

First Meeting of
the ad hoc
Working Group
on FADs.

Primera Reunión
del Grupo de
Trabajo Ad hoc
sobre plantados

1st session

La Jolla, 15th May 2016



INTER-AMERICAN TROPICAL TUNA COMMISSION

89TH MEETING

Guayaquil (Ecuador)
29 June-3 July 2015

RESOLUTION C-15-03

COLLECTION AND ANALYSES OF DATA ON FISH- AGGREGATING DEVICES

Section 5. *Ad Hoc* Working Group on FADs

15. An *ad hoc* Working Group on FADs (Working Group) is established.
16. This Working Group shall be **multi-sectorial**, involving various stakeholders such as scientists, fishery managers, fishing industry representatives, administrators, representatives of non-governmental organizations, and fishers. Expressions of interest to participate in the Working Group shall be provided to the Director no later than 1 October 2015.
17. To the highest degree possible, the Working Group shall conduct its work **electronically** or, if convenient and cost-effective, in targeted face to face meetings that take place in conjunction with other Commission meetings.
18. The Working Group shall present an **initial report of its findings at the 2017 meeting of the SAC**.
19. The **Terms of Reference** of the Working Group are those indicated in Annex III.
20. The Working Group shall seek **input from other similar working groups on FAD management established in other tuna regional fisheries management organizations (tuna-RFMOs)**.
21. The IATTC, at its **2017 annual meeting**, will review the progress and outcomes of the Working Group and will decide on the necessity for its continuation.

Terms of reference

- **Collect and compile information** on FADs in the EPO, including but not limited to data collected by the IATTC and reports prepared by the scientific staff of the IATTC;
- **Review** the FAD data collection requirements established in Resolution C-15-03 to assess the necessity for revision;
- **Compile information** regarding developments in other tuna-RFMOs on FADs;
- **Compile information** regarding developments on the latest scientific information on FADs, including information on non-entangling FADs; and
- Prepare **a preliminary report** for the SAC, including specific recommendations, as appropriate.

Dates

The meeting will be held in two 1-day sessions:

15 May

26 June

A third session (to be defined between 27 June and 1 July) would be available whose utilization will be defined by the Group according to how the two first sessions have progressed.

Agenda

1. Opening of the meeting
2. Adoption of the agenda
3. Review of the intersessional activities of the *Ad Hoc* Working Group on FADs
4. Summary of the collection and compilation of information on FADs in the EPO; identification of information gaps
5. Progress regarding the most recent scientific information on FADs, including information on non-entangling FADs
6. Review of the data-collection requirements established in Resolution C-15- 03; proposal for standard forms
7. Progress regarding management of FADs in other tuna RFMOs
8. Identification of potential management measures for FADs: pros and cons
9. Development of a Work Plan for the Group for the 2016-2017 period
10. Research priorities
11. Recommendations to the Commission
12. Adjournment

Agenda

1. Opening of the meeting
2. Adoption of the agenda
3. Review of the intersessional activities of the *Ad Hoc* Working Group on FADs
4. Summary of the collection and compilation of information on FADs in the EPO; identification of information gaps
5. Progress regarding the most recent scientific information on FADs, including information on non-entangling FADs
6. Review of the data-collection requirements established in Resolution C-15- 03; proposal for standard forms
7. Progress regarding management of FADs in other tuna RFMOs

3. Review of the intersessional activities of the Ad Hoc Working Group on FADs

- *Summary of the activities carried out by the Group since its creation.*
- *Assessment of the functioning of the current electronic format of the Group and possible improvements.*

