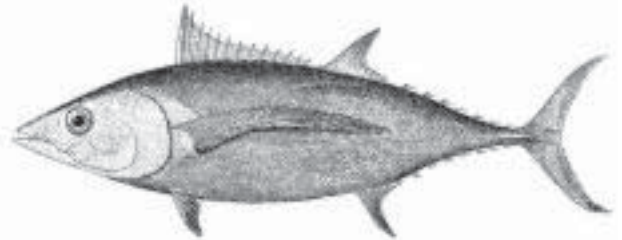




Background: Highly Migratory Species

What are highly migratory species?

The term “highly migratory species” (HMS) derives from Article 64 of the United Nations Convention on the Law of the Sea. Although the Convention does not provide an operational definition of the term, an annex to it lists species considered highly migratory by parties to the Convention. In general, these species have a wide geographic distribution, both inside and outside countries’ 200-mile zones, and undertake migrations of significant but variable distances across oceans for feeding or reproduction. They are pelagic species, which means they do not live near the sea floor, and mostly live in the open ocean, although they may spend part of their life cycle in nearshore waters. They are harvested by U.S. commercial and recreational fishers and by foreign fishing fleets. Only a small fraction of the total harvest is taken within U.S. waters.



Albacore tuna (NOAA)

The HMS Fishery Management Plan (FMP) authorizes the Council to actively manage the following species:

- Tunas: north Pacific albacore, yellowfin, bigeye, skipjack, and northern bluefin
- Sharks: common thresher, pelagic thresher, bigeye thresher, shortfin mako, blue
- Billfish/swordfish: striped marlin, Pacific swordfish
- Other: dorado (also known as dolphinfish and mahi-mahi)

Under the FMP, the Council monitors other species for informational purposes, and some species—including great white sharks, megamouth sharks, basking sharks, Pacific halibut and Pacific salmon—are designated as prohibited. If fishers targeting highly migratory species catch these species, they must release them immediately.

The Fishery and Gear

Except for the swordfish drift gillnet fishery off California, highly migratory species fisheries are among the few remaining open access fisheries on the West Coast. However, some members of the fishing industry are concerned that reductions in other fisheries (like groundfish) could push more people into HMS fisheries, increasing fishing pressure.

As a result of these concerns, the Council may consider developing a limited entry program to control excess capacity. The Council adopted a control date of March 9, 2000, in case a limited entry program is needed in the near future. This date was announced in the Federal Register as an advance notice to the public that a limited entry program may be adopted and that any new entrants in the fishery after the control date may not qualify for a permit. The announcement applies to all commercial and charter fisheries for highly migra-

tory species. Control dates are established to minimize the rush of new entrants into a fishery that often occurs when limited entry is being considered. It should be noted the FMP does not include a limited entry program, but an amendment to the plan could be developed sometime in the near future to establish one.

Many different gear types are used to catch highly migratory species:

