SECOND INTERNATIONAL WORKSHOP ON BIOFADs

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***Ad-Hoc* permanente WORKING GROUP ON FADs**

10th Meeting

03-04 June 2026

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Senior scientist, ISSF

ISSF INTERNATIONAL SEAFOOD SUSTAINABILITY FOUNDATION

Nestlé Purina Petcare Europe

Photo: David Itano

Workshop Participants

29 Fishers and

Scientists from:

Ecuador

France

Ghana

Korea

New Caledonia

Seychelles

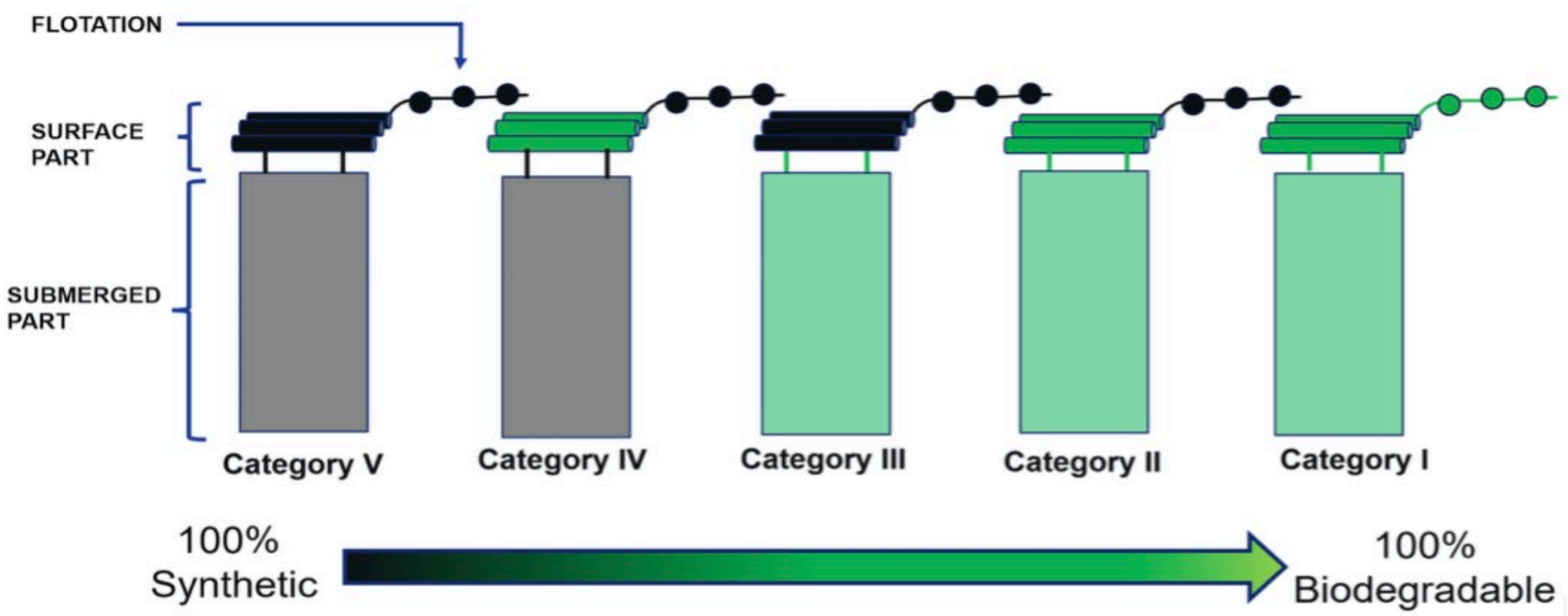
Spain

USA

Objectives of the workshop

- ✓ To evaluate the **effectiveness and durability of biodegradable materials and designs** tested across different oceans.
- ✓ To exchange practical experiences from fishing fleets and identify operational, logistical and economic **challenges** in the transition to bio-FADs.
- ✓ To discuss **opportunities for improving** design, implementation, and bio-FAD traceability during trials.
- ✓ To **foster collaboration and discuss recommendations** for faster implementation of bio-FADs and compliance with regulatory requirements

