

June 8th, 2020



# Sustainable Initiatives

## World Oceans Day



Fishery Improvement Project  
**TUNA CONSERVATION GROUP**



# FADS SUSTAINABLE MANAGEMENT



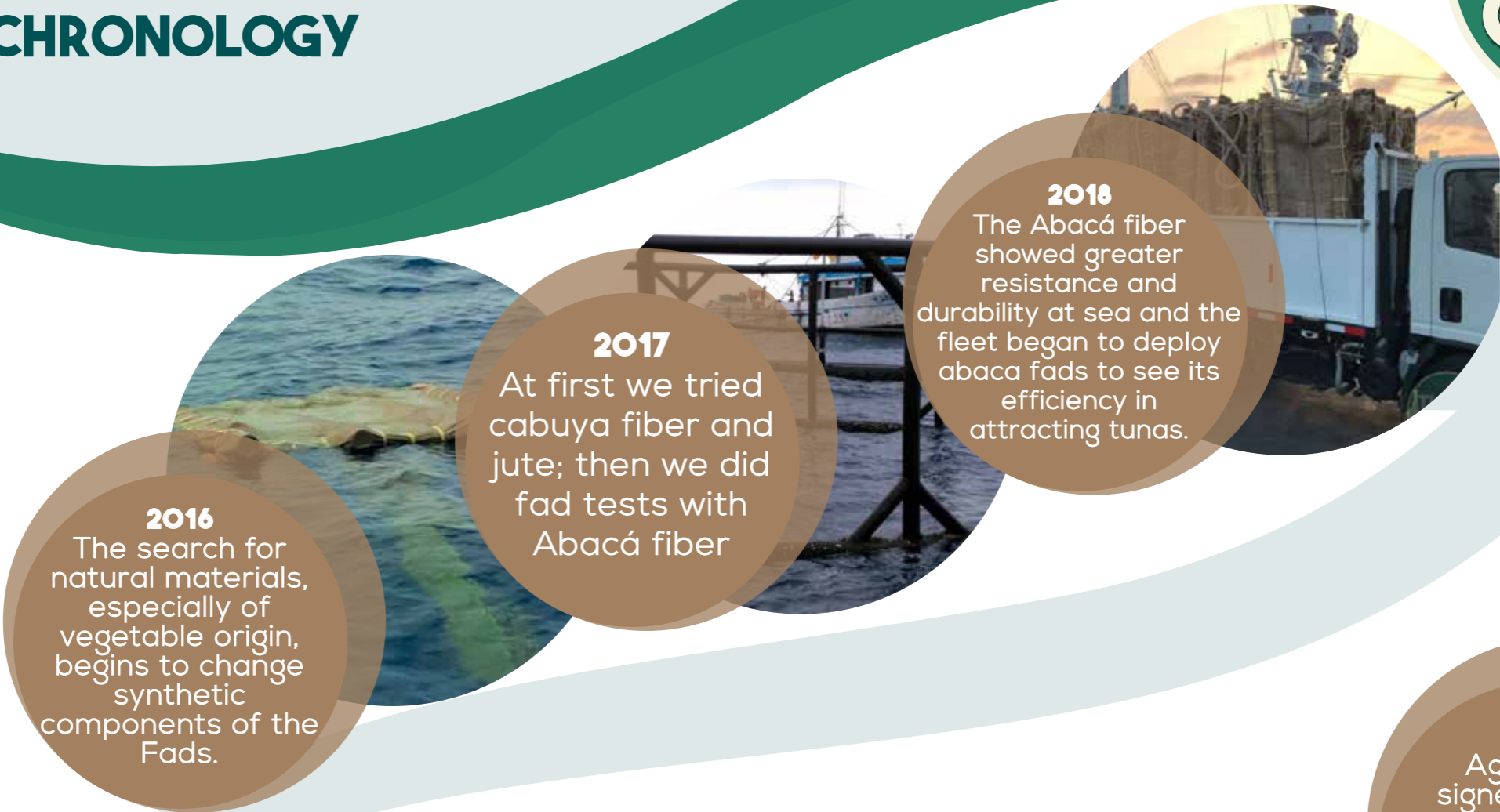
**TUNACONS.ORG**

Guayaquil, Nobis Building 705  
info@tunacons.org

# RESEARCH AND TESTING BIODEGRADABLE FADS CHRONOLOGY



Since 2015, we have been working together with WWF Ecuador to improve the tuna fishery with purse seines. This alliance represents a commitment to seek a balance between conservation, productivity and sustainability of the tuna fishery.



