

INTER-AMERICAN TROPICAL TUNA COMMISSION
AD HOC PERMANENT WORKING GROUP ON FADS

7TH MEETING

La Jolla, California, USA
12-13 May 2023

DOCUMENT FAD-07-05

**RECOMMENDATIONS OF THE AD HOC
PERMANENT WORKING GROUP ON FADS**

The *Ad Hoc* Permanent Working Group on FADs (FADWG) recommends:

1. On Biodegradable FADs

- 1.1. Consider the following definition for Biodegradable: Non-synthetic materials¹ and/or bio-based alternatives that are consistent with international standards² for materials that are biodegradable in marine environments. The components resulting from the degradation of these materials should not be damaging to the marine and coastal ecosystems or include heavy metals or plastics in their composition.
- 1.2. The following are FAD categories, based on their degree of biodegradability (from non-biodegradable to 100% biodegradable), with the understanding that the respective definitions do not apply the electronic buoys that are attached to FADs in order to track them.:
- ✓ Category I. The FAD is made of fully biodegradable materials.
 - ✓ Category II. The FAD is made of fully biodegradable materials except for plastic-based flotation components (e.g., plastic buoys, foam, purse-seine corks).
 - ✓ Category III. The subsurface part of the FAD is made of fully biodegradable materials, whereas the surface part and any flotation components contain non-biodegradable materials (e.g., synthetic raffia, metallic frame, plastic floats, nylon ropes).
 - ✓ Category IV. The subsurface part of the FAD contains non-biodegradable materials, whereas the surface part is made of fully biodegradable materials, except for, possibly, flotation components.
 - ✓ Category V. The surface and subsurface parts of the FAD contain non-biodegradable materials.

¹ For example, plant-based materials such as cotton, jute, manila hemp (abaca), bamboo, natural rubber, or animal-based such as leather, wool, lard

² International standards such as ASTM D6691, D7881, TUV Austria, European or any such standards approved by the Members of the IATTC

- 1.3. Notwithstanding the above categories, the use of non-biodegradable materials, in particular nylon ropes, can be used exclusively to strengthen the structure of the floating or underwater component of the FAD categories I & II, if required and as a temporary solution.
- 1.4. That the Commission establish a gradual timeline for implementation of biodegradable FADs that take into consideration the results of ongoing research trials and the availability of materials.
- 1.5. Consider prototypes 1 and 2 [[Document FAD-07-02](#)] and the "[Jelly FAD](#)", and their improvements, as current potential examples for effective biodegradable FAD construction.
- 1.6. Reduce, to the extent possible and within the gradual process of biodegradable FAD implementation, the amount of material and the non-biodegradable components for their design and construction, provided that fishing efficiency is not compromised.
- 1.7. Fishers supported by ship-owners should continue trialling bioFAD designs in a continued effort, deploying systematically a percentage of their FADs made of biodegradable materials and sharing the results in the FADWG.

2. On non-entangling FADs

- 2.1. Revise Annex II of C-19-01 to require exclusively the design and deployment of non-entangling FADs.³

3. On stranding FADs

- 3.1. Consider alternative mechanisms to continue monitoring buoys that are leaving the convention area or fishing grounds and that are susceptible for deactivation, taking into account the implications with regard the limits on active FADs per vessel
- 3.2. To the extent possible, provide data to the Secretariat on the entire trajectory of FADs, even when transiting outside the convention area or the fishing grounds, monitored through new FAD marking systems, the FAD's buoy or other systems.
- 3.3. Consider putting in place a set of best practices for optimizing FAD retrieval.
- 3.4. Promote FAD recovery programs, both from the land and from the sea, and establish standards to ensure the effectiveness of these programs.
- 3.5. Create awareness of FAD strandings and encourage the expansion of the in-country data collection efforts on FAD strandings in the EPO to harmonize with SPC-WCPFC efforts in the WCPO.
- 3.6. Develop solutions to process/recycle FAD materials in ports.

³ A FAD that does not include any netting materials for any part of the FAD including both the surface structure (e.g., raft) and subsurface structure (e.g., tail) (Document IATTC-100-03 ADD.1 , Section 2.2).

4. On data collection

- 4.1. The scientific staff to provide feedback to those CPCs with fleet members providing incorrectly buoy data so that the issue can be corrected in as early as possible.
- 4.2. Organize workshops with fishing companies, captains and crew and buoy providers to try to showcase the correct reporting protocols for buoy data. And use these workshops also to collect first-hand direct information on the fishery dynamics.
- 4.3. Fishing companies and buoy providers to make available the historical buoy acoustic information to avoid losing data of enormous value for science, and in particular stock assessment.

5. On research

- 5.1. Increase Pacific-wide collaboration on drifting FAD research, in particular on the design of dFADs and the use of biodegradable materials. This includes higher WCPFC-IATTC communication on current and planned Non-entangling and Biodegradable FAD trials and other research projects; as well as homogenizing data collection processes, increasing non-confidential data exchanges and collaborating on data analyses.
- 5.2. Complement research on the buoy acoustic index with other acoustic tools available on tuna vessels (e.g., sonar, echo sounders).
- 5.3. Continue the work on acoustic discrimination to improve buoy-derived abundance indices.
- 5.4. Conduct further tests to test and propose technology improvements to meet FAD marking requirements and better understand the life cycle of FADs.