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MINIMUM REQUIREMENTS FOR RESPONSIBLE DRIFTING FAD USE



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Drifting fish aggregating devices (FADs) deployed by tuna purse seine fisheries have been a driving force behind the doubling of global tuna catches since the 1990s¹. Tuna and other species are attracted to FADs as they drift through the ocean, and satellite buoys and echo sounders allow fishing vessels to efficiently track the precise locations of the largest groups of fish.

Universally, the management of drifting FADs is weak, characterised by an absence of responsibility on the part of owners and operators for the impacts of their FADs on ocean ecosystems². Lack of transparency around FAD operations means that no one is even sure how many drifting FADs are deployed around the world, though estimates indicate that the number is well above 100,000³. The most recent and reliable data from countries that are Party to the Nauru Agreement (PNA) show that in some parts of the Pacific a FAD can be found drifting every 12km, giving an indication of the pressure that tuna populations are under⁴.

What is certain is that the enormous scale of FAD operations is extracting an unsustainably high price from the ocean. FAD use is having an impact on the stock status of the three main tuna species caught in the equatorial Pacific⁵ as well as on tropical tuna stocks in the Atlantic and Indian Oceans⁶, while the fact that so many FADs are in the water has led to changes in the migration and growth patterns for entire populations of tuna and the other pelagic species who are attracted to floating objects⁷.



UNIVERSALLY, THE MANAGEMENT OF DRIFTING FADS IS WEAK, CHARACTERISED BY AN ABSENCE OF RESPONSIBILITY ON THE PART OF OWNERS AND OPERATORS FOR THE IMPACTS OF THEIR FADS ON OCEAN ECOSYSTEMS.

Bycatch mortality of sharks is high⁸, and even if FADs are never set on by a fishing vessel, the entangling nets and ropes they are commonly made of act as ghost gear, catching fish, sharks and turtles as they drift through the ocean⁹.

The lack of regulations governing drifting FAD use means that there is no penalty for failing to retrieve a FAD. Consequently, the loss rate in some fisheries is above 90 per cent¹⁰, leaving tens of thousands of FADs to sink and litter the seabed, or wash up on the coastlines of small island nations. The clean-up costs of this debris can be substantial¹¹, and there is currently no effective mechanism for obliging the vessel owners and their flag states to shoulder the financial burden of their polluting behaviour¹².

Clearly, an immediate and dramatic overhaul of drifting FAD operations is required. Regulations should be adopted globally to ensure that FADs are constructed in a fashion that minimises their impact on ocean health, and that FAD ownership, operations and tracking are completely transparent, with data made available to the public. Every effort must be made to recover all deployed FADs, and penalties should be paid by operators who fail to achieve this.

This document sets out the minimum requirements for the construction, use and management of drifting FADs. If fisheries and their management organisations are unable to agree to their implementation, then the only remaining course of action will be a complete moratorium on the use of drifting FADs.

Image far left Skipjack tuna. Credit: Alex Hofford/Greenpeace

Image left A turtle caught in a FAD

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FAD CONSTRUCTION

- All FADs should be non-entangling and constructed without using mesh materials (such as shade cloth or netting).
- All FADs should be 100% biodegradable, with the exception of materials used for the instrumented buoys.
- FAD design and materials used should be confirmed by the vessel observer prior to deployment.

Image left: A turtle swimming near a drifting FAD. Credit: Alex Hofford/ Greenpeace



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FAD OPERATION

- FADs should be marked and ownership of FADs clarified by complying with the FAO Voluntary Guidelines on the Marking of Fishing Gear, enabling all FADs to be traced back to their owners.
- FAD owners should be fully compliant with international marine pollution law (MARPOL Annex V, UNCLOS, London Convention etc).
- The implementation of management measures such as time-area closures, limits on FAD deployments and avoidance of bycatch hotspot areas should be supported and adhered to.
- The use of supply vessels and other support vessels should be phased out as soon as possible.
- The raft and the substructure of the FAD should have a permanent label showing the unique vessel identifier (UVI) and the unique ID number of the satellite buoy attached to it.
- 100% observer coverage should be in place on all vessels involved in FAD fishing, maintenance or retrieval. No FAD should be deployed or retrieved without the presence of an observer.

Image left: A tuna purse seine vessel. Credit: Alex Hofford/Greenpeace

FAD OWNERSHIP & TRANSPARENCY

- Ownership of a FAD should be assigned to the vessel that deploys it, must count towards its FAD deployment limit, and must remain the responsibility of that FAD owner until it is retrieved and suitably disposed of.
- The practice of buoy exchanges, whereby purse seiners and their supply vessels attach their own satellite buoys to FADs they encounter belonging to other vessels, should be prohibited.
- All FAD ownership data, including the unique satellite buoy ID, should be part of the mandatory information collected by the relevant RFMO. RFMOs should publish FAD ownership information to maximise transparency and establish responsibility for lost and abandoned FADs. This could ultimately be incorporated into a global FAD register.
- All FAD ownership data, including the unique satellite buoy ID, date and time data and FAD ownership data (vessel name and registration number) should be reported to the fisheries manager/ RFMO in near real-time.
- All FAD operational data should be independently verified, removing reliance on self-reporting by satellite buoy service providers and vessel owners.
- All FAD operational data should also be made available on publicly accessible platforms.
- All FAD operational data should be made available for scientific analysis.