**2016**  
The search for natural materials, especially of vegetable origin, begins to change synthetic components of the Fads.

**2017**  
At first we tried cabuya fiber and jute; then we did fad tests with Abacá fiber

**2018**  
The Abacá fiber showed greater resistance and durability at sea and the fleet began to deploy abaca fads to see its efficiency in attracting tunas.

**2019**  
Agreement signed with the Universidad del Norte to investigate organic treatments that strengthen the resistance of abaca



In compliance with the IATTC Resolution from January 1, 2019, the fleet uses non-entangling FADs. But Tunacons goes further by also shipping EcoFADs that are non-entangling and biodegradable.

The IATTC regulates the collection and deployment of FADS prior to the start of the closures, and has established a maximum limit of active Fads according to the size of each vessel.

## 2020

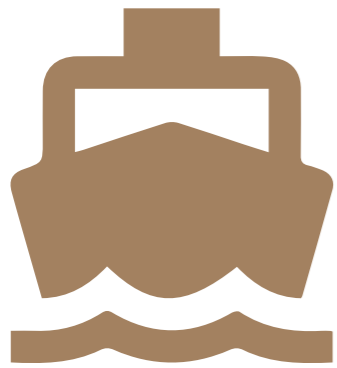
The fleet is already working on its own capture strategy to fulfill its commitment to **replace 20% of its traditional FADs** with **EcoFADs**. Starting on January 1st, 2021.

# COOPERATION WITH IATTC TO EVALUATE EFFECTIVENESS OF THE USE OF DEGRADABLE FADS



90 days

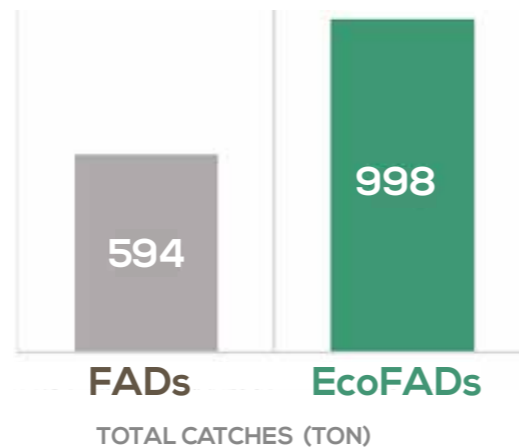
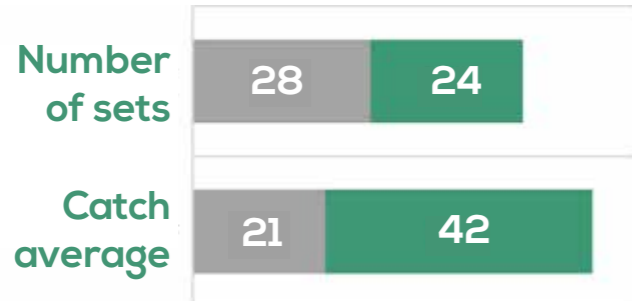
tests show that abaca fiber with treatment, after 90 days deteriorates by 67%



**31** Tunacons group boats participate in the program  
**\$120 Thousands** Approximate investment for this program



This program is developed in collaboration with the European Union



In this project the FADs are deployed in pairs. First an EcoFAD and then 10 to 15 miles away, its Traditional Fad couple. Both with their identification tag on the buoy and on the Fad.