Conservation measures to transition to BIOFAD



RFMO	Entry into Force	Transition Approach	Deadline for Full Category I Compliance	Reference
IATTC	From 2026	Stepwise transition	By 2031*	C- 23-04
WCPFC	–	Encouraged (not mandatory)	–	CMM 2023-01
IOTC	From 2026	Stepwise transition	By 2029	Res. 24/02
ICCAT	From 2025	Stepwise transition	By 2028	Rec. 24-01

*the Commission will evaluate in 2030 whether to mandate that, by 2031, only Category I biodegradable FADs be deployed or redeployed by vessels

Conventional dFAD designs

Indian Ocean | Indian Ocean | All Regions

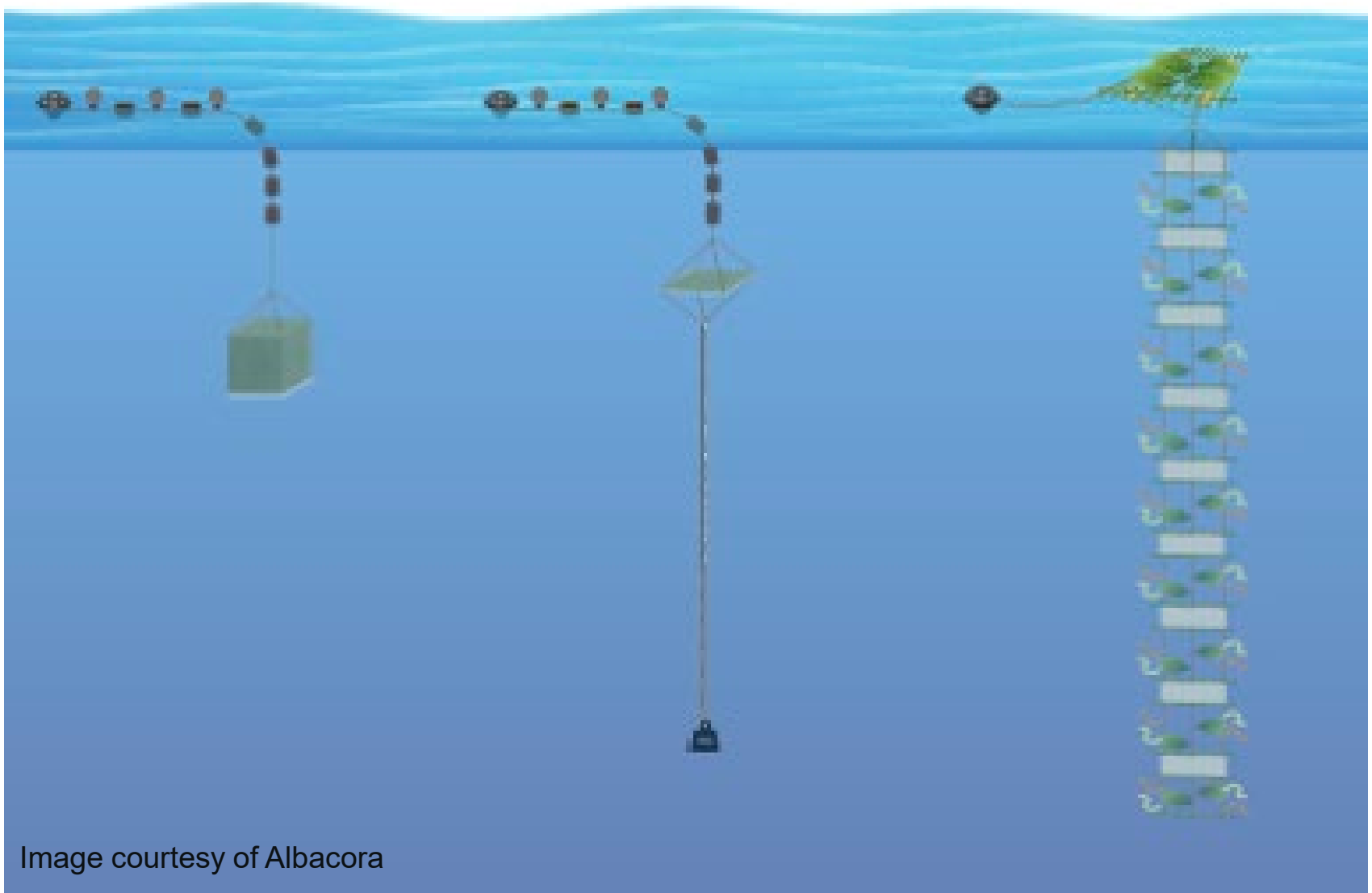
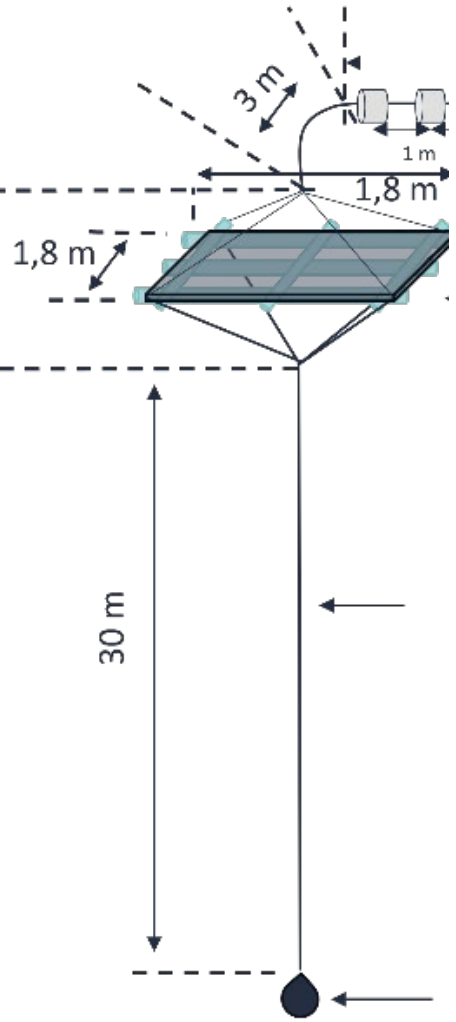


