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Annual Report to the Marine Mammal
Commission, Calendar Year 1975
A Report to Congress

Marine Mammal Commission, Washington, D C

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ANNUAL REPORT OF THE
MARINE MAMMAL COMMISSION, CALENDAR YEAR 1975

A REPORT TO CONGRESS

31 January 1976

Marine Mammal Commission

1625 Eye Street, N.W.

Washington, D.C. 20006

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MARINE MAMMAL COMMISSION
1625 EYE STREET, N. W.
WASHINGTON, DC 20006

The President of the Senate

The Speaker of the House of Representatives

Sirs:

I have the honor to submit, in accordance with Public Law 92-522, 21 October 1972, the third Annual Report of the Marine Mammal Commission, Calendar Year 1975.

Respectfully,



Victor B. Scheffer, Chairman

31 January 1976

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INTRODUCTION

Background

This is the third Annual Report of the Marine Mammal Commission, an independent commission established under Title II of the Marine Mammal Protection Act of 1972 (P.L. 92-522, 21 October 1972).

In the Marine Mammal Protection Act, Congress established a national policy to encourage the development of marine mammal populations to optimum sustainable levels, while maintaining the health and stability of the marine ecosystem. Title II of the Act charges the Marine Mammal Commission with responsibility for developing and reviewing information, actions, and policy to insure that these objectives are attained.

Personnel

The three Commissioners, appointed by the President, are: Victor B. Scheffer (Chairman), Bellevue, Washington; Richard A. Cooley, Santa Cruz, California; and Donald B. Siniff, Minneapolis, Minnesota. Dr. Siniff was appointed for a three-year term in September 1975 to replace Dr. A. Starker Leopold.

The nine-member Committee of Scientific Advisors on Marine Mammals, composed of scientists knowledgeable in marine ecology and marine mammal affairs, included (at the close of 1975): Richard H. Backus, Woods Hole Oceanographic Institution; Robert L. Brownell, Jr., Smithsonian Institution; John J. Burns, Alaska Department of Fish and Game; Chairman Douglas G. Chapman, University of Washington; L. Lee Eberhardt, Battelle-Northwest; Francis H. Fay, University of Alaska; Ancel M. Johnson, U.S. Fish and Wildlife Service, Anchorage, Alaska; Clayton E. Ray, Smithsonian Institution; and Sam H. Ridgway, Naval Undersea Center, San Diego.

During the course of the year, the following individuals completed their terms of service on the Committee: George A. Bartholomew, University of California, Los Angeles; Jack W. Lentfer, U.S. Fish and Wildlife Service, Anchorage, Alaska; Kenneth S. Norris, University of California, Santa Cruz; G. Carleton Ray, Johns Hopkins University; William E. Schevill, Harvard University and Woods Hole Oceanographic Institution; Donald B. Siniff, University of Minnesota; and Jesse R. White, Miami, Florida.

Senior Commission staff members are: John R. Twiss, Jr., Executive Director; Robert Eisenbud, General Counsel; Robert J. Hofman, Scientific Program Director; and Margie W. Barnes, Administrative Officer.

Major Activities in 1975

During 1975, the Commission:

- . Participated in the Marine Mammal Protection Act Oversight Hearings conducted by the House Subcommittee on Fisheries and Wildlife Conservation and the Environment
- . Contributed to developing a more constructive approach to solving the problem of porpoise kill incidental to the commercial yellowfin tuna fishery
- . Held four workshops on critical problems (status of Atlantic bottlenose porpoise stocks; porpoise breeding in captivity; numbers and movements of killer whales in Washington State; and tuna-porpoise behavior)
- . Committed approximately \$436,000 to a program of directed research and study consistent with the goals and objectives of the Act
- . Continued a review and study of U.S. activities pursuant to relevant laws and international conventions
- . Continued a review of all national research programs conducted under the Act
- . Recommended action on 60 applications for permits to take marine mammals
- . Recommended to the Departments of Commerce and of the Interior standards for the holding of marine mammals
- . Recommended changes in the Endangered Species List
- . Undertook studies of marine and coastal areas in which marine mammals may require special protection.

These activities and others are more fully described in the body of the Report.

RESEARCH AND STUDIES PROGRAM

In the Marine Mammal Protection Act of 1972, Congress recognized that existing knowledge of the ecology and population dynamics of marine mammals was not adequate to provide the basis for management decisions to conserve them. Therefore, Congress directed that not less than two-thirds of the Commission's annual funds be expended on research and studies.

Eight Categories of Research

The Commission, in consultation with the Committee of Scientific Advisors, identified eight categories of necessary research on marine mammals: (a) Assessment of marine mammal populations; (b) Relationships between marine mammals and their environments; (c) Magnitude and effect of marine mammal take; (d) Husbandry techniques for captive marine mammals; (e) Socio-economic and legal aspects of marine mammal protection and conservation; (f) Assessment of man-induced hazards; (g) Identification and preservation of critical habitats; and (h) Ecological life histories of individual species.

The importance of each category is detailed as follows:

(a) Assessment of Marine Mammal Populations

For each species of marine mammal, reliable information on stock identity and size, distribution patterns, and age-sex composition is necessary for its management. These baseline data are important also because they provide the basis for measuring changes resulting from human activities. The data are acquired through field investigation, review of the available literature, and consultation with knowledgeable persons.

(b) Relationships between Marine Mammals and their Environments

Marine mammals require food and breeding areas. Moreover, they affect, and are affected by, subtle and poorly understood changes in the marine ecosystem. A comprehensive knowledge of the relationships between marine mammals and other marine biota (especially commercially harvested fish and shellfish) is required to determine the optimum sustainable population levels.

(c) Magnitude and Effect of Marine Mammal Take

Precise, current data on the magnitude and effects of taking are essential for management. Marine mammals may be taken for scientific research, public display, native subsistence, and commercial use under waivers of the moratorium. They may also be taken under provisions of agreements such as the International Whaling Convention, the Interim Convention on Conservation of North Pacific Fur Seals, and the Convention for the Conservation of Antarctic Seals.

(d) Husbandry Techniques for Captive Marine Mammals

About twenty marine mammal species are commonly held in captivity for research and public display. Investigations of reproductive biology, behavior, space requirements, nutritional requirements, and disease are necessary to improve husbandry practices, and thereby reduce the number of animals which might otherwise be removed from wild populations.

(e) Socio-economic and Legal Aspects of Marine Mammal Protection and Conservation

Many activities affecting the protection and conservation of marine mammals are undertaken pursuant to existing domestic laws and/or international treaties or conventions. Continuous review and evaluation of these authorities, as well as activities conducted thereunder, are needed to determine the extent to which they are consistent with the Marine Mammal Protection Act.

(f) Assessment of Man-Induced Hazards

In addition to suffering the impact of direct taking by man, many species of marine mammals are sensitive to, and adversely affected by, other human activities. The Commission encourages investigation of the adverse impacts of factors such as: human visitation to breeding and haul-out grounds; pollution; fisheries for species which are important in the diet of marine mammals; oil and gas exploration, extraction, and transportation; and power boating. These investigations will help to provide an adequate body of information on which to base recommendations designed to remedy or prevent undesirable situations.

(g) Identification and Preservation of Critical Habitats

Certain geographic areas are critical to the survival of marine mammal populations. These areas may be vital for food, breeding, haul-out or other purposes, and should be protected from activities which threaten their integrity. Identifying these areas, protecting them from disturbance, and preventing their deterioration are important management objectives.

(h) Ecological Life Histories

Management decisions to protect and conserve marine mammals should be based upon an understanding of all aspects of their biology; it is especially important to understand those particular biological characteristics which influence or determine a species' role in the marine ecosystem. Therefore, there is a need for research that will provide data on, for example, food habits, predator/prey and competitive relationships, ethology (behavior), reproduction, and spatial requirements. Analysis of the data should provide insight into the selective factors that have molded the various life history strategies, and should provide a basis for predicting the effects of alternative management actions.

Review of Federally Funded Research

Since Congress did not intend that the Commission address all information needs through its own field research, the Commission reviews all federally funded marine mammal research projects to avoid wasteful duplication of effort and to insure the expeditious development of a sound data base for management decisions. In the spring of 1976, the results of a Commission review of research objectives and priorities will be published, along with recommendations for changes in emphasis in the research activities of appropriate federal agencies. This review is part of an effort to insure the implementation of an integrated, national marine mammal research program.

One thrust of the coordinated research activities is the development of the data base necessary for the management of marine mammal populations at optimum sustainable levels. Congress hoped, and the Commission shares the hope, that these new marine mammal management practices will serve as a model for the conservation and protection of other wild-life as well.

Commission Research and Study Projects (Short titles)

The following brief notes summarize activities within the Commission's research and study program.

Marine Mammal Species Inventory

(R.L. Brownell and C.M. Schonewald, Smithsonian Institution)

This analysis is one of the most important undertaken by the Commission from the standpoint of establishing a base for comprehensive conservation efforts. For each species, the report will contain the common name, species distribution, stock designations (both recognized and proposed), population size, institutions conducting research, and levels of take over the last ten years by location and country involved. Only such comprehensive information can provide an adequate base for the negotiation of conventions and other major policy decisions related to management.

Marine Mammals at the Farallon Islands

(D. G. Ainley, Point Reyes Bird Observatory)

The investigator has a unique opportunity to study the reestablishment, at the Farallon Islands off California, of a breeding colony of northern elephant seals ^{1/}, and to monitor the changing status of three other pinnipeds: the Steller sea lion, the California sea lion, and the harbor seal. Observation of the Steller sea lion colony indicates a population decline; this decline may be caused by the high incidence of stillbirths, or by a low pregnancy rate, or both. Gray whales were observed in summer residence in California for the first time in decades, and data were collected on females with calves. In all, eight cetacean and five pinniped species have been under observation. The Commission renewed this contract to insure uninterrupted collection of data. The information it is providing is necessary to identify population trends and to provide a basis for assessing the impact of human activities.

