Section 202(h)(1) of the Magnuson-Stevens Fishery Conservation and Management Act states that “[t]he Secretary of State, in cooperation with the Secretary [of Commerce], shall seek to secure an international agreement to establish standards and measures for bycatch reduction that are comparable to the standards and measures applicable to United States fishermen for such purposes in any fishery regulated pursuant to this Act for which the Secretary, in consultation with the Secretary of State, determines that such an international agreement is necessary and appropriate.” Similar provisions are contained in both the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA).

Section 202(h)(3) of the Magnuson-Stevens Act requires that the Secretary of Commerce, in consultation with the Secretary of State, submit annually to the Senate Committee on Commerce, Science, and Transportation and the House Committee on Natural Resources a report describing actions pursuant to Section 202(h) of the Act. Since the 2008 Report, the United States has not entered into any new bycatch reduction agreements. Nonetheless, the United States continues to be a leader, both bilaterally and multilaterally, in reducing bycatch globally, in addition to actively pursuing cooperative research and scientific activities related to bycatch. In 2009, NOAA’s National Marine Fisheries Service (NMFS) worked with our international partners through bilateral cooperation and regional fisheries management organizations (RFMOs), as well as Multilateral Environmental Agreements (MEAs), to address bycatch.

Throughout 2009, NMFS supported a number of broad initiatives to reduce bycatch across species. For example, the NMFS Northeast Fisheries Science Center worked with the International Council for the Exploration of the Sea (ICES) Study Group for Bycatch of Protected Species on issues such as bycatch measurement and mitigation of protected species groups. Bilaterally, NMFS worked closely with our Canadian and Mexican partners to conduct joint research and explore management measures to conserve species at risk, including marine mammals and sea turtles.

Additionally, NMFS continued to strongly advocate for progressive actions within RFMOs to reduce bycatch in the past year. At the Second Joint Meeting of Tuna RFMO’s, held in San Sebastian, Spain in June 2009, the United States agreed to support an intercessional meeting to address bycatch within global tuna fisheries. The terms of reference for the meeting call for the development of advice to tuna RFMOs on best practices, methods and techniques to assess and to reduce the incidental mortality of non-target species, such as seabirds, turtles, sharks, marine mammals, and of juveniles of target species. The joint tuna RFMO bycatch meeting is slated to occur prior to the third Joint Meeting of Tuna RFMOs, scheduled for mid-2011.

As first called for at the 2006 Review Conference of the United Nations Fish Stock Agreement (UNFSA), with additional support from the 2006 United Nations General Assembly (UNGA) sustainable fisheries resolution and the 2007 meeting of the United Nations Food and Agriculture Organization’s Committee on Fisheries (FAO COFI), several RFMOs have conducted or undergone performance reviews with the intent of improving their effectiveness and efficiency in
fulfilling their mandates. These reviews have typically included an examination of the organization’s actions to address bycatch, such as the implementation of management measures to reduce incidental mortality. In 2008 and 2009, of the RFMOs in which the United States is a member, the International Commission for the Conservation of Atlantic Tuna (ICCAT) and Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) each underwent an independent review, and the Northwest Atlantic Fisheries Organization (NAFO) and the Inter-American Tropical Tuna Commission (IATTC) are planning a review in 2010 and beyond.

The remainder of this report details additional actions taken to reduce bycatch internationally for marine mammals, seabirds, sea turtles and sharks.

**Marine Mammals**

Bycatch threatens marine mammals worldwide, in fisheries employing nearly every type of fishing gear, and poses the greatest conservation threat worldwide to many marine mammal populations. NMFS and the Department of State continue to work in and with international fisheries and conservation bodies to support scientific and management efforts to characterize and address international marine mammal bycatch issues. For example, the United States provided support for a relevant International Whaling Commission (IWC) Disentanglement workshop (planned for 2010). In addition, the United States is a party to the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), which has established an ad hoc Working Group on Incidental Mortality Associated with Fishing to focus on the assessment and avoidance of incidental mortality of Antarctic marine mammals in commercial fisheries.

