Comisión Interamericana del Atún Tropical Inter-American Tropical Tuna Commission



2ª Reunión del Grupo de Trabajo conjunto de las OROP atuneras sobre plantados San Diego, California USA, 08-10 May 2019

Participation

CPCs at the 2nd joint t-RFMO FAD WG

source: registration list (05/07/2019)

25 CPCs – 86 participants 5 ORGs – 10 participants 5 ONGs – 10 participants 9 observers + IATTC staff

Participation

Proportion of PS catches of tropical tunas from CPCs that participate in the 2nd joint t-RFMO FAD Working Group



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Proportion of PS catches of tropical tunas from CPCs that participate in the 2nd joint t-RFMO FAD Working Group





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I Discussions	9 To-dos 103 Files 4 Text documents Events			
May 7 May 7 May 4 Apr 27 ee all update	<mark>ct updates</mark> David J. commented on <u>6. Research</u> on L. commented on <u>1. Functioning of the FAD-TWG</u> You commented on <u>2. Definitions</u>			
iscussions	Post a new message	Watch a quick vide	o about Dis	cussions
David J.	<u>6. Research</u> - Here the questions I will posing to the group during the discussion se research	ssion on 🔤 🔤	May 7	3
Jon L.	<u>1. Functioning of the FAD-TWG</u> - Dear all, If you are planning to attend the meeting next week and have not registered yet, please do it as soon as	i i i i i i i i i i i i i i i i i i i	May 4	36
훩 Josu S.	<u>2. Definitions</u> - Sorry, there was a mistake in the previous version of document DEFINITIONS_Buoys_v1.docx. Attached the right version	à cà cà cà cà	Apr 27	10
Escalle	<u>3.Fishery indicators</u> - Hi all, Attached are our comments on the Fishery Indicators of We also think it is important to prioritize the indicators, in particular the ones specific	document. 🚾 🚾	Apr 24	2

Joint Technical Working Group (JTWG)

RFMO	Name
-	Josu santiago
ЮТС	Hilario Murua
ЮТС	Shiham Adam
ютс	Stephen Ndegwa
ютс	Paul de Bruyn
IATTC	Jon Lopez
IATTC	Ernesto Altamirano
IATTC	Martin Hall
IATTC	Alexandre Aires-da-Silva
ICCAT	David Die
ICCAT	Daniel Gaertner
ICCAT	Miguel Neves dos Santos
WCPFC	Naiten Bradley Phillip Jr.
WCPFC	Tony Beeching
WCPFC	Graham Pilling
WCPFC	Lauriane Escalle



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Agenda

- 1. Opening of the meeting
- 2. Adoption of the agenda
- 3. Review of the **progress of the key areas** for action for the joint t-RFMO FAD WG identified during the 1st Joint t-RFMO FAD Working Group Meeting
- 4. Review of the current management measures on FADs
- 5. Definitions of terms related to FAD fishing, notably those related to science and management of FADs
- 6. Minimum standards and formats to optimize and harmonize the **collection of data** on FADs and definition of systems to accurately quantify numbers of FADs and active buoys.
- 7. Marking and tracking of FADs
- 8. FAD fishery indicators
- 9. Progress regarding scientific information on FADs and ongoing research in the different tRFMOs

10. Impacts of FADs in tuna fisheries and recent developments in their mitigation.

11. Current and Future initiatives for FAD fishery sustainability.

- 12. Areas of future cross RFMO collaboration on FADs
- 13. Other matters
- 14. Recommendations
- 15. Adoption of the report and closure







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21 documents

	Session	Main Author	Title
	4	Chassot	Outburst of FAD fishing following quota implementation: The case of Indian Ocean yellowfin
	4	Gershman	Toward true FAD deployment limits in the t-RFMOs
		Grande	Best Standards for Data Collection on FOBs: Towards a Science Based FOB fishery management
E signal	6	Grande	From fishermen' to scientific tools: Progress on the recovery and standardized processing of echosounder buoys data
🕵 🗄 🗳 using Čapproach	0	Guery	Estimating density of non-tracked dFADs with spatial capture-recapture models
ding 🖁 🖁 🗒 offort development		Maufroy	Options for a better monitoring and control of operational buoys
eimpact actions re	0	Baske	Options for improving dFAD recovery and accountability to minimize coastal habitat damage and marine litter
g <u> </u>	7	Escalle	Recently available dFAD tracking data in the WCPO: challenges, new research areas and potential useful tool to guide management
devices fisheries doc	ι	Kaplan	Global analysis of beaching events in French dFAD trajectory data for impacts on sensitive habitats and proximity to ports
buove 0numbe	r howev	€ S antiago	A novel approach to obtain indices of abundance of tropical tunas from echosounder buoys
	different	Uranga	Treatment of acoustic data obtained from echosounder buoys for tuna biomass estimates
onical $\sigma \sigma$	q	Baidai	Machine learning for characterization of tuna aggregations under drifting FADs from commercial echo sounder buoys data
Opical Out lishir		Moreno	Towards acoustic discrimination of tuna species associated with FADs
or u sea be	aching	Moreno	Mitigating environmental impacts of Fish Aggregating Devices in the tropical tuna purse seine fisheries
		Pérez	Effect of inter-FAD distances on the movements of tuna in an array of FADs: an empirical modeling approach
		Zudaire	Preliminary results of BIOFAD project: testing designs and identify options to mitigate impacts of drifting Fish Aggregating Devices on the ecosystem
eine (∩ (Oindian ⊃ c	an ຫຼັ	Zudaire	Towards the use of non-entangling and biodegradable dFADs: actions to mitigate their negative effects in the ecosystem
		Abdullahi	The impact of FAD on food security of Coastal Community in Somalia
	11	Herrera	FAD-Watch: turning the tide on FAD-beaching
📲 🗄 🗖 🖓 acoustic		Herrera	Implementing management plans and voluntary initiatives regarding FADs: the OPAGAC experience – an update
🕷 🗮 🎽 📩 marine fol		Nootmorn	Fish Aggregating Devices Purse Seine Fishery in the Andaman Sea, Thailand
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Recommendations

