4 years, 1967-68 to 1970-71. The reasons are unknown. NMFS La Jolla suggests that these possibilities be investigated: 1) increased boat traffic in Monterey Bay area may be causing a larger proportion of the whales to migrate farther offshore; 2) Eskimos in Siberia and Alaska may be killing more whales; and 3) increased tourboat traffic in Scammon's Lagoon, one of the whale's major Mexican calving grounds, may be reducing the survival rate of calves. The lagoon is south of the Bay of Sebastian Vizcaino on the west coast of Baja California.

Mexico Establishes Sanctuary

By presidential decree, effective in early January 1972, Mexico established a refuge for whales in Scammon's Lagoon.



SAN PEDRO NO. 1 IN LANDINGS VALUE, CAMERON, LA., IN VOLUME

San Pedro, California, retained its position as No.1 fishing port during 1971 in value of landings--but Cameron, La., replaced it in volume.

Many of the same seaports remained among the top 10 in value of catch to fishermen and in pounds landed. None of the 10 occupies the same position on both lists.

The leading ports by value of landings were San Pedro, Calif.; Brownsville-Port Isabel, Tex.; Kodiak, Alaska; New Bedford, Mass.; Aransas Pass-Rockport, Tex.; Dulac-Chavin, La.; San Diego, Calif.; Freeport, Tex.; Cameron, La.; and Morgan City, La.

Tuna is the primary species landed at San Pedro; menhaden accounts for most landings at Cameron.

The portrankings by volume in 1971 were Cameron, La.; San Pedro, Calif.; Pascagoula-Moss Point, Miss.; Dulac-Chavin, La.; Morgan City, La; Empire, La.; Kodiak, Alaska; Gloucester, Mass.; New Bedford, Mass.; and San Diego, Calif.

WASHINGTON-OREGON SALMON PACK ROSE SHARPLY

Preliminary estimates of the 1971 Washington-Oregon canned salmon pack indicate 615,550 standard cases (48 one-pound cans per case). This is an increase of 357,900 cases (139%) over 1970. Dominating the 1971 pack was Puget Sound sockeye salmon: 251,483 cases, 41% of total.

The canned pack of sockeye salmon in Puget Sound was up to 50% above the cycle year 1967 pack.

The 1971 Puget Sound pink-salmon pack of 146,800 cases was slightly less than double the 1969 cycle year pack of 75,857 cases.

In Puget Sound, pink salmon are 2-yearolds when they return from the ocean to spawn; sockeye salmon are 4-year-olds when they return. Puget Sound pink-salmon runs occur only in odd-numbered years.

1971 GULF MENHADEN CATCH SETS RECORD

The menhaden catch in the Gulf of Mexico broke all records in 1971--over $1\frac{1}{2}$ billion pounds were landed in Mississippi, Louisiana, and Texas. It was the largest catch of a single species in U.S. history. Menhaden, primarily, is an additive in meal fed to poultry and cattle.

MORATORIUM ON NORTHERN STOCK OF PACIFIC SARDINE RECOMMENDED

The "catastrophic decline" in California sardines in the late 1940s motivated establishment of the California Marine Research Committee (MRC). MRC coordinated U.S. and state research on sardines.

On Feb. 8, 1972, MRC recommended a moratorium on the northern stock of Pacific sardine. Although this stock is very important to commercial and sport fish industries of California, MRC said, data from CalCOFI indicated it was at extremely low level. Drs. W. Lenarz and P. Smith of NMFS La Jolla Laboratory provided some of the data.

MRC Recommends Legislation

MRC asked the Director, California Department of Fish and Game, to initiate appropriate legislation in the 1972 regular session of the California Legislature. It asked the U.S. State Department to join with Mexico to enact a moratorium on northern stocks of Pacific sardines off west coast of northern Baja California, Mexico.

REVIEW PACIFIC NORTHWEST COASTAL-POLLUTION STUDIES

Six Oregon State University scientists have compiled a review of all oceanographic literature on the coastal zone from Cape Flattery, Wash.; to Cape Mendocino, Calif. It is entitled, "Oceanography of the Nearshore Coastal Waters of the Pacific Northwest Relating to Possible Pollution." The first volume contains a bibliography and 21 chapters on the physical, biological, and chemical characteristics of the northeastern Pacific. The second volume contains charts and tables. The report excludes studies on bays and estuaries.

Available From GPO

The report was prepared with a grant from the Water Quality Office of the Environmental Protection Agency. It is part of the waterpollution-control research series sponsored by the Water Quality Office. Copies are available through the U.S. Government Printing Office for \$11.25.

NMFS ALASKA HOLDS POT FISHING WORKSHOPS

Nearly 200 fishermen, businessmen, and students came to a series of informal workships designed by NMFS Alaska Region to demonstrate assembling and fishing techniques of pots for sablefish and other bottomfish. The workshops were held in Homer, Seward, Sitka, Petersburg, and Ketchikan in January. Components of the pots, preshipped to the workshops, were assembled with audience participation. The completed pots, ready to fish, were left with fishermen at each location. The fishermen will experiment with them on various species. Results of the test fishing will be made available to other interested fishermen.

Extension Program

The workshops were part of the NMFS Alaska fisheries extension program. Fred Hipkins, fishing-gear research specialist, from Seattle, Wash., demonstrated and supervised pot-assembly methods. He discussed experiments, evaluation, and fishing experience with the pots on black cod in Washington and Oregon waters.

The purpose of the workshop was to expose fishing communities to relatively inexpensive gear that, potentially, can be used by independent fishermen to catch underutilized bottomfish resources. This purpose was explained by NMFS Alaska coordinator, Walter Jones, who arranged the workshops. A step-by-step description of pot construction (6 and 8 foot), with a materials list, will be written by Fred Hipkins for distribution to workshop participants. Information on NMFS experimental fishing with pots off Alaska during sablefish tagging in February will be provided fishermen.

