



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](#).

Gillnets & Entangling Nets

Gillnets and entangling nets are walls of netting that are designed to catch fish by gilling, capturing the fish in the mesh by it's head and gills, or entangling the entire body of the fish. These walls of nets may be set along the seafloor, anywhere in the water column, or at the surface. The main difference between gillnets and entangling nets is that entangling nets are set to have more slack in the netting, which results in fish becoming completely entangled in the net. Conversely, with gillnets, the netting is more taught and fish only are entangled through their head.

Most entangling gear used in the U.S. today is much smaller than the oceanic driftnets of years past. Gillnets are set to entangle migrating fish and can be used at the surface, mid-water, or seafloor bottom. Fishermen carefully select a mesh size to catch the target species and to reduce **bycatch**. The giant oceanic driftnets, which were mostly used by foreign fleets, have been prohibited under the [United Nations High Seas Drift Net Agreement](#) in 1994. In fact, many states have banned the use of gillnets entirely.

To create the wall-like structure of the nets, floats are attached along the top of the net on the **headrope** and weights are attached along the bottom of the net on the **footrope**. Gillnets and entangling nets may be fixed or attached to a vessel or anchored to a buoy. Additionally, they may be set to drift freely in the water. Depending on the size and location of use, these nets may be **hauled** in by hand or by mechanized equipment like winches and drums. Gillnets and

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entangling nets can range in size from less than 50 m (164 ft) to over 2,000 m (6,560 ft) in length.

Gillnets and entangling nets may be set in straight lines or they may be used to encircle the targeted species. Gillnets and entangling nets are used to target many species of fish and **crustaceans**, from shallow coastal and **inland waters** to open-ocean **pelagic** waters. In California, a **[gillnet fishery](#)** exists for Swordfish and Sharks.

There are three general classification of gillnets and entangling nets:

1. **[Set gillnets](#)**
2. **[Driftnets](#)**
3. **[Trammel nets](#)**

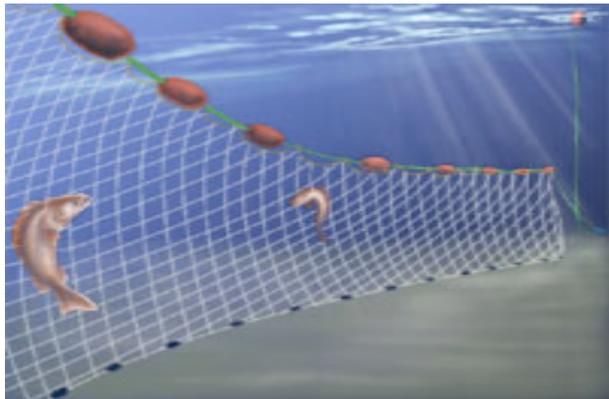
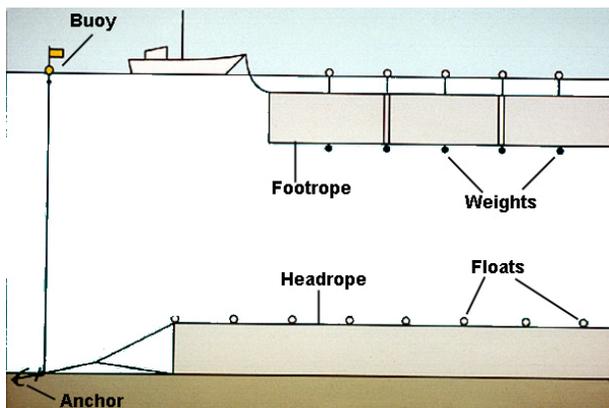


Illustration of gillnets/entangling nets set at the surface and the seafloor (left) and the gilling of fish (right). (Credit: Scottish Fishing Information Pamphlet, Source-UN FAO and Matthew Squillante, Monterey Bay Aquarium Seafood Watch).

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Additional Resources

[Bycatch Reduction Database](#)

FAO – [The Use of Technical Measures in Responsible Fisheries: Regulation Of Fishing Gear](#)

Marine Conservation Society – [Fishing Methods](#)

Rhode Island Sea Grant – [Bycatch Fact Sheet](#)