TUNA CONSERVATION GROUP

Progress of the Good Practices onboard Code for Bycatch handling and release

TUNA CONSERVATION GROUP

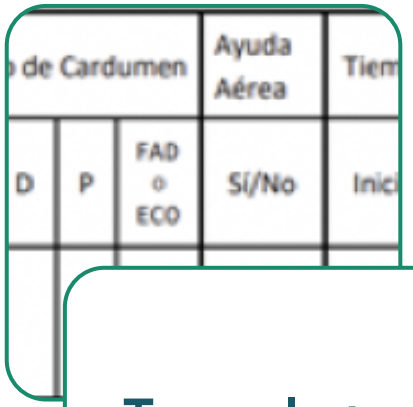
Began to apply in October 2017

It is a guide to captains and crew

In order to encourage good handling practices on board, and mitigate the mortality of species considered vulnerable that interact in purse seine tuna fishing.

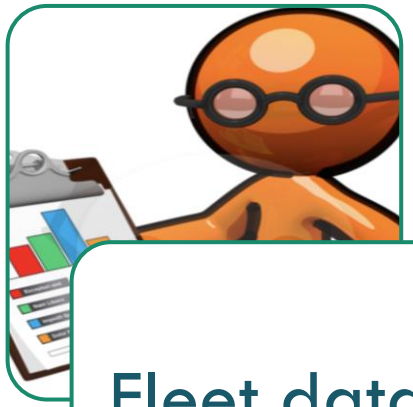
It compiles the measures taken by the fleet voluntarily, which serves to improve the maneuvers of the tuna purse seiners and to minimize the impact on the marine ecosystem

TEMPLATE SCHEME WORK



Template design

Tunacons workshops to train the crew



Fleet data collection

Provide the information to the Tunacons´office

Data entry into Tunacons Base

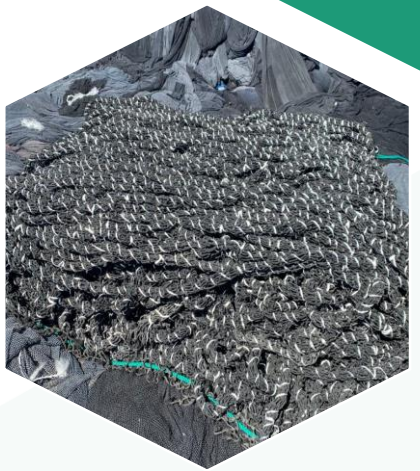
Results are shown to Tunacons members

Useful tool to take decisions if needed, and to inform the crew

DEGRADABLE NON ENTANGLING FADS IMPLEMENTATION

Floating structure: rectangular, covered with 1 1/8 " net

Net tale 1 1/8"



"chorizo" tale, 3 ½"

In accordance with the 2 criteria established in resolution C-19-01

The 44 TUNACONS vessels before January 2019 use NON ENTANGLING FADs

In addition, efforts are made to determine a 100% degradable FAD of natural material of plant origin.

DEGRADABLE NON ENTANGLING FADS IMPLEMENTATION

NATURAL ORIGIN FAAD TESTING

FIBER	# FADs DEPLOYESD	# SETS	CATCH (tons)	DETAILS
Yute	1	0	0	FIRST TEST
Cabuya	74	0	0	There were no sets. It degrades quickly after 30 days.
Abacá	424	27	677	22 releases under registration and 5 sets as external information.
TOTAL	498	27	677	Average of 25 tons. by lance

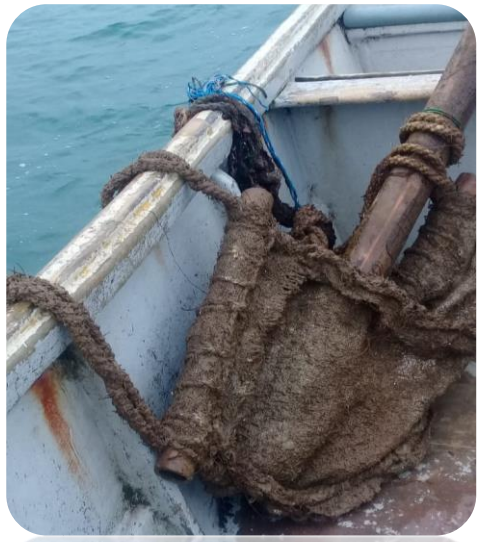
Durabilidad de las fibras Probadas

- Yute : 30 días
- Cabuya : 40 días
- Abacá : 67 días

Cabuya

Abacá

DEGRADABLE NON ENTANGLING FADS IMPLEMENTATION



PRUEBA FIBRA DE ABACÁ CON ACABADO GRASA ANIMAL

		PRUEBAS CON TEJIDO 1				
MÁXIMA FUERZA	**TEJIDO CRUDO 1**	**27 DÍAS**	**47 DÍAS**	**65 DÍAS**	**82 DÍAS**	**89 DÍAS**
RESISTENCIA URDIDO (**N**)	2105,58	1378,41	1125,5	1283,47	773,14	704,7
	100%	65%	53%	61%	37%	33%
RESISTENCIA TRAMA (N)	1811,45	1774,87	1853,1	1817,17	1638,85	330,07
OBSERVACIONES	Trama y urdido un solo hilo.					

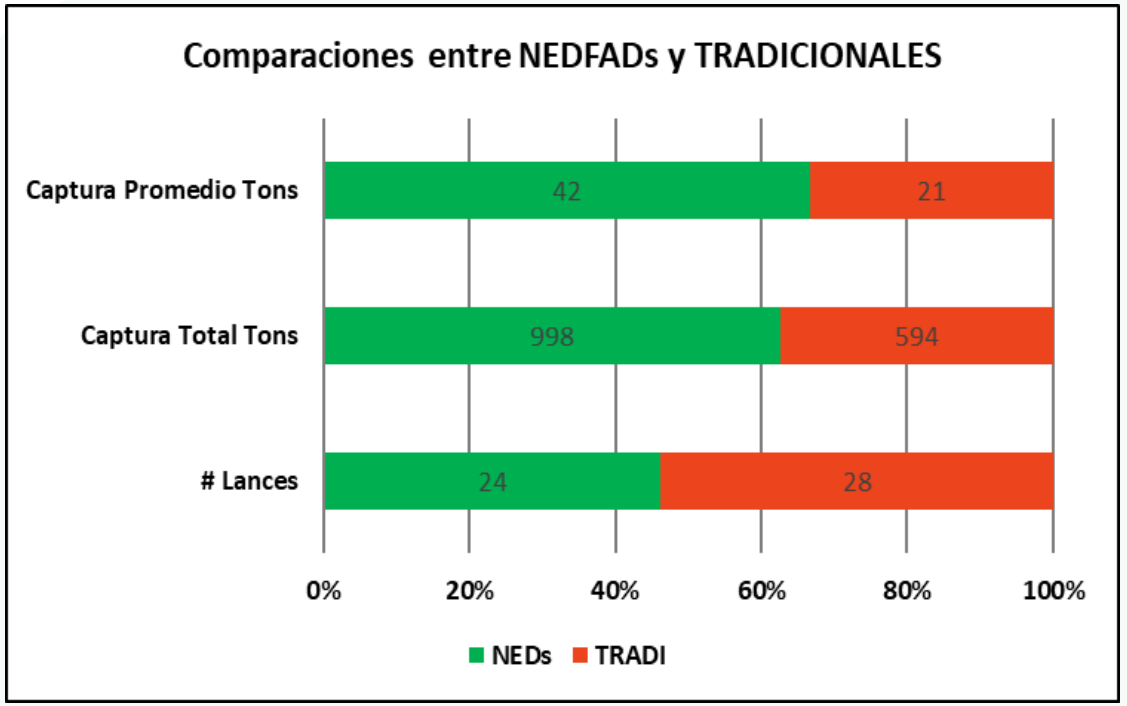
- • The resistance of the fiber before being at sea was 2105.6 N.
- • After 89 days at sea, its resistance was 704.7 N.
- • Loss of 67% resistance.