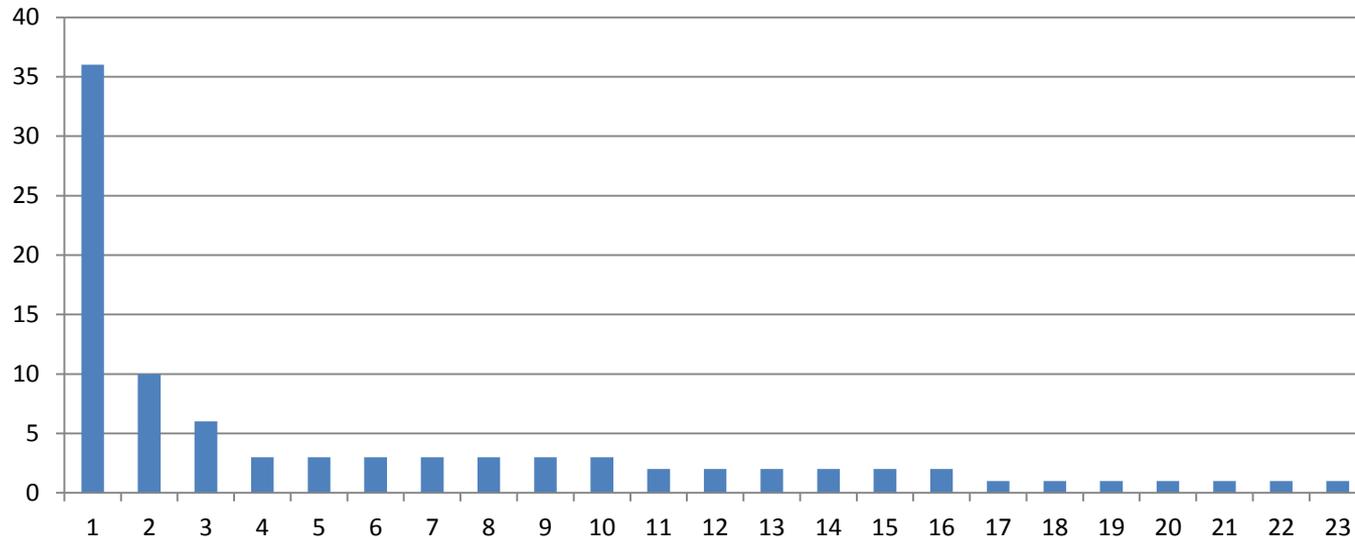
3. Review of the intersessional activities of the Ad Hoc Working Group on FADs

5 discussion topics:

- Functioning of the Working Group
- Collection of information on FADs in the EPO
- Review of the data collection requirements set out in Resolution C-15-03
- Progress by other similar working groups on FAD management in other tRFMOs
- Progress in scientific information on FADs

3. Review of the intersessional activities of the Ad Hoc Working Group on FADs

- Date of creation: September 2015
- Participants: 64
- “Active” participants: 23
- Shared documents: 20
- Entries in Base camp: 92 (3 participants - 50%)



3. Review of the intersessional activities of the Ad Hoc Working Group on FADs

- Date of creation: September 2015
- Participants: 64
- “Active” participants: 23
- Shared documents: 20
- Entries in Base camp: 92 (3 participants - 50%)

Discussion Topic 1: Functioning of the Working Group		46
Discussion Topic 2: Collection of information on FADs in the EPO		2
Discussion Topic 3: Review of the data collection requirements set out in Resolution C-15-03		3
Discussion Topic 4: Progress by other similar working groups on FAD management in other tRFMOs		18
Discussion Topic 5: Progress in scientific information on FADs		8
Others		15

4. Summary of the collection and compilation of information on FADs in the EPO; identification of information gaps

- *Summary describing the type of information that is currently being collected on FADs in the EPO*
- ~~*Gaps in data collection related to the fishery on FADs*~~
- ~~*What additional information would be necessary; viable ways of obtaining it to improve the elaboration of management advice.*~~

5. Progress regarding the most recent scientific information on FADs, including information on non-entangling FADs

What are the main gaps in scientific knowledge directly related to the management of FADs, including technological aspects related to improvements in the mitigation of bycatch. The topics to be covered will also include, among others: a) description of the object; b) drift and utilization of the FAD; c) possible modifications to mitigate impact; d) recovery of FADs?

- Gaps in data collection related to the fishery on FADs*
- What additional information would be necessary; viable ways of obtaining it to improve the elaboration of management advice.*

5. Progress regarding the most recent scientific information on FADs, including information on non-entangling FADs

BIBLIOGRAPHY OF RELEVANT REFERENCES TO AID THE IATTC FAD WORKING GROUP (All references cited are available as PDFs at the following link): <https://www.iattc.org/Misc/IATTC-FAD-WG-Bibliography.htm>

SAC-07 INF C(f) 1 Acoustic discrimination at FADs

SAC-07 INF C(g) 2 Acoustic discrimination at FADs

SAC-07 INF C(h) BIOFAD

~~SAC-07 INF C(i) Review of the Spanish FAD plan~~

SAC-07 INF C(j) Towards a Tropical Tuna Buoy derived Abundance index

6- Review of the data collection requirements established in Resolution C-15-03; proposal for standard forms

