The Pacific halibut fleet, which fishes with hooks only, consists of a variety of vessels, both in size and purpose. Fishing vessels range in size from a small single-person skiff with a few hundred pounds of annual quota, to traditional wooden 65' longline schooners dating back to the 1920s, all the way to 150' multi-purpose steel vessels that fish halibut, sablefish, tender salmon, herring and more.

The fleet ownership is distributed mainly along the west coast of the U.S. and Alaska. Over 63% of the Alaska quota is owned by Alaskans with the next largest number of IFQ owners being based in Washington. It is also in Alaska that the majority of the coast-wide quota pounds are owned and landed, representing nearly 54% of the halibut fishery quota by weight.

Distribution of the 2010 coast-wide halibut removals, not including wastage and other fisheries' bycatch of halibut.

- Commercial 82%
- Sport 15%
- Personal Use 2%
- IPHC Research 1%
For both the U.S. and Canada, the sport fishery represents a significant section of the west coast marine sport fisheries effort. Landings in the sport fishery are divided somewhat equally between individuals and charter operations, with significant charter operations occurring in the central Gulf of Alaska and northern British Columbia. In 2008, the fishery landed over ten million pounds coast-wide. Economic value assessments estimate the sport fishery value in this fishery at over $50 million and volume of participation second only to the sport salmon fishery.

In 2008, the commercial fishery landed 57.83 million pounds (26,231 m.t.) with an ex-vessel value of over $180 million dollars. When extrapolated to a retail value the fishery increases to over $400 million dollars in direct product value. As an integral component of the north Pacific fisheries landscape, the halibut industry provides significant employment aboard the vessels, in fishing plants, and within the related dock-side industries. Alaska has recognized that the fishing industry is one of the top three employers for the entire state with employment numbers and related value lower than only the oil industry and government related activities. As a nearly nine-month long commercial fishery, the halibut industry provides opportunity for consistent employment as well as a continuous market supply of an excellent food product recognized world-wide.