DEGRADABLE NON ENTANGLING FADS IMPLEMENTATION

NEDFADs IATTC – TUNACONS PROJECT

SETS UNTIL 21-04-2020

	# Lances	Captura Total Tons	Captura Promedio Tons
NEDs	24	998	42
TRADI	28	594	21



DATA TEMPLATE

37 ships of the fleet fill the Template, registering the following information:

- Fishing trip general information
- **Fishing operations**
  - **I. Record of sets and Catches:**
    - Choolfish type
  - **II. Sorting grid record**
    - Juvenile tunas and bycatch fauna escaping.
  - **III. Registro de Captura Incidental en Objetos Naturales o en Fads:**
    - Id. FAD – Bycatch (held, released alive and returned dead).

TUNA CONSERVATION GROUP

Plan de Mejoramiento Pesquero

Información General del Viaje de Pesca

B/P:	Dynmar			N° Matricula:	P-00-07794
Viaje de Pesca N°:	04	SALIDA		ENTRADA	
Días de Viaje:	45	Puerto:	Posorja	Puerto:	Bahia
Rejilla excluidora:	Si	Fecha:	06 / 10 / 2019	Fecha:	20 / 11 / 2019
Cap. de Pesca:	Mario Romani			Responsable de los datos:	Joao Da Silva

Operaciones de Pesca

I. Registro de los Lances

Fecha	N° Lance	Posición Geográfica	Tipo de Cardumen				Ayuda Aérea	Tiempo del Lance		°T Agua de mar	Capturas de Atún (Tons)					
			B	D	P	FAD	Si/No	Inicio	Termino		YFT	SKJ	BET	Otros	Bodegas	Descartes
02/11	15	Lat: 00-16 S Long: 135-08 W				X	Si	06:27	09:06	26,3	6	2	10	—	4EB	—

Observaciones:

II. Registro de la Rejilla Excluidora

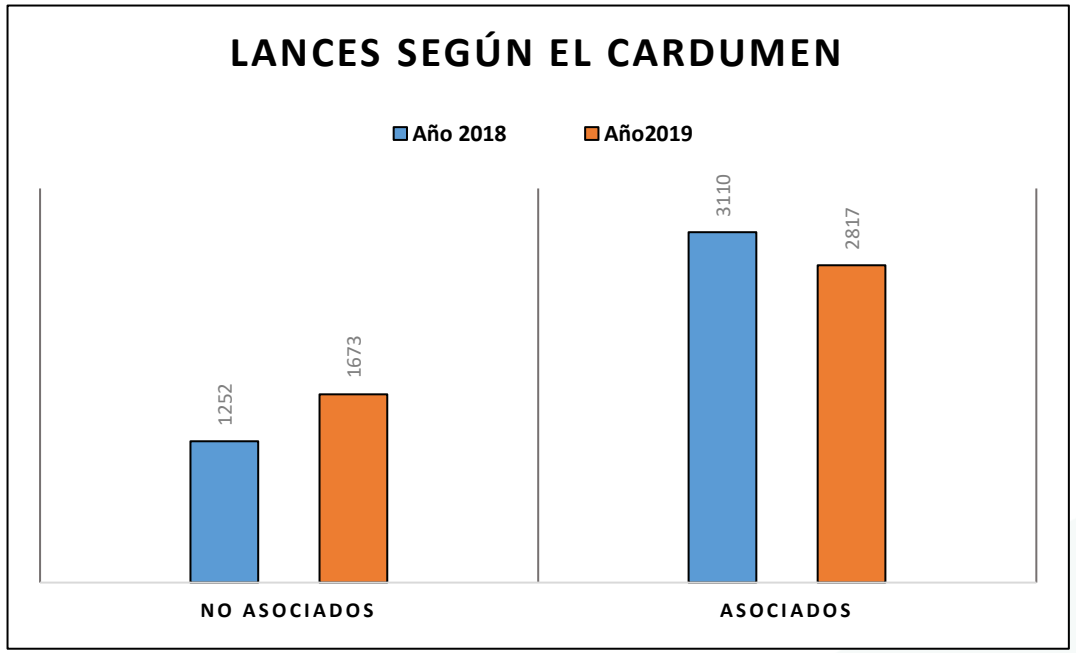
Modelo de Rejilla:	Amin	% sumergido	70	Otras especies que escaparon por la rejilla											
Atunes que escaparon por la rejilla (Toneladas)					Dorados (N° Individuos)			Wahoo (N° Individuos)			Otros (N° Individuos)				
Especies	Pequeño < 2,5 Kg	Mediano 2,5 - 15 Kg	Grande > 15 Kg	Total	Pequeño < 80 cm	Grande > 80 cm	Total	Pequeño < 12 lb	Grande > 12 lb	Total	Especie 1	Especie 2	Especie 3	Total
SKJ														
YFT	9,010			9,010										
BET														

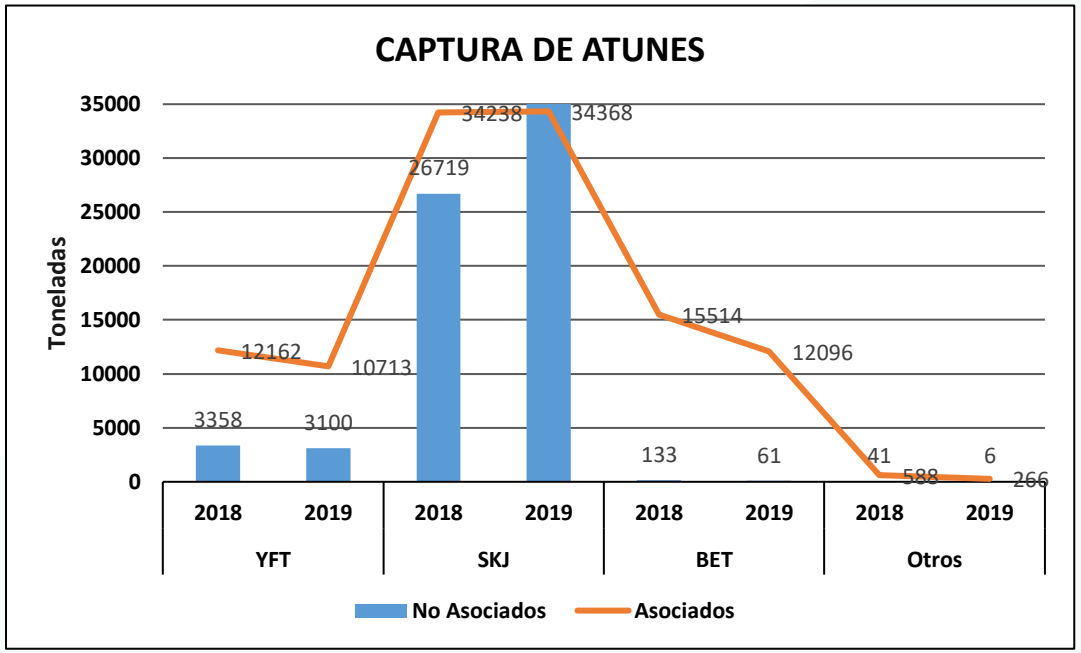
Observaciones:

III. Registro de Captura Incidental en Objetos Naturales o en Plantados

Id. Del FAD o del Obj. Nat.	Nombre de la Especie	# ejemplares retenidos		# ejemplares liberados vivos		# ejemplares regresados muertos		Observaciones
		Pequeño	Grande	Pequeño	Grande	Pequeño	Grande	
NAT 563162	WAH	1	6					Se guardaron en la gamboza de frio seco
	DOL	5	8					Se guardaron en la gamboza de frio seco.
	FAL			1	1			Se libro con grupos pectores segun TUNACONS.

