

Tuna fisheries and fish aggregation device symposium

Arue, Tahiti, French Polynesia, 28 November–2 December 2011

Symposium objectives

Since ancient times, fishers have known about the natural tendency of pelagic fish such as tuna, mahi mahi, sharks and marlins to gather around floating objects. Technical progress — in terms of making large nets — after the mid-20th century made it possible to use this aggregating phenomenon on a larger scale; first along coastal areas (e.g. Philippines, Indonesia) and then farther out in the open ocean. It is currently estimated that nearly three-quarters of the world's tropical tuna catches (i.e. albacore, skipjack tuna, yellowfin tuna and bigeye tuna) come from these floating objects, commonly known as fish aggregation devices, or FADs.

This tendency of large pelagic fish species to aggregate around floating objects has been used at two very different scales.

- In coastal zones, local fishers moor FADs on the sea bottom in depths of 50–2,500 metres to encourage tuna to gather in specific areas known to fishers for daily fishing expeditions. In such cases, FADs can be considered to be effective, small-scale fisheries management tools that make it possible to transfer fishing pressure away from nearshore areas to the open ocean, thereby favouring the harvesting of species (i.e. pelagic) that are less sensitive to local fishing effort.
- In the open ocean, tuna purse-seine vessels use drifting FADs equipped with electronic location emitters, which allows for large-scale tuna harvesting. Given the catch volume they generate around the world, the massive use of drifting FADs should be subject to in-depth studies so as to better assess the potential impacts of this fishing technique in terms of the risks of overfishing and disturbing the balance of the ecosystems involved (the “ecological trap” hypothesis).

By pooling international experience and expertise, the symposium will serve four main objectives:

1. Sharing knowledge to allow consistent and controlled development of moored FADs for the benefit of small-scale tropical island fisheries.
2. Gaining a better understanding of the risks brought about by the large-scale use of drifting FADs by tuna purse-seine fleets.
3. Better defining and implementing fishing techniques designed to avoid bycatch and accidental capture of sensitive marine species such as marine mammals, turtles and sharks.
4. Better understanding why fish aggregate around floating objects and what are the consequences of the deployment of FADs on the ecology of species.

Session schedule

The symposium has six sessions:

Session 1 – Regional overview of moored and drifting FAD use

Session 2 – Moored FADs and coastal fisheries: Technologies and fisheries

Session 3 – Drifting FADs and long-range fishing: Ecosystem impacts

Session 4 – Socioeconomic and fisheries systems (moored and drifting FADs)

Session 5 – Understanding the phenomenon of aggregation (moored and drifting FADs)

Session 6 – Posters

Symposium committees

Steering committee	Scientific committee
Michel Blanc	Michel Blanc
Priscille Frogier	Laurent Dagorn
Loïc Gourmelen	Jean-Claude Gaertner
Pierre Mery	Paul Gervain
Christian Moretti	Olivier Guyader
Bruno Peaucellier	Martin Hall
Tiare Penilla Y Perella	Kim Holland
Alain Santoni	David Itano
Mainui Tanetoa	Beatriz Morales-Nin
Marc Taquet	Lionel Reynal
Bruno Ugolini	Marc Taquet
Stephen Yen Kai Sun	

Registration and call for contributions

Participants are invited to visit <http://fads2011.sciences-conf.org> to:

- register and obtain a login and a password,
- complete their registration form, and
- submit their contributions (abstracts).

There are no registration fees, although the closing date for registration is 31 October 2011.

Practical information

All documents relating to the conference are available at: <http://www.peche.pf>

For further information, send a message to: Tahiti.dcp.2011@ifremer.fr