- *Proposal for the FAD inventory and activity form that vessels should carry so that owners and operators maintain and notify the required information to the appropriate national authorities (in accordance with Resolution C-15-03).*
- *Review the proposal and compare it to the current data collection system, identifying similarities and differences.*
- *Agree a standard format to propose to the Commission for use by the fleet concerned as of 1 January 2017.*

6- Review of the data collection requirements established in Resolution C-15-03; proposal for standard forms

Section 1. FAD Data Collection

2. Beginning 1 January 2017, CPCs shall require the owners and operators of all purse-seine vessels flying their flag, when fishing on FADs in the IATTC Convention Area, to collect and report the information contained in Annex I. The data may be collected through a dedicated logbook, modified...

Annex I

CPCs are required to ensure their vessel owners and operators maintain and report to the appropriate national authorities:

- a) An inventory of the FADs present on the vessel specifying in particular for each FAD:
 - i. FAD identification¹;
 - ii. FAD type (e.g., drifting natural FAD, drifting artificial FAD); and
 - iii. FAD design characteristics (dimension and material of the floating part and of the underwater hanging structure), which can be provided by good-quality photographs.
- b) For every FAD activity, the:
 - i. Position;
 - ii. Date;
 - iii. Hour;
 - iv. FAD identification¹;
 - v. FAD type (e.g., drifting natural FAD, drifting artificial FAD);
 - vi. FAD design characteristics (dimension and material of the floating part and of the underwater hanging structure);
 - vii. Type of the activity (set, deployment, hauling, retrieving, loss, intervention on electronic equipment, other (specify)); and
 - viii. Results of any set in terms of catch and by-catch.

6- Review of the data collection requirements established in Resolution C-15-03; proposal for standard forms



SAC-07 INF C(1) Review of the Spanish FAD plan

Comisión Interamericana del Atún Tropical
REGISTRO DE OBJETOS FLOTANTES (ROF)

No. de crucero	No. de objeto	No. de encuentro	No. de lance	AA	FECHA MM	DD	HORA	LATITUD	N/S	LONGITUD	W
A. COMPONENTES (marque todos los aplicables)											
Árbol	Al encontrarlo		Al dejarlo								
Animal muerto	[]	[]	1	[]							
Cadena / cable / anillos / peso	[]	[]	2	[]							
Caña / bambú	[]	[]	3	[]							
Contenedor con carnada / carnada	[]	[]	4	[]							
Cuerda / sogá	[]	[]	5	[]							
Flotadores / corchos	[]	[]	6	[]							
Luz artificial para atraer pescado	[]	[]	7	[]							
Malla de red	[]	[]	8	[]							
Sacos / bolsas	[]	[]	9	[]							
Madera / triplay / tarima / carrete	[]	[]	10	[]							
Tambor metálico / plástico	[]	[]	11	[]							
Tubos de PVC u otro plástico	[]	[]	12	[]							
Lona de plástico, tela u otro	[]	[]	13	[]							
Desconocido	[]	[]	14	[]							
Otro	[]	[]	15	[]							
	[]	[]	16	[]							
B. EQUIPO LOCALIZADOR (marque todos los aplicables)											
Bandera	Al encontrarlo		Al dejarlo								
Boya satelital	[]	[]	1	[]							
Boya, corchos, etc.	[]	[]	2	[]							
Lámpara	[]	[]	3	[]							
Radior transmisor / baliza	[]	[]	4	[]							
Reflector de radar	[]	[]	5	[]							
Desconocido	[]	[]	6	[]							
Otro	[]	[]	7	[]							
	[]	[]	8	[]							
C. MÉTODO DE LOCALIZACIÓN (marque solamente UNO)											
Radar	[]	[]	1								
Radiogoniómetro	[]	[]	2								
Satélite	[]	[]	3								
Visual – el objeto mismo	[]	[]	4								
Visual – pájaros	[]	[]	5								
No aplicable	[]	[]	6								
Desconocido	[]	[]	7								
Otro	[]	[]	8								
D. SI HAY MALLA DE RED EN EL OBJETO:											
¿Malla colgada del objeto?	Si	No	Desc								
Area estimada de malla colgante (m ²)	[]	[]	[]								
Luz de malla predominante (pulgadas)	[]	[]	[]								
E. OTROS DATOS											
¿Contenedor de carnada relleno?	Si	No	NA	Desc							
¿Fauna enmallada?	[]	[]	[]	[]							
Profundidad máxima del objeto (m)	[]	[]	[]	[]							
Dimensiones (m)	[]	[]	[]	[]							
Claridad del agua	Clara	[]	Turbia	[]	Muy turbia	[]					
% epibiotá	[]	[]	[]	[]							
F. CAPACIDAD DEL EQUIPO TRANSMISOR (marque todos los aplicables)											
Orientación al objeto	Al encontrarlo		Al dejarlo								
Posición geográfica del objeto	[]	[]	1	[]							
Temperatura del agua	[]	[]	2	[]							
Cantidad de atún	[]	[]	3	[]							
Especies de atún	[]	[]	4	[]							
Desconocido	[]	[]	5	[]							
Otro	[]	[]	6	[]							
	[]	[]	7	[]							
G. PROCEDENCIA DEL OBJETO (marque solamente UNO)											
Su barco – este viaje	[]	[]	1								
Su barco – viaje previo	[]	[]	2								
Sembrado	[]	[]	3								
Otro barco – con permiso	[]	[]	4								
Otro barco – sin permiso	[]	[]	5								
Encontrado a la deriva	[]	[]	6								
Desconocido	[]	[]	7								
Otro	[]	[]	8								
H. EQUIPO EXPERIMENTAL (continúe al dorso)											