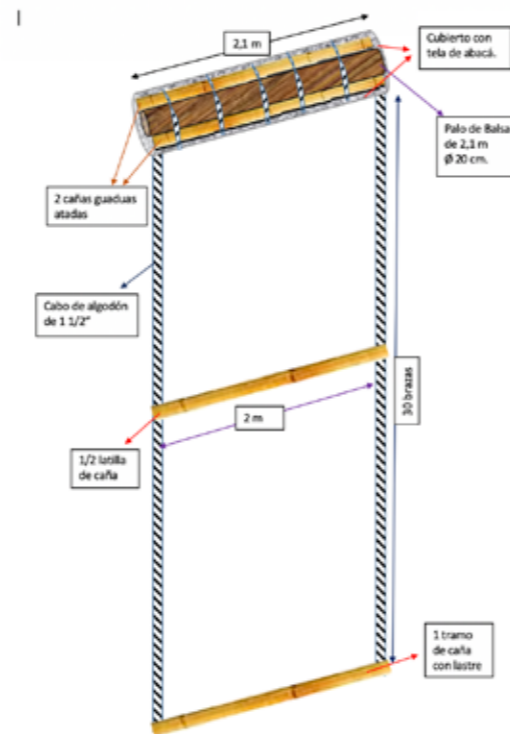
# PROTOTYPES OF IATTC COOPERATION PROJECT



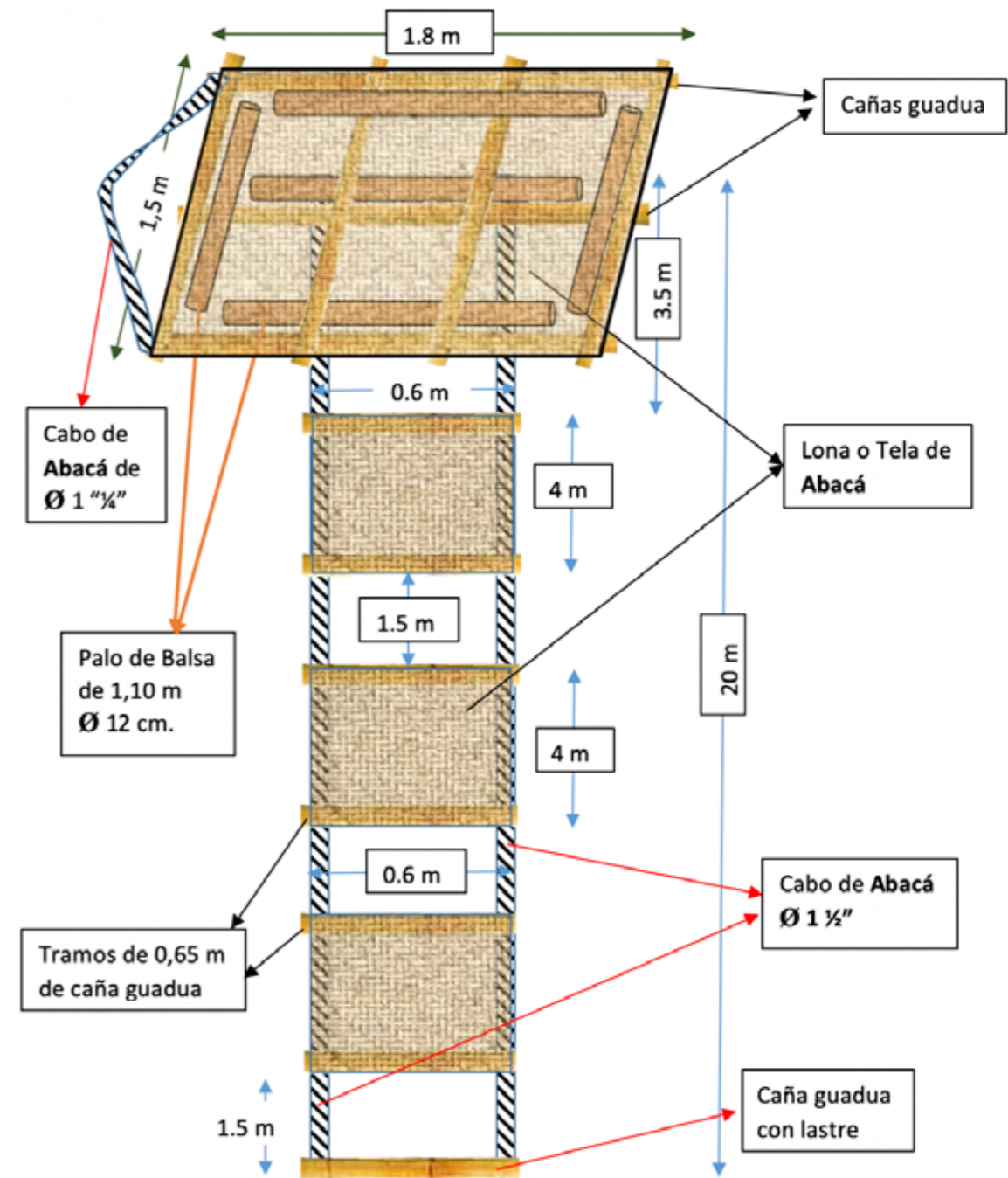
Animal greased abaca fabric to extend durability in sea water.