Image top right A purse seine brailer bringing tuna on board.
Credit: Alex Hofford/
Greenpeace

Image bottom right A beached FAD collected in the Seychelles. Credit: Nature Seychelles





FAD RETRIEVAL

- Abandonment of FADs should be strictly prohibited, and every effort should be made to retrieve FADs before they risk beaching.
- If a FAD becomes lost as a result of technical failure, its time of loss, last known position and the circumstances in which it was lost should be reported immediately to the fishery manager/RFMO.
- If a FAD cannot be retrieved, the “polluter pays” principle should apply. If such an event occurs within the exclusive economic zone of a coastal state, agreement on compensation should be reached between the FAD owner and coastal state. If the event occurs on the high seas, FAD owners should pay compensation into a liability fund established at the relevant RFMO.
- Repeated failure to retrieve FADs should lead to sanctions against vessel operators, including potential placement on RFMOs’ IUU lists.

Image left A drifting FAD with a “sausage” of bundled net recovered in the Maldives. Credit: IPNLF.

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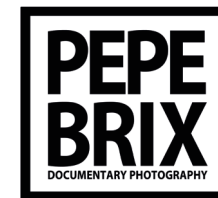
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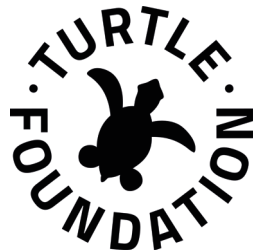
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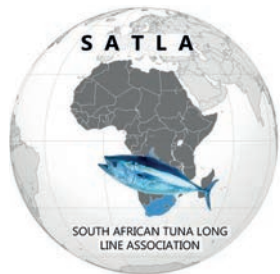
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APPENDIX



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- ¹ G Gomez, S Farquhar, H Bell, E Laschever & S Hall (2020) The IUU Nature of FADs: Implications for Tuna Management and Markets, *Coastal Management*, 48:6, 534-558, DOI: 10.1080/08920753.2020.1845585
- ² Q Hanich, R Davis, G Holmes, E Amidjogbe & B Campbell. (2019). Drifting Fish Aggregating Devices (FADs), *The International Journal of Marine and Coastal Law*, 34:4, 731-754, DOI: <https://doi.org/10.1163/15718085-23441103>
- ³ D Gershman, A Nickson & M O'Toole (2015) Estimating the use of FADs around the world: An updated analysis of the number of fish aggregating devices deployed in the ocean. Pew Environment Group 1–24. https://www.pewtrusts.org/-/media/assets/2015/11/global_fad_report.pdf
- ⁴ L Escalle, B Muller, T Vidal, S Hare, P Hamer & the PNA Office (2021) 'Report on analyses of the 2016/2021 PNA FAD Tracking Programme' presented at the Seventeenth Regular Session of the Scientific Committee to the Western and Central Pacific Fisheries Commission (WCPFC-SC17-2021/MI-IP-04, 24th July 2021)
- ⁵ B Leroy, J Scutt Phillips, S Nicol, G Pilling, S Harley, D Bromhead, S Hoyle, S Caillot, V Allain, J Hampton (2013) A critique of the ecosystem impacts of drifting and anchored FADs use by purse-seine tuna fisheries in the Western and Central Pacific Ocean, *Aquat. Living Resour.*, 26:1, 49-61, DOI: 10.1051/alr/2012033
- ⁶ A Fonteneau, P Pallarés & R Pianet (2000) A worldwide review of purse seine fisheries on FADs, pp. 15-35. J Y Le Gal, P Cayré & M Taquet (eds.) *Pêche thonière et dispositifs de concentration de poissons*. Actes Colloques-IFREMER 28
- ⁷ F Marsac, A Fonteneau & F Ménard (2000) Drifting FADs used in tuna fisheries: an ecological trap? *Biology and behaviour of pelagic fish aggregations*
- ⁸ C Eddy, R Brill, D Bernal (2016) Rates of at-vessel mortality and post-release survival of pelagic sharks captured with tuna purse seines around drifting fish aggregating devices (FADs) in the equatorial eastern Pacific Ocean, *Fisheries Research*, 174, 109-117, <https://doi.org/10.1016/j.fishres.2015.09.008>
- ⁹ JD Filmlalter, M Capello, J Deneubourg, PD Cowley & L Dagorn (2013) Looking behind the curtain: quantifying massive shark mortality in fish aggregating devices, *Frontiers in Ecology and the Environment*, 11: 291-296. <https://doi.org/10.1890/130045>
- ¹⁰ L Escalle (2021) nr 4
- ¹¹ AJ Burt, J Raguain, C Sanchez et al. (2020) The costs of removing the unsanctioned import of marine plastic litter to small island states. *Sci Rep*, 10, 14458 <https://doi.org/10.1038/s41598-020-71444-6>
- ¹² R Churchill (2021) Just a Harmless Fishing Fad—or Does the Use of FADs Contravene International Marine Pollution Law? *Ocean Development & International Law*, 52:2,169-192, DOI: 10.1080/00908320.2021.1901342