7- Progress with regard to the management of FADs in other tuna RFMOs

- *Summary of updated information on the results and progress of Working Groups on FADs in other RFMOs.*
- *Evaluate such progress and its relevance to the work of the Group*
- *Identification of future synergies if considered necessary.*

7- Progress with regard to the management of FADs in other tuna RFMOs

IATTC	tRFMO's Working Groups on FADs
<p>Basecamp</p>	<p style="text-align: center;">IATTC Res. C-15-03 -spa</p> <p>Section 5. Ad Hoc Working Group on FADs</p> <ol style="list-style-type: none"> 1. An ad hoc Working Group on FADs is established. 2. Multi-sectorial; expressions of interest to participate, no later than 1 Oct 2015. 3. To the highest degree possible, the WG shall conduct its work electronically. 4. Initial report at the 2017 SAC meeting. 5. Terms of Reference (Annex III). 6. Input from other similar WG on FAD (tRFMOs) 7. 2017 IATTC will review the progress and outcomes <p style="text-align: center;">Annex III</p> <p>The objectives of the Working Group are:</p> <ol style="list-style-type: none"> 1. Collect and compile information on FADs in the EPO; 2. Review the FAD data collection requirements established in Res C-15-03 to assess the necessity for revision; 3. Compile information regarding developments in other tuna-RFMOs on FADs; 4. Compile information regarding developments on the latest scientific information on FADs, including information on non-entangling FADs; and 5. Prepare a preliminary report for the SAC, including specific recommendations, as appropriate.

7- Progress with regard to the management of FADs in other tuna RFMOs

ICCAT	tRFMO's Working Groups on FADs
Report 2015 meeting Report 2016 meeting	<p>ICCAT Rec. 14-03</p> <p>ICCAT Rec. 15-02</p> <ol style="list-style-type: none"><li>1. Terms of Reference:<ol style="list-style-type: none"><li>a. Assess the use of FADs (number & types) and evaluate ways to improve the use of information related to FADs (stock assessments, effort estimate)<li>b. Review the information provided by CPCs pursuant to the FAD related provisions in the relevant ICCAT CMMs;<li>c. Assess the relative contribution of FADs to the overall fishing mortality;<li>d. Assess the developments in FAD-related technology, notably with regard to: fishing mortality, marking and identification, ecological impact (non-entangling & biodegradable).<li>e. Identify management options, including the regulation of deployment limits and characteristics of FADs<li>f. Identify and assess options for and timing of recovery of FADs in order to ensure a proper management of the marine environment.