### Prototipo 1



### Prototipo 2



# CURRENT MANAGEMENT MEASURES FOR FAD FISHERY



FAD limits according to vessel capacity



Collection of FADs 15 days before the start of the closure



forbiddance of FADs deployment 15 days before the closure



Share data with IATTC about FAD drifting

# FADS MANAGEMENT PLANS



## Ecuadorian fleet

The approval of a National Management Plan for the tuna fishery in sets on FADs approved by the government of Ecuador with the aim of reducing negative impacts on marine ecosystems.



## Tunacons fleet

It has the same basis as the National Plan, incorporates more specific measures and actions such as a project to collect marine trash in the Galapagos Marine Reserve in cooperation with the government and WWF Ecuador.



# STRATEGIC ACTIONS





# FLEET DATA COLLECTION TEMPLATE



## Plan de Mejoramiento Pesquero Información General del Viaje de Pesca

B/P:			N° Matricula:	
Viaje de Pesca N°:	SALIDA		ENTRADA	
Días de Viaje:	Puerto:		Puerto:	
Rejilla excluidora:	Fecha:	/ /	Fecha:	/ /
Cap. de Pesca:	Responsable de los viajes:			

## Operaciones de Pesca

I. Registro de los Lances																								
Fecha	N° Lance	Posición Geográfica	Tipo de Cardumen				Ayuda Aérea	Tiempo del Lance		* T Agua de	Capturas de Atún (Tons)													
			B	D	P	FAD o ECO		Sí/No	Inicio		Termino	YFT	SKJ	BET	Otros	Bodegas	Descartes							
		Lat.:																						
		Long:																						

Observaciones:

## II. Registro de la Rejilla Excluidora

Modelo de Rejilla:		% su- mergido	Otras especies que escaparon por la rejilla											
Atunes que escaparon por la rejilla (Toneladas)				Dorados (N° Individuos)			Wahoo (N° Individuos)			Otros (N° Individuos)				
Especies	Pequeño < 2,5 Kg	Mediano 2,5 - 15 Kg	Grande > 15 Kg	Total	Pequeño < 80 cm	Grande > 80 cm	Total	Pequeño < 12 lb	Grande > 12 lb	Total	Especie 1	Especie 2	Especie 3	Total
SKJ														
YFT														
BET														

Data collected in the template between years 2018 and 2019  
Biodegradable FAD testing program of the Tunacons group.

## Most common species released alive

### 120 turtles

Mostly:  
*Eretmochelys coriácea*,  
*Lepidochelys olivácea* y  
*Chelonia mydas*



### 135 rays

Mostly:  
*Mobula thurstoni*  
*Pteroplatytrigon violacea*

### 4066 sharks

Mostly:  
*Carcharhinus falciformis*  
*Sphyma lewini*  
*Sphyma zygaena*



# BYCATCH GOOD PRACTICES CODE



## CREW *to the rescue*

Deliveries of teaching material

Crewmembers to the Rescue is the continuous training program that takes place in each closed period to reinforce IATTC regulations, the release of sensitive accompanying fauna, and updating of general knowledge.



# BYCATCH GOOD PRACTICES CODE



A good practices manual for releasing sensitive companion fauna as stipulated by IATTC is delivered to the crew and when they put it into practice, the results of their application are shared online.



