



## Are fish sensitive to trawling recovering in European waters?

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**Are fish sensitive to trawling recovering in European waters?**

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**Abstract**

For the past couple of decades, the fishing pressure induced by towed demersal gear has decreased and this decrease may have allowed the number of sensitive fish in the sea to increase. Here we use the fact that the sensitivity of fish to trawl induced mortality depends on the life history of the fish species as well as on its susceptibility to towed demersal gear to identify species sensitive to towed demersal gear. We find that the sensitive species thus identified correspond well with the species classified by IUCN as threatened. Using trawl surveys in European Atlantic waters from 36°N to 62°N and weighing the influence of each survey with its variability around the long-term development, we estimated combined indicators of the change in abundance of each species. The majority of the sensitive species increased in numbers after 2000, with the most notable exceptions being starry ray and wolffish. These two species both showed continued decline since their highest abundance in the mid 1980's. The increase in most of the species was not coupled to limitations in allowed catches, as most of the species have no species specific catch limit.

**Keywords:**

Sensitive fish, DLS assessment of abundance, species recovery

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