7- Progress with regard to the management of FADs in other tuna RFMOs

ICCAT	tRFMO's Working Groups on FADs
Report 2015 meeting Report 2016 meeting	<p>ICCAT Rec. 14-03</p> <p>ICCAT Rec. 15-02</p> <ol style="list-style-type: none"> <li>2. First meeting in 2015. Second meeting in 2016 <li>3. Composed by scientists, fisheries managers, industry representatives and other interested stakeholders. <li>4. Report on its work with a view to recommend the adoption of appropriate measures at the latest at the 2016 ICCAT Meeting. <li>5. Chaired by the Chair of Panel 1 and the Chair of SCRS. <li>6. open forum/dialogue.... Recommendations to the COM through sessions which should ensure a balanced presence and active participation of scientists and managers. <li>7. The ICCAT Secretariat should work with the Secretariats of other tuna RFMOs... promote the cooperation... , including through the organization of a joint session in 2016 with the interested tuna RFMOs.

7- Progress with regard to the management of FADs in other tuna RFMOs

IOTC	tRFMO's Working Groups on FADs
	<p style="text-align: center;"><u>IOTC Res. 15/09</u></p> <ol style="list-style-type: none"> 1. An ad hoc working group on FADs (Annex I), drifting and anchored, is created <ul style="list-style-type: none"> • to assess the consequences (number, technology) to inform and advise on future FAD-related management options. • multi-sectorial nature • findings in time for the 2017 IOTC Scientific Committee. 2. Try to work in conjunction with the ICCAT FAD working group. <p style="text-align: center;">Terms of Reference</p> <ol style="list-style-type: none"> 1. Objectives of the ad hoc working group on Fish Aggregating devices (FADs): <ul style="list-style-type: none"> • Collect and compile information; • Review the FAD data collection requirements established in Res 15-08 to assess the necessity for revision; • Assess the effect of FAD's density and spatial distribution; • Assess the developments in FAD-related technology : changes in catchability / marking and identification / ecological impact (non-entangling & biodegradable). • To evaluate ways to improve the use of information related to FADs in the process of stock assessment, particularly in the standardisation of catch per unit effort, and in ecological risk assessment for non-target species;

7- Progress with regard to the management of FADs in other tuna RFMOs

IOTC	tRFMO's Working Groups on FADs
	<p style="text-align: center;"><u>IOTC Res. 15/09</u></p> <ul style="list-style-type: none"> • To evaluate ways to improve the use of information related to FADs in the process of stock assessment, particularly in the standardisation of catch per unit effort, and in ecological risk assessment for non-target species; • Through an active exchange of views, to identify management options, including the regulation of deployment limits and characteristics of FADs, and activities of support vessels; • To assess the consequences of these management options, in conjunction with other fleets fishing mortality components, on IOTC-managed species and on the pelagic ecosystems. <ol style="list-style-type: none"> 2. All types of FADs, anchored or drifting, would be considered in the ad hoc WG. 3. Special provisions be made for those countries in terms of compiling and assimilating the data . 4. Use of meeting participation fund (MPF) . 5. Confidentiality policy. 6. Multi-sectorial nature 7. Meet once a year; report on its work to the WPTT and WPEB annual sessions. 8. The IOTC will review its progress and will decide on the necessity for its continuation.

7- Progress with regard to the management of FADs in other tuna RFMOs

WCPFC	tRFMO's Working Groups on FADs
Report 2015 meeting	<p>•WCPFC11-2014-30 Rev1. Draft ToRs for a FAD Management Options WG</p> <p>At WCPFC10 in adopting CMM 2013-01 the Secretariat was tasked with preparing a report for consideration by the SC, TCC and Commission in 2014. As a response to this tasking, on 23 July 2014 the Secretariat sent out WCPFC Circular 2014/60, which provided a number of relevant papers and draft proposals, and proposed the establishment of a working group on FAD Management Options</p> <p>Objective</p> <p>To review the reference papers listed below, as well as other relevant information and advice from SC and TCC, and to recommend a way forward for the Commission on the following issues:</p> <ol style="list-style-type: none">a. Collection of additional data on FADs and their use in WCPO fisheries;b. FAD marking, and identification, and use of electronic signatures;c. FAD monitoring, tracking and control;d. FAD Management options; ande. Advise on options for FAD marking and monitoring for WCPO wide application.

First Meeting of
the ad hoc
Working Group
on FADs.

Primera Reunión
del Grupo de
Trabajo Ad hoc
sobre plantados

2nd session

La Jolla, 26th June 2016



Agenda

8. Identification of potential management measures for FADs: pros and cons
9. Development of a Work Plan for the Group for the 2016-2017 period
10. Research priorities
11. Recommendations to the Commission
12. Adjournment