

reduction strategies, researching alternative gear technologies, holding skipper workshops, monitoring the fishery, and enforcing the regulations in order to implement the plan. The MMPA provides that, if there is insufficient funding available to develop and implement a take reduction plan for all such stocks, then NMFS must use several factors to prioritize development and implementation of take reduction plans. NMFS has followed this provision to prioritize development and implementation of Pacific Offshore Cetacean, Harbor Porpoise, and Atlantic Large Whale take reduction plans. In addition, NMFS is in the process of developing a take reduction plan with the Western North Atlantic coastal bottlenose dolphins take reduction team. Finally, NMFS disbanded the Atlantic Offshore Cetacean take reduction team in August 2001, because the nature of the fisheries that were included in a draft plan had changed tremendously since 1996, when the take reduction team was convened and prepared a draft plan. NMFS is compiling data necessary for any take reduction plan or plans for marine mammal stocks that were addressed by this team.

Implementation of these take reduction plans provide examples of accomplishments in reducing bycatch of marine mammals. In 1997, NMFS issued regulations to implement the Pacific Offshore Cetacean Take Reduction Plan addressing incidental takes of beaked whales, pilot whales, pygmy sperm whales, sperm whales, and humpback whales in the California Oregon thresher shark/swordfish drift gillnet fishery. Management efforts included use of new technology (pingers, i.e., acoustic deterrent devices), gear modifications (lowering the depth of the net in the water column), outreach (mandatory skipper workshops), and permitting changes (to limit expansion of the fleet). In 1998, the team determined that the fishery had achieved the MMPA's immediate goal of reducing incidental mortality and serious injury below the potential biological removal (PBR) level for the strategic marine mammal stocks addressed by the plan. Efforts continue to ensure that bycatch remains less than PBR and that the MMPA's long-term goal is achieved of reducing incidental mortality and serious injury to insignificant levels approaching a zero mortality and serious injury rate.

In 1998, NMFS issued regulations to implement the Harbor Porpoise Take Reduction Plan addressing incidental takes of harbor porpoise in the Northeast sink gillnet fishery and the Mid-Atlantic coastal gillnet fishery

through the use of pingers, gear modifications, and closures. Prior to implementation of this take reduction plan and fishery management plan actions intended to reduce harbor porpoise bycatch, an estimated 1,521 harbor porpoise died each year from interactions with these fisheries. Bycatch in both fisheries was dramatically reduced in 1999, 2000, and 2001 to levels below the PBR level in all three years. Efforts continue to ensure that bycatch remains less than the PBR level and that the MMPA's long-term goal is achieved.

Other marine mammals have been the focus of bycatch or entanglement reductions studies and regulations. In 1999, NMFS issued regulations to implement the Atlantic Large Whale Take Reduction Plan addressing incidental takes primarily of North Atlantic right whales, but also humpback, fin, and minke whales, in Atlantic lobster trap/pot and gillnet fisheries. This plan creates a regulatory (e.g., gear modifications, closures) and non-regulatory (e.g., disentanglement, gear research) framework for reducing bycatch. Recent efforts include a number of gear modifications, including requiring that fixed gear with lines attached to nets and traps have "weak links." These devices are designed to break in the event that a large whale gets entangled in the line before the whale becomes more entangled. Atlantic lobster trap/pot and gillnet fisheries are now required to have weak links at various intervals on their fishing gear. In order to further protect right whales, NMFS has instituted Dynamic Area Management and Seasonal Area Management regulations to restrict fishing in areas where and times when right whales congregate to feed and are vulnerable to becoming entangled in lines from fixed fishing gear.

F. Progress in NMFS's Commitment to Reducing Incidental Catch of Seabirds

In 1999, the United Nations' Food and Agricultural Organization (FAO) adopted an International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (IPOA-Seabirds). The IPOA-Seabirds is a voluntary measure under which FAO Member States agree to: (1) assess the degree of seabird bycatch in their longline fisheries; (2) develop individual national plans of action to reduce seabird bycatch in their longline fisheries that have a seabird bycatch problem; and (3) develop a course of future research and action to reduce seabird bycatch.

In 2000, NMFS participated in the First International Fishers Forum for

Reducing Incidental Catch of Seabirds in Longline Fisheries. Fishermen, researchers, gear manufacturers, and others met for the first time and shared ideas, research plans, and codes of industry practices.

Then in February 2001, NMFS announced its U.S. National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (NPOA), that was developed in cooperation with the U.S. Fish and Wildlife Service (USFWS) and the Department of State. Under the NPOA, NMFS is committed to: (1) assessing U.S. longline fisheries for seabird bycatch by February 2003 (including use of and expansion of existing observer programs); (2) implementing measures to reduce seabird bycatch within 2 years of determining a problem exists; (3) preparing an annual report on status of seabird bycatch mortality for each longline fishery; and (4) advocating NPOAs within relevant international fora.

In 2002, NMFS provided \$250,000.00 in assistance to the Western Pacific Regional Fishery Management Council (WPFMC) in sponsoring the Second International Fishers Forum for Reducing Incidental Catch of Sea Turtles and Seabirds in Longline Fisheries held in November 2002. This forum had grown in scope and enthusiasm from the initial forum in 2000 and was attended by participants from over 28 Nations. The meeting was very successful in enhancing cooperation with the fishing industry, fishery agencies, academic institutions, NGOs, and international bodies on seabird and sea turtle bycatch research and outreach. Efforts are underway for a Third International Fishers Forum planned for 2004 in Japan. To fulfill its protected resources obligations, NMFS believes it is critical for the agency to work side-by-side with the fishing industry to design gear and alter fishing practices to reduce bycatch, as well as to monitor and evaluate bycatch and the effectiveness of bycatch reduction measures.

In order to understand the population-level impacts of incidental longline bycatch of seabirds and sea turtles, NMFS and the USFWS have undertaken studies to monitor population status and threats. These studies have identified numerous threats that continue to impact sea turtle and seabird populations.

Under the MSA, NMFS has taken action to prevent further impacts on seabirds and sea turtles, including implementation of bycatch reduction techniques for seabirds and area closures to reduce interactions with sea