SETS AND CATCHES





Increase of sets not associated in the year 2019

- Decrease in YFT capture to 2019, both in Non-Associates and Associates.
- The SKJ maintains the catch level in associates, but in Non-associates it has increased.
- BET has decreased in both

REJILLA EXCLUIDORA

The data does not reflect a clear logical trend of evasion in terms of greater% sinking of the grid, greater escape of juvenile Tunas.

Sin embargo, a pesar de estar ocupado haciendo maniobras, los capitanes se esfuerzan en registrar evasión.

DATOS REJILLA 2018							
Túnidos (tons)					Otras Especies (Uni.)		
%Sumergido	N° lances	Atún Capturado	Atún salió x la rejilla	%Escape	DORADO	WAHOO	Spp
1 _ 25	111	1439	35	2,46%	132	10	45
25 - 50	860	17254	58	0,34%	1402	207	78
50 - 75	959	21185	111	0,52%	5587	2798	16
75 - 100	586	15497	43	0,28%	433	2	378
Total	2516	55374	247	0,45%	7554	3017	517

DATOS REJILLA 2019							
Túnidos (tons)					Otras Especies (Uni.)		
%Sumergido	N° lances	Atún Capturado	Atún salió x rejilla	%Escape	DORADO	WAHOO	Spp
1 _ 25	239	6149	343	6%	945	164	1466
25 - 50	785	15632	121	1%	2578	805	167
50 - 75	1096	27586	753	3%	3091	1628	1440
75 - 100	743	16126	205	1%	1598	253	633
Total	2863	65493	1422	2%	8212	2850	3706

• However, we know the following:

En el 2018, de 55.374 Tons capturadas, un

0,45% tunas run away

In 2019, from 65493 Tons catches:

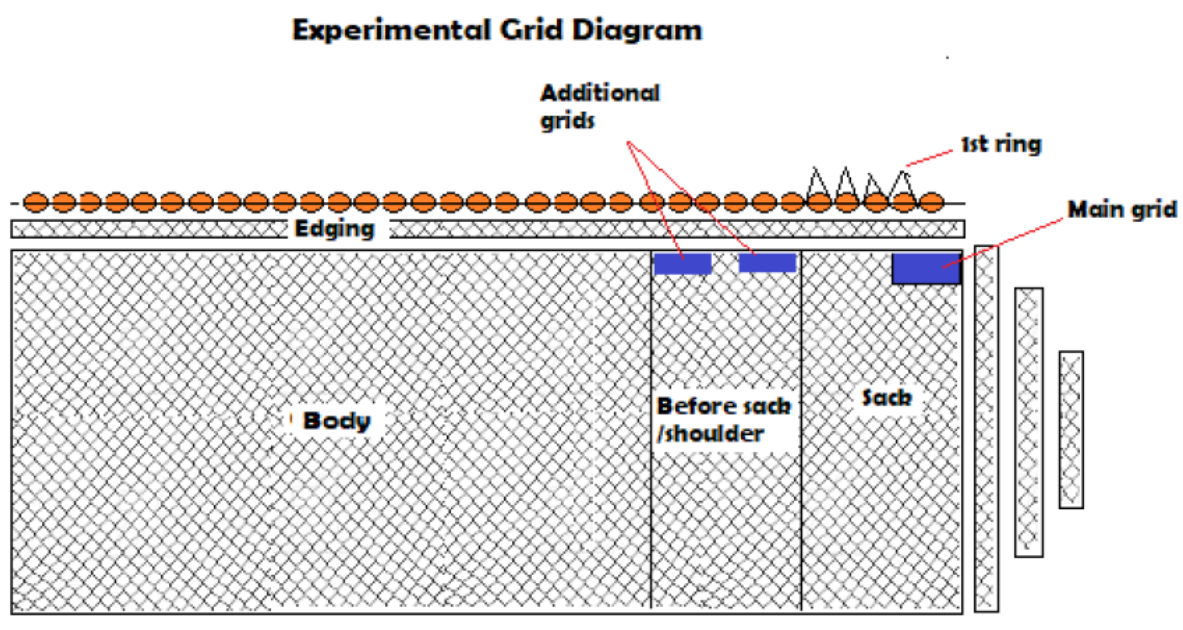
2% of tunas pass through the purse seine net.

Thousands of units of mahi-mahi, wahoo and spp (chanchitos, yellowtail,) also escaped

1st WORKSHOP ON ANALYSIS AND IMPROVEMENT OF USEAND FUNCTION OF SORTING GRIDS.

- Review of SORTING grid models in other fisheries around the world.
- Presentations of results of the models tested by the Ecuador, Tunacons, Probecuador and CIAT fleet.

• Most captains gave their opinion about changes that the experimental grid should have, and proposed how the location and date of the tests should be.



Experiment:

a) Experiment of exclusive exclusion grid in the bag area:

a.1) A 4m x 4m grid with 9cm x 10cm net in the bag area

a.2) A 5m x 4m grid with 9cm x 10cm net in the bag area

b) Main grid experiment with additional auxiliary grids:

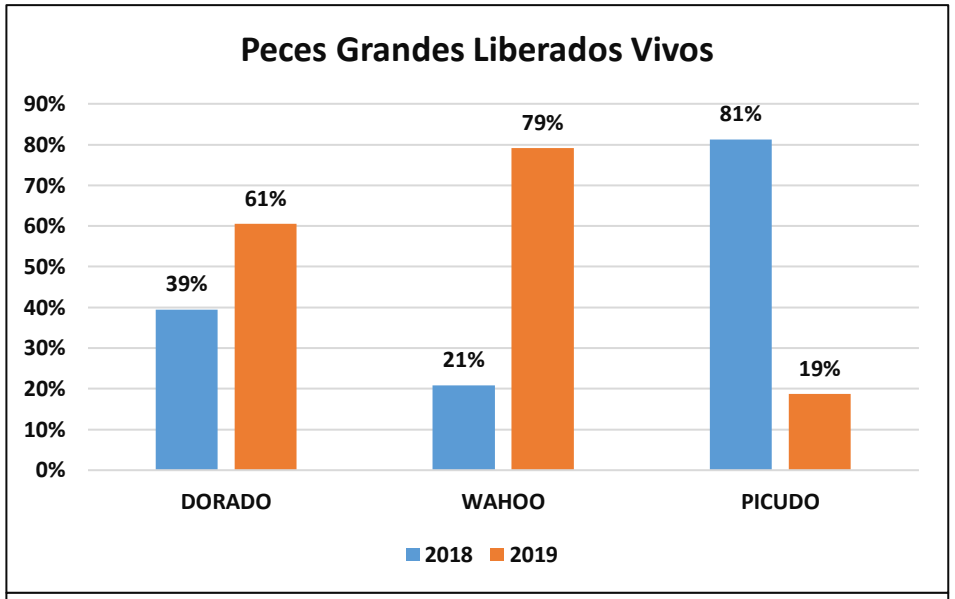
b.1) A 4m x 4m grid in the bag, plus a 4m x 2m grid in the antecoat, both with 9cm x 10cm net.

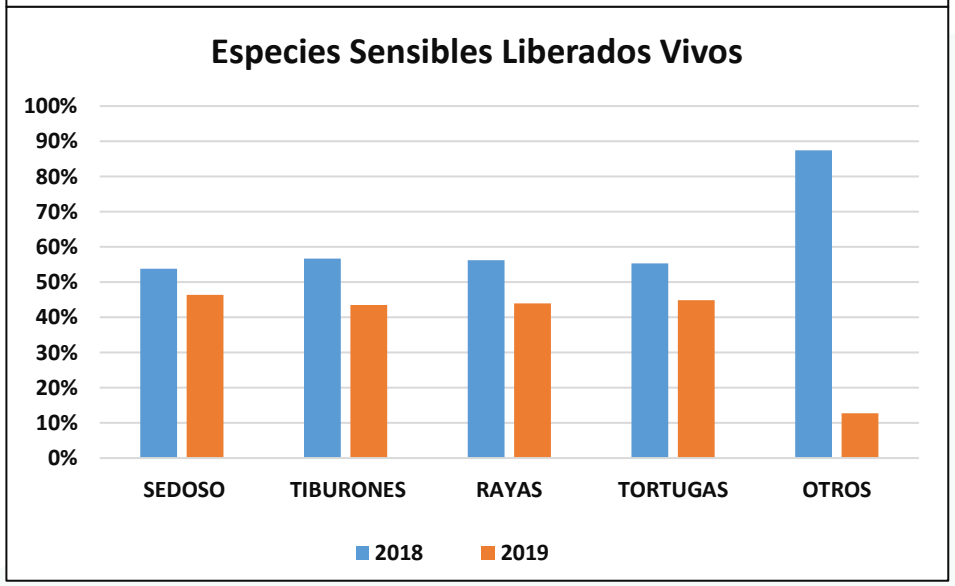
b.2) One 4m x 4m grid in the bag, plus two 4m x 2m grids in the antecoat, all with 9cm x 10cm net.