Report on San Miguel Island

(R. L. DeLong)

San Miguel Island, off southern California, is the only island in the world that supports six different species of pinnipeds. The island provides an exceptional opportunity to

^{1/} Common names for marine mammals are used in this Report. See Appendix A for scientific nomenclature.

study interspecific pinniped behavior as well as the ecology and biology of the individual species. In this study, the investigator identified specific threats to pinniped populations, and recommended elimination or reduction of human disturbance, especially during the breeding season; elimination of commercial capture of the California sea lion and other pinnipeds; development of non-consumptive, esthetic uses of San Miguel Island pinniped populations; and provision for pinniped welfare as oil reserves are developed offshore and on the Island. A review of resource management agencies which might undertake necessary management efforts is included in the final report.

Aerial Counts of Pinnipeds: Pacific Coast (B. R. Mate, Oregon State University)

The purpose of this study was to collect data on the status, composition, distribution, and movement of pinniped populations along the Pacific coast of the contiguous United States and nearby waters. During ten aerial surveys, the investigator discovered previously unknown rookeries and hauling-out areas, and noted range extensions for three pinniped and three cetacean species. This type of information is critically important for establishing the baseline standards that are necessary to evaluate the impact of human activities such as outer continental shelf oil and gas development.

Gray Whales in their Breeding Waters (R. Gard, Colorado State University/University of Alaska)

The analysis of data from this study resulted in important findings for the conservation of gray whales. Aerial censuses of the lagoons, the coast of Baja California, and the west coast of the Mexican mainland indicated that the total number counted in 1975 (1760 whales) was similar to the count in 1974 (1811 whales). In 1975, however, the number in San Ignacio Lagoon was 25% lower than in 1974. The observed decrease in whales may well be related to the increase in large tourist vessels and small boats. A similar cause may explain the late arrival of fewer whales in Canal Ballenitas where the popularity of whale watching has resulted in increased outboard boat traffic. The investigator also identified an important gray whale nursery area.

Cetacean Strandings on the Texas Coast (D. J. Schmidly, Texas A&M University)

Biological and ecological data on cetaceans in this area is essential. To gather additional data, the investigator established a comprehensive specimen and data recovery network

to investigate stranded or beached cetaceans, and, so far, has responded to sixteen stranding reports. From these studies, as well as from literature surveys, indications of the types, abundance, and seasonal occurrence of cetaceans will be gained. The investigator is also observing free-ranging bottlenose porpoises to determine the most effective methods of observation.

Marine Mammal Biological Data from Stranded Cetacean Salvage Program

(J. G. Mead, Smithsonian Institution)

An important source of information concerning the distribution and biology of cetaceans is the study of stranded individuals. Historically, stranded specimens have usually been lost to science due to the lack of organized recovery programs. In this study, the investigator is conducting a continuing program of recovery and examination of stranded animals found along the U.S. Atlantic coast. Supplemental information on cetaceans is being obtained from surveys of existing literature and museum collections. Thus far, the investigator has gathered data on the distribution, biology, and taxonomy of 34 species of cetaceans. These data contribute to the development of a more adequate information base.

Killer Whale Workshop

(D. G. Chapman and A. W. Erickson, University of Washington)

A workshop on the killer whale was held to assess the status of this species in the Pacific Northwest, and to recommend studies needed to insure its proper management and conservation. The participants found current knowledge to be sparse, particularly as concerns abundance and distribution. They noted that although there is little evidence that commercial collecting activities are presently threatening Puget Sound killer whales, the effect of take on the social structure, behavior, and composition of individual killer whale "pods" (groups) is unknown. The participants recommended the early initiation of a major study of killer whales in the Pacific Northwest. The recommended research would address both the development of technology required to perform the necessary research as well as basic population and life history studies of the species. Technological research would concentrate on the development of suitable marking procedures and aerial census to assess population abundance and movements. Life history studies would concentrate on pod structure, i.e., integrity, age-sex composition, social structure, behavior, and interaction with other pods. As a result of the workshop recommendations, the Commission is seeking to develop a coordinated interagency research program designed to help answer the substantive questions.

Killer Whales in Puget Sound
(A.W. Erickson, University of Washington)

As shown by the Commission's workshop, data on the size and movements of the killer whale population in Puget Sound is essential. The investigator is examining methods for radio-tagging and monitoring movements of killer whales. So far, he has developed a prototype radio transmitter and attachment device, and is planning to test other marking methods. Special emphasis is being given to an investigation of freeze-branding techniques in coordination with another Commission-supported project. Much of the marking information obtained from this study should be applicable to other cetaceans. As time, opportunity, and resources permit, the investigator will also conduct research on reproductive cycles, genetic factors (e.g., blood chemistry differences among stocks), and other aspects of the biology of the killer whale.

Pollutants and Sea Lion Mortality
(W.G. Gilmartin et al., Naval Undersea Center)

The investigators are attempting to determine if there is a cause-effect relationship between pollution and reproductive failure in the California sea lion. Apropos of San Miguel Island, it is hypothesized that the high incidence of pup mortality may be due to high tissue toxicant levels. If true, there is cause for great concern, because reproductive failure could quickly lead to extinction of local populations.

Background Study of the California Sea Otter
(C.D. Woodhouse, Jr., Santa Barbara Museum of Natural History)

Although the sea otter has recovered from the verge of extinction, its population growth has placed it in competition with man and has raised controversial issues such as the conflict with abalone fishermen. Management decisions on sea otters will have to draw on an up-to-date knowledge of the status and biology of the species. This study will provide a summary and appraisal of the present knowledge of the sea otter with reference to its interactions with man, the status of its populations, and its general biology and ecology.

Natural History of the California Sea Otter
(J. E. Vandevere)

The purpose of this study is to characterize the feeding habits of the southern sea otter, and to assess its influence on the composition of its habitat. Data are being collected on the otters' feeding cycles, duration of feeding, amount consumed, and size and kind of prey species. The information

is important because the California sea otter and west coast shellfish fisheries compete for some of the same prey species.

Behavior of the California Sea Otter

(J.L. Kavanau, University of California, Los Angeles)

Using radio telemetry and visual observation, the investigator will study the behavior, home range, activity cycle, and foraging strategies of the California sea otter. Results will help to document the sea otter's recolonization of its former range and to evaluate its role in the ecosystem. The study will support efforts to conserve and protect sea otters from man-induced hazards.

Systematics of Harbor Seals and Walruses

(F.H. Fay and J.J. Burns, University of Alaska)

The taxonomic and systematic status of many harbor seal and walrus populations is uncertain. Since management policies are best formulated for specific taxonomic groups, it is important that scientific classifications accurately represent the populations involved. In this investigation, museum specimens in Canada, northern Europe, and Asia were measured and compared in an attempt to identify significant phenotypic variation. Preliminary analysis suggests that there are geographically discrete populations.

Harbor Seals in San Francisco Bay

(R.W. Risebrough et al., Bodega Bay Institute of Population Ecology)

A small population of harbor seals in San Francisco Bay is threatened by increasing disturbance and environmental pollution. The investigators are assessing the impact of pollution and human disturbance on both the seals and their habitat. The results will contribute to our understanding of habitat degradation and its impact, and may suggest means of preventing it.

Harbor Seals in Washington State

(M.L. Johnson, University Puget Sound)

The harbor seal has declined sharply in numbers in many parts of its range. Grays Harbor, Washington, still has a population of 100-500 seals; it provides an ideal area for intensive study of this species. The investigator is evaluating the population with major emphasis on numbers, fluctuations, and local or migratory movements. Monthly aerial surveys are being carried out, as are direct observations on

Gertrude Island in Puget Sound. The results will include recommendations for the conservation of Washington harbor seal populations.

Harbor Seals in Prince William Sound
(K. Pitcher, Alaska Department of Fish and Game)

Systematic collections of harbor seals in the Prince William Sound area are being made to determine their reproductive parameters, and the type and abundance of prey species. Identification of common prey species from stomach content analyses will help to elucidate the interaction between the seals and fish in the area. Analysis of reproductive tracts will provide reproductive data necessary to establish proper harvest levels, should the hunting of seals in this area be resumed.

Abundance and Distribution of Harbor and Gray Seals Along the
Maine Coast
(D.T. Richardson, Department of Marine Resources, State of Maine)

A statistical sampling program has been designed to give yearly estimates of the populations and distributions of harbor and gray seals in Maine waters. An aerial survey of the entire coastline identified 200 haul-out sites. Randomly selected sites, representative of habitat types, are periodically monitored for seasonal and yearly changes in seal abundance. The results will be used to make management decisions on the taking of seals for public display and research. They will also provide information on the role of the seals with respect to commercial and sports fisheries.

Harbor Seals in Oregon
(L.G. Forslund, Oregon State University)

This study was designed to determine behavioral aberrations caused by human activities that might be affecting reproduction and recruitment. After the study had been partially completed, the investigator encountered difficulties with personnel and equipment. The Commission determined that the contract could not be fulfilled, terminated it, and withheld unexpended funds.

Food Consumption by Northern Fur Seals
(K. Miller, University of Alaska)

The investigator will determine metabolic rates and heat budgets of fur seals under various physiological conditions, and will use these data in an effort to determine the annual caloric requirements of the North Pacific fur seal herd. The results will elucidate the extent of competition between fur seals and commercial fisheries.

Food Habits of Walruses in the Bering Sea
(F.H. Fay, University of Alaska)

The walrus may be an indicator species useful to man in monitoring the effects of environmental perturbations upon the sea floor of the Bering Sea Shelf. The investigator is qualitatively and quantitatively examining walrus stomach contents to determine diet. The results will be used to develop better estimates of the dependence and impact of the walrus on the invertebrate faunae of the region. The information will be valuable in estimating the probable effects of further commercial development (fisheries, oil, minerals) on the Bering Sea ecosystem.

