

Sustainable technologies

SeaNet helps with the introduction of sustainable technologies such as improved fishing gear and methods. To do this [SeaNet Extension Officers](#) work with commercial fishers to assist them implement these new technologies and methods in ways that are both effective and practical.

Sustainable technologies and methods introduced over the last 10 year include:

- Work with groups of commercial fishers and individual operators who are interested in reducing fishing impacts, to develop and **codify environmental ‘best practice’ and environmental management planning**.
- Introduction of **Catch and Release**: In recent years, new catch and release requirements have been implemented to better protect undersize fish and protected species. SeaNet has helped implement The ‘*National Strategy for the Survival of Released Line-Caught Fish*’. This requires wherever possible, fish to be released should be retained in water and the use of gaffs and abrasive landing nets should be avoided.
- Trialling and subsequent introduction of **De-Hookers**: De-hooking devices facilitate the quick and efficient release of hooked animals, therefore increasing their chance of survival. The deep-hooked de-hooker removes deeply swallowed hooks from the mouth and throat.
- Trialling and introduction of the ‘**Popeye Fishbox**’ a by-catch reduction device for the prawn industry
- Introduction to prawn vessel operators and net makers of the **square mesh codends** device to limit by-catch.
- Introduction of **deep setting long line technique** for by-catch mitigation. This project aims to increase effective targeting of deep-swimming market species in tuna fisheries while reducing the likelihood of taking unwanted shallow water species (by-catch).
- Trialling of the **turtle smart crab pots and ropes**.
- Testing of two **pingers** designed to reduce interaction with marine mammals.

By-catch Reduction Device (BRD) library

OceanWatch Australia through the Australian Government’s ‘Envirofund’ grant scheme, has set up a [By-catch Reduction Device \(BRD\) library](#) to provide commercial fishers nationally with the latest by-catch reduction devices and equipment to trial.

The library enables fishers to trial and experience these new or modified devices, before they purchase or modify their existing gear.