FAD research priority projects

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on behalf of the experts that participated in the research plan

FAD RESEARCH PRIORITY PROJECTS

Impact of FADs on target species

1. Sub-regional study of FAD impacts on BET and YFT catch rate
2. Understanding BET and YFT catch
3. A science based FAD number/set numbers
4. Impact of FAD densities on tuna associative behaviour

Impact of FADs on non-target species

5. Estimates of by-catch and discard rates, by species and identification of hot spots
6. By-catch release practices with special focus on sharks and manta rays

Impact of FADs on the habitat

7. Biodegradable FADs tests
8. Pilot project on the recovery of FADs

P1. Sub-regional study of FAD impacts on BET and YFT catch rate

Objective

Sub-regional study on % of BET and YFT composition on FAD sets,

including size structure of these species in the catch (hotspot analyses)

Rationale and Relevance for management

- Provides area-specific information on the potential impacts of FADs on BET/YFT.
- Provides a scientific basis for potential area closures.

Duration: 6 months

Approximate total budget: US$40,000

P2. Understanding BET and YFT catch

Objective

Influence of vessel, captain, technology used and FAD/Gear attributes

on BET/YFT catch rates

Rationale and Relevance for management

- Will provide key information for stock assessments as well as any mitigation measure to reduce the impact of FAD fisheries in BET/YFT catches. Inform harvest strategies

Duration: 12 months

Approximate total budget: US$70,000

P3. Study a science-based FAD number/FAD set limit

Objective

Identify and summarize challenges confronting research on the development of science-based FAD number/FAD set limits and propose possible studies and additional data sources to address those challenges.

Rationale and Relevance for management

- The present project will serve to provide guidance on what type of data should be collected and what type of research could be conducted to achieve a scientific basis for establishing the sustainable number of FADs at sea.

Duration: 4 months

Approximate total budget: US$24,000

P4. Impact of FAD densities on tuna associative behaviour

Objective

Identify and summarize challenges on the development of an index of FAD densities and propose possible studies and additional data sources to address those challenges.

Rationale and Relevance for management

- Understand change the effectiveness and the productivity of the vessels

Duration: 12 months

Approximate total budget: US$54,000

P5. Estimates of by-catch and discard rates at FADs, by species and identification of hot spots

Objective

Sub-regional study on discard and by-catch rates and species composition at FADs sets and identification of hot spots.

Rationale and Relevance for management

- Provides area-specific information on the potential impacts of FADs on by-catch species
- Provides a scientific basis for potential area closures.

Duration: 6 months

Approximate total budget: US$40,000

P6. By-catch release practices with special focus on sharks and mobulids

Objective

Investigate ways to release sharks and mobulids from the net and the deck.

Rationale and Relevance for management

- Releasing practices appeared to be one of the preferred management options to mitigate by-catch during the survey on FAD management options conducted within the FAD WG in IATTC.Provides a relatively simple management option if releasing practices are successful

Duration: 12 months

Approximate total budget: US$40,000

P7. Biodegradable FAD tests

Objective

Identify biodegradable FAD materials and designs and test them

Rationale and Relevance for management

- Would minimize the impact of FAD structures on the ecosystem
- Although there are ongoing projects on the use of biodegradable FADs, it might be necessary a large-scale test with high numbers of FADs tested in real fishing conditions.

Duration: 12 months

Approximate total budget: US$290,000

P8. Pilot project on the recovery of FADs

Objective

Identify FAD recovery areas and the strategy to recover them

Rationale and Relevance for management

Would provide a relatively simple management measure to minimize the impacts of FADs on the habitat.

Duration: 3 months

Approximate total budget: US$20,000