Censusing Walrus Populations
(G.C. Ray, Johns Hopkins University)

Pinniped population assessment requires that animals be out of the water. To develop a predictive model, the investigator is observing and remotely sensing the Pacific walrus to determine the effects of weather, time of day, season, and sea-ice conditions on hauling-out behavior. An insight into the environmental and behavioral variables affecting hauling-out of the walrus in particular, and pinnipeds in general, should significantly advance our ability to accurately assess marine mammal populations.

Findings from a Mass Stranding of Porpoise
(J.R. Geraci, New England Aquarium)

A September 1974 stranding of approximately 200 Atlantic white-sided porpoises at Lingley Cove, Maine, provided a rare opportunity to investigate causes of mass stranding. Representative carcasses were obtained for detailed studies, and gross pathology examinations, as well as histological studies of selected tissues, were completed. Stenurus globicephalae, a parasitic worm of the head sinuses and middle and inner ears, was found in abundance in all of the subadult and adult porpoises. These parasites may cause echo-confusion and

contribute to strandings. Concurrent with the biological analyses, characteristics of the cove itself are being studied to determine if acoustic or other characteristics may have contributed to the stranding.

Workshop on Status of Bottlenose Porpoise
(D.K. Odell, University of Miami)

The workshop was convened (23 June 1975) to review knowledge of bottlenose porpoise populations; status of research underway and contemplated; management needs; and further studies necessary to provide the base for sound management decisions. Because of the recognized lack of scientific information, participants concentrated on developing a research plan. It included studies of census methodology and means of collecting vital statistics on local populations. Participants also felt that a multi-agency, interdisciplinary bottlenose porpoise research program should be developed, and so recommended. They stressed Commission involvement to ensure uniformity and comparability of data collection procedures, and also suggested that the Commission assume responsibility for the establishment of a central data storage system. They further recommended that guidelines for collecting activities should be established to minimize disturbance to the animals. Consistent with these recommendations, the Commission has contracted for additional studies to (a) assess the utility of various survey methods used to census porpoise populations; and (b) identify various public and private institutions that could serve as clearing houses and storage banks for marine mammal tagging information. At present, the Commission is developing recommendations to be transmitted to the appropriate federal agencies.

Bottlenose Porpoise in Louisiana and Mississippi
(S. Leatherwood, Naval Undersea Center)

Using aerial surveys, line transects, and square unit sampling techniques, the investigator is assessing the population levels of Atlantic bottlenose porpoises along the coast of Louisiana and Mississippi. By using different census techniques, the accuracy and utility of the various methods are being compared. Field testing is also designed to measure the effects of variables such as weather, type of aircraft, and observer bias.

Survey of Bottlenose Porpoise in Southeast Florida
(D.K. Odell, University of Miami)

Monthly aerial surveys are providing information on abundance, seasonal distribution, and habitat preference of bottlenose porpoises in the coastal and estuarine waters of Florida. For each herd sighted, data on herd size, composition, and behavior are recorded. The investigator has recorded population densities in and around Biscayne Bay and in Everglades National Park, a protected area. On an opportunistic basis, the investigator has also performed autopsies on ten stranded cetaceans. As a result, significant data are being collected on the dwarf and pygmy sperm whales, species about which little is known.

Survey of Bottlenose Porpoise in Southwest Florida
(J.H. Kaufman and A. B. Irvine, University of Florida)

Under their first contract, the investigators used radio and visual tagging to study movements, activities, and habitat preference of bottlenose porpoises near Sarasota, Florida. The Commission has extended support of this study so that tagging and movement studies can be expanded to other Florida areas.

Workshop on Breeding Bottlenose Porpoise in Captivity
(K. Benirschke, Zoological Society of San Diego)

The bottlenose porpoise is the cetacean most commonly kept in captivity for display and research. Because most captures are concentrated in small geographic areas, removal from the wild may be having detrimental effects on some stocks. This workshop was convened to explore methods of propagating captive stocks to reduce the need for collection and its impact on wild populations. The final report of the workshop will include a recommended research program designed to improve propagation in captivity.

Standard Methods for Censusing Marine Mammals
(D.G. Chapman et al., University of Washington)

A critical evaluation of marine mammal censusing techniques is being developed through consultations with researchers conducting field projects and through an exhaustive and continuing literature review. To provide additional data for analysis, the investigators have become actively involved in a number of field projects using a variety of techniques. Previously calculated population estimates, especially of fur seals and great

whales, are being examined. Certain aspects of line-transect estimators are being evaluated through theoretical analysis and computer simulation. As a result of the study, recommendations will be made for improvements in census methodology, and specific research problems requiring further intensive investigation will be identified. The ultimate goal is to establish internationally accepted standard census techniques for each species of marine mammal to ensure greater uniformity of data. The Commission expects this work to have a substantial worldwide impact upon censusing methods and to substantially improve the utility of data collected. At the request of the Commission, the investigator and members of his staff are providing guidance and advice to all other Commission-supported censusing efforts.

Infectious Diseases of Marine Mammals (N.A. Vedros, University of California)

Infectious diseases of marine mammals in the wild and in captivity were studied in this project. Special study of reproductive failure in California sea lions revealed that, from April through May 1975, more than 90% of the pups on San Miguel Island had leptospirosis. It can be presumed that many of the recorded deaths were caused by this pathogen. Some infectious diseases may cross species barriers to cause serious problems in man or his domestic animals. For example, Leptospira pomona, known to infect swine, cattle, and man, has recently been shown to cause uremic death and reproductive failure in wild pinnipeds.

Pulmonary Function in Marine Mammals (G.L. Kooyman, University of California)

This completed investigation was a study of pulmonary function and its relation to morphology, health, and disease in wild and captive marine mammals. Pulmonary function tests were conducted on gray whale calves, California sea lions, and harbor porpoises. Enough material was collected to determine the embryonic development of the lung in sea lions and porpoises. This study contributed to a better understanding of the unique respiratory systems and capabilities of marine mammals.

Laser Marking of Marine Mammals
(T. Dohl, University of California, Santa Cruz)

Reliable marking methods are necessary for many research activities. For most species, satisfactory methods have not yet been developed. The purpose of this research is to develop a laser brand that will rapidly, painlessly, and silently provide a permanent identifying mark on unrestrained animals. Tests to determine the final selection of laser type are being conducted on live animals.

Freeze Branding of Marine Mammals
(L.H. Cornell, Sea World, Inc.)

Although cryogenic (freeze) marking has shown promise as a swift and painless way to mark animals, results have varied with investigators. To increase the usefulness of this technique, the investigator is testing it on captive and free-ranging dolphins. Information is being obtained on the proper duration of contact, temperature, and pressure necessary to produce long-lasting marks.

Radio Tracking of Whales
(K.S. Norris, University of California, Santa Cruz)

The investigators have developed a non-injurious radio tracking technique using expandable harness to hold recoverable tracking and data gathering equipment. The system was tested on a suckling gray whale. Before the radio package automatically released itself, the calf was tracked for 63 hours and more than 213 kilometers. In addition to providing the information on movements, the instruments also recorded behavioral data such as the duration of dives.

Methods to Study Trophic (Food) Relations of Marine Mammals
(K.S. Norris, University of California, Santa Cruz)

The impact of marine mammals on their habitats is an essential consideration in establishing management programs. This investigator is working on four techniques for estimating the impact of an animal on its habitat. He has developed:

- (1) equipment for pumping the stomachs to determine the diet of small marine mammals and thus avoiding killing the animal;
- (2) freeze branding equipment for marking (three Pacific white-sided porpoises have been captured, branded, and released);
- (3) a recoverable depth-of-dive transmitter which

releases itself to facilitate the location and sampling of a species' food source; and (4) an apparatus for monitoring the metabolic rate of free-swimming marine mammals.

Analysis of Porpoise Mortality in the Tuna Fishery (W.G. Clark)

The Act states that "it shall be the immediate goal that the incidental kill or serious injury of marine mammals permitted in the course of commercial fishing operations be reduced to insignificant levels approaching a zero mortality and serious injury rate." The Commission has funded research to provide data and technical improvements toward this goal. Because of the very large number of marine mammals involved and the uncertain status of the affected populations, special attention has been devoted to the incidental taking of porpoises in the yellowfin tuna fishery of the eastern tropical Pacific Ocean.

This study is a review of the total kill of porpoises in the yellowfin tuna purse-seine fishery, the causes of that mortality, and its effect on porpoise populations. The investigator points out the difficulties in trying to estimate the total kill from the observed kill. He recommends a study to assess injury and indirect mortality, because these affect the relationship between observed and total kill. He also recommends investigating the age structure of the incidental kill to determine whether the kill is random with respect to age. He concludes that further reduction of mortality will be most dependent on the effectiveness of improved gear modifications.

Analysis of Efforts to Reduce Incidental Porpoise Mortality (A. Pivorunas)

The investigator collected information on research efforts to reduce incidental mortality and serious injury of porpoises, including those data relating to the behavior of the porpoises and tuna, fishing gear dynamics and development, and porpoise biology and population estimates. He identified specific information needs and recommended further studies to reduce incidental take. Research on tuna-porpoise behavior, the nature of the tuna-porpoise bond, the causes of mortality during a set, the total number and the age-sex structure of animals taken, and the size and trends of impacted populations, as well as other aspects of the problem, were identified as unresolved issues which warrant new or increased research efforts.

A New Device to Reduce Porpoise Mortality
(J.T. Gonsalves, Progressive Fishing Enterprises)

The purpose of this study is to test the use of solid, polyvinyl-coated nylon panels in tuna purse seine nets. If it turns out that the solid panels help porpoises escape from the pursed net, a relatively simple gear modification could greatly contribute to reducing mortality and injury.

Analysis of Marine Mammal Laws and Treaties
(E.C. Pinkus, Center for Law and Social Policy)

There were to be two parts of this review: 1) the identification and analysis of relevant laws and treaties, and 2) an examination of U.S. activities being conducted pursuant to these authorities. During the course of the study, the investigator provided a summary of the provisions of relevant statutes and treaties pertaining to marine mammals. However, work could not be completed on the review of activities of the United States pursuant to these statutes and treaties to the mutual satisfaction of the investigator and the Commission within the estimated cost and period of performance. The contract was therefore terminated and the Commission retained the unexpended funds.