- Troll gear. Trolling involves towing lines with multiple hooks behind a vessel. Fishing lines are rigged to outriggers (trolling poles), which are deployed at about a 45 degree angle from the sea surface. Albacore are usually harvested by trollers with jigs or live bait.
- Drift gillnets. A gillnet is a panel of netting suspended vertically in the water by floats, with weights along the bottom. Fish are entangled in the net. Drift gillnet gear is anchored to a vessel, and drifts along with the current. It is usually used to target swordfish and common thresher sharks. Most drift gillnets are used off California, with a small fraction being used off the Oregon coast. The drift gillnet fishery is heavily regulated by the states of California and Oregon and by the federal government. This gear is not legal in Washington. New measures to protect sea turtles from drift gillnets were put in place in August 2001.
- Harpoon. The harpoon fishery mainly targets swordfish and mostly takes place in California. Harpoons used to be the primary method of harvesting swordfish until the drift gillnet fishery became popular in the 1980s. There are only a few vessels still using harpoons. Harpoons are not legal gear in Washington.
- Pelagic longline. Pelagic longline gear consists of a main horizontal line that has shorter lines with baited hooks attached to it. The gear is used at various depths and at different times of day, depending on the species being targeted. Longliners from Hawaii currently target swordfish and tuna on the high seas. However, the FMP prohibits West Coast longliners from fishing in the Exclusive Economic Zone or targeting swordfish anywhere, due to concerns about the take of endangered sea turtles. Hawaii longliners operate under a regulatory framework mandating gear modifications and operating procedures, including limits on the number of sets they may make, to reduce the take of sea turtles when targeting swordfish. If a similar framework were implemented for West Coast vessels, they too could target swordfish.
- Coastal purse seine. A purse seine is an encircling net that is closed by means of a purse line threaded through rings on the bottom of the net. This gear is effective in catching schooled tunas. “Coastal” purse seiners are smaller vessels that fish close to the California shore. They mainly harvest coastal pelagic species (sardines, anchovies, mackerel), but they also fish for bluefin and other tunas when they are available.
- Large purse seine. Large purse seine gear is used in major fisheries in the eastern tropical Pacific and the central and western Pacific. This fishery is monitored by the Inter-American Tropical Tuna Commission and the National Marine Fisheries Service (for U.S. vessels). In 2005 and 2006, the number of U.S. purse seiners fishing under the South Pacific Tuna Treaty was 15 and 12, respectively. Most of the catch is landed in American Samoa; none was landed on the U.S. West Coast (Coan et al. 2000).
- Recreational fisheries. The recreational fisheries for highly migratory species consist of private vessels and charter vessels using hook-and-line gear. In California, both private boats and a larger charterboat fleet fish



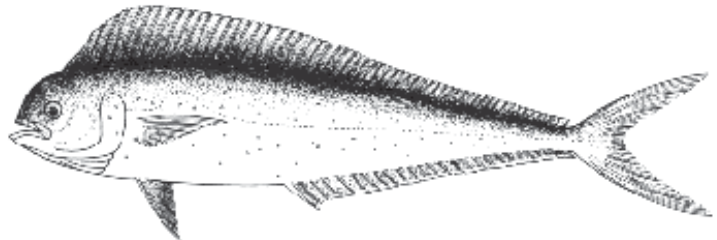
Bluefin tuna (NOAA)

for tunas, dorado, billfish, and sharks. Albacore tuna are a seasonally important recreational target off of Oregon and Washington.

Fishery Management Plan

National Marine Fisheries Service (NMFS) partially approved the fishery management plan for West Coast highly migratory species fisheries on February 4, 2004. NMFS disapproved provisions that would have allowed targeting swordfish by West Coast longline vessels east of the 150° W longitude. Despite this limitation, there are several advantages to having an FMP for these species. The FMP:

- Allows the Council to provide advice to NMFS and the Department of State, so that West Coast interests are represented in international negotiations and decision-making.
- Increases public awareness about West Coast HMS fishery issues.
- Facilitates greater public involvement in managing HMS fisheries.
- Helps garner congressional support to the Council and NMFS for the study and management of HMS fisheries.



Dolphinfish (mahi-mahi)

The FMP is a “framework” plan, which means it includes some fixed elements as well as a process for creating or changing regulations without amending the plan.

In biggest short-term change for fishers stemming from the FMP are new monitoring requirements, which came into effect on April 11, 2005. As of that date commercial fishers must obtain a permit from NMFS to fish for HMS and maintain logbooks documenting their catch. (Current state-mandated logbooks meet this requirement.) Recreational charter vessels must also keep logbooks. If requested by NMFS, a vessel must carry a fishery observer. These measures are intended to improve data collection about HMS catches.

The Management Context

Since highly migratory species move throughout large areas of the Pacific and are fished by many nations and gear types, management by the U.S. alone is not enough to ensure that harvests are sustainable in the long term.

The U.S. is a member of the Inter-American Tropical Tuna Commission (IATTC), which is responsible for the conservation and management of fisheries for tunas and other species taken by tuna-fishing vessels in the eastern Pacific Ocean. A new intergovernmental organization to coordinate management of HMS in the western and central Pacific was established in 2004. The U.S. is a signatory to the convention establishing the Central and Western Pacific Fisheries Commission. Congress recently ratified U.S. membership on the Commission. The implementing legislation designates one of the five U.S. commissioner seats for a PFMC member.

