Addressing FAD Ecological Impacts
Research & Best Practices to Reduce Bycatch and Ocean Debris

Although purse-seine fishers also set on free-swimming schools and use naturally occurring floating objects to catch tuna, they’re relying more on artificial Fish Aggregating Devices (FADs).

Over 40% of the global tuna catch is made with FADs, which have increased in all oceans.

FADs, like other fishing gears, need to be managed to reduce their ecological impacts, including:

1. The unintentional capture of small tuna, which can contribute to overfishing

2. The unintentional capture/entanglement of non-target species such as sharks and sea turtles or other finfish and billfish (also known as bycatch)

3. Damage and marine litter when FAD structures are lost or abandoned, in fragile marine habitats like coral reefs

4. Ghost fishing when fishing gear continues to entangle animals

Ongoing Research

ISSF is investigating ways to lessen FAD fishing’s impacts

Best Practices

Do not cover FAD surfaces with mesh

Use non-meshed materials such as ropes or canvas sheets for hanging components

Use natural or biodegradable materials such as bamboo, palm leaves or other vegetal fibers

Simplify FAD structure, reducing size, volume and weight as much as possible

Avoid setting on small tuna schools

Focus on shark and mobulid ray release efforts from the deck, in the first brails

Reduce bycatch

Reduce turtle entanglement

Reduce shark entanglement

Reduce shark and turtle mortality

Reduce ocean debris and damage to coastal ecosystems

Reduce ocean debris and facilitates FAD retrieval

Can reduce bycatch with little impact on total target catch

 Increase survival of released sharks

References

1Restrepo, V. et al. (2017). A summary of bycatch issues and ISSF mitigation initiatives to date in purse seine fisheries, with emphasis on FADs. ISSF Technical Report 2017-06.


4Dagorn, L. et al (2012). Is it good or bad to fish with FADs? What are the real impacts of the use of drifting FADs on pelagic marine ecosystems? Fish and Fisheries.