Analysis of Marine Mammal Laws and Treaties and U.S. Activities
(S. Gaines, Environmental Law Institute)

Continuing its efforts to develop this body of information, the Commission contracted with the Environmental Law Institute. Work under the contract is proceeding well, and a final report is expected in April 1976.

Analysis of the Term "Optimum" in the Marine Mammal Protection Act
(G.A. Bertrand)

The investigator analyzed the provisions and legislative history of the Marine Mammal Protection Act with reference to the terms "optimum sustainable populations", "optimum carrying capacity", "functioning element in the ecosystem", and "health and stability of the marine ecosystem". Criteria for formulating marine mammal management policies were identified and discussed. The final report provided definitions and management recommendations.

Study of the Regulations and Permit Mechanism in the Act
(J. Wheelus)

The investigator reviewed, compared, and analyzed implementing regulations and the permit mechanisms promulgated by the Departments of Commerce and the Interior. The results were used by the Commission in monitoring implementation of the Act and in formulating recommendations for changes in regulations to insure consistency with the purposes and policies of the Act.

Marine Mammal Bibliography
(P. Stone)

The Commission's reference materials have been catalogued and organized into an effective reference system available to any interested person. The collection also includes Commission contracts. This specialized library will have continuing importance in furnishing reference lists, materials, and information to Congress, to the scientific community, and to the general public.

INCIDENTAL TAKING OF MARINE MAMMALS
IN THE COURSE OF COMMERCIAL FISHING OPERATIONS

Under the Act, the Secretary of Commerce must develop regulations, in consultation with the Commission, to govern the incidental taking of marine mammals in the course of commercial fishing. In 1975, the incidental mortality and serious injury of porpoises associated with commercial yellowfin tuna fishing continued to be the major problem.

The problem results from fishing practices which make use of the fact that certain species of porpoise associate with yellowfin tuna. Tuna purse seiners herd porpoises, enclose them with nets, and thereby catch the yellowfin tuna which swim below and behind them. However, in the process, more than 100,000 porpoises die each year from shock, injury, and suffocation when they become trapped in the nets. Since February 1974, the Commission has repeatedly stressed the inadequacies of data on which levels of kill are estimated for a number of reasons: porpoise mortality and serious injury rate caused by foreign tuna vessels may be much higher than that caused by our own vessels; porpoise mortality and serious injury resulting from vessels without National Marine Fisheries Service observers may be higher than from those carrying observers; unpermitted (out of season) fishing within the Inter American Tropical Tuna Commission regulatory area by some vessels of some signatory and non-signatory countries is reputedly common but not reflected in estimates of mortality and serious injury; porpoises that are chased, captured, injured, and released may subsequently die of shock or other causes; disruption of social groups resulting from setting on porpoises may cause additional mortality, especially among young animals; and population estimates are based upon incomplete surveys.

For these and other reasons, the Commission and its Committee of Scientific Advisors felt concerned that certain affected populations were being stressed or were declining under the pressure of incidental mortality and serious injury. In May 1975, the Commission wrote the National Marine Fisheries Service to advise them that it was actively considering the possibly depleted status of certain porpoise populations and to request any information developed since the public hearings in December 1974. Upon being informed that no new information was available on the status of stocks affected by commercial tuna fishing, the Commission and Committee considered the matter on the basis of the best available data. As a result, the Committee of Scientific Advisors concluded that the two

varieties of eastern tropical spinner porpoise (Stenella longirostris), and possibly the spotter porpoise (Stenella attenuata) are in decline. The Committee recommended that the two varieties of eastern spinner porpoise be designated as "depleted" while the population trends in the spotter porpoise be carefully monitored in view of its apparently precarious state. The Committee also noted the immediate need to refine and continue analysis of the status of the various impacted populations, to study methods to reduce kill to acceptable levels, and to study the behavioral patterns of fish and porpoise in the seining operation in order to gain an understanding of the tuna-porpoise bond, the circumstances of kill, and other behavioral factors that might be used to lessen incidental kill. Finally, the Committee noted that international efforts to reduce incidental taking of porpoise are needed.

Shortly after its review in July, the Commission received a draft report from the National Marine Fisheries Service entitled "Progress Report of Research on Porpoise Mortality" dated 8 August 1975. In light of substantial differences between the data contained in this Report and data previously available to the Commission and Committee, the Tuna-Porpoise Subcommittee immediately reviewed the material. As a result of its preliminary review, the Subcommittee requested that its recommendation on the status of spinner porpoise populations be withdrawn from active consideration by the Commission pending a detailed study of the Report and the data on which it was based. The Subcommittee noted that the new figures for size of impacted populations, roughly twice the old estimates, and the more detailed life history data, required such a withdrawal pending detailed study. It also noted with concern that only some of the factors identified in its previous statements had been addressed in the Report, and that it was not possible to soundly evaluate the data inasmuch as the new Report contained only point figures without confidence limits. The Subcommittee also expressed concern about the influence of factors such as a change in fishing conditions which had apparently resulted in an increased total incidental porpoise mortality in 1975.

The August 1975 Progress Report of the Service indicated that the number of porpoise killed per set on porpoise had increased in 1975 after showing a decline each year since 1971, as did the number of porpoise killed per ton of yellowfin tuna caught on porpoise. In fact, more porpoise were captured in purse seines in 1975 than in 1974, and the Progress Report projected that the total observable porpoise kill would probably increase in 1975 over the 1974 level. In addition, the Report recognized that a large proportion of the seriously

injured porpoises may have died sometime after release or suffered other impairment which would contribute to the total take. The Report projected an estimated level of kill of 93,000-214,000 animals in 1975, 81,000-186,000 of which would be killed by U.S. fishermen compared to a total kill of 113,000 animals in 1974, of which U.S. fishermen killed 98,000. By December, a final estimated kill figure had not yet been determined by the National Marine Fisheries Service, but it was clear that the goal of reducing the porpoise mortality rate by 50 percent, established by the National Marine Fisheries Service in connection with its 1974 regulations governing incidental taking, had not been achieved.

A Commission-sponsored study of the levels of incidental porpoise mortality in the yellowfin tuna fishery conducted by William Clark, University of Washington, analyzed all available data. He gave estimates of porpoise killed in 1972-1975, and recommended studies to assess the extent of incidental injury and indirect mortality and to investigate differences with age and the rate of direct mortality of netted porpoises. He concluded that there is no way to accurately estimate the total kill from the observed kill and other available data because of the incomplete nature of those data and difficulties associated with statistical analysis of the information.

The Tuna-Porpoise Subcommittee, in a further review of the Service's 8 August Report, examined the conclusion of the Report that "there is no striking evidence that the stock is either increasing or decreasing. At present the stock probably is either stable or increasing or decreasing slightly." The Subcommittee determined that the conclusion is reasonable if the assumptions underlying the various estimates are correct and if the populations' reductions in the past twelve to fifteen years have resulted in responses in the birth and/or death rate. The Subcommittee noted, however, that certain troubling questions remain. These include: doubts as to the validity of the assumption that the performance by non-U.S. flag vessels is equal to that of the U.S. fleet; concern about the lack of confidence intervals for the figures upon which estimates are based; the lack of sensitivity of the population analysis to the possibility that incidental take is selective of immature rather than mature animals or is sex selective; the total uncertainty about what fractions the present populations are of those present prior to the onset of purse seining on porpoise; and concern about the impact of chase, capture, injury, and social disruption upon the populations. The Subcommittee noted that in 1975, 45 porpoises were caught for each one killed and that an estimated 7 million porpoises are or will be set upon in 1975. Thus, either each porpoise would be caught an average of 1.5 times a year or a smaller number would be set upon much more frequently. Finally, the Subcommittee concluded that there is no adequate information concerning the dynamics of the

affected porpoise populations that assure that the present kill rate is not causing continuing reduction in their size.

The Commission expressed these concerns in testimony before the Subcommittee on Fisheries and Wildlife Conservation and the Environment, House Merchant Marine and Fisheries Committee on 21 October 1975 and further suggested that those nations fishing on porpoise and exporting fish to the United States should be advised that Sections 101 and 102 of the Act will be invoked to embargo any fish caught in a manner inconsistent with the U.S. program for porpoise protection. In addition, the Commission recommended on 9 December 1975 that the Secretary of State develop an international observer exchange program to determine the consistency of foreign fishing operations with U.S. standards.

Following public hearings conducted by the National Marine Fisheries Service concerning changes in the regulations governing incidental taking, the Commission transmitted recommendations, by letter of 6 November 1975, that the general permit to be issued to tuna fishermen be limited to authorize the killing of up to 85,060 marine mammals subject to adjustment during the term of the permit as appropriate, based upon information concerning the status and trends of the affected populations so as to assure their protection and conservation consistent with the purposes and policies of the Act. The Commission noted that it found no basis for confidence that any quota above zero would provide the basis for absolute assurance that the principal stocks of porpoises will increase in size and, again, noted the importance of developing and implementing an intensive research program to assess and monitor population status and trends, consistent with its previous recommendations.

Final regulations published by the National Marine Fisheries Service on 5 December 1975 announced that a quota would be imposed during 1976 to prohibit any setting on porpoises if there has not been a 30 percent reduction in incidental mortality. The Commission wrote the National Marine Fisheries Service on 8 December 1975 indicating that it had recommended a numerical limitation of 85,060 on the permissible level of take as a prudent measure to minimize the potential jeopardy of the affected populations and suggesting that this approach was preferable to the mechanism announced in the preamble to the final regulations which was confusing and fraught with potential difficulties. The Commission requested clarification as to whether or not a quota had been established and, if so, how such a quota would be implemented.

As part of a coordinated effort to reduce incidental mortality and serious injury, several cooperative working sessions involving the Marine Mammal Commission, the National Marine Fisheries Service, the tuna industry, and environmental organizations were held for purposes of resolving questions concerning the statistical methods of analysis and other difficulties associated with the quota. Additional working sessions concerning the quota as well as research and development efforts are scheduled for 1976.