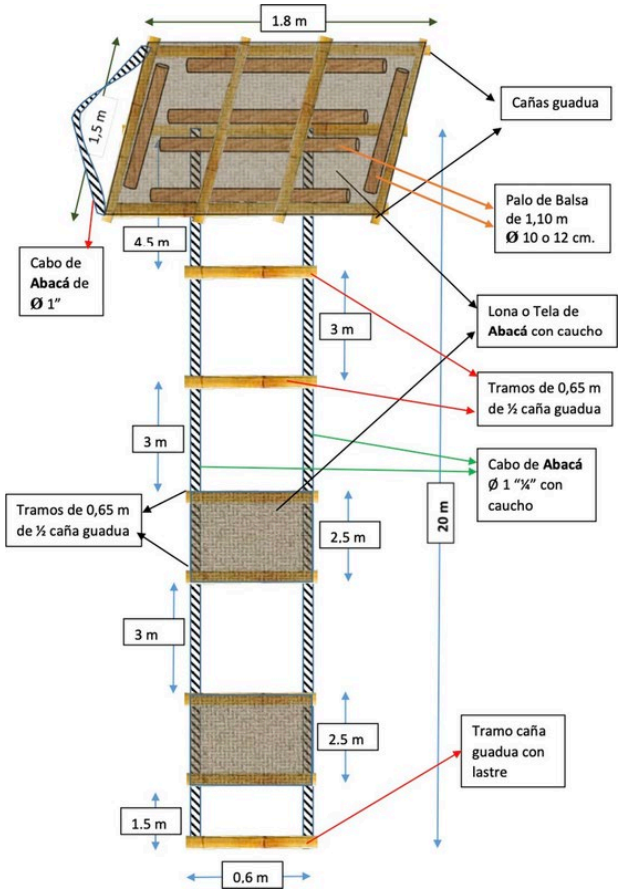
Image courtesy of Albacora

BIOFAD designs

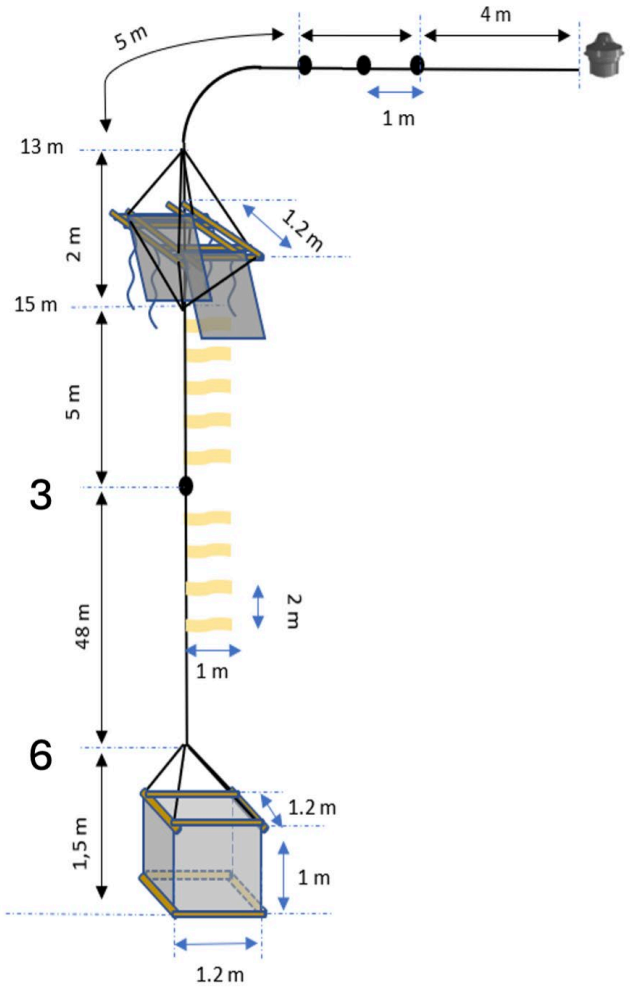
Indian Ocean



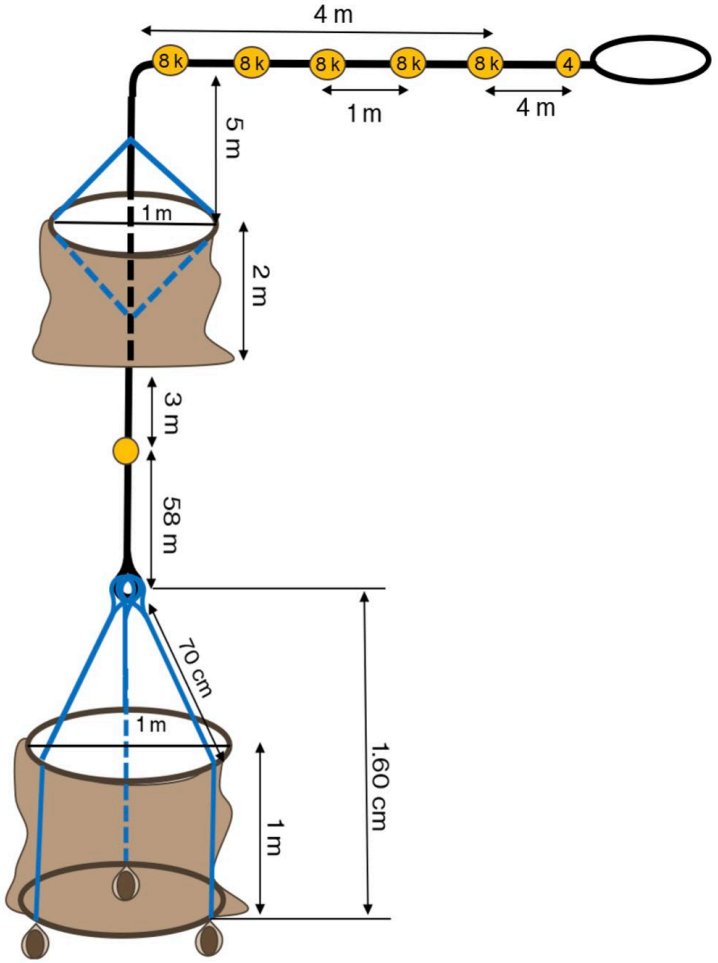
All Regions



Pacific Ocean



Indian Ocean
Pacific Ocean

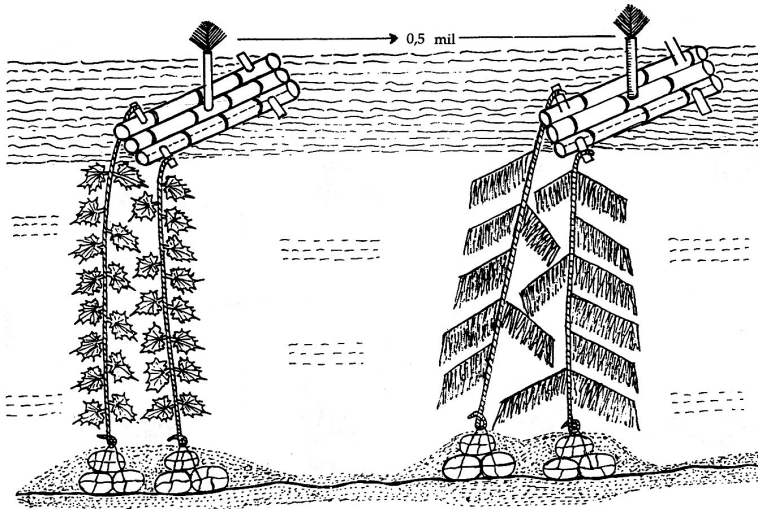


FAD design evolution

1886 Carl Benz

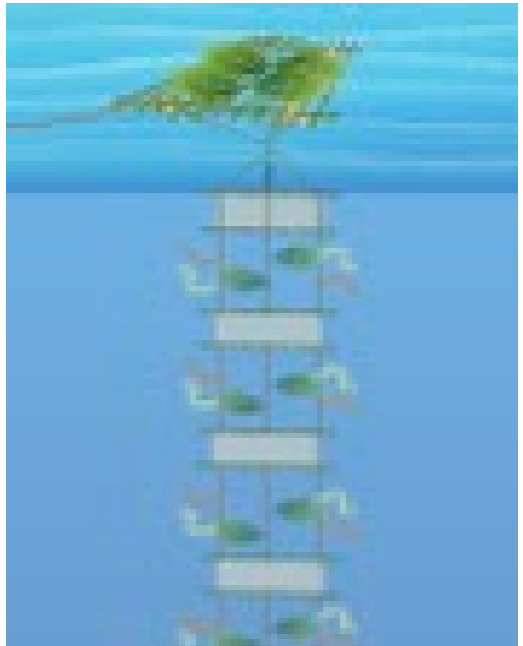
140 years later

2026 Mercedes Benz



200 AD Romans

1800 years later

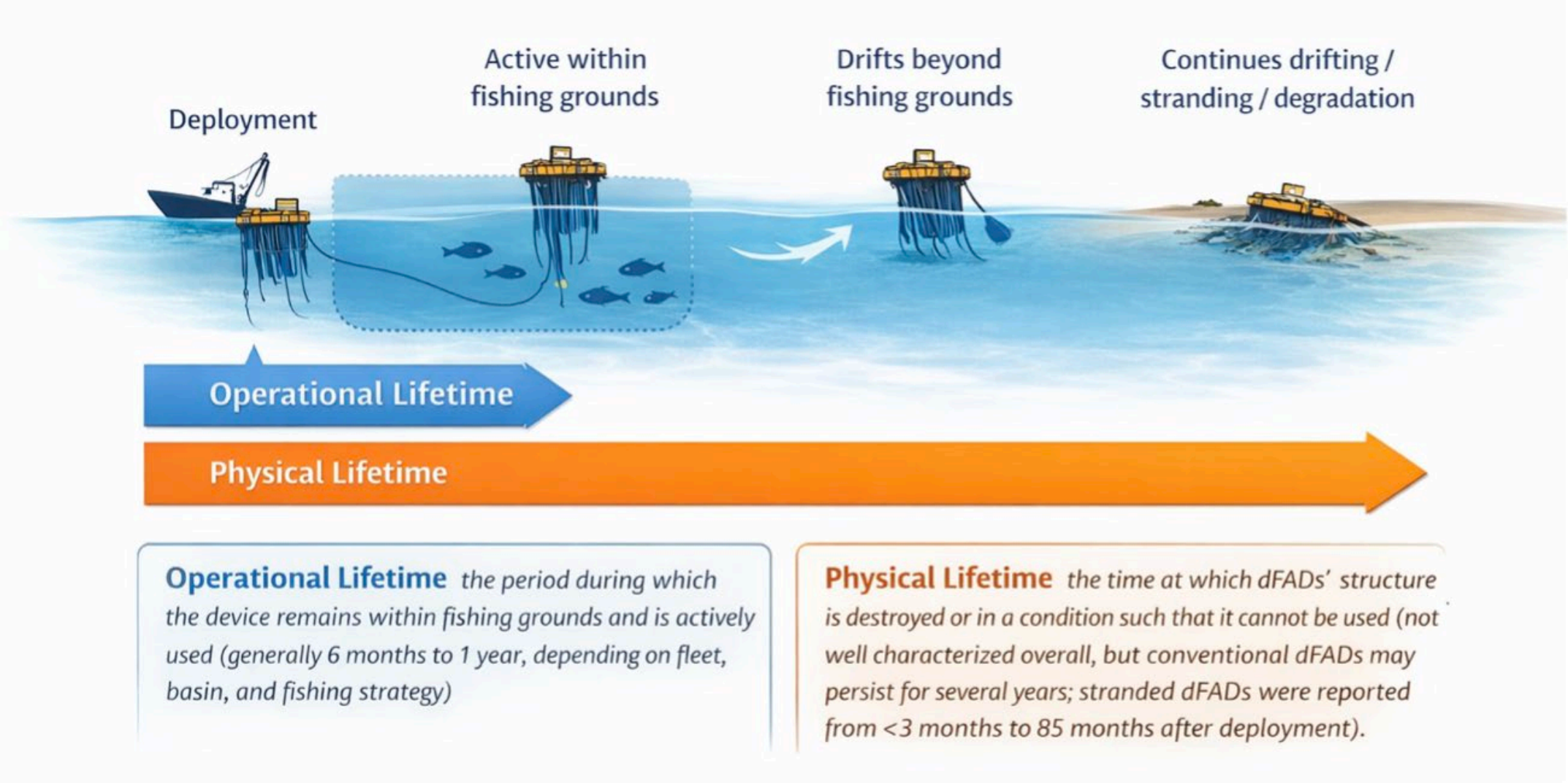


Average catch per set

CONFAD = BIOFAD

Average catch per set			
Trial	**BIOFAD**	**CONFAD**	**Whole region**
