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Sushi Under Threat as Biomass of Popular Ingredient Halves Since 1950PiPa News

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A beloved ingredient used in sushi could soon disappear entirely if overfishing is not controlled, according to a new study.

Yellowfin tuna is a common ingredient in some globally popular dishes, not only sushi, but also sashimi, poke bowls and sandwiches.

However, the species is so overexploited – especially in the Indian Ocean – that it could soon disappear from these popular dishes, according to a paper published in *Ocean and Coastal Management* reveals

The global biomass — the weight of a specific population in the water — of yellowfin tuna has declined by 54 percent since industrial exploitation began in 1950. Now, it has emerged that the Indian Ocean has seen a massive decline, with the species decline significantly. 70 percent in the last seven decades, the study said.

Stock photo shows a plate of sushi, of which yellowfin tuna is a key ingredient. Researchers have found that yellowfin tuna populations are rapidly declining.
Photography by Tonelson/Getty

Kristina Heidrich, lead author of the study and Ph.D. A candidate in the Sea Around Us – Indian Ocean, which is part of the School of Biological Sciences of the University of Western Australia (PCA), said in a press release that recent years have seen more decline.

"Biomass continues to decline everywhere except for stabilizing trends in the Western Pacific, driven by management interventions," Heidrich said.

Dirk Zeller, co-author of the study and director of the Sea Around Us – Indian Ocean, added that in most places, fin tuna fishing "has exceeded the maximum sustainable yield".

Overfishing has long been a problem for the species, to the extent that it is classified as Close Threatened by the International Union for Conservation of Nature.

The researchers' conclusions were reached by assessing tuna biomass changes between 1950 and 2020 using multiple methodologies, including more than 950 records of yellowfin tuna taken from "Baited Remote Underwater Video Systems (BRUVS)."

"The data collected with BRUVS provided a more holistic and fisheries-independent picture of the oceanic community and the status of the populations, which can complement fisheries-dependent data and analyses," Jessica Meeuwig, the paper's other co-author and director PCA's Marine Futures Lab said in a statement.

"These fisheries-independent BRUVS data suggest that, since 2014, yellowfin tuna in the Indian Ocean are the least common, least abundant, have the lowest biomass, and are the smallest yellowfin tuna in the set existing data," he said.

A catch reduction of 30 percent in the Indian Ocean is urgently needed, to "stop and reverse" the decline in yellowfin tuna, according to Heidrich.

According to the International Seafood Sustainability Institute, 61 percent of all tuna stocks are at a healthy level of abundance but 13 percent are considered overfished.

The Food and Agriculture Organization of the United Nations reports that the majority of tuna stocks are "fully exploited," meaning there is no way their fisheries could expand. Some are even in danger of falling.

"Beyond yellowfin tuna fisheries that contribute more than $16 billion to the global economy annually, the species is an apex predator that plays a vital role in the functioning, productivity and overall health of marine ecosystems, " said Daniel Pauly, co-author of the Institute. study and lead researcher of the Sea Around Us initiative at the University of British Columbia, said in a statement.

"The risk of population collapse is high if the current management does not adapt," he said. "Strict management restrictions must be implemented to reduce overall fishing capacity, rebuild overfished populations, and reduce the collateral damage these fisheries cause to other species such as sharks."

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