U.S. Swordfish Fisheries in the North Pacific Ocean¹

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The United States is a major harvesting and consuming nation for swordfish (*Xiphias gladius*). U.S. swordfish fisheries of the North Pacific Ocean can be categorized according to three distinct gear types -- harpoon, drift gill net, and longline. The harpoon and drift gill net fleets are based in California. The longline fleet consists of vessels based in Hawaii and California. In 2006, the largest catch of swordfish has been contributed by the longline fishery. This report provides information on recent developments in U.S. swordfish fisheries in the North Pacific Ocean and the status of these fisheries in 2006.

Longline Fishery

The U.S. longline fleet in the North Pacific Ocean is composed of Hawaii- and California-based longline vessels. One segment of the Hawaii-based fleet uses deep-set gear to target bigeye tuna. The other segment uses shallow-set gear to target swordfish. Each segment is subject to separate federally imposed limits on the number of allowed interactions with sea turtles. During 2004 and 2005 these limits were not reached. However, early in 2006, the shallow-set fishery for swordfish exceeded its annual limit of 17 allowed interactions with loggerhead sea turtles. As a result, this segment of the Hawaii-based longline fishery was closed by the National Marine Fisheries Service on March 20, 2006. Shallow-set longline fishing out of California was prohibited in 2006.

During the first half of 2006, a total of 121 U.S. longline vessels made 723 trips, fished 8,191 days, and set 16 million hooks². Among these were 35 vessels that made 55 shallow-set trips, fished 844 days, and set 700,000 hooks from January to March 20, 2006. The number of swordfish caught in the first half of 2006 was 27% less than in 2005 (15,034 fish vs. 20,708 fish). Most (89%) of the swordfish caught in 2006 were taken by Hawaii-based vessels making shallow sets. The total landed catch³ of swordfish by U.S. longline vessels through June 2006 was estimated at 1,051 mt.

² NMFS longline logbook summary of hooks deployed as of 10/11/2006.

³ NMFS logbook number of swordfish *kept* × estimated mean whole weight of landed swordfish in 2005 (74.5kg).

Because of the early closure of the Hawaii-based shallow-set longline fishery, the U.S. longline catch of swordfish will be markedly lower in 2006. All Hawaii-based vessels that made shallow sets to target swordfish subsequently converted to deep-set gear and targeted tunas. The Hawaii-based longline fishery will operate under the same regulatory conditions in 2007.

Drift Gill Net Fishery

Preliminary estimates show that 32 California drift gill net vessels have participated in the fishery in 2006, 5 fewer vessels than the total number of vessels active in all of 2005. The 2006 drift gillnet swordfish catch to date is estimated at 20 mt, nearly an order of magnitude below the total 2005 catch of 185 mt. The drift gill net swordfish catch usually peaks in October or November. Thus, if the remainder of 2006 follows the historical pattern for this fishery, participation and landings should be close to those of the previous year.

Harpoon Fishery

An estimated 17 California harpoon vessels operated in the first half of 2006 compared to a total of 21 vessels that fished in all of 2005. Participation in this fishery in 2006 is expected to be about the same as in 2005. The 2006 harpoon fishery swordfish catch to date is estimated at 15 mt compared to a total 2005 catch of 73 mt. The final 2006 catch is expected to be slightly less than the 2005 catch when data for all landings are processed.