In late 1975, results of gear tests aboard tuna purse seiners chartered by the National Marine Fisheries Service suggested that adoption of certain net modifications and other gear might reduce total incidental mortality and serious injury substantially. The National Marine Fisheries Service and the tuna industry plan to test this gear on ten or more vessels in early 1976.

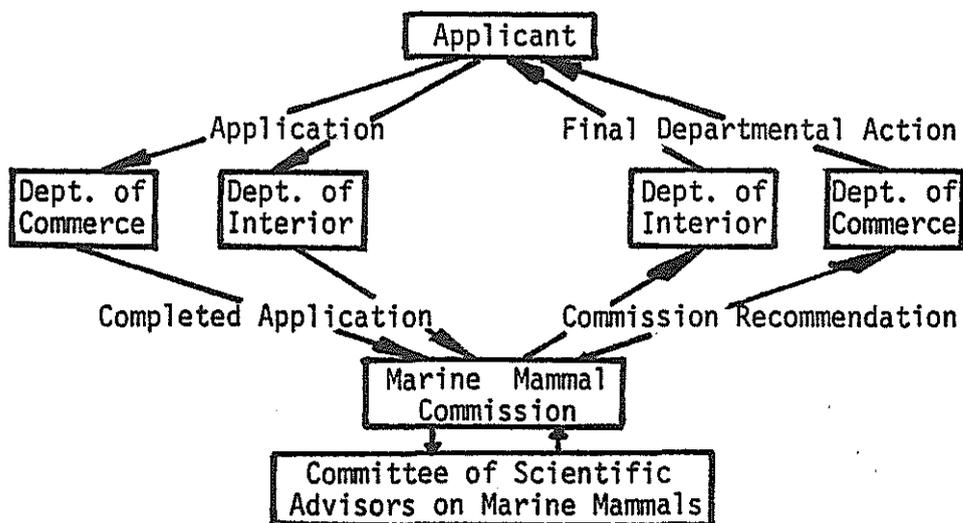
The possibility of capitalizing on certain behavioral characteristics of tuna and porpoise to reduce incidental mortality was not adequately pursued in 1975. Therefore, the Commission convened a workshop on tuna-porpoise behavior on 8 and 9 December 1975. The workshop was attended by representatives of the National Marine Fisheries Service, the tuna industry, the academic community, the environmental community, and the Marine Mammal Commission. Participants identified a research program that would lead to the characterization of the tuna-porpoise bond and other factors affecting porpoise mortality in the net and recommended that the research program be initiated as soon as practicable. It is hoped that it will be possible to undertake the recommended research starting in the summer of 1976.

Although the tuna-porpoise problem remains unresolved, the situation has improved. The concerns previously expressed by the Commission are now widely shared. By the end of 1975, significant commitments had been made for concerted action to solve the problem. The Commission looks forward to implementation of these coordinated actions in early 1976.

PERMIT APPLICATION AND REVIEW PROCESS

A central feature of the Marine Mammal Protection Act is its provision for a moratorium on the taking or importing of marine mammals or marine mammal products except by certain Indians, Aleuts, and Eskimos for subsistence or native handi-crafts and clothing. However, the Act does provide for the issuance of permits during the moratorium by either the Secretary of Commerce or the Secretary of the Interior, depending upon the species of animal involved, to allow taking for scientific research or public display, provided that the permit application is first reviewed by the Marine Mammal Commission and found to be consistent with the Act. Commission review is carried out in consultation with the full Committee of Scientific Advisors on Marine Mammals.

A schematic representation of the permit application review process follows:



The permit application and review process involves three stages: 1) receipt and initial review of the application at the Department, publication in the Federal Register, and transmittal to the Commission; 2) review of the application by the Commission and transmittal of its recommendations to the Department; 3) final processing by the Department, including consideration of all comments and the recommendations of the Commission and the public, resulting in approval or denial of the application.

Efficient operation of the process depends upon quick handling at all stages. The efficiency of the permit process during 1974 suffered from problems and delays described in the 1974 Annual Report of the Commission. Performance during 1975 has shown a remarkable improvement. Over two-thirds of all applications transmitted by the Departments in 1975 reached the Commission in less than 45 days; over half in less than 30. The Commission reviewed and transmitted recommendations on nearly 75% of all applications in less than 35 days. Nearly 80% of permit applications on which the Commission made recommendations to both Departments were acted upon in less than 45 days, approximately 60% in less than 30. Almost half of all applications processed by the Departments during 1975 resulted in permit issuance or denial within 90 days, nearly 70% in less than 20 days following Commission review and comment. Appendix B presents a comparison of 1975 figures with those for 1974, and with those for the period prior to February 1974, broken down by Department. It shows the significant improvement at every stage of the permit application and review process.

The Commission believes that the Departments are aware of possibilities for further improvement and that restructuring and simplification of certain procedures, discussed below, will further increase the efficiency of the overall process.

Modification of Permit System

Sections 101 and 104 of the Act authorize the Secretary, in consultation with the Commission, to issue permits for taking and importing marine mammals for purposes of scientific research and public display. Experience with the administrative procedure and regulations governing such permits suggests the need for some major changes in the regulations and practices so as to more efficiently and effectively implement the provisions of the Act and meet the legitimate needs of those involved in scientific research and public display activities.

The present permit system involves application forms that are often more complicated and rigorous in their demands for information than is necessary. They require information which is often irrelevant for purposes of evaluating the proposed activity, and this results in confusion and delays in processing applications. In addition, the overly rigid form of many issued permits is the cause of time-consuming modifications resulting from changes in circumstances or research plans.

The present permit system fails to reflect the fact that activities which constitute "taking" vary widely in their impacts on the affected marine mammals. Those impacts range, depending upon the activity, from only potential or slight disturbance, without any determinable adverse impact, to death. This distinction is not adequately reflected in the currently applicable regulations. In the case of opportunistic research, for example, applicants are sometimes impossibly burdened with the requirement to predict the species, age, sex, number, etc. of marine mammals to be taken.

The Commission believes that establishment of a graduated permit system would significantly streamline both application and permit issuance procedures. Under such a system, classes of permits would be established corresponding to the severity of the impact of the proposed activities upon the affected marine mammals. Informational and procedural requirements would vary in degree of specificity and burden depending upon the potential impact of the proposed taking. Such a graduated system should provide for the issuance of permits for such categories as killing or live capture and removal of animals for research or public display; research activities which pose a serious hazard to the welfare of the affected animal; tagging, sampling, and subsequent release of animals; sampling and other activities involving stranded animals; census and behavioral studies; and collection, importation, and exchange of dead marine mammals or specimens.

The Commission on 11 August 1975, recommended that the National Marine Fisheries Service modify its regulations so as to provide an effective mechanism to deal with some of these problems concerning scientific research. It will shortly recommend to both the Department of Commerce and the Interior further efforts to bring about implementation of the suggested major changes in the permit system.

Marine Mammal Maintenance Standards and Guidelines

Section 104(c) of the Act requires that permits specify the methods of capture, supervision, care, and transportation of any live marine mammal during and after taking or importation.

The Commission recognized the need to develop uniform standards to measure the adequacy of holding facilities and practices at its first meeting in 1974, and established a special subcommittee of the Committee of Scientific Advisors to develop such standards. Information and comments on the subcommittee's draft proposals were solicited from specialists from both the United States and abroad.

The resulting Marine Mammal Maintenance Standards and Guidelines were transmitted to the Departments of Agriculture, Commerce, and the Interior on 20 October 1975 with the recommendation that they be adopted and that appropriate provisions and arrangements be developed for their uniform administration and application, including inspection and enforcement. They are based upon the best available information on the biological needs of marine mammals in captivity. The Standards and Guidelines are designed to establish criteria to be employed by the agencies to secure the welfare of captive marine mammals in compliance with the provisions of the Marine Mammal Protection Act and the Federal Laboratory Animal Welfare Act. They should serve to encourage the care and maintenance of marine mammals so as to enhance the health and life span of captive marine mammals, ensure humane treatment, reduce the need to remove marine mammals from wild populations, and enhance the public display and scientific research experience. The Commission will continue to cooperate with the three Federal agencies in the course of their efforts to implement the Standards and Guidelines.

REQUESTS FOR WAIVERS OF THE MORATORIUM

Under the authority granted in Sections 101(a)(3)(A) of the Act, the Secretaries of Commerce and the Interior, in consultation with the Marine Mammal Commission, may waive the moratorium on the taking and importing of marine mammals or marine mammal products if such waiver is determined to be consistent with the goals and policies of the Act. Three requests for waivers were considered during 1975.

Request of the Fouke Company to import South African fur seal skins

An application for waiver of the moratorium was submitted to the National Marine Fisheries Service in March 1975 by the Fouke Company of Greenville, South Carolina, to allow it to import from the Republic of South Africa up to 70,000 South African fur seal skins each year over a ten year period for processing and subsequent sale. A similar application by the Fouke Company had been denied by the Secretary of Commerce on 9 September 1974. The harvesting of fur seals in South Africa had been judged inhumane.

The Commission participated in the formal hearing on 18-24 September 1975, before an Administrative Law Judge pursuant to Section 103 of the Act, and submitted a brief concerning the proposed waiver and regulations proposed by the National Marine Fisheries Service to govern the waiver. The Commission noted that various provisions of the Act concerning quotas, humane harvest, age of animals when taken, and prohibition against importing any animal which was nursing at the time of taking were, in its opinion, not satisfied. It also noted that the legal difficulties arising from the proposed importation of skins taken in Namibia, about which representatives of the Department of State had testified, had not been resolved. The Commission therefore recommended that the Administrative Law Judge deny the proposed waiver, the proposed regulations, and the permit application. It suggested that, should the foreign policy and international law aspects of this matter be resolved, the applicant be encouraged to negotiate arrangements to obtain skins from animals taken at a time and in a manner which will insure compliance with the Act. It further suggested that the status of the seal population and the management program of the Republic of South Africa be reviewed in a supplemental hearing, with the benefit of the record already developed.