GENERAL

1. The mandate and responsibilities of the Joint t-RFMO Working Group on FADs (JWG) be discussed within each t-RFMO, and that guidance on these matters be provided by the RFMOs (perhaps through the Kobe process steering committee) in order to clarify and define the respective roles of the JWG and the Joint Technical Working Group (JTWG).

2. The agendas of future meetings of the JWG should focus on a **limited number of key issues**, thus allowing more progress to be made on identified priority issues. The JTWG should identify the key issues to be discussed.











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MANAGEMENT

3. t-RFMOs should **prioritize scientific studies which provide advice on potential limits** on FAD deployments /sets and/or the current active FAD/buoy limits, in relation to management objectives.

4. The t-RFMOs should explore opportunities for **consistency and harmonization**, if possible, across t-RFMOs in FAD management measures .

5. Each t-RMFO should develop, as a matter of priority, systematic monitoring and reporting procedures on the number of active FADs/buoys in its Convention Area.

6. FAD **management objectives** should be defined, both within each t-RFMO and jointly, to guide research, data collection, and the development of effective conservation measures.







DEFINITIONS

- 7. Each t-RFMO should **adopt definitions** of priority terms related to the FAD fishery.
- 8. The JTWG should identify definitions whose harmonization is a priority.
- 9. Any definitions proposed by the JTWG should be **reviewed by the Scientific Committee of each t-RFMO**.











DATA COLLECTION

10. The **minimum standards for data collection should be reviewed** by the relevant technical or scientific working groups within each t-RFMO, and revised or adopted as appropriate.

11. Discussions on minimum data collection standards should be **prioritized in the future work of the JTWG**.











MARKING AND TRACKING

12. Given the possibility of buoys becoming separated from a FAD or being replaced, a system for **marking both buoys and FADs should be explored**.

13. High-resolution buoy position data should be made available for research purposes.











Recommendations

INDICATORS

14. The **suite of indicators** prepared by the JTWG and presented during the meeting should be **reviewed**, and **used as appropriate**, by each t-RFMO.

15. Those indicators should be extended to include research on **overall biomass indicators**, such as buoyderived indices and the status of stocks/species.

16. **Time series should be developed** by each t-RFMO for all the indicators, including buoy-related indicators, using historical data to capture fishery evolution and seasonality and ENSO-cycle variability.

17. The development of indicators should be **consistent with data collection criteria and definitions**.









RESEARCH

18. The JTWG should develop a **five-year joint research plan** on FADs, with input from the Scientific Committees of the t-RFMOs.

19. The joint FAD research plan should **define priorities** for each of the research actions, with higher priority for items that benefit all t-RFMOs or more than one t-RFMO, and organize ad hoc scientific meetings, as appropriate.

20. t-RFMOs should set aside and **invest resources in medium- and long-term research on FADs**, preferably research that is conducted jointly or transferable across t-RFMOs.

21. The Scientific Committees of the t-RFMOs should consider the positive experience of the workshops for vessel captains, owners and crew, and **develop a mechanism for regular exchange of scientific information and stakeholder knowledge across t-RFMOs**.

22. The results of research conducted by different groups and/or with the support of different fleets should be **promptly and widely shared** with all fleets and researchers involved and other interested parties.

23. t-RFMOs should facilitate **cooperation/collaboration with t-RFMOs actively involved with acoustics**, promote professional development in acoustics and, where necessary, hire scientists with expertise in acoustic data analysis, to work with the data related to acoustic buoys.













MITIGATION

24. t-RFMOs should accelerate progress to reduce contributions of FADs to marine litter and mitigate negative impacts on coastal habitats and marine ecosystems and endangered, threatened and protected species, such as use of FADs without netting and those made with biodegradable materials, as well as mechanisms and incentives for recovering FADs.

25. At its next meeting, the JWG should consider the **impact of FADs on juvenile tunas** and review mitigation measures to reduce those impacts.

- 26. Continue to **involve fishers** in the process of finding solutions.
- 27. Conduct **region-specific research** to test mitigation strategies, as solutions adapted to each ocean and region.
- 28. Consider **incentives** to promote implementation of technological solutions.



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SUSTAINABILITY

29. Collaboration, mutual trust, and sharing of knowledge and data among t-RFMOs, scientists, industry and NGOs should be strengthened in order to tackle unresolved issues related to the sustainability of the FAD fishery.

SUSTAINABILITY

30. Hold a meeting to evaluate the information available to assess the effect of each t-RFMO's measures on FADs, with special focus on sharing information on challenges and successes.



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