A new Workshop with IATTC is being scheduled with international experts in fishing techniques.

TUNA CONSERVATION GROUP

FADs Bycatch



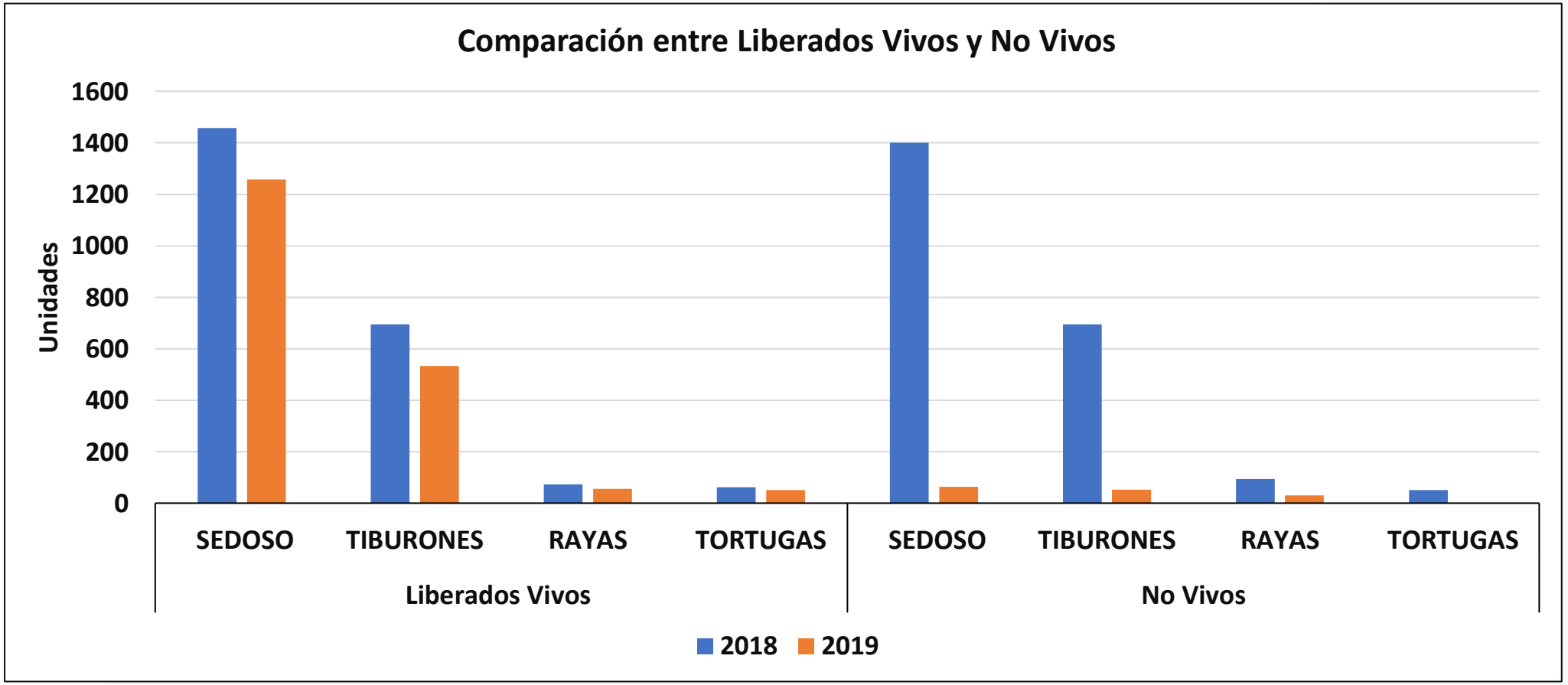


Applying good practices in the management of sensitive species, a large number of Sharks, Rays and Turtles have been released.