The Administrative Law Judge transmitted a recommended decision to the Director, National Marine Fisheries Service, on 22 December 1975 recommending, among other things, a waiver of the moratorium. As of 31 December, the recommended decision was before the Director for his consideration.

Application of the State of Alaska for Waiver and Return of Management of Certain Marine Mammal Populations

The State of Alaska filed an application on 31 January 1973 with the Secretaries of Commerce and the Interior to resume management of certain marine mammal populations pursuant to Section 109(a)(2) of the Act. The proposed State management program would involve taking of certain marine mammals and therefore would entail a waiver of the moratorium pursuant to Section 101(a)(3)(A).

In June 1975, the Commission received a copy of a Discussion Paper, Consideration of a Waiver of the Moratorium and Return of Management of Certain Marine Mammals to the State of Alaska. The Discussion Paper had been prepared by the Department of Commerce-Department of the Interior Task Force to serve as the final draft prior to issuance of the Draft Environmental Impact Statement. The Commission conducted, with its Committee of Scientific Advisors, a comprehensive review of the Discussion Paper and, by letter of 17 July 1975 to the Directors of the National Marine Fisheries Service and the Fish and Wildlife Service, transmitted its detailed comments. The Commission indicated its distress that the proposal and associated information had not yet been integrated into a coherent, rational package. The Commission suggested that certain immediate actions were necessary and feasible in order to insure the productive consideration and disposition of the State's application and to avoid further unnecessary and unacceptable confusion and difficulties. The Commission recommended that the Discussion Paper be modified to respond to its comments and that a working group of representatives of State and Federal agencies quickly be convened to resolve the problems identified.

Both the National Marine Fisheries Service and the Fish and Wildlife Service responded to the Commission's letter on 7 August 1975, indicating that a Draft Environmental Impact Statement would be issued within the next few weeks and expressing a desire to receive the Commission's comments on the DEIS. Representatives of the National Marine Fisheries Service and the Fish and

Wildlife Service met with representatives of the State of Alaska during the last days of December 1975 to resolve certain problems relating to the waiver request. A Draft Environmental Impact Statement, as well as Federal and State regulations, are supposed to be transmitted to the Commission for a review early in 1976.

Waiver of the Moratorium on Walrus and Return of Management to the State of Alaska

On 13 February 1975, the Director of the Fish and Wildlife Service published a determination that consideration of a waiver of the moratorium on taking of walrus was appropriate. He also published a preliminary determination that Alaska's laws and regulations met the standards for approval and return of management of walrus under such a waiver. Proposed Federal regulations were published under Section 103 of the Act.

The Commission participated and filed briefs in the formal hearing conducted before an Administrative Law Judge in Anchorage, Alaska, and Washington, D.C. concerning the proposed waiver, return of management, and regulations. The Commission recommended that the Administrative Law Judge recommend approval of the proposed waiver of the moratorium and approval of the cooperative Federal-State management program, subject to certain conditions concerning, among other things, changes in the Federal regulations and the State laws and regulations dealing with management policy statements, registration of sport hunters, definition and identification of subsistence takers, marking of raw ivory, methods and means to insure humane taking, a quota on taking, and maintenance of optimum sustainable population levels.

The Administrative Law Judge rendered his decision on 10 July 1975 and transmitted it to the Director of the Fish and Wildlife Service for his consideration. That recommended decision was essentially consistent with the position and recommendations of the Commission. The Director, on 24 December 1975, published his decision to waive the moratorium and implement a Federal-State management program upon approval of revised State laws and regulations.

ENFORCEMENT

During 1975, the Commission conducted an intensive review of the enforcement efforts of the National Marine Fisheries Service and the Fish and Wildlife Service under the Marine Mammal Protection Act. The review was prompted by the Commission's analysis of a number of specific enforcement problems which suggested more serious and generally applicable difficulties.

Information about enforcement policies and practices was gathered by written inquiry and discussion with staff members of the National Marine Fisheries Service and the Fish and Wildlife Service. Materials relating to investigative procedures, performance under enforcement contracts with States, general enforcement policies, assessment of civil penalties, and prosecutions have been analyzed and several problem areas have been noted.

One problem area noted by the Commission is that of State participation in enforcing the provisions of the Act. Congress anticipated that existing Federal enforcement resources, both human and fiscal, might be overtaxed as a result of new responsibilities under the Act. It therefore provided that State officers could be deputized to enforce the Act, and it authorized the Departments to enter into enforcement contracts with the States, whereby the States would be paid to assume enforcement responsibility. The Fish and Wildlife Service relies upon the former method exclusively, while the National Marine Fisheries Service utilizes both of these mechanisms to supplement its enforcement capability. Approximately one-third, or nearly \$500,000, of the National Marine Fisheries Service enforcement budget is paid to States for enforcement efforts under contracts. Available data suggest that the efficiency of cooperative enforcement efforts in States, whether by deputization or contract, varies widely. The Commission will continue its review of this aspect of enforcement in an effort to assess the relative merits of the agencies' different approaches and to assist in developing the most effective cooperative enforcement mechanism.

A second problem is the apparent lack of coordination among the National Marine Fisheries Service, the Fish and Wildlife Service, the Coast Guard, and the Treasury Department

(Customs) on enforcement issues. Although cooperative agreements between some of those agencies have been concluded with respect to enforcement of other wildlife statutes, such agreements have not been developed to secure coordinated and effective enforcement of the provisions of the Act. The Commission has noted several incidents which resulted in failure to enforce the provisions of the Act as a result of inadequate cooperation and has encouraged the agencies to explore and develop cooperative enforcement mechanisms.

A third problem noted by the Commission is the apparent absence of clear enforcement policies within the agencies. Decisions by field personnel within the agencies vary as to whether and to what extent to investigate reported violations, initiate prosecutions, or assess civil penalties. Regional officers are given substantial discretionary authority, as are State officials performing under contract. The Commission has therefore urged the National Marine Fisheries Service and the Fish and Wildlife Service to formulate policy statements and guidelines for use by field and supervisory personnel and will consult with both agencies concerning the scope and content of the documents.

Finally, the Commission noted a relative lack of enforcement activity under the Act. As of 31 December 1975, penalties in the amount of \$54,439 had been proposed or assessed by the National Marine Fisheries Service in civil proceedings, and \$4,300 had been collected in addition to a number of forfeitures of seized property which was illegally taken, possessed, or imported, since the effective date of the Act. To date, 13 criminal prosecutions have been referred to U.S. Attorneys by the National Marine Fisheries Service; 11 are still pending, one was dismissed, and one was disposed of in civil proceedings. Information concerning enforcement activities by the Fish and Wildlife Service is less complete but indicates that no criminal prosecutions have been undertaken by the Fish and Wildlife Service since the Act went into effect.

Interest by the National Marine Fisheries Service and the Fish and Wildlife Service in enforcement activities substantially increased during the last three months of 1975. The Commission is encouraged by the increased activity, and is actively consulting with the agencies in the course of efforts to insure that enforcement problems are resolved.

ENDANGERED SPECIES

Consistent with its mandate to examine marine mammals for purposes of recommending appropriate changes in the Endangered Species List, the Commission established a subcommittee of the Committee of Scientific Advisors on Marine Mammals to carry out the review. During 1975, the Subcommittee submitted a draft of its first major review of the status of a number of marine mammal populations to the full Committee for review. In the spring of 1976, the Commission expects to receive the Committee's recommendations.

During 1975, the Commission reviewed the status of the Hawaiian monk seal, and determined that: 1) the number of Hawaiian monk seals has declined significantly over a period of years; 2) the species is in danger of extinction throughout its range; 3) the current range appears to be similar to the historic range, but there are major changes in the relative number of seals observed on different islands; 4) there has been a significant reduction in available haul-out and pupping habitat; 5) there are no reliable population estimates for the period preceding commercial exploitation, although there are indications that the monk seal was numerous; 6) numbers appear to have been decreasing since 1960 with the exception of a possible increase on French Frigate Shoals; 7) the early 1970 population estimate was 700 to 1000 animals; 8) the present population level is estimated to be $1,000 \pm 500$, based upon the actual count of 578 animals; 9) accurate counts which would provide data for a reliable trend analysis are not available; 10) at its current low level, the population is vulnerable to any disturbance and loss of habitat; 11) human disturbance during the nursing period results in significant reduction in survival of young before, during, and after weaning; 12) shark attack, particularly on weaned pups, also causes significant mortality; and 13) harassment by domestic dogs has apparently contributed to the decline of the species at Midway Atoll and Green Island.

As a result of these and other findings, the Commission recommended to the National Marine Fisheries Service that it proceed to designate the species as "depleted" under Sections 3(1)(A) and (B) of the Marine Mammal Protection Act of 1972 and that it proceed, pursuant to Section 4 of the Endangered Species Act of 1973, to designate and protect the species as

endangered. However, noting that protection from all forms of human intrusion may represent the single most important protective action available to prevent extinction, and further believing that designation as depleted or endangered will not suffice to secure this species' protection and conservation, the Commission also recommended to the National Marine Fisheries Service that it undertake cooperative action with the Department of the Interior, the Navy, the Coast Guard, the State of Hawaii, and such other agencies as may be appropriate: 1) to designate the Midway and Kure Atoll breeding areas, as well as French Frigate Shoals, Laysan Island, Lisianski Island, and Pearl and Hermes Reef in the Hawaiian Islands National Wildlife Refuge, as critical habitat pursuant to Section 7 of the Endangered Species Act of 1973; 2) to erect a fence on the north end of Green Island to prohibit access by people and dogs; 3) to place Seal, Rocky, Dynamite, and Eastern Island at Midway Atoll permanently off limits to all persons, including military personnel; and 4) to prohibit access to the islands and islets of Frigate Shoals, other than Tern Island, except for specially permitted research activities, and to census the Hawaiian seal population in this area by aerial survey only in order to minimize disturbance. Lastly, the Commission commended certain census techniques to the National Marine Fisheries Service and the Fish and Wildlife Service for their consideration in developing information on the status and trends of the population.

