

Overfishing - how it affects marine life

Skates and rays

The primary threat to skates and rays is overfishing. Skates and rays are types of fish that are targeted by commercial fisheries across the globe. Examples of this include the US and European Atlantic skate fishery, and the world's largest ray fisheries in Southeast Asia. They are targeted for their popularity as fish for human consumption across the world.

The common blue skate is an example of such marine life that is regularly affected by 'bycatch' by other coastal fisheries. This is when an untargeted species is caught by mistake in the process of catching other fish. As species they are particularly vulnerable to trawl fisheries.



Trawling is a fishing method that uses towed nets to catch fish and other marine species living on or close to the seabed. Bottom trawling is a highly destructive fishing practice because it can capture any species living on the ocean floor, rather than just catching the intended fish. It rips through the environment and is non-selective, removing all plants and animals in its path. Supertrawlers can be up to 1.5 football fields long and can drag over half an acre in one pass.

Schooling fish

Schooling fish, like the blue tip snapper, are particularly vulnerable to overfishing. Fish take part in 'schooling' as a selected behaviour. When lots of fish in close proximity display this behaviour, a school of fish is formed.

Modern fishing techniques are designed to capture fish demonstrating this behaviour. As they swim together in a larger school, the fishing nets can capture up large numbers in a small amount of time. This leaves species that school vulnerable to overfishing. This type of fish have yet to adapt to the predator of humans; they may evolve over time to change their behaviour of swimming in large groups to make them less vulnerable, but this evolution has not yet occurred.

Schooling fish are therefore some of the most fished stocks in the world. Whilst schooling fish represent only 12% of marine fish species, they represent 30% of the fished species of commercial importance on the planet.