The FMP framework can also provide a mechanisms to meet U.S. responsibilities under the United Nations Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (known as the UNIA). The UNIA interprets the duties of nations to cooperate in conserving and managing fisheries resources, and dictates that coastal states may not adopt measures that undermine the effectiveness of

regional measures to achieve conservation of the stocks.

The U.S. is also a member of the Food and Agriculture Organization of the United Nations (FAO), which has implications for HMS management. In 1995 the FAO's Committee on Fisheries developed a Code of Conduct for Responsible Fisheries, which more than 170 member countries, including the U.S., have adopted. Pursuant to this Code of Conduct, the U.S. has adopted the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas and four International Plans of Action (IPOAs):

- International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries
- International Plan of Action for the Conservation and Management of Sharks
- International Plan of Action for the Management of Fishing Capacity
- International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

In turn, the U.S. has developed national plans of action to carry out the objectives of these international plans. The FMP provides a way to support these national plans of action. In fact, the seabird avoidance measures in the FMP are consistent with the national plan of action on seabirds.

Hot Topics

Some of the challenges in managing highly migratory species are listed below. For more details, please see the Fishery Management Plan and Environmental Impact Statement for U.S. West Coast Fisheries for Highly Migratory Species.

Overfishing. NMFS has notified the Council that both bigeye and yellowfin tuna are subject to overfishing. According to the Magnuson-Stevens Act, the Council must respond by proposing measures to end overfishing and rebuild the stock. Any response is complicated by the wide-ranging nature of the fish and the many nations, states, and regions involved. Effective management requires a great deal of cooperation among these entities. Therefore, the U.S. cannot rebuild HMS stocks alone. If the U.S. acts alone, U.S. fishers could be penalized by having to comply with rules that other nations do not adhere to, and there would be little or no benefit to the fish stocks. Thus, the Council response for bigeye tuna considers how best to interact with international organizations, such as the IATTC and the Western and Central Pacific Fisheries Commission, to develop cooperative ways to rebuild overfished stocks. Similar measures have been developed for yelloweye tuna.

Incidental take of sea turtles. NMFS disapproved portions of the FMP that would have permitted targeting swordfish by West Coast longline vessels. To catch swordfish, longlines are set at relatively shallow depths and in areas where threatened and endangered sea turtles are more likely to be encountered. Vessels fishing out of Hawaii, under the Western Pacific Fishery Management Council's Pelagic Species FMP, faced similar problems and restrictions. Hawaiian vessels may now target swordfish under regulations establishing gear and operating restrictions that address incidental take concerns. Adopting similar regulations for West Coast vessels could allow them to target swordfish also. (However, the FMP prohibits longline fishing inside the West Coast EEZ.)

Sharks. Sharks are especially vulnerable to overfishing because of their biology and life history, and there is some concern that they may become locally depleted. The West Coast states have taken measures to protect sharks. A federal law prohibits "shark finning," where the fins are removed and the carcass is discarded. Including pelagic shark species in the FMP enables catches to be monitored and managed. The FMP also designates great white, megamouth, and basking sharks as prohibited species, meaning if these species are caught, they

may not be retained. This discourages intentional catch and, in cases where the shark survives the interaction, reduces fishing mortality.

Incomplete data. Improved data collection is needed in order to effectively manage highly migratory species, both in the commercial and recreational fisheries. The FMP includes provisions to increase and improve monitoring and reporting in HMS fisheries.

Managing fishing capacity. Currently, there are few high seas longline vessels fishing from West Coast ports because of the restrictions on targeting swordfish; but if the incidental sea turtle take problem is resolved, the number could increase. A limited entry program would allow any rapid change in fishing capacity to be effectively managed. The Council established a control date of March 9, 2000, which may be used when establishing qualifying criteria for obtaining a permit.

How Do I Get Involved?

- Read the Fishery Management Plan (<http://www.pcouncil.org/hms/hmsfmp.html>; also available from the Council office).
- Contact Kit Dahl, Staff Officer for highly migratory species, at kit.dahl@noaa.gov or 503- 820-2280.
- Attend a Council meeting or subcommittee meeting.

Last updated July 16, 2008