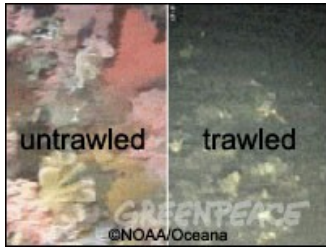


# Bottom Trawling has no place in a Sustainable Ocean

Reed Lannan



- Bottom Trawling devastates area twice the size of the United States every year



(Photo retrieved from: <http://www.bycatch.moonfruit.com/>)

- Some Trawls have a 20:1 by-catch to target catch rate
- Trawls are a significant cause of population declines in threatened and endangered species



(Photo credit: Landsat)

- Plumes of dirt and sediment rises up and blocks photosynthesis for critical microorganisms
- The path of destruction from bottom trawlers is so vast it can be seen from space.

Bottom trawling is a notoriously destructive fishing practice, and is decimating some of the most diverse and productive ecosystems in our oceans. The method involves dragging large nets across the sea floor, bulldozing the seascape and capturing any organism within its path. Conservationists have proper reason to be so adamantly opposed to its prevalence. Many overlook the intensive damage it inflicts on the sea floor, seamounts, deep-sea corals and many other critical ocean features. There is still a vast amount about the deep ocean that we have yet to discover, but what has been elucidated is the amount of irreparable damage occurring to vital components of the ocean due to trawling activity. The damage is devastating and much of the injured organisms and damaged habitat is slow to recover, if at all. Trawling capacity has significantly increased due to improved technologies such as improved sonar and stronger engines that enable trawlers to fish at depths of 2000 meter. This increase in efficiency and depth capacity promotes massive catches with minor effort. Sounds like great news for fishers' doesn't it? Wrong. With huge scores of organisms being easily caught this method of fishing promotes over-harvesting fish stocks, which can ultimately lead to reduce available stock and population extinction. Destruction of deep-sea ecosystems can negatively cascade upwards and manifest in unbalances for other fish stocks we rely on. Furthermore, bottom trawling is non-selective and catches many non-target organisms, known as by-catch. It is said that only 10 percent of total catch is of target species. Thus, contentious conservation issues abound when portions of the by-catch are of threatened and endangered species.

In order to preserve fish stocks and the health of our oceans it is vital that there is an end to unsustainable bottom trawling. The marine environment and fish stocks are suffering for little global economic gain. Of the total fish landed in 2001 0.2-0.25% of it is accounted for by bottom trawling. To ensure future health of our oceans we need to raise the intensity of implementation. Enforcement, monitoring, and compliance are paramount. An international moratorium on deep sea bottom trawling is greatly advised as the benefits resulting would exceed the gains. Putting a halt to the destructive bottom trawling can yield benefits for artisanal fisheries and ecotourism. Effort has been made to regulate bottom trawling to promote sustainability, but it still doesn't suffice.

Bottom trawling can either be dealt with by independent nations passing their own laws, agreements between nations, or an international scale. Increasing the establishment of cooperative management agreements between adjacent nations, or establishing a global moratorium to ban deep sea bottom trawling are likely to be the two most viable routes for successful conservation. Various countries have recognized the instability of trawling and the reduction of coastal ecological health and passed laws to prohibit trawling under certain conditions and in certain areas. In 2001, New Zealand protected 19 seamounts and 30 percent of the area within its exclusive economic zone. It should be noted that this 30 percent only included a small fraction of area that is vulnerable to bottom trawling. Independent and small cooperative agreements are a good start towards eliminating bottom trawling, but due to the limitations in jurisdiction of the independent nations such agreements can be ineffective. Eastern Tropical Pacific Seascape is an agreement between the nations Costa Rica, Panama, Columbia, and Ecuador and they have implemented a ban on bottom trawling. Agreements such as these are good starting points, but they are still not an adequate solution.

Regional management between cooperating nations can indeed be effective in regulating a portion of bottom trawling within the designated areas, but it still ignores the overlooked importance of the deep sea trawling activity occurring outside of nations' exclusive economic zones and continental shelves. In 2006, there was an attempt to pass a law for a global ban for bottom trawling in the high seas at a United Nations conference. This was unfortunately denied. Waters outside of regional waters are a major concern as there have been numerous reports of illegal, unreported, and unregulated fishing (IUU). Greenpeace reported seeing 64 vessels bottom trawling in the high seas, of which five were blacklisted. With bottom trawling reeking havoc on our oceans, IUU fishing running rampant, and a desperate need for strengthened governance and management, a global solution is necessary.

## References

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