

WHEN AND WHERE MATTER: WHY WE NEED A NUANCED APPROACH TO dFAD MANAGEMENT

Drifting fish aggregating devices, or dFADs, are floating structures used to attract fish in the open ocean so that they can be caught more easily. They have significantly enhanced the efficiency of commercial fishing operations over the past 40 years. Notably, dFADs improve catch volumes and reduce operating costs in developing countries that rely on fish exports. However, they are also driving up the number of marine species that are incidentally caught as "bycatch".

THE PROBLEM WITH DRIFTING FISH AGGREGATING DEVICES

Purse seine fishing is an industrial form of fishing that often uses dFADs to lure schools of fish, particularly tuna. When purse seine fishing is used in combination with dFADs, the result can be a non-selective, large-scale harvest.

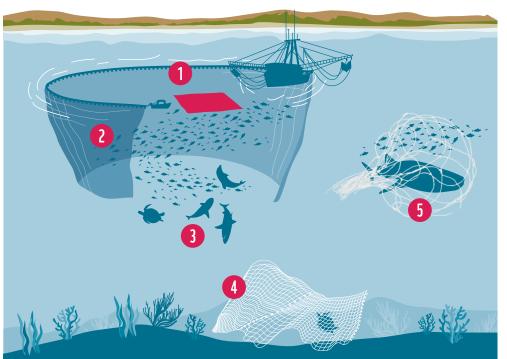
The use of purse seine nets in combination with dFADs is commonly used to target low-value skipjack tuna. However, this combination of gear also increases the likelihood that juvenile tuna will be caught. The harvesting of juveniles is of particular concern for high-value, overfished stocks such as yellowfin and bigeye tuna because juveniles of these species have not yet reproduced.

In the Indian Ocean, dFAD-associated purse seine fisheries result in a 25% juvenile yellowfin catch, which is substantially greater than the global average of 16%. Aside from juvenile tuna, dFADs also increase the bycatch of endangered, threatened and protected (ETP) species such as

sharks, rays, sea turtles and marine mammals.

A study of more than 80 000 dFAD trajectories in the Indian Ocean between 2012 and 2018 found that about 40% of the tracked dFADs drifted away from fishing grounds and became Abandoned, Lost or Discarded (ALD) fishing gear. These abandoned dFADs pollute the ocean and can cause ecosystem damage.

5 Poor tracking and retrieval of ALD fishing gear can lead to a phenomenon called "ghost fishing", where derelict lost equipment continues to fish, leading to the unnecessary deaths of various forms of sea life, including ETP species.





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WWF RECOMMENDATIONS

WWF urges the 28th Session of the Indian Ocean Tuna Commission to consider the long-term impacts that various fishing methods might have on the long-term sustainability of the Indian Ocean's fisheries, with a particular focus on the yellowfin tuna fishery. WWF recommends the following decisions:



ADOPT A COMPREHENSIVE dFAD MANAGEMENT PLAN

A comprehensive dFAD management plan would include:

- The development and implementation of sciencebased limits on dFAD deployments
- A dFAD register for the IOTC
 - Verification of ownership, tracking and recovery of dFADs
- The transition of existing dFADs to biodegradable materials.



ADOPT A THREE-MONTH SPATIO-TEMPORAL CLOSURE IN 2024 TO ALLOW DEPLETED TUNA STOCKS TO RECOVER

Temporary fishery closures in certain areas could help rebuild tuna stocks while maintaining economic activity. These spatio-temporal closures aim to alleviate harvesting pressure during critical seasons for stock populations, allowing tuna to mature and spawn before fishing activities are resumed.

FURTHER RECOMMENDATIONS



Abandoned or lost at sea, "ghost" fishing gear is classified as the deadliest form of plastic pollution in the ocean, and poses a serious threat to ocean ecosystems, especially ETP species. **WWF therefore urges IOTC members to commit to higher retrieval rates and the use of non-entangling, biodegradable dFADs to minimise ghost fishing and marine pollution.**



The above measures would be complemented by **measures to ensure the transparency and traceability of all dFAD-related activities**, including near real-time submission of all data transmitted by operational buoys to an independent third party. This would include a **strong monitoring**, **surveillance and control system** that monitors vessels and gear types for fishing activities during closures. This system would also help ensure that, during closure periods, there is no reallocation of dFADs to other forms of fishing. For ongoing accuracy of dFAD management measures, WWF also recommends that the **IOTC Scientific Committee assesses stock health of other tuna in the Indian Ocean and further analyses the impacts of continued dFAD use, including in conjunction with other fishing gear.**



For more information

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