NMFS has participated in additional multilateral scientific efforts to address marine mammal bycatch in the North Atlantic through the ICES. NMFS scientists participate in the ICES Working Group on Marine Mammal Ecology and the ICES Study Group for Bycatch of Protected Species. These ICES groups facilitate collaborative research among international partners such as the United States, Canada and the European Community to provide scientific data for the management and mitigation of North Atlantic fisheries’ impacts on protected species.

The United States continues to work to build the capacity of nations to assess, manage, and reduce bycatch of marine mammals, including through technology transfer, training, support of management measures, and the development of fisheries observer programs. In 2009, NMFS worked with a number of nations to this end, including Costa Rica, Mexico, Uruguay, Vietnam and members of the Pacific Islands Forum Fisheries Agency.

Last year, NMFS also participated in collaborative research efforts to assess and monitor international or transboundary marine mammal populations, including humpback whales, baleen whales and Steller sea lions. International partners for this work have included: Australia, Canada, Dominican Republic, Ecuador, Fiji, Germany, Japan, Peru, Russia, South Africa, and United Kingdom. The data collected in these efforts are integral for assessing the health and status of marine mammal populations in order to detect and monitor the impacts of bycatch on those populations. The United States also strongly supported the initiation of the Southern
Ocean Research Partnership, a non-lethal research program on large whales in the Southern Ocean. Other member nations of the Partnership include Australia, Argentina, Brazil, Chile, Costa Rica, France, Italy, Mexico, New Zealand, South Africa, and Uruguay.

In 2009, NMFS initiated the development of an International Marine Mammal Action Plan, an agency-wide initiative to provide strategic guidance and recommendations regarding actions the agency should take to protect and conserve marine mammals outside U.S. waters. The action plan will focus particularly on identifying new high-priority actions and ensuring that NMFS’ many ongoing actions are coordinated in a strategic fashion. Toward that end, NMFS conducted an inventory of its international marine mammal activities over the past five years and assessed (a) threats facing marine mammals internationally; (b) the feasibility of NMFS action to address those threats; and (c) the relevance of such action to legislative mandates and government priorities. A final action plan is expected in 2010.

NMFS currently is evaluating a petition by two environmental non-governmental organizations requesting that the United States ban swordfish imports from nations whose bycatch of marine mammals exceeds U.S. standards. The Center for Biological Diversity and Turtle Island Restoration Network submitted the petition in March 2008. NMFS published a notice of receipt of the petition in December 2008, and requested public comments through March 2009. In addition, NMFS contacted every nation that exported swordfish to the United States during the past four years and invited those nations to provide information and comments relevant to the petition. NMFS currently is evaluating the petition in light of the more than 40,000 total comments submitted by the public, environmental and industry groups, members of Congress, and swordfish exporting nations, and will determine how to respond to the petition.

**Seabirds**

Bycatch in fisheries has become widely recognized as a major threat to many seabirds. Seabirds such as albatrosses and petrels, can be caught in virtually any type of fishing gear, but are most often taken in longline fisheries when they attempt to take sinking baits attached to hooks and are pulled underwater with the outgoing lines. The only multilateral agreement that coordinates international activity to mitigate known threats to albatross and petrel populations is the Agreement on the Conservation of Albatrosses and Petrels (ACAP), which entered into force in 2004. Although the United States is not yet a party to ACAP, the ACAP treaty was submitted to the U.S. Senate on September 26, 2008, for its advice and consent to ratification. ACAP is included in a list of the Administration’s priorities for treaties pending before the Senate as indicated by a letter sent by the Department of State to the Senate Committee on Foreign Relations in May 2009. Federal agencies involved with ACAP are currently working together to develop draft implementing legislation for submission to the U.S. Congress in the near future.

The primary objective of ACAP is to “achieve and maintain a favorable conservation status for albatrosses and petrels.” ACAP’s Advisory Committee meets annually and oversees the activities of four working groups, which cover breeding sites, taxonomy, status and trends, and bycatch. These groups have made significant progress in reviewing the population status and trends of threatened seabird species, addressing taxonomic issues, collecting information on
breeding sites, and assessing threats to species from factors associated with these sites. On this basis, they have begun to devise strategies for addressing seabird bycatch and engaging RFMOs.