Can Catch Other Bottomfish

NMFS staff emphasized that the pots would fish bottomfish other than sablefish, such as cod, lingcod, rockfishes, and soles. Many southeast Alaska fishermen are so oriented to salmon, king crab, and halibut fishing that they doubt they can fish for much less than 20 cents per pound. There are markets in all workshop areas offering 8-12 cents per pound (depending on dressed condition) for rockfishes and around 17 cents a pound for true cod (for bait). The market now for sablefish is strong-around 30 cents per pound.

ALASKA FORECASTS 1972 SALMON CATCH

The 1972 catch forecast for Bristol Bay red salmon is grim, that of pink salmon bright, according to the Alaska Department of Fish and Game.

The catch of red salmon in Bristol Bay is predicted at about 5,375,000 fish. This will produce a case pack of about 375,000 standard cases--down 45% from 1971 pack, but slightly above cycle year pack of 335,000 cases.

1972 Alaskan Salmon Catch Forecast (In Numbers of Fish)

Region	King	Red	Coho	Pink	Chum	Total
			(1,00	0 Fish)		
So. Eastern Central Western	300 30 280	800 2,990 5,370	750 670 170	16,500 12,350 1,140	1,000 3,080 1,290	19, 350 19, 120 8, 250
Total	610	9,160	1,590	29,990	5,370	46,720

An Alaskan pink salmon pack of 1,420,000 cases is predicted, 39% above 1971's 1,017,653 cases. This would be up slightly from the 1970 cycle year pack of 1,329,000 cases.

ALASKA'S SALMON-FISHERY LICENSING SOARS

Alaska requires licenses for fishermen, vessels, and gear. Between 1962 and 1971, only the numbers of purse seines licensed annually remained relatively constant. Those of troll, drift net, and set-net licenses reached record levels in 1970 and 1971. More than 4,000 fishermen entered Alaska's fisheries during the decade.

	1962	1971
Vessels	8,157	10,710
Gear: Troll Purse seine Drift gill net Set gill net	1,440 1,402 2,895 2,294	2,353 1,323 4,779 3,062
Fishermen: Resident Nonresident	10,333 	14,176 6,388
Total fishermen	16,405	20,564

Nonresident fishermen make up about 30% of all fishermen. The home state of nonresident fishermen has not been tallied, but the Alaska State Department of Revenue reports that over half of the nonresidents were from Washington State, and one-fourth from Oregon. An estimated 600-700 Californians register to fish in Bristol Bay.

In 1971, only 14 Alaska vessels fished in Washington State waters.

BLOODWORM MAY BE MOST VALUABLE MARINE ANIMAL

On the basis of weight, the bloodworm used as bait by sport fishermen may be the most valuable regularly harvested marine animal.

In 1971, about 845,000 pounds were harvested in Maine. They were worth about \$1,250,000 to the diggers, who took the worms from mud flats exposed by receding tides. In recent years, the bloodworms have averaged about 140 to the pound and cost anglers about \$1 a dozen. This is almost \$12 a pound if sold by weight.

Because bloodworms are valuable, scientists of Maine's Department of Sea and Shore Fisheries, supported financially by NMFS, are studying causes of mortality in harvesting, handling, and shipping.

TAGGED BLUE SHARK RECAPTURED 2000 MILES AWAY

A 6-foot blue shark, tagged off Cape Cod, Mass., October 1970, was recaptured by a Taiwanese longliner in April 1971. The site was latitude 19⁰29' N. longitude 43⁰23' W.-over 2000 miles southeast of tagging site, about half way between the West Indies and Africa. This is the farthest east a tagged shark has moved.

Earlier, a blue shark was recovered from this same area. It had traveled 1800 miles westward from the Canary Islands.

Both sharks were free for nearly 6 months. Their rates of travel were 10.5 and 11.8 miles per day.

U.S. FIRM FLIES EELS TO BRITAIN

A Philadelphia, Pa., firm last fall delivered 70 tons of live eels by air freight to London in less than 12 hours. The mortality rate for such shipments rarely exceed two percent.

The size of the British market was estimated at around 800 tons a year. Most imports are made from December to March, when live eels, mainly from Ireland, are out of season. Frozen eels are imported only when adequate live supplies are not available. American yellow (known in London as brown) and silver-bellied eels are sold in Britain. (Fish Industry Board, New Zealand.)

BASKET COCKLE IS EXPOSED BY OREGON RESEARCHERS

A bay clam common to Oregon, the basket cockle, is having its life history told. It is the result of a 3-year study, begun in 1969, by Oregon State University's Department of Fisheries and Wildlife to learn more about this important invertebrate's biology.

"Harvest regulations are based on a very limited knowledge of the basic biology of this animal. We sought to gain information which would provide a basis for alterations in management practices, where needed, to regulate harvest," said Robert Scott, a research assistant.

"As a near-surface dweller, the basket cockle is easy to harvest with sport gear and in the study area, the sport harvest of clams has been tremendous. As a result, it is not uncommon to find cockles in limited supply in once heavily populated areas in Netarts Bay."

It Is Long Lived

The basket cockle is long lived. It may live as long as 10 to 15 years in Oregon estuaries. Age of cockles up to 2-3 years can be determined on the basis of size. "Older individuals become increasingly difficult to age, because growth patterns become more irregular. Counts of shell 'growth rings' provide no useful indication of age on animals from the study area," Scott notes.

The spawning season is long. Freeswimming larval stages are found in the Bay from early spring to late fall.

Oregon shellfish harvest regulations set daily limit of the first 36 cockles dug, regardless of size.

