

# **Evaluation of dFAD construction materials in the WCPO**

Lauriane Escalle, Stephen Brouwer and Graham Pilling



- Wide of Fish Aggregating Devices (FAD) in the WCPO
- Juvenile tuna catch and bycatch of SSI
- Potential ecosystem impacts:
  - Ghost fishing
  - Tuna school fragmentation
  - Marine pollution
  - Damage to coral reefs or coastal areas
- WCPFC encourages the use of biodegradable and non-entangling materials



- Observer data 2011–2018
- Materials used in 2 different parts of dFADs



RAFT

Main structure + buoyancy components + cover

Submerged APPENDAGES Increase drag, and attractiveness

### General materials used by year



## dFADs investigated : deployment, setting, servicing or visiting



### General materials used by fleet



## dFADs investigated : deployment, setting, servicing or visiting



### Details on materials used by fleet



## Natural materials, when used, in raft



## Details on materials used by fleet



## Natural materials, when used, as appendages





## Artificial materials, when used, in raft



#### Details on materials used by fleet



## Artificial materials, when used, as appendages



## Non-entangling FADs used by year

## **Net presence**



Pacific Community

Communauté du Pacifique

### Non-entangling FADs used by fleet

## **Net presence**



Pacific Community Communauté du Pacifique



- Note the materials currently used in dFADs in the region. In particular, the low use of non-entangling and biodegradable materials, as well as the variability among fleets.
- Note the review of biodegradable materials and non-entangling dFAD designs from research projects in other oceans.
- Consider potential research activities and at-sea trials of biodegradable and non-entangling design options in the WCPO and provide corresponding advice to the FAD Management Options Intersessional Working Group.



## **Thanks for your attention**