



THE PEW CHARITABLE TRUSTS



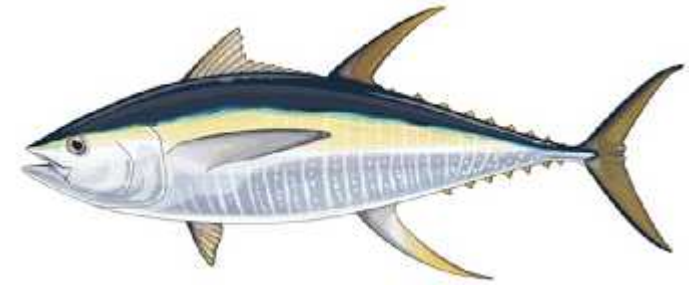
Summary of existing measures

Presentation to the WCPFC FAD Working Group

Pohnpei, FSM, Sept. 28-30

Dave Gershman

Agenda



- Introduction
- Comparison of measures across RFMOs
- WCPFC-specific measures
 - FAD management plans
 - FAD closure
- Recommendations

Measures to do what?

To enable FAD use within biological parameters

1. Collect data
2. Manage bycatch, ecosystem impacts
3. Mitigate juvenile tuna catch

Comparison of selected FAD-related measures

Measure	IATTC	ICCAT	IOTC	WCPFC
Management Plans	No	Yes	Yes	Yes
Reporting FAD activity, numbers	Yes	Yes	Yes	No
Support vessels	No	Yes	Yes	No
Marking, ID FADs	Yes (2017)	No	Pending	No
Non-entangling	No (should be deployed)	Yes (2017)	No (to be phased-in)	No
Biodegradable	No (should be promoted)	No (should be prioritized)	No (should be promoted)	No
Restrict numbers of FADs	No	Yes (monitored)	Yes (monitored)	No
Catch limits	No	Yes (TAC for YFT, BET)	Yes (TAC for YFT)	No
Time area closures	Yes	Yes	No	Yes

3 Take-Away Points

1. Different approaches reflecting different priorities across RFMOs
2. Although having the largest number of deployments, WCPFC has fewer FAD measures
3. No RFMO has a systemic approach to manage FADs

Comparison of selected FAD-related measures

Measure	IATTC	ICCAT	IOTC	WCPFC
Management Plans	No	Yes	Yes	Yes
Reporting FAD activity, numbers	Yes	Yes	Yes	No
Support vessels	No	Yes	Yes	No
Marking, ID FADs	Yes (2017)	No	Pending	No
Non-entangling	No (should be deployed)	Yes (2017)	No (to be phased-in)	No
Biodegradable	No (should be promoted)	No (should be prioritized)	No (should be promoted)	No
Restrict numbers of FADs	No	Yes (monitored)	Yes (monitored)	No
Catch limits	No	Yes (TAC for YFT, BET)	Yes (TAC for YFT)	No
Time area closures	Yes	No	No	Yes

FAD Management Plans

- Required by several iterations of the tropical tuna measure
- Para 37 requires submission, with strategies to limit capture of small BET and “at a minimum meet” suggested guidelines
- Guidelines specified in Attachment E

Updated Assessment

Criteria from Attachment E, CMM 2015-01	China	Chinese Taipei	Ecuador	El Salvador	EU	FSM	Indonesia
Year of issue	2013	2009	No plan on file	2012	2010	2009	2014
Scope							
Vessel-types	Green	Green	Red	Green	Green	Green	Green
FAD types	Green	Green	Red	Green	Green	Green	Green
Max FAD numbers permitted to be deployed	Green	Green	Red	Red	Red	Green	Green
Reporting procedures for deployment	Red	Green	Red	Red	Green	Green	Green
Catch reporting from FAD sets	Green	Green	Red	Green	Green	Red	Green
Incidental by-catch reduction and utilization policy	Green	Green	Red	Green	Green	Green	Red
Consideration of interaction with other gear types	Red	Red	Red	Red	Red	Red	Red
Statement or policy on "FAD ownership"	Red	Red	Red	Red	Red	Green	Red
Institutional arrangements for management of the FAD Management Plans							
Institutional responsibilities	Red	Green	Red	Green	Green	Green	Green
Application processes for FAD deployment approval	Red	Green	Red	Red	Red	Green	Green
Obligations of vessel owners and masters in respect of FAD deployment and use	Green	Red	Red	Green	Green	Green	Green
FAD replacement policy	Red	Red	Red	Red	Red	Green	Red
Reporting obligations	Green	Green	Red	Green	Green	Green	Green
Observer acceptance obligations	Green	Green	Red	Red	Red	Green	Green
Relationship to Catch Retention Plans	Red	Red	Red	Red	Red	Green	Green

Conclusion

1. No CCM's plan met minimum criteria
2. Plans range widely in format and detail
3. Older plans not updated, appear out of date
4. Not satisfactory as information gathering tool

FAD Closure

FAD Closures and Purse Seine Bigeye Catches