TUNA CONS

TUNA CONSERVATION GROUP

FADs Bycatch

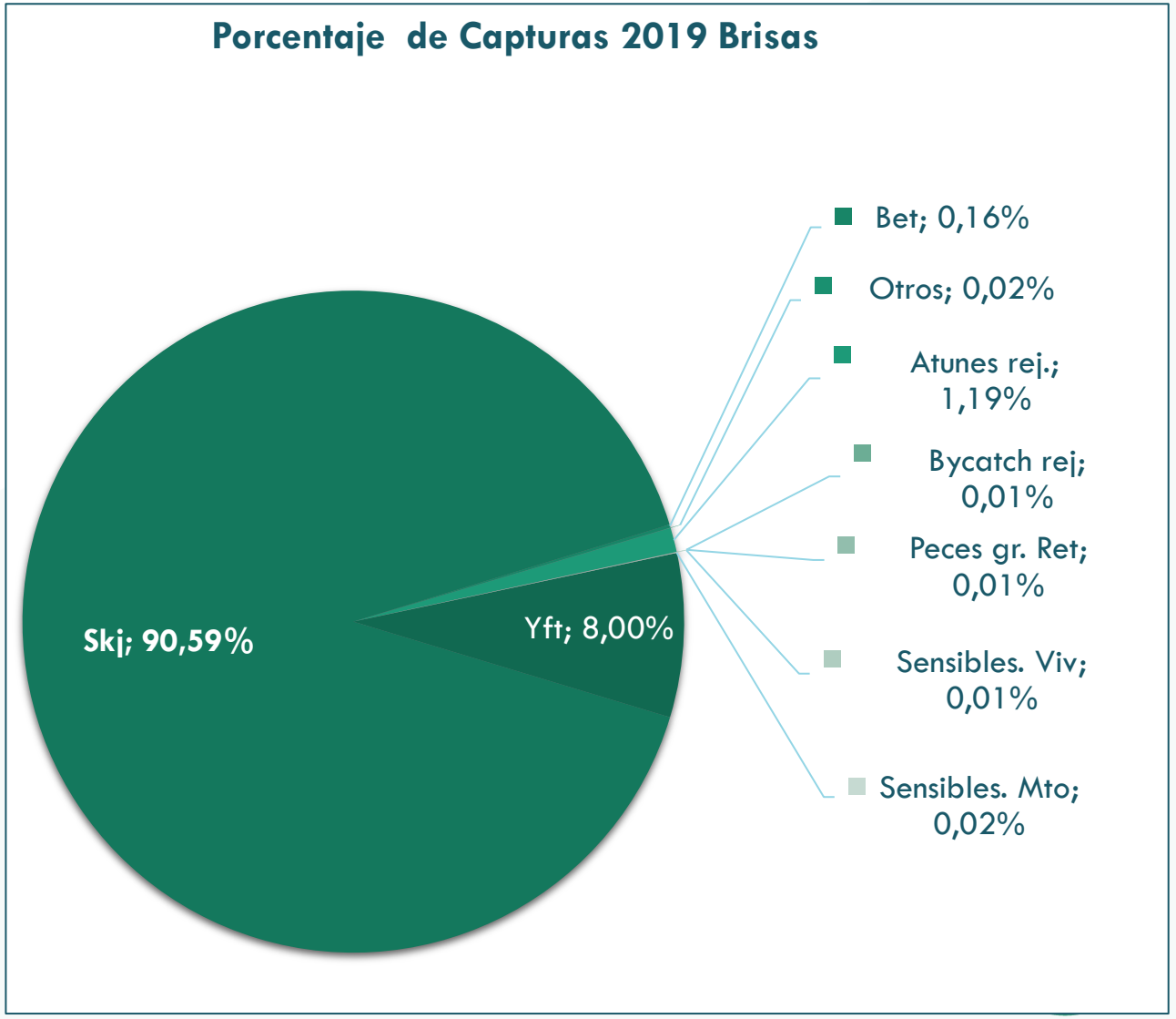


Free school sets Bycatch

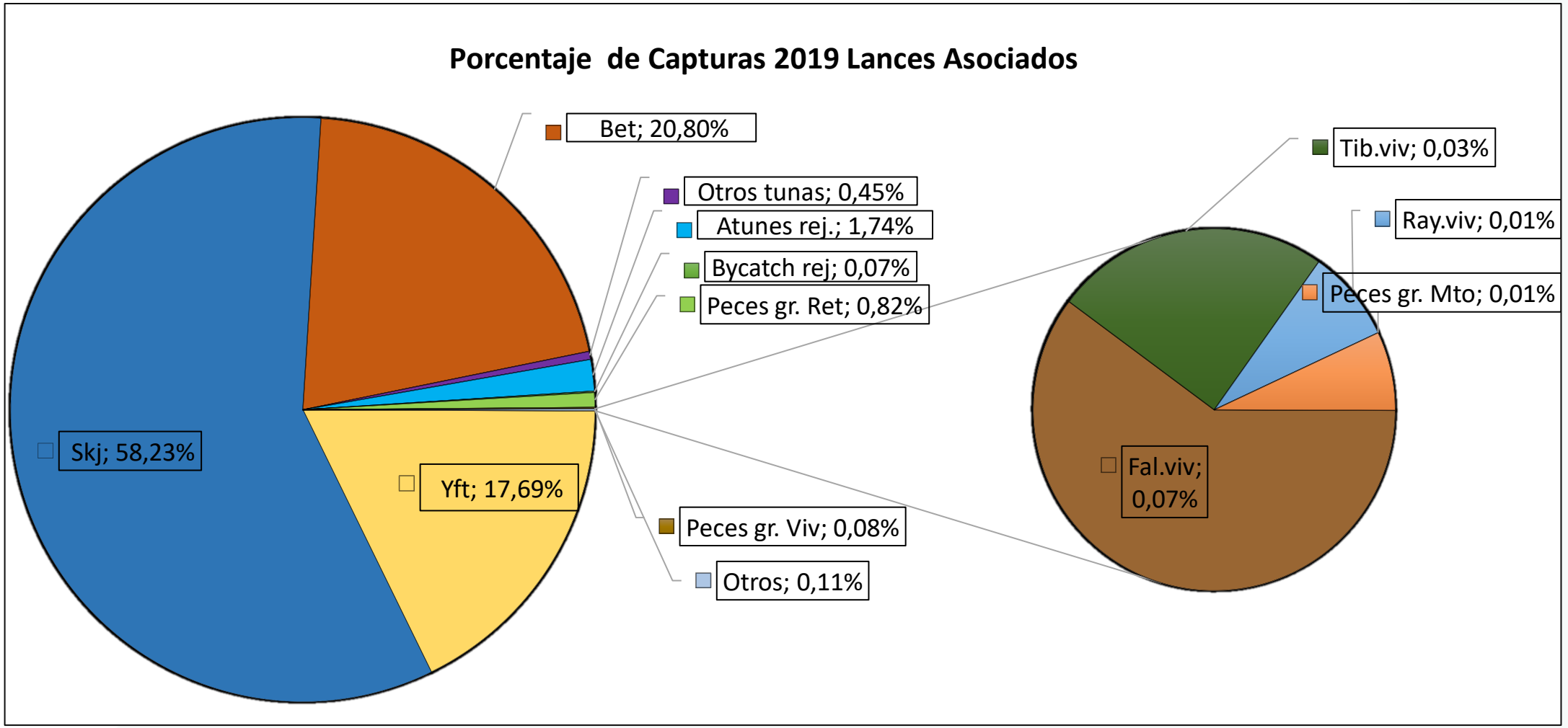
The percentages of bycatch rates in Free school are low.

- Grid Tunas: They are juvenile tunas that escape through the Grid (1.19%)
- Bycatch Grid: they are mahi mahi, juvenile wahoo and "chanchitos" (0.01%)
- Fish gr. Ret .: They are golden, wahoo, Picudos.
- Sensitive Live: Released by good practices unharmed, Silky, other sharks, Manta rays, turtles and others (0.01%).

Sensitive: Returned to the sea dead Sharks Silky and others, Matarrayas, others.



The percentages of the by-catch species in the sets on FADs are higher than in the sets in FREE SCHOOL, but **THE PERCENTAGES OF INCIDENTAL CATCH ARE ALSO LOW.**



RAY TAG PROGRAM

34 RAYAS LIBERADAS


hoy en
TUNA CONS
TRIPULANTES
Al rescate
Compartimos la liberación de una tortuga Verde por la tripulación del BP Rafa.
BUENAS PRÁCTICAS
a bordo para la conservación de la biodiversidad marina.

TUNA CONS

TUNA CONSERVATION GROUP

FLEET DATA COLLECTION TEMPLATE

PLANTILLA DE RECOLECCIÓN DE DATOS EN LA FLOTA

TUNA CONS

TUNA CONSERVATION GROUP
Fishery Improvement P...

Plan de Mejoramiento Pesquero
Información General del Viaje de Pesca

B/P:				N° Matricula:	
Viaje de Pesca N°:		SALIDA			NTRADA
Días de Viaje:		Puerto:		Puerto:	
Rejilla excluidora:		Fecha:	/ /	Fecha	/ /
Cap. de Pesca:			Responsable de lo...os:		

Operaciones de Pesca

I. Registro de los Lance

Fecha	N° Lance	Posición Geográfica	Tipo de Cardumen				Ayuda Aérea	Tiempo del Lanc		°T Agua de	Capturas de Atún (Tons)					
			B	D	P	FAD o ECO	Si/No	Inicio	Termin...		YFT	SKJ	BET	Otros	Bodegas	Descartes
		Lat.:														
		Long.:														
Observaciones:																

II. Registro de la Rejilla Excluidora

Modelo de Rejilla:		% sumergido		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														

Datos recogidos en la plantilla entre años 2018 y 2019
Programa de puebas de plantados biodegradables del grupo Tunacons.

