

Fishery Basics – Fishing Vessels

Fishing Vessel Types

Fishing vessels are typically designed with a specific purpose. That purpose is to locate, **catch**, and preserve fish while out at sea. The planned operations of a vessel determine the overall size of the vessel, the arrangement of the deck, **carrying capacity**, as well as the machinery and types of equipment that will be supported by the vessel. Due to the inherent differences in **fishing communities** around the world, there is a wide range of types and styles of fishing vessels. Vessel sizes can range from the 2 m (6 ft) dug out canoes used in **subsistence** and **artisanal** fisheries, to factory ships that exceed 130 m (427 ft) in length. Commercial fishing vessels can also be characterized by a variety of criteria: **types of fish** (See Biology & Ecology) they catch, **fishing gear and methods used** (See Fishing Gear), capacity and **processing** capabilities, and the geographical origin of the vessel. In 2002, the United Nations Food and Agriculture Organization (FAO) estimated the **world fishing fleet** had approximately four million vessels, with an average vessel size ranging from 10-15 m (33-49 ft). Based on a **quarterly catch statistics report**, published by the **Pacific Fisheries Information Network** (**PacFIN**), approximately 1,950 vessels landed their catches in California ports.

Due to the technological innovations that began in the 1950s, many fishing vessels are now classified as <u>multi-purpose vessels</u>, because of the ability to switch out gear types depending on the targeted species. However, single use vessels still exist in the world fishing fleet today. The <u>United Nations Food and Agriculture Organization (FAO)</u> has identified eight general vessel classifications by fishing method, which we have provided detailed information on. Most, if not all, modern <u>commercial</u> vessels are also equipped with advanced technological equipment for navigation and fish finding.

Dredgers

Similar to <u>trawlers</u> (See Fishing Vessel Types), <u>dredgers</u> drag a fishing device behind the vessel. However, rather than a net, dredgers drag a <u>dredge</u>, which consists of a heavy frame with an attached mesh bag. Some dredges have a rake-like device or teeth along the bottom of the frame that assist in the removal of targeted <u>shellfish</u> species from the seafloor. As the dredge is dragged along, the shellfish are pulled up from the seafloor and collected in the bag. Dredgers may operate in rivers and estuaries, as well as in coastal waters offshore. A generalized deck arrangement does not exist for dredge vessels and they can vary in size.

Most dredge fishing in the United States occurs along the east coast and no dredge fishing occurs in California waters. In the Northeast, dredgers target Scallops and Clams, while along the Mid-Atlantic and South Atlantic coasts dredgers target Clams and Oysters.

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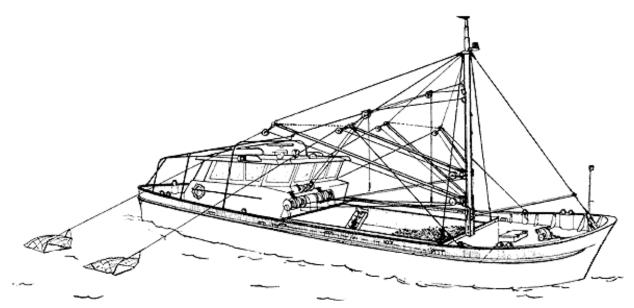


Illustration of a dredger. (Credit: Food and Agriculture Organization of the United Nations)

References

Commercial Fishing. In: Encyclopedia Britannica Online [Internet]. Encyclopedia Britannica; c2011 [cited 2011 May 12]. Available from: <u>http://www.britannica.com/EBchecked/topic/127892/commercial-fishing/65560/History-of-commercial-fishing</u>

Fishing Vessel Types: Technology Fact Sheets. In: Fisheries and Aquaculture topics. [Internet] Rome: Food and Agriculture Organization of the United Nations; c2005-2011 [cited 2011 May 12]. Available from: <u>http://www.fao.org/fishery/vesseltype/search/en</u>

Turner J. Fishing Vessel Types. In: Fisheries and Aquaculture topics. [Internet] Rome: Food and Agriculture Organization of the United Nations; c2005-2011 [modified 2005 May 27; cited 2011 May 12]. Available from: <u>http://www.fao.org/fishery/topic/1616/en</u>

Additional Resources

National Marine Fisheries Services: Fisheries Gear (link to: <u>http://www.nmfs.noaa.gov/fishwatch/fishinggears.htm</u>)

National Marine Fisheries Services: Interactive Illustration with Vessels, Gears and Species (link to: http://www.nmfs.noaa.gov/speciesid/Sustainability.html)