The 3rd Meeting of the Parties of ACAP was held in Bergen, Norway in April 2009. The United States attended the meeting as an observer, and participated on the Seabird Bycatch Working Group as an invited expert. The United States also provided information critical to the addition of the three North Pacific albatross species to ACAP’s Annex 1, which lists the species covered by the agreement. Therefore, ACAP now covers all species of albatross in the world. One of these species, the short-tailed albatross, is listed as endangered under the ESA, and as vulnerable by the International Union for Conservation of Nature (IUCN).

In 2009, NMFS and the Department of State continued to support progressive measures to protect seabirds from bycatch in RFMOs, building upon existing measures or resolutions in the Western and Central Pacific Fisheries Commission (WCPFC), Inter-American Tropical Tuna Commission (IATTC), CCAMLR, and International Commission for the Conservation of Atlantic Tunas (ICCAT). These RFMOs continue to refine binding seabird conservation measures to represent best practices. For example, in IAATC, NMFS actively participated in a one-day technical meeting devoted to seabird bycatch in May 2009, and took a leadership role in discussions related to minimizing bycatch of seabirds in IATTC waters. The United States will continue to work with IATTC nations to adopt binding conservation measures to reduce seabird bycatch in IATTC waters.

In 2007, the ICCAT Standing Committee on Research and Statistics (SCRS) Ecosystem Sub-Committee initiated work on an assessment of the impact on seabirds of fishing activities of all the vessels fishing for tunas and tuna-like species in the Convention Area. In 2009, the United States played an active role in the discussions of the ICCAT Ecosystem Sub-Committee, the SCRS, and at the annual meeting regarding the results of the three-year ecological risk assessment on seabirds, which was partially funded by the United States. NOAA and the State Department will continue to work with ICCAT nations to strengthen the existing seabird bycatch measure, reflecting the results of the ecological risk assessment and best practices worldwide.

Furthermore, NMFS promotes seabird conservation through bilateral fishery meetings and by assisting other nations and relevant international bodies to address priority seabird issues. In 2009, NMFS provided funding for the reduction of seabird bycatch in Russia and along the Peruvian coast. These programs build on previous support for seabird bycatch mitigation provided to both Russia and Peru in 2008. Additionally, NMFS and ACAP supported work to develop a monitoring program for a population of waved albatross in the Galapagos and on Española.

**Sea Turtles**

Incidental take in fishing operations is one of the most serious threats to the recovery and conservation of marine turtle populations. Accordingly, a priority for the United States Government at both the RFMOs and within the MEAs has been negotiating and adopting binding bycatch reduction measures. By 2007, the IATTC and the North Atlantic Fisheries Management Organization (NAFO) had adopted some of the most progressive sea turtle conservation measures and called for implementation of the Food and Agriculture Organization of the United
Nations (FAO) Guidelines to Reduce Sea Turtle Mortality. These measures also called for the use of safe-handling and de-hooking guidelines, and regular reporting of sea turtle interactions. In August 2008, the Indian Ocean–South East Asian Marine Turtle Memorandum of Understanding (IOSEA) Signatory States met, and adopted a resolution encouraging the Indian Ocean Tuna Commission (IOTC) and the Western Central Pacific Fisheries Commission (WCPFC) to take measures to require their vessels to use bycatch mitigation measures to protect sea turtles.

In December 2008, the WCPFC adopted management measures (CMM 2008-03) that called for the implementation of the FAO guidelines, as well as the use of safe-handling and de-hooking practices, making it the first RFMO to implement such a comprehensive sea turtle conservation measure. This resolution also required that vessels in the Convention Area use large circle hooks with no offset greater than 10 degrees, whole finfish bait, or a measure to reduce sea turtle bycatch that has been approved by the Scientific Committee and the Technical Compliance Committee. In 2009, the United States contributed to the development by the WCPFC’s Scientific Committee of guidance on how to handle and release turtles hooked or entangled in longline gear. The guidance will be used by WCPFC members in implementing the provisions of CMM 2008-03.