Especies más comunes liberadas vivas

120 tortugas

Mayormente:
Eretmochelys coriácea,
Lepidochelys olivácea y
Chelonia mydas

135 rayas

Mayormente:
Mobula thurstoni
Pteroplatytrygon violacea

4066 tiburones

Mayormente:
Carcharhinus falciformis
Sphyrna lewini
Sphyrna zygaena

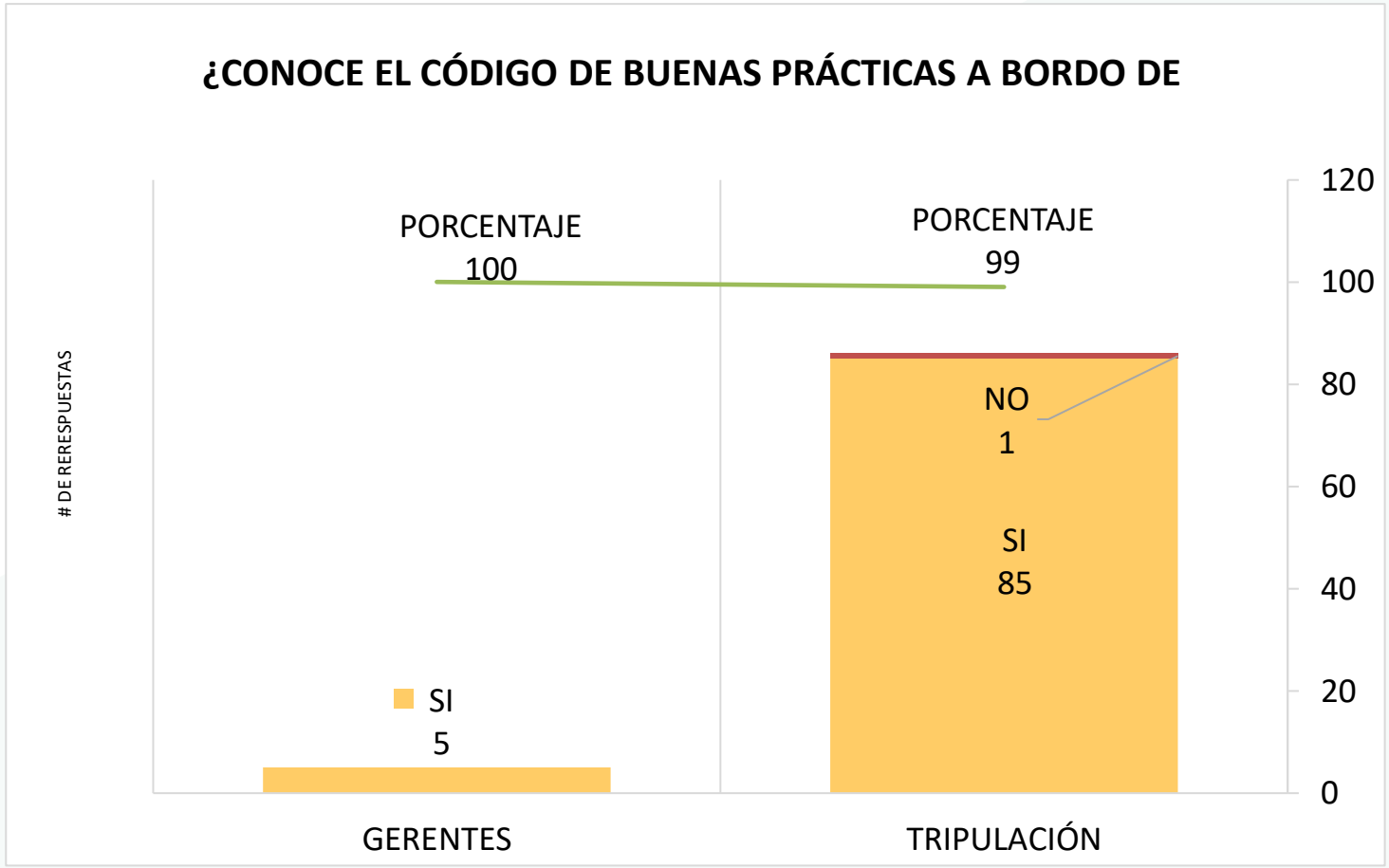
MOST COMMON ALIVE RELEASE SPECIES

CONSTANT TRAINING TO UPDATE KNOWLEDGE IN:

- Latest CIAT resolutions
- Release of live bycatch based on the Code.

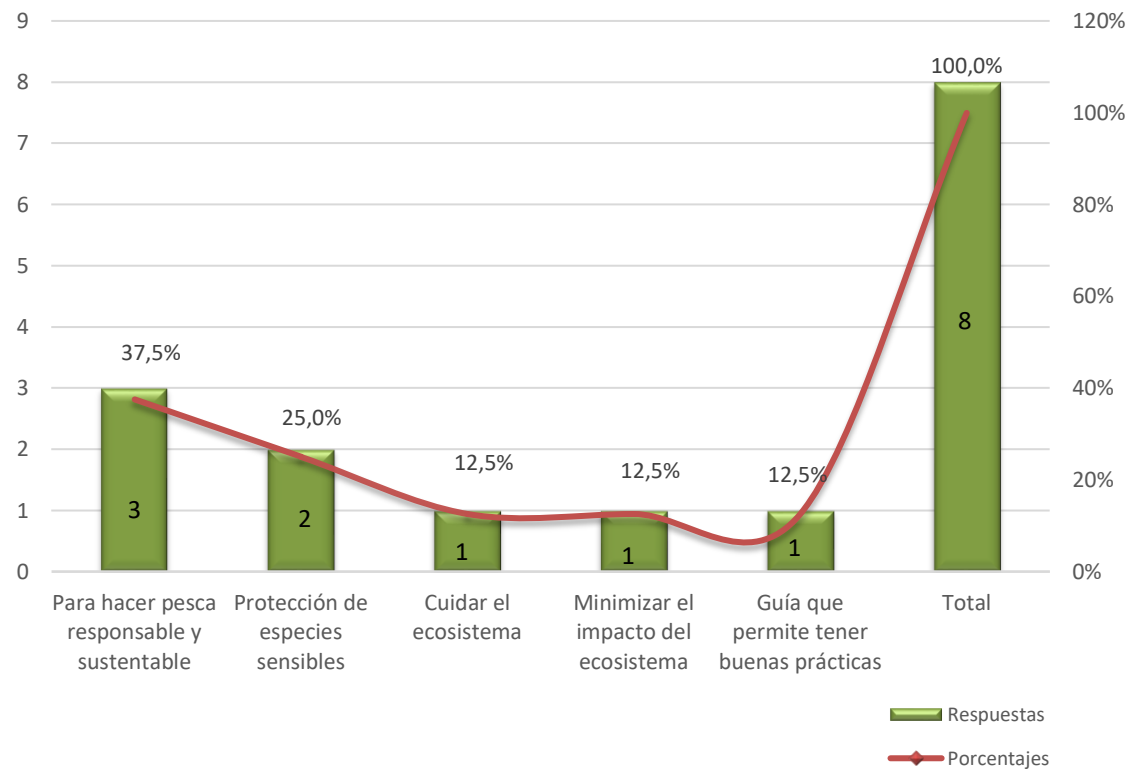
Workshops are also held in cooperation with ISSF & Azti.
To exchange experiences in the release of sensitive species and in degradable FADs.

