

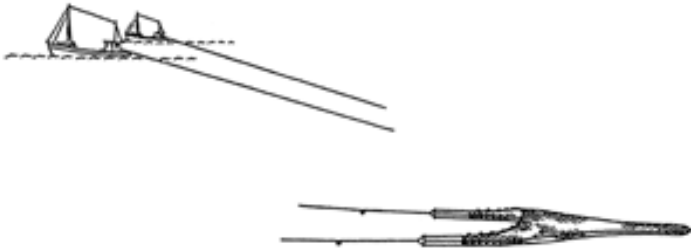


Gear type fact sheet

Source : FAO/FIIT - Fisheries Industry and Technologies [↔](#)

Bottom pair trawls

updated : 13-Sep-2001



ISSCFG Classification :

- Category (intl.) : Trawl nets
- Category (intl.) : Bottom trawls
- Subcategory (intl.) : Bottom pair trawls**

Profile

General description: A bottom pair trawl consists of a cone-shaped body, normally made of two or four (and sometimes more) panels, closed by a codend and with lateral wings extending forward from the opening.

Specific Equipment: Long heavy cables (bridles) of steel or combination rope may be inserted between the net and the warp to increase the catching width of the trawl gear. 4-500 meters of such cables will result in a fishing width of 4-500 meters, which is more than twice the width of a conventionally rigged single otter trawl. This rigging require smooth bottom, while a rigging with shorter bridles with a heavy weight attached at the joining to the towing warp is more commonly used on rougher grounds.

Specific Handling Equipment: Only one drum of the trawl winch is required on each of the two trawlers to handle the warp of each side.

Fishing Vessels using this gear: A pair trawler may be an open boat with an outboard engine, or any vessel up to 60 meters trawlers. The pair trawlers are normally of similar power and sizes. This fishing practice is often used by non powered vessels (small to medium size engines).

Fishing Operations: The bottom pair trawling is operated by two vessels, each towing a trawl warp attached to the bridles in front of the two trawl wings. One of the vessels is handling the trawl and takes the catch. The other is only a towing vessel, the so-called "slave". It is a common practice to alternate the operation between the two vessels. Equal towing pull by the two vessels are very important to ascertain that the trawl is symmetric during fishing. This can be controlled by using tension meters or recently developed symmetry sensors. Another important operational parameter is to maintain correct and steady distance between the two towing vessels. Radar measurements is commonly used for this purpose and for smaller boats a connecting line between the vessels will do the job.

Features

Target Species: Bottom fish, including flatfish and to a lesser extent shrimp.

Areas: all

The Gear and its Environment: Bottom pair trawls can be operated in very shallow waters (2-5 meters) to depths down to 5-800 meters, in marine and inland waters.

Impacts:

- *environmental* : Similar to single bottom otter trawl, except that pair trawls do not have the ploughing impact of trawl doors.
- *species* : The major negative impact of bottom pair trawls on the biological environment is related to the capture and frequently discarding of non target sizes and species both of fish and non-fish species. Regulation concerning minimum mesh size in the codend is the most commonly used methods to limit the capture of non-target fish sizes. In recent years such size selectivity has been improved by the introduction of square mesh codends and selection devices like grids.

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