Fishery Basics – Fishing Gear

Gear Types

All types of fishing gear, regardless of how it might be used, are designed to lure and capture fish. Fishing gears are defined as tools used to capture marine/aquatic resources, whereas how the gear is used is the fishing method. Additionally, a single type of gear may also be used in multiple ways. Different target species require different fishing gear to effectively catch the target species.

Fishing gears fall under two general categories, active gear and passive gear. Active gears are designed to chase and capture target species, while passive gears generally sit in one place allowing the target species to approach the capture device. The United Nations Food and Agriculture Organization (FAO) further classifies fishing gear into 11 categories primarily based on how the gear are fished, we have provided detailed information about each category See Fishing Gear. To browse a partial list of fishing methods and marine zones where they might be used click here.

Seine Nets

Seine nets, sometimes called dragnets, are one of the oldest types of commercial fishing nets used. Seine nets primarily capture demersal species and can be operated from the shore (beach seines) or from a boat (boat seines). They typically are long nets with fixed ropes attached to each end. However, the length of the net varies from 10 to 1,200 m (3,937 ft) depending on where and what it is being fished. The nets are weighted along the bottom and have floats on top to maintain the shape of the net under water. To help retain the catch, some designs use the net as is, whereas other designs use bags or pockets within the net.

One end of the net is anchored, either to a buoy when boat seining or a point on shore when beach seining, then the opposite end of the net is set around a particular area where target species are expected to be. This end of the net is returned to the starting point and then hauled along the seafloor. As the net is hauled towards the shore, the fish are herded toward the middle or collection area of the net.

Traditional seine nets differ from purse seines (See Fishing Gear – Surrounding Nets) as traditional seine nets only surround the fish from the sides. Seine nets have been used all over the world, from shallow coastal waters to depths of 500 m (1,640 ft). Although they do not play a large role in U.S. commercial fisheries, Native American tribes used beach seines historically.

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Illustrations of a beach seine (top) and boat seine (bottom). (Credit: Food and Agriculture Organization of the United Nations)

References


Additional Resources

FAO – The Use of Technical Measures in Responsible Fisheries: Regulation Of Fishing Gear

Marine Conservation Society – Fishing Methods

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