Trawling

Trawling is one of the most common methods of fishing. It involves towing one or more trawl nets behind a boat or in between two boats, either along the ocean's floor or through the water.

Trawl nets are usually shaped like a cone or funnel with a wide opening to catch fish or crustaceans and a narrow, closed ‘cod-end’. Trawls can be used at various depths, down to around 3000 metres below the surface.

In fisheries managed by the Australian Fisheries Management Authority (AFMA) there are three mains types of trawling: demersal trawling, midwater trawling and Danish seining.

Demersal trawling

In Australia, demersal trawls are used to catch fish or prawns that live on sandy or muddy sea floors.

Trawlers (boats towing the nets) catching fish often use one net (this is called a single trawl) or two nets (twin trawl), while trawlers catching prawns may use a twin-rig (towing two nets) or quad-rig (towing four nets). Demersal trawls use otterboards, made of timber or steel, to keep the mouth of the net open, and a ground rope with bobbins on it to reduce contact with the sea floor.

Demersal trawling can sometimes catch unwanted species of fish (not the type of fish the net was supposed to catch). This is known as bycatch and it is monitored by on-board fishery observers who assess the environmental impact of the trawling.
Midwater trawling

Midwater trawling involves one or two boats towing a net and targets surface species (species that swim near the surface of the ocean) such as redbait and jack mackerel. This type of fishing generally has very low levels of bycatch and does not impact on the sea floor.

Large midwater nets must have a Seal Excluder Device (SED) that allows seals, who may be feeding on the fish caught in the nets, to swim out of a special opening.

Danish seining

Seine nets are usually long flat nets that act as a fence. The nets are used to surround a school of fish and guide them into a central net.

Danish seine fishing gear is very light and has minimal impact on the sea floor — it skips over it, herding the fish into the net. In general, catch sizes are small, so there is less damage to populations, and there is very little bycatch with this type of fishing.

Would you like to learn more about trawling and other fishing methods? There is more information on the AFMA website www.afma.gov.au. Check it out!