INTERNATIONAL ASPECTS OF MARINE MAMMAL
PROTECTION AND CONSERVATION

Marine mammals inhabit the world ocean, and problems of their conservation and protection are international. The Commission directs part of its effort to the solution of those problems.

International Whaling Commission (IWC)

Commission activities in 1975 concerning the International Whaling Commission included consultation with the U.S. Commissioner (Dr. Robert M. White) in the formulation of the U.S. position and participation in the 27th Session of the IWC. That session established quotas based upon the New Management Procedure which had been adopted at the 1974 meeting of the IWC and which significantly reduced the permissible catch levels.

Following the IWC meeting, the Marine Mammal Commission wrote to Dr. White on 20 October 1975 noting that, although all issues relevant to the protection of the great whales were by no means resolved, the quotas established were based upon the advice of the IWC Scientific Committee and represented significant progress. The Commission suggested that the fact that no member nation had filed objection to the quotas was evidence of the viability of the New Management Procedure and indicated good faith on the part of member nations to comply with these arrangements.

The Commission noted, however, that continued whaling by non-member nations threatens to render the cooperative efforts and sacrifices of member nations futile. The Commission further noted that enlisting non-member whaling nations in the IWC, so as to prevent the circumvention of cooperative efforts by member nations, is an extremely difficult and challenging issue facing the United States and other IWC members. The Commission suggested that the whaling activities of non-member nations should be considered "fishing activities" under the provisions of the so-called Pelly Amendment to the Fisherman's Protective Act which provides authority to prohibit the importation of fishery products of countries whose nationals conduct fishing activities in a manner or under circumstances which tend to diminish the effectiveness of an international conservation program. The Commission further suggested that the threat of

invoking, or indeed the invocation of, the sanctions of the Pelly Amendment might serve to encourage non-member nations to join the IWC and to conduct whaling operations in accordance with its conservation program. The Commission recommended that efforts be undertaken to assess the extent to which the whaling operations of non-member nations diminish the effectiveness of the IWC program, and to advise those nations that their activities are being reviewed in light of the Pelly Amendment.

The Commission was advised that the U.S. Commissioner welcomed its recommendation, that it was under review, and that a response to the recommendation was being prepared for transmittal shortly after the New Year.

Inter-American Tropical Tuna Commission (IATTC)

In a continuing effort to reduce mortality and serious injury of marine mammals in the course of commercial fishing operations, the Commission wrote the Secretary of State on 9 December 1975 recommending that he vigorously pursue mechanisms which will be adequate to provide assurance that the yellowfin tuna purse seining fishing practices of foreign countries are such that the incidental kill and serious injury of porpoises are minimized, and that preventative measures taken to reduce such incidental take are consistent with the standards of the United States. The Commission further recommended that the Department of State seek to establish an international observer exchange program similar to that which exists within the International Whaling Commission. The Commission also noted that sanctions were available against foreign countries whose nationals do not fish in compliance with U.S. standards under Sections 101(a) and (2) and 102(c) (3) of the Act.

Interim Convention on Conservation of North Pacific Fur Seals

The Commission provided recommendations for and participated in two meetings concerning the renegotiation of the Interim Convention in March and December 1975. The U.S. Delegation unsuccessfully tried to introduce the "optimum sustainable population" concept embodied in the Marine Mammal Protection Act. At both the first and second meetings, there was opposition, particularly on the part of the Japanese, to the incorporation of the new management concepts into a revised convention.

At the second meeting, it was agreed that the Interim Convention be extended for four years with certain changes.

- 1) that the Convention shall continue in force until one year from the day on which a party shall give notice of its intention to withdraw;
- 2) that at the request of any party, representatives of the four governments can be called to meet at a mutually agreeable time within ninety days of such request;
- 3) that the respective parties will seek to ensure the utilization of those methods for the capture and killing and marking of fur seals on land or at sea which will spare the fur seals pain and suffering to the greatest extent practicable;
- 4) that requirements for pelagic research be flexible with respect to the type and amount of such research.

Krill Resources of the Southern Ocean

In response to a request from the National Science Foundation that the Commission review material relating to the conservation of krill resources in the Southern Ocean, the Commission noted with pleasure that the National Science Foundation is responsibly addressing this critical issue. Further, the Commission noted: that krill management should be approached from an ecosystem perspective; that distribution, abundance, life history, and population parameters of affected species, including krill, are poorly understood and therefore do not now provide a reliable basis for management decisions; that any krill harvest should not be of such intensity as to cause the depletion of species higher in the food web; that research in the area of "ecosystem response" should be given high priority; that the distribution, abundance, and life histories of species that feed on krill should be fully described as quickly as possible; that attention should be paid to the principle of establishing management regulations prior to exploitation; that significant effort should be devoted to defining "research needs" and starting the research; that steps should be taken to identify research needs and priorities as well as to carry out needed research; and that such other steps as may be needed to conclude an effective international agreement governing any krill fishery should be undertaken.

APPENDIX A
NOMENCLATURE

COMMON NAME	SCIENTIFIC NAME
<u>Carnivora</u>	
Southern sea otter	<u>Enhydra lutris</u>
<u>Cetacea</u>	
Atlantic whitesided porpoise (dolphin)	<u>Lagenorhynchus acutus</u>
Bottlenose porpoise (dolphin)	<u>Tursiops truncatus</u>
Common porpoise (dolphin)	<u>Delphinus delphis</u>
Dwarf sperm whale	<u>Kogia simus</u>
Gray whale	<u>Eschrichtius robustus</u>
Killer whale	<u>Orcinus orca</u>
North Pacific whitesided porpoise (dolphin)	<u>Lagenorhynchus obliquidens</u>
Pygmy sperm whale	<u>Kogia breviceps</u>
Spinner porpoise (dolphin)	<u>Stenella longirostris</u>
Spotted porpoise (dolphin)	<u>Stenella attenuata</u>
Striped porpoise (dolphin)	<u>Stenella coeruleoalba</u>
<u>Pinnipedia</u>	
California sea lion	<u>Zalophus californianus</u>
Gray seal	<u>Halichoerus grypus</u>
Guadalupe fur seal	<u>Arctocephalus townsendi</u>
Harbor seal	<u>Phoca vitulina</u>
Hawaiian monk seal	<u>Monachus schauinslandi</u>
Northern elephant seal	<u>Mirounga angustirostris</u>
Northern fur seal	<u>Callorhinus ursinus</u>
Pacific walrus	<u>Odobenus rosmarus</u>
South African (Cape) fur seal	<u>Arctocephalus pusillus</u>
Steller sea lion	<u>Eumetopias jubatus</u>

APPENDIX B

PERMIT APPLICATION REVIEW AND PROCESSING

I

INITIAL PROCESSING

Time Lapse Between Receipt of Application At
Department and Transmittal to Commission for Review

Department of Commerce
% and # of applications transmitted

No. Days	Prior to Feb. 74*		1974		1975	
	%	#	%	#	%	#
0-30	8	2	6	4	60	29
31-45	26	7	11	7	11	5
46-60	22	6	11	7	4	2
61-80	26	7	28	18	4	2
81-100	8	2	8	5	0	0
101-120	4	1	12	8	2	1
121+	8	2	25	16	19	9
		<u>27</u>		<u>65</u>		<u>48</u>

Department of Interior
% and # of applications transmitted

No. Days	1974		1975	
	%	#	%	#
0-30	9	1	17	2
31-45	27	3	42	5
46-60	27	3	17	2
61-80	36	4	8	1
81-100	0	0	8	1
101-120	0	0	0	0
121+	0	0	8	1
		<u>11</u>		<u>12</u>

(NOTE: Due to rounding, percentages do not always total 100.)

*Prior to mid-February 1974, the Commission, with neither staff nor offices, was not in a position to provide timely reviews. Also, the permit system was new to the National Marine Fisheries Service. Note: The Department of Interior did not transmit any permit applications to the Commission for review prior to February 1974.

II

COMMISSION REVIEW TIME

% and # of applications transmitted

No. Days	Prior to Feb. 74		1974		1975	
	%	#	%	#	%	#
0-25	0	0	13	10	17	10
26-35	22	6	20	15	57	34
36-45	22	6	59	44	18	11
46+	56	15	8	6	8	5
		<u>27</u>		<u>75</u>		<u>60</u>

III

FINAL PROCESSING

Elapsed Time from date of Transmittal
of Commission Recommendations

Department of Commerce
% and # of applications processed

No. Days	Prior Feb. 74		1974		1975	
	%	#	%	#	%	#
0-30	36	8	33	21	56	22
31-45	9	2	19	12	20	8
46-60	14	3	16	10	8	3
61-80	9	2	13	8	13	5
81-100	14	3	3	2	3	1
101-120	0	0	2	1	0	0
120+	18	4	14	9	0	0
		<u>22*</u>		<u>63</u>		<u>39**</u>

* 2 applications withdrawn

3 applications processed prior to Commission review

** 9 applications were awaiting final action by the
Department on 31 December 1975

Department of Interior
% and # of applications processed

No. Days	1974		1975	
	%	#	%	#
0-30	36	4	67	6
31-45	18	2	22	2
46-60	27	3	0	0
61-80	9	1	11	1
81-100	9	1	0	0
101-120	0	0	0	0
121+	0	0	0	0
		<u>11</u>		<u>9*</u>

* 3 applications were awaiting final action by the Department on 31 December 1975

IV

TOTAL PROCESSING

Time Lapse Between Receipt of Application at
Department and Issuance or Denial of Permit

Department of Commerce
% and # of applications processed

No. Days	Prior to Feb. 74		1974		1975	
	%	#	%	#	%	#
0-90	4	1	3	2	56	22
91-120	12	3	8	5	10	4
121-150	36	9	16	10	10	4
151-180	16	4	25	16	5	2
181-200	8	2	8	5	0	0
201-250	20	5	11	7	8	3
251+	4	1	29	18	10	4
		<u>25</u>		<u>63</u>		<u>39*</u>

