## Highly Migratory Species: Overview

Highly migratory species include the tunas, billfishes, pelagic sharks, and dolphinfish. As a group, they contribute to some of the most valuable commercial fisheries and are also very important in the sport fishery, especially in southern California. Currently, the harvest of highly migratory species is regulated by the state. However, beginning in 2001, the Pacific Fishery Management Council has proposed adopting a fishery management plan regulating the take of highly migratory species within and outside the Exclusive Economic Zone. Upon completion of the fishery management plan process, which may take more than two years, jurisdiction over the harvest of these species will pass to the federal government.

Currently, five distinctive gear types are used to take highly migratory species commercially. The oldest and most common is hook and line gear. The gear may be used to take any highly migratory species but, traditionally, most of the fishing has been for tunas. The majority of albacore are taken by trolling vessels with a small portion of fish landed by pole-and-line fishing using live bait. Albacore are taken along the West Coast of the U.S. and Canada, as well as on the high seas of the north and south Pacific Oceans. A very small fleet of bait boats continues to target the tropical tunas, yellowfin and skipjack tuna, off Mexico and Central America. Southern California has a small harpoon fleet (< 50 vessels) pursuing swordfish during the summer months. This is in contrast to the more than 200 vessels fishing during the 1950s and 1960s. They generally operate within the Channel Islands but occasionally may venture as far north as Morro Bay. The third type gear used to take highly migratory species is the purse seine. Two distinct fleets exist; a small remnant high seas fleet that fishes for tropical tunas in the eastern Pacific and 40 wetfish vessels that occasionally land tuna when they are locally available. The high-sea purse seine fleet fishes in an area regulated by the Inter-American Tropical Tuna Commission and is subject only to state licensing and landing taxes on fish landed in the state. The wetfish fleet targets bluefin tuna during the summer but also takes yellowfin and skipjack tuna. Occasionally, in some years, they may catch significant amounts of albacore.

California currently allows drift gillnet vessels fishing with large mesh nets to take swordfish, tunas and sharks. They generally fish off southern California in the summer and move north with the fish in the fall. Access is limited and the vessels are restricted by seasonal and area closures. In addition, the fishery must be in compliance with federal regulations governing the take of marine mammals and protected species. To this end, the National Marine Fisheries Service has established a Take Reduction Team to

reduce the catch of marine mammals. The state has followed the recommendation of the team and implemented regulations covering gear, area and seasonal closures to assure few marine mammals are taken. The drift gillnet fishery also operates under a December 2000 NMFS biological opinion which closes central California from August 15 through October 31 to protect leatherback turtles, and southern California during August and January of El Niño years to protect loggerhead turtles.

The final gear type is pelagic longline. While the state does not allow longline vessels to fish in the exclusive economic zone, they may file for offshore fishing declarations, fish outside 200 miles and return to the state with their catch. Offshore longline vessels usually target swordfish but will fish for tunas during times of local abundance. Currently there are no longlining restrictions except fishing is not allowed within 200 miles of shore.

Recreational anglers using hook and line gear target highly migratory species whenever the opportunity arises. Commercial passenger fishing vessel and private boat anglers pursue these species in U.S. waters and territorial seas of Mexico. Oceanic regimes play a major role in determining availability and which species will be harvested. During 1999, highly migratory species accounted for over 9.5 percent of all fish landed by California anglers. During eight of the past 10 years, tropical species such as yellowfin tuna, skipjack tuna, and dolphinfish have dominated the catch. Temperate tunas (albacore and bluefin tuna) have only contributed significant catches in the years following a major El Niño event. Catches of sharks and billfish are important to anglers of the state, but constitute a minor portion of the overall catch. When the highly migratory species fishery developed at the turn of the century, fishing activity was confined to southern California with most of the effort at Santa Catalina Island. As fishing vessels developed the capability to go further, sport anglers followed the fish to the offshore islands and banks. San Clemente, Santa Barbara, San Nicholas, the Channel Islands, plus associated banks started to play a greater role in the fishery. Sport fishing for albacore started in northern California following World War II but never reached the magnitude of the southern California fishery because of the lack of anglers and fish. Trips from San Diego to northern Mexico originated in early 1930s, and expanded to the offshore islands and southern Baja California in the late 1940s. Extended long-range trips off Mexico, greater than 800 miles, started in the late-1950s and continue to be popular today with both party boat and private boat anglers.

Currently, the stocks of all highly migratory species are considered to be healthy although common thresher shark may face some reductions in take under the Council's fishery management plan because they were overfished

in the 1980s. Most of the controversy surrounding the take of highly migratory species centers around user conflicts, take of state and federally protected species, longlining inside 200 miles, and bycatch. User conflicts exist between commercial gear types (harpoon vs. drift gillnets, drift gillnets vs. longline) but a more controversial issue is the conflict between commercial fishers and sport anglers. Area and time closures have helped to eliminate some of the conflicts between drift gillnets and sport marlin anglers and prohibiting longlines inside 200 miles has also helped to reduce the conflict. Some conflicts arise over the take of tuna when sport anglers encounter purse seiners fishing in areas they are fishing. Finally, the environmental community is concerned over the take of marine mammals, protected species, and bycatch in the commercial fishery. Their concerns have been alleviated to some extent by implementation of recommendations from the take reduction team for the drift gillnet fishery and the recent Biological Opinion on the take of sea turtles in the fishery. Bycatch will continue to be an issue in the drift gillnet and longline fisheries until effective measures are developed which reduce the catch to close to zero. This is especially true for shark bycatch.

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