EXTERNAL ASSESSMENT OF THE GOOD PRACTICES CODE

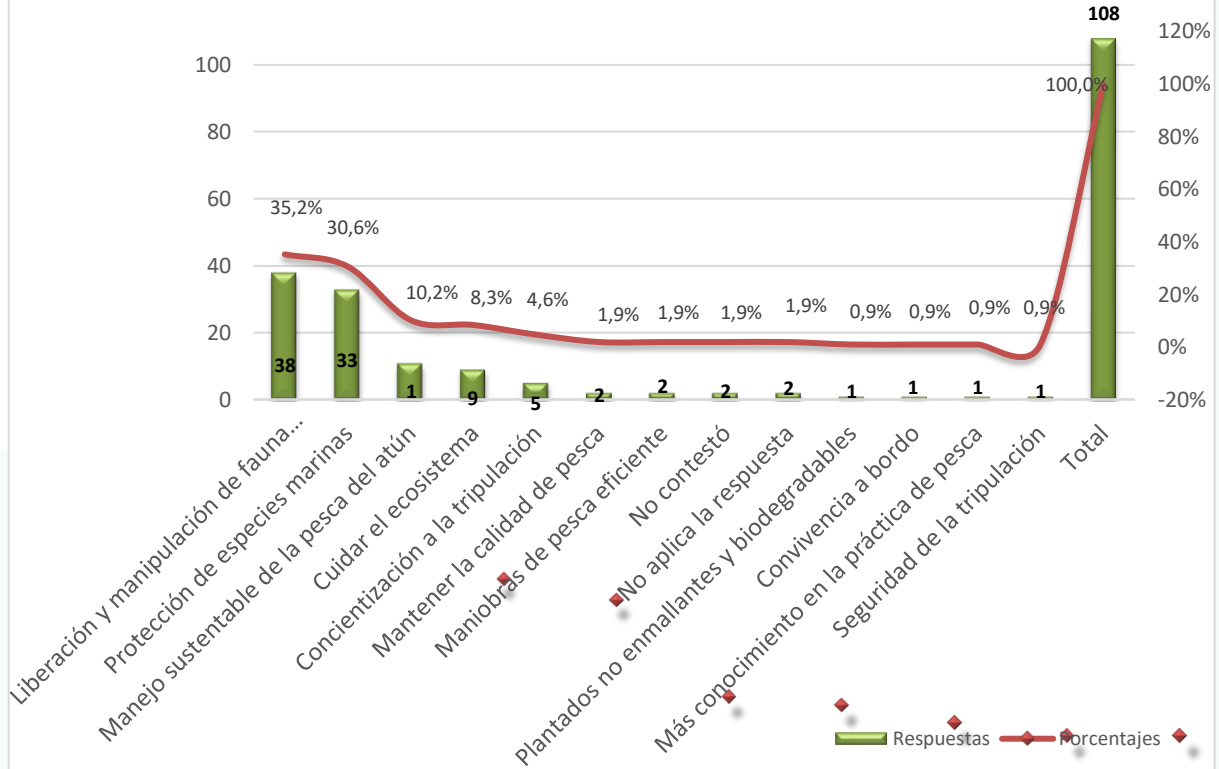


TUNA CONSERVATION GROUP

OPINION ON THE IMPORTANCE OF THE CODE - MANAGERS

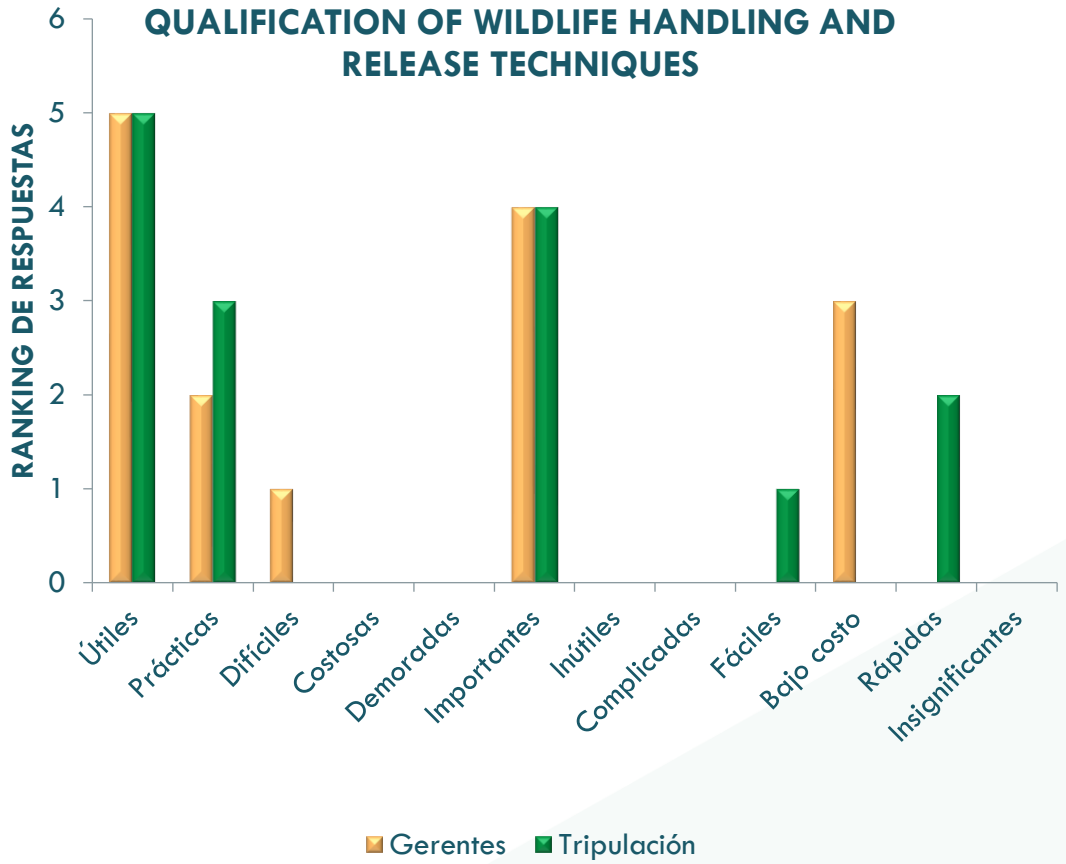


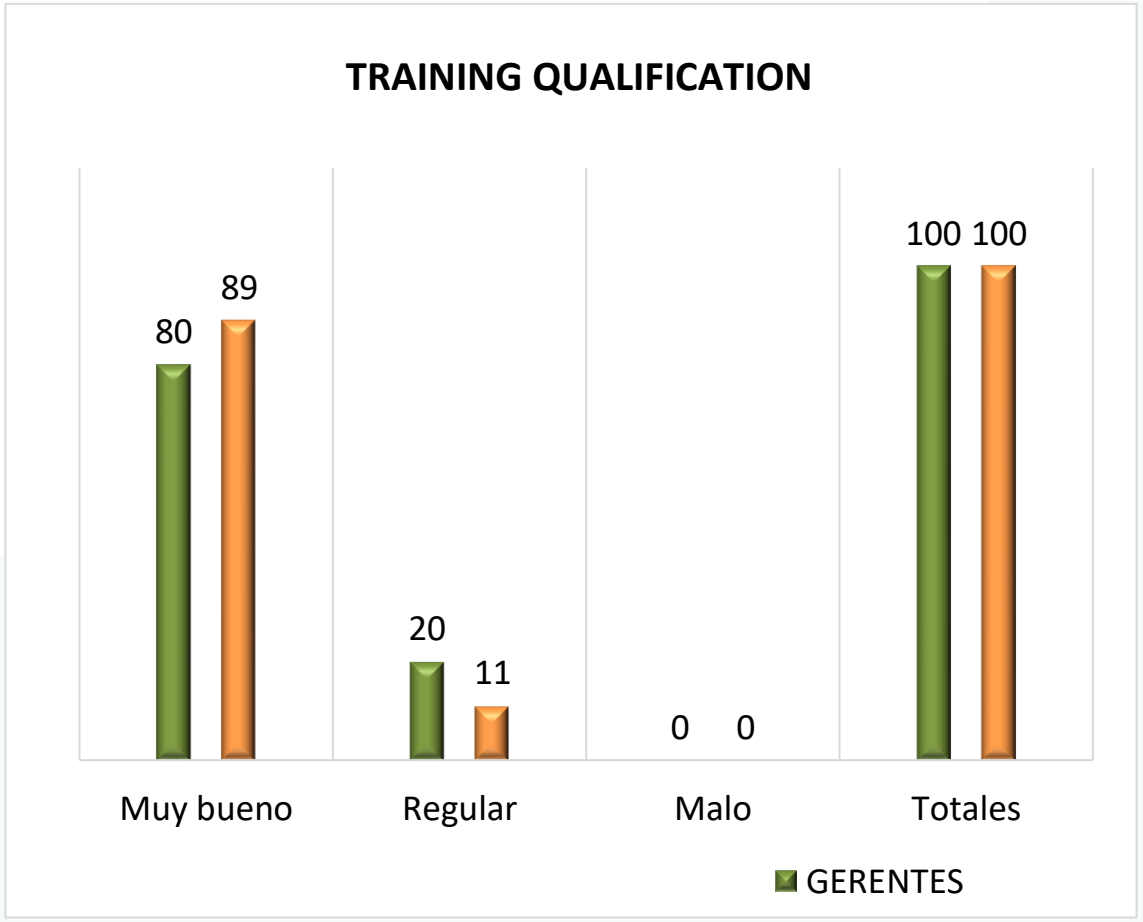
OPINION ON THE IMPORTANCE OF THE CODE - CREW

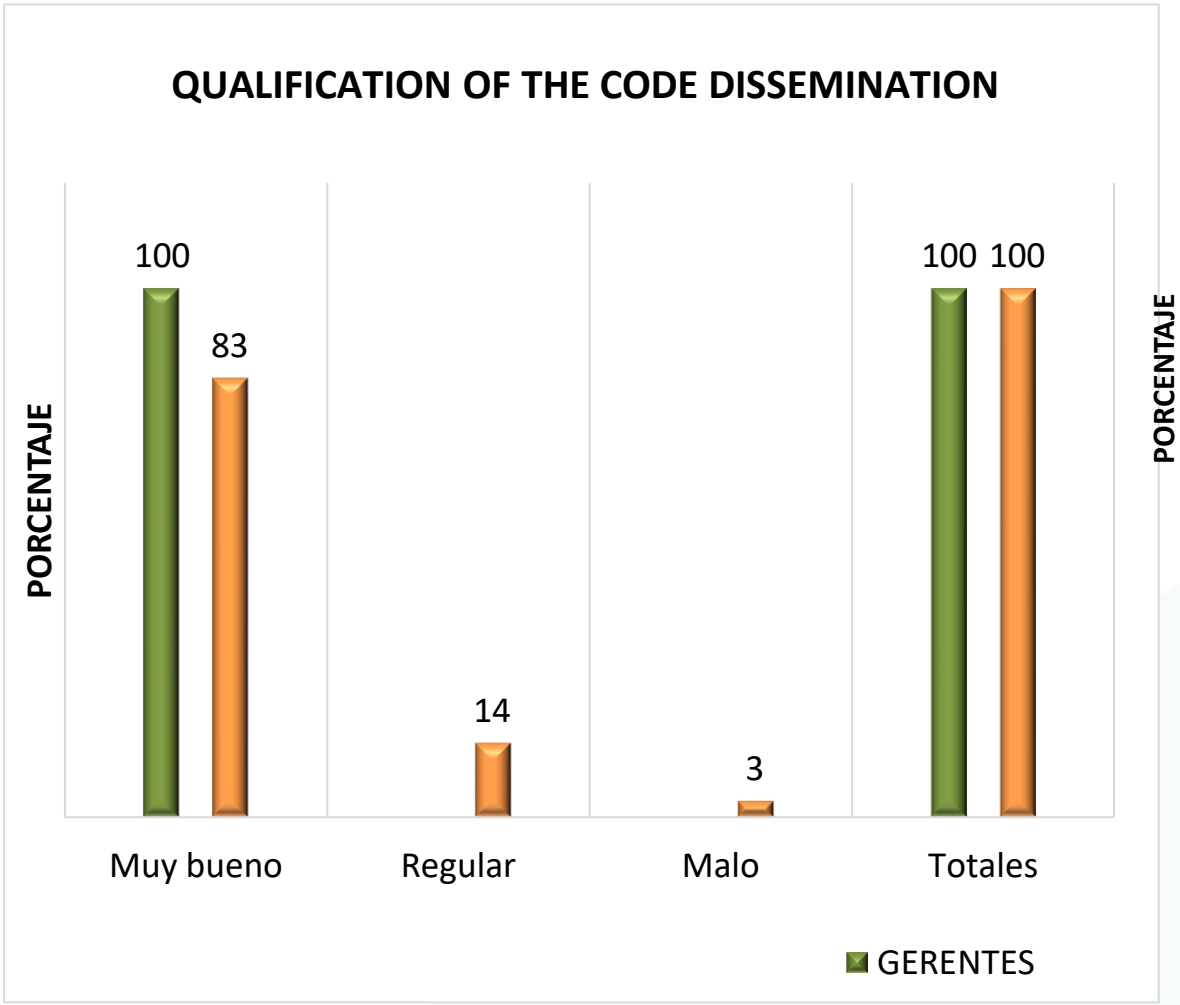


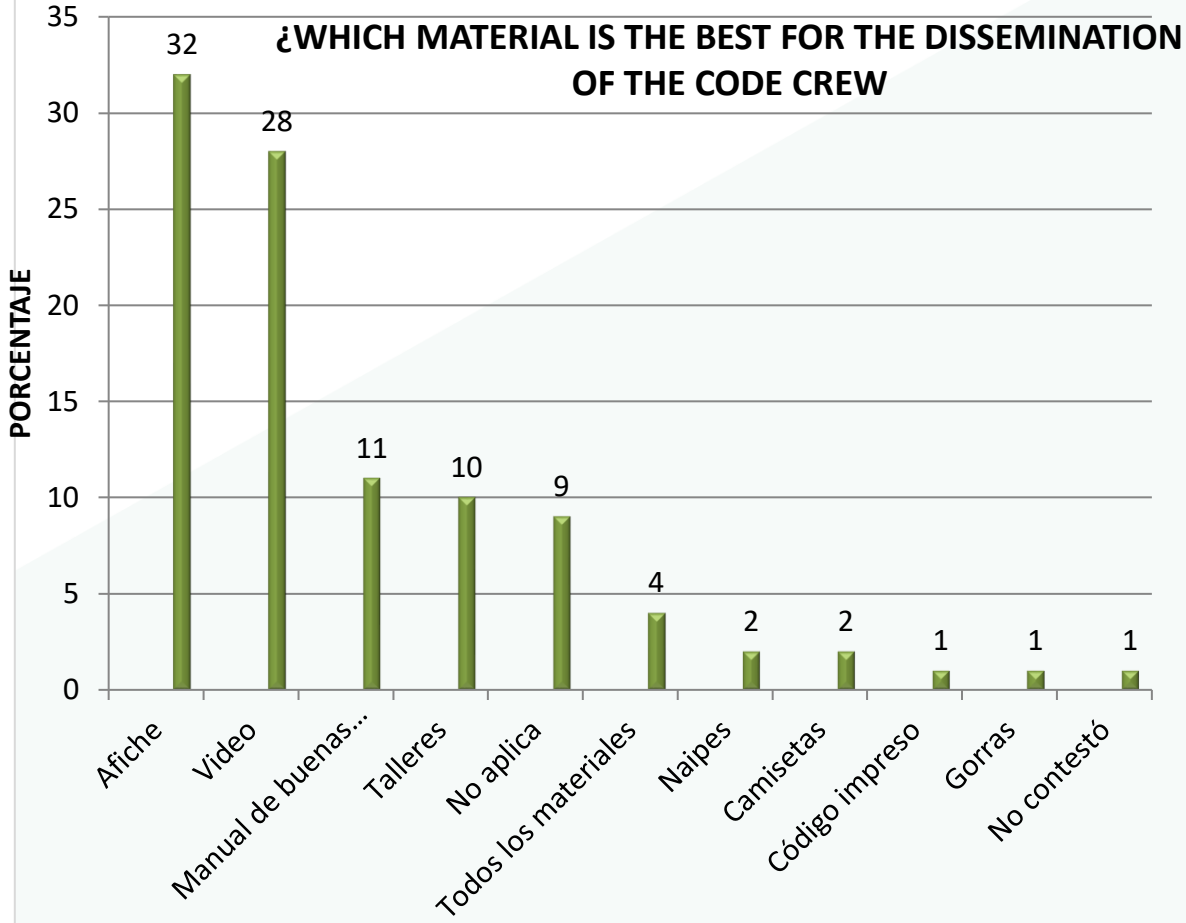
TUNA CONS

TUNA CONSERVATION GROUP


QUALIFICATION OF WILDLIFE HANDLING AND RELEASE TECHNIQUES
RANKING DE RESPUESTAS
6
5
4
3
2
1
0
Útiles
Prácticas
Difíciles
Costosas
Demoradas
Importantes
Inútiles
Complicadas
Fáciles
Bajo costo
Rápidas
Insignificantes
Gerentes
Tripulación


TRAINING QUALIFICATION
80
89
20
11
0
0
100
100
Muy bueno
Regular
Malo
Totales
GERENTES





TUNA CONSERVATION GROUP

La parte de imagen con el identificador de relación rId13 no se encontró en el archivo.

3 clics

GRACIAS

TUNA CONSERVATION GROUP