In addition to the work that NMFS has carried out in multilateral fora, the 1989 passage of Public Law 101-162 committed the United States Government to work to ensure that other countries take measures to protect sea turtles in their shrimp fisheries by using measures comparable to those in effect in the United States, such as Turtle Excluder Devices (TEDs). In order to comply with Public Law 101-162 and be able to import shrimp into the United States, countries must develop national TED programs that include domestic regulations and regular enforcement. Over the past 20 years, the United States has worked with numerous governments to establish these TED programs. Fifteen nations\(^1\) were certified in 2009 as employing TEDs for purposes of importing shrimp from those fisheries into the United States. In addition, Twenty-four nations and one economy\(^2\) were certified as having fishing environments that do not pose a danger to sea turtles. Sixteen other nations were identified as having cold water shrimp fisheries, where turtles are not present. Each year the State Department and NMFS personnel travel to countries to carry out TED inspections and trainings. In 2009, to complement the work under Public Law 101-162, NMFS and the State Department carried out trainings in Costa Rica, El Salvador, French Guiana, Gabon, Guatemala, Honduras, Malaysia, and Nicaragua.

In addition to NMFS’ efforts to reduce sea turtle bycatch in shrimp trawls, NMFS has worked to identify and develop bycatch mitigation technology for longline and gillnet fisheries. Over the past decade, NMFS has regularly partnered with countries around the world to test large circle hooks with whole finfish bait in their longline fisheries. By working together with these countries, NMFS helps identify the appropriate bait and circle hook combination to reduce sea turtle interactions as well as the severity of interactions, thus likely reducing mortality. Some of the countries that NMFS researchers have worked with on cooperative trials include Brazil,

\(^1\) [http://www.state.gov/r/pa/prs/ps/2009/05/122568.htm](http://www.state.gov/r/pa/prs/ps/2009/05/122568.htm)

\(^2\) [http://frwebgate4.access.gpo.gov/cgi-bin/TEXTgate.cgi?WAISdocID=16021055505+18+1+0&WAISaction=retrieve](http://frwebgate4.access.gpo.gov/cgi-bin/TEXTgate.cgi?WAISdocID=16021055505+18+1+0&WAISaction=retrieve) or Federal Register, Vol. 74, No. 86, p21048-21049 (May 6, 2009).
Chile, Costa Rica, Ecuador, El Salvador, Guatemala, Indonesia, Italy, Morocco, Nicaragua, Peru, Philippines, Uruguay, and Vietnam.

To complement ongoing work with countries to reduce longline bycatch, NMFS has conducted training on safe-handling and de-hooking practices for bycaught turtles. In 2009, NOAA worked with Vietnam, Philippines, Kiribati, Fiji, Tuvalu, and New Caledonia, through the WCPFC, to reduce mortality of sea turtles through proper de-hooking techniques.

With respect to gillnets, NMFS has partnered with the Wider Caribbean Sea Turtle Conservation Network and the Trinidad and Tobago Ministry of Fisheries to test experimental gillnet designs for reducing leatherback turtle entanglements. This promising work has shown significant reduction in leatherback bycatch while maintaining the value of the catch. NMFS has also partnered with Mexico and NGOs to test the effectiveness of using visual deterrents in commercial gillnet fisheries to reduce sea turtle bycatch. In 2009, the field work was completed and researchers submitted the final report concluding that lightsticks did not effectively reduce sea turtle bycatch, but shark-shaped silhouettes were effective in reducing sea turtle bycatch.

Also in 2009, NMFS provided substantial bilateral and multilateral support to assess and monitor sea turtle populations in the South Pacific, Atlantic, Gulf of Mexico, and Caribbean regions. International partners for this work have included: Brazil, Mexico, Italy, Portugal, Spain, and Vanuatu. The data obtained are integral for assessing the health and status of population. Furthermore, the United States supported efforts in Mexico and with member States of the Pacific Island Forum Fisheries Agency to reduce illegal sea turtle harvest and mortality.

**Sharks**

Fishing, both through direct pressure and incidental mortality resulting from bycatch, represents the greatest threat to the long term sustainability of sharks and rays. The United States has worked aggressively through RFMOs, MEAs, including Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and other fora to urge nations to implement measures comparable to those applicable in the United States to protect sharks in fisheries operations.