# TUNA ACTION PLAN



## "TUNA PAN"

Promote a national plan for the sustainable management of the industrial tuna fishery with the following components:

- 1 Management of the fishery under scientific, social and economic criteria.
- 2 Strengthen the control and monitoring systems
- 3 Develop a safe and efficient traceability program  
Reduce catches of juvenile tunas.

- 4 Reduce catches of endangered specimens such as turtles, sharks and stingrays.
- 5 Strengthen scientific research on tuna populations.
- 6 Develop training and environmental education programs for the crew.

MINISTERIO DE PRODUCCIÓN,  
COMERCIO EXTERIOR, INVERSIONES Y PESCA



# OBSERVERS ON BOARD CLASS 6 SMALLER SHIPS



Training for biologists,  
under standards  
IATTC & INP

1

Ray tagging program



Coordination of  
boarding of trained  
observers

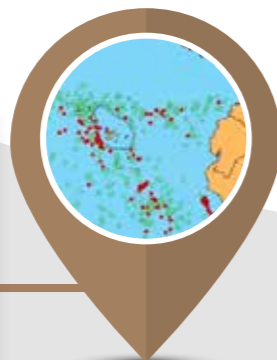
2

"We have  
**4.385 days**  
of monitoring  
until now".



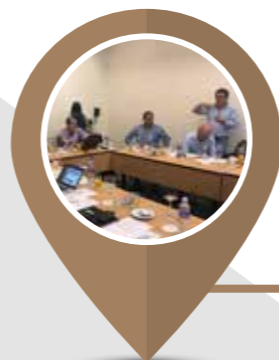
# 100%

coverage of  
on-board  
observers on  
Tunacons ships



Observers fill out their  
data templates on  
board and upon arrival  
give the template to  
INP & IATTC for  
analysis.

3



This data becomes  
useful information for  
decision making.

4



# SCIENTIST COOPERATION WITH IATTC



Pilot of human and electronic observers in smaller ships



Improvement in bycatch good practices



Tests with degradable FADs



Pilot on the collection of lost FADs



Impact of FADs sets in juvenile tunas



Technical Review of the sorting grid use



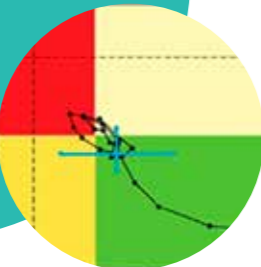
Impact of depths of nets on juvenile tunas



Fleet capacity management plan



Tropical Tuna Stock Assessment



Currently, a mechanism to report the drift of FADs is under discussion.

# GOVERNANCE SCHEME



Every month, Tunacons progress monitoring meetings are held with its managers, either in person or online to guide our sustainable mission.

Board of Directors with entrepreneurs



Cooperating partner



General Manager



Management Team



Strategic Alliances



External advisors



Fisheries Technology Coordinator



Communication Coordinator



Observers on board Coordinator

# COMUNUCACIÓN CORPORATIVA



[www.TUNACONS.org](http://www.TUNACONS.org)  
The web and networks serve to communicate all the progress and the latest news of the project



Coordination with International Communication Agencies to inform our activities



We convened the first "EcoFAD meeting" to exchange experiences with experts



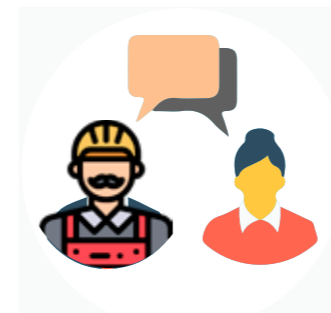
The work on the sustainability of tuna fishing has been incorporated into the media



**YOUTUBE**  
All the technical actions to release sensitive fauna are published on our channel.



The project director as spokesperson has been invited to share our progress in most specialized forums locally and internationally.



Internal communication campaigns have been carried out so that the crew and workers know about the importance of Tunacons



Tunacons entrepreneurs are frequently consulted as a primary source of information.





*Let's collaborate together  
for a healthy marine ecosystem*