* 9 applications were awaiting final action by the Department on 31 December 1975

Department of Interior
% and # of applications processed

No. Days	1974		1975	
	%	#	%	#
0-90	18	2	11	1
91-120	36	4	67	6
121-150	18	2	11	1
151-180	9	1	11	1
181-200	9	1	0	0
201-250	9	1	0	0
250+				
		<u>11</u>		<u>9*</u>

* 3 applications were awaiting final action by the Department on 31 December 1975

APPENDIX C

COMMISSION RECOMMENDATIONS: CALENDAR YEAR 1975

- 21 January: Interior, scientific research permit application, J. Lentfer
- 5 February: Commerce, public display permit application, Long Island Game Farm
- 13 March: Commerce, that certain changes and modifications be effected in proposed US text for renegotiation of Interim Convention on Conservation of North Pacific Fur Seals
- 13 March: Commerce, that additions and modifications be made to Draft US Position Paper for renegotiation of Interim Convention on Conservation of North Pacific Fur Seals
- 13 March: Commerce, public display permit application, Benson Wild Animal Farm
- 13 March: Commerce, public display permit application, Waikiki Aquarium
- 13 March: Commerce, scientific research permit application, N. Hall/W. Dawson
- 13 March: Commerce, public display permit application, Marine Animal Productions
- 13 March: Commerce, scientific research permit application, Mystic Marineline Aquarium
- 13 March: Commerce, scientific research permit application, G. Folk
- 13 March: Commerce, scientific research permit application, D. Siniff
- 14 March: Commerce, comments relative to Draft Environmental Impact Statement on Renegotiation of Interim Convention on Conservation of North Pacific Fur Seals; that recommended changes, expansions be undertaken
- 18 March: Commerce, scientific research permit application, T. Peterle

- 26 March: Commerce, public display permit application, San Diego Zoo
- 26 March: Commerce, public display permit application, Lafayette Park Zoo
- 26 March: Commerce, public display permit application, Morro Bay Aquarium
- 26 March: Commerce, public display permit application, Brookfield Zoo
- 31 March: Commerce, that collection of sea lions for public display should be permitted at Santa Cruz; favoring controlled, supervised, experimental collection of sea lions at San Miguel, subject to limitations regarding time and method
- 3 April: Commerce, public display permit application, Portland Zoo
- 9 April: Commerce, that proposed policy governing taking and importing of marine mammals not be adopted
- 23 April: Commerce, public display permit application, New York Zoological Society (P-112)
- 23 April: Commerce, public display permit application, New York Zoological Society (P-112A)
- 23 April: Commerce, public display permit application, Steinhart Aquarium
- 24 April: Interior, scientific research permit application, D. Siniff
- 2 May: Commerce, public display permit application, Gulfarium
- 2 May: Commerce, public display permit application, Toledo Zoological Park
- 2 May: Commerce, scientific research permit application, A. Erickson
- 13 May: Commerce, scientific research permit application, O. Mathisen
- 15 May: Commerce, scientific research permit application, State of Alaska, Department of Fish and Game

- 20 May: Commerce, scientific research permit application, G. Ray/D. Wartzok
- 21 May: Commerce, public display permit application, Ocean World
- 22 May: Interior, scientific research permit application, T. Loughlin
- 28 May: Interior, public display permit application, Jackson Zoological Park
- 2 June: Commerce, public display permit application, Seneca Park Zoo
- 5 June: Commerce, scientific research permit application, G. Kooyman
- 9 June: State, to include certain scientists among International Whaling Commission delegation
- 11 June: Interior, scientific research permit application, G. Ray/F. Fay
- 11 June: Commerce, public display permit application, Sea World
- 11 June: Commerce, scientific research permit application, R. Brownell
- 20 June: Interior, public display permit application, Louisville Zoological Gardens
- 2 July: Commerce, scientific research permit application, W. Zapol
- 2 July: Commerce, scientific research permit application, T. Dohl
- 17 July: Commerce, detailed comments regarding Alaska Discussion Paper; that Discussion Paper be modified to conform to comments; that a group of Federal and State representatives be convened to resolve legal, scientific, organizational issues which threaten to cause difficulties
- 17 July: Interior, detailed comments regarding Alaska Discussion Paper; that Discussion Paper be modified to conform to comments; that a group of Federal and State representatives be convened to resolve legal, scientific, organizational issues which threaten to cause difficulties

- 17 July: Commerce, that the National Marine Fisheries Service consider funding specific research proposal on tuna/porpoise problem
- 25 July: Commerce, scientific research permit application, B. LeBoeuf
- 31 July: Interior, that proposed waiver be granted, that proposed state regulations be adopted and that management authority for walrus be returned to the State of Alaska subject to certain modifications
- 11 August: Commerce, scientific research permit application, Northwest Fisheries Center (National Marine Fisheries Service); that regulations be modified to provide effective mechanism for administration of permits issued for certain types of activities
- 12 August: Interior, scientific research permit application, D. Costa
- 12 August: Interior, public display permit application, Sea World
- 20 August: Commerce, suggested design for tuna/porpoise behavioral research; suggested participants including industry; funds offered by Commission to National Marine Fisheries Service for assistance
- 29 August: Commerce, scientific research permit application, H. Winn
- 29 August: Commerce, scientific research permit application, Northwest Fisheries Center (National Marine Fisheries Service)
- 4 September: Commerce, scientific research permit application, G. Whittow
- 16 September: Interior, scientific research permit application, H. Campbell/B. Irvine
- 19 September: Commerce, that remote sensing and radio tracking for marine mammals data acquisition should be pursued; that NOAA meeting on subject should take place; funds offered by Commission to NOAA for assistance

- 23 September: Commerce, scientific research permit application, Central Maine Power Company
- 1 October: Corps of Engineers, that application of Marin County to place and maintain markers and speed limit signs on Salt Works Canal to afford additional protection to seals of Strawberry Spit be favorably and expeditiously processed
- 1 October: Commerce, public display permit application, Sea World
- 1 October: Commerce, public display permit application, Central Park Zoo
- 3 October: Commerce, Interior: to restate recommendations regarding Alaska Discussion Paper and advisability of convening group of experts, and request timely response
- 9 October: Commerce, public display permit application, Utica Zoo
- 9 October: Commerce, public display permit application, Van Donwen's Seals
- 10 October: Commerce, that certain points should be included in US position for second-round renegotiation of Interim Convention on Conservation of North Pacific Fur Seals
- 20 October: Commerce, that efforts be undertaken to assess extent to which activities of countries not signatory to the International Whaling Convention may threaten effectiveness of International Whaling Commission conservation program; that such countries be notified that their activities are being reviewed in light of the Pelly Amendment to Fishermen's Protective Act of 1967
- 20 October: Interior, 1) that exploration and further exploitation in area of Channel Islands be delayed until completion of baseline studies, and, if activities take place notwithstanding recommendations, they should be in accordance with certain guidelines; 2) that Interior assume lead agency responsibility for developing management plan to insure protection of marine mammal populations on San Miguel Island

- 20 October: Interior, Commerce, Agriculture: transmitting recommended standards and guidelines for marine mammal maintenance and recommending they be jointly adopted and arrangements made for their uniform administration and application
- 28 October: Commerce, additional matters for inclusion into US position for renegotiation of Interim Convention on conservation of North Pacific fur seals
- 31 October: Commerce, scientific research permit application Louisiana State University
- 31 October: Commerce, scientific research permit application, Southwest Fisheries Center (National Marine Fisheries Service)
- 4 November: Commerce, that certain topics be considered for US-Mexican, US-Canadian cooperative research
- 6 November: Commerce, that general permit be granted to American Tunaboat Association to take up to 85,060 marine mammals, subject to provision for adjustment of number; that request for radio tracking and tagging be denied pending submission of scientific research permit application; that certain modifications to proposed regulations be implemented
- 18 November: Commerce, that Saltonstall-Kennedy funds be applied to tuna-porpoise research
- 24 November: Commerce, scientific research permit application, State of Alaska, Department of Fish and Game
- 24 November: Commerce, scientific research permit application, M. Johnson, D. Jeffries
- 24 November: Commerce, public display permit application, Brookfield Zoo
- 24 November: Commerce, public display permit application, Sri Lanka Zoo
- 5 December: Commerce, public display permit application, El Paso Zoo
- 8 December: Commerce, that certain additional topics be included in discussions of US-Mexican cooperative research

- 8 December: Commerce, to restate and clarify 6 November recommendations and note that Commission recommendations were not adopted and request explanation
- 9 December: State, that Department negotiate to minimize incidental kill and injury in foreign yellowfin tuna seining activities; that preventive measures be required that are consistent with US standards; that agreement on an international observer program be sought
- 11 December: National Science Foundation: that significant effort be devoted to defining research needs and undertaking research relevant to gaining an understanding of Antarctic krill; that efforts be made to this purpose as part of the International Southern Ocean Study.
- 19 December: Interior, scientific research permit application, H. Campbell/B. Irvine
- 19 December: Interior, scientific research permit application, T. Loughlin
- 19 December: Interior, scientific research permit application, C. Jones
- 24 December: Commerce, that the Hawaiian monk seal (Monachus schauinslandi) be designated "depleted" under Marine Mammal Protection Act and "endangered" pursuant to Endangered Species Act; that specific measures be taken to secure greater protection for this species
- 24 December: Interior, that Fish and Wildlife Service undertake certain actions on Hawaiian monk seal with respect to its designation as endangered, designation of critical habitats, and management of areas within Hawaiian Islands National Wildlife Refuge
- 24 December: Coast Guard, that Coast Guard undertake cooperative efforts to implement recommended action with respect to management of activities and personnel on Kure Atoll and French Frigate Shoals
- 24 December: Navy, that Department undertake cooperative efforts to implement recommended action with respect to management of activities and personnel on Midway
- 29 December: Commerce, public display permit application, Ocean World