At the strong urging of the United States, the 2009 UNGA sustainable fisheries resolution calls upon the tuna RFMOs to strengthen or establish precautionary, science-based conservation and management measures for sharks taken in fisheries within their Convention areas. The resolution further notes that not all RFMOs have adopted conservation and management measures for the regulation of bycatch of sharks resulting from other fisheries. The 2009 resolution builds upon UNGA sustainable resolution 62/177, which calls for strengthened protections for vulnerable and endangered shark populations around the world. Among other things, the resolution language calls for establishing limits on shark catches, undertaking improved assessment of the health of shark stocks, reducing shark bycatch in other fisheries, and limiting shark fisheries until management measures are adopted.

In preparation for the 2010 CITES Conference of the Parties, the United States developed a report for identifying key shark species and examining these for consideration and possible listing under CITES. Furthermore, the United States, in partnership with Palau, proposed adding
oceanic whitetip, three types of hammerhead (Scalloped, Smooth, and Great), dusky and sandbar sharks to Appendix II. The European Union and Palau have also proposed adding porbeagle and spiny dogfish sharks to CITES Appendix II. All of these proposals will be addressed at the 2010 Conference of Parties in Qatar.

Furthermore, numerous RFMOs to which the United States is party, including ICCAT, IATTC, NAFO, and WCPFC, have taken measures to protect sharks. In 2007, based on U.S. and Canadian proposals, ICCAT passed a measure requiring data collection; measures to reduce fishing mortality on porbeagle and shortfin mako sharks until assessments determine sustainable harvest levels; an assessment of porbeagle sharks (which was completed in June 2009); and research on pelagic sharks, specifically to identify potential nursery areas. In 2008, ICCAT adopted a measure requiring the release of bigeye thresher sharks that are still alive when brought to the vessel, as well as the recording and reporting of incidental catches and live releases of this species. At the 2009 annual meeting, ICCAT adopted a measure prohibiting the retention of bigeye thresher sharks and requiring the release of them when caught, with an exception for a Mexican small-scale coastal fishery.

On January 1, 2008, WCPFC Conservation and Management Measure 2006-05, which the United States was instrumental in getting adopted and which governs the conservation and management of sharks, came into effect. It calls on commission members, cooperating non-members, and participating territories (CCMs) to implement the International Plan of Action for Sharks and to advise the WCPFC annually on their implementation. The measure encourages the inclusion of particular items in National Plans of Actions or other relevant policies for sharks. Such plans should include measures to minimize waste and discards from shark catches and to encourage the live release of incidental catches of sharks. Each CCM is expected to include key shark species, to be identified by the Scientific Committee, in annual reports to the Commission. The measure currently applies only to vessels greater than 24 m in length. It requires members to take measures necessary to ensure that their fishers fully utilize any retained catches of sharks. The full utilization requirements are similar to those under ICCAT and IATTC. The measure also provides that vessels may have on board fins that total no more than 5 percent of the weight of sharks onboard.

The broader bycatch restrictions contained in the measure encourage CCMs with tuna fisheries and fisheries not directed at sharks to release live sharks that are caught incidentally and are not used for food or other purposes. Finally, CCMs are encouraged to cooperate in the development of stock assessments for key shark species within the Convention Area.

At the second meeting of the Joint Meeting of Tuna Regional Fisheries Management Organizations, held in Spain 2009, the participants agreed to call on RFMOs to establish precautionary, science-based conservation and management measures for sharks taken in fisheries within the convention areas of each tuna RFMO, consistent with the FAO International Plan of Action on Sharks. These measures, and RFMOs’ progress in adopting them, will likely be further discussed at the 2011 Joint Tuna RFMO bycatch summit.

Finally, NMFS has worked collaboratively with bilateral and multilateral partners to provide training, technical, and research assistance to improve the management of shark stocks, including
reducing their bycatch. In 2009, NMFS worked with partners in Brazil, Colombia, Portugal, Spain, Uruguay and Venezuela to develop better, more comprehensive research and scientific capabilities in the region.

**Conclusion**

During 2009, the United States advanced its efforts to secure international management measures to establish standards for bycatch reduction comparable to the standards and measures applicable to U.S. fishermen. It is the opinion of NMFS that it is both necessary and appropriate for the United States to continue its efforts to seek such international agreements. As such, the United States will continue to work bilaterally, multilaterally and globally to ensure that measures are in place to reduce bycatch, as part of a larger call for the implementation of ecosystem approaches to fisheries management.