BIOFAD project (IO)	28	44	NA
IATTC trials (EPO)	33.6	31.7	19-29
Tunacons (EPO)	27	NA	19-29
JellyFAD Ugavi (EPO)	39.4	35.9	19-29
JellyFAD SPC trials (WCPFC)	35	42.5	30

Lifespan of a FAD



Operational Lifetime *the period during which the device remains within fishing grounds and is actively used (generally 6 months to 1 year, depending on fleet, basin, and fishing strategy)*

Physical Lifetime *the time at which dFADs' structure is destroyed or in a condition such that it cannot be used (not well characterized overall, but conventional dFADs may persist for several years; stranded dFADs were reported from <3 months to 85 months after deployment).*

Operational Lifespan observed *in situ*

Lifespan (months)	
Trial	**BIOFAD**
IATTC trials (EPO)	4
Tunacons (EPO)	3-4
Jelly-FAD Ugavi (EPO)	11
Jelly-FAD WCPFC	6

Challenges: Trials

- **Limited traceability** of deployed bio-FADs
- Rigorous **construction quality control** remains essential
- **Insufficient support** from vessel owners to fishers
- **Poor communication** within and between companies

Challenges: Materials

- **Bio-plastics**:The bio-based origin of a material does not ensure environmental safety.
- Material composition **transparency and chemical safety** are critical considerations.
- Limited availability of organic materials in some regions

Conclusion

- **Substantial progress by fleets**

- **Organic materials (plant based)** should remain the primary focus for bio-FAD construction.

- **FAD designs must be lighter** to reduce environmental impacts and facilitate retrieval.

- Transition to bio-FADs is not solely dependent on technological readiness.
  Key human factors: communication, awareness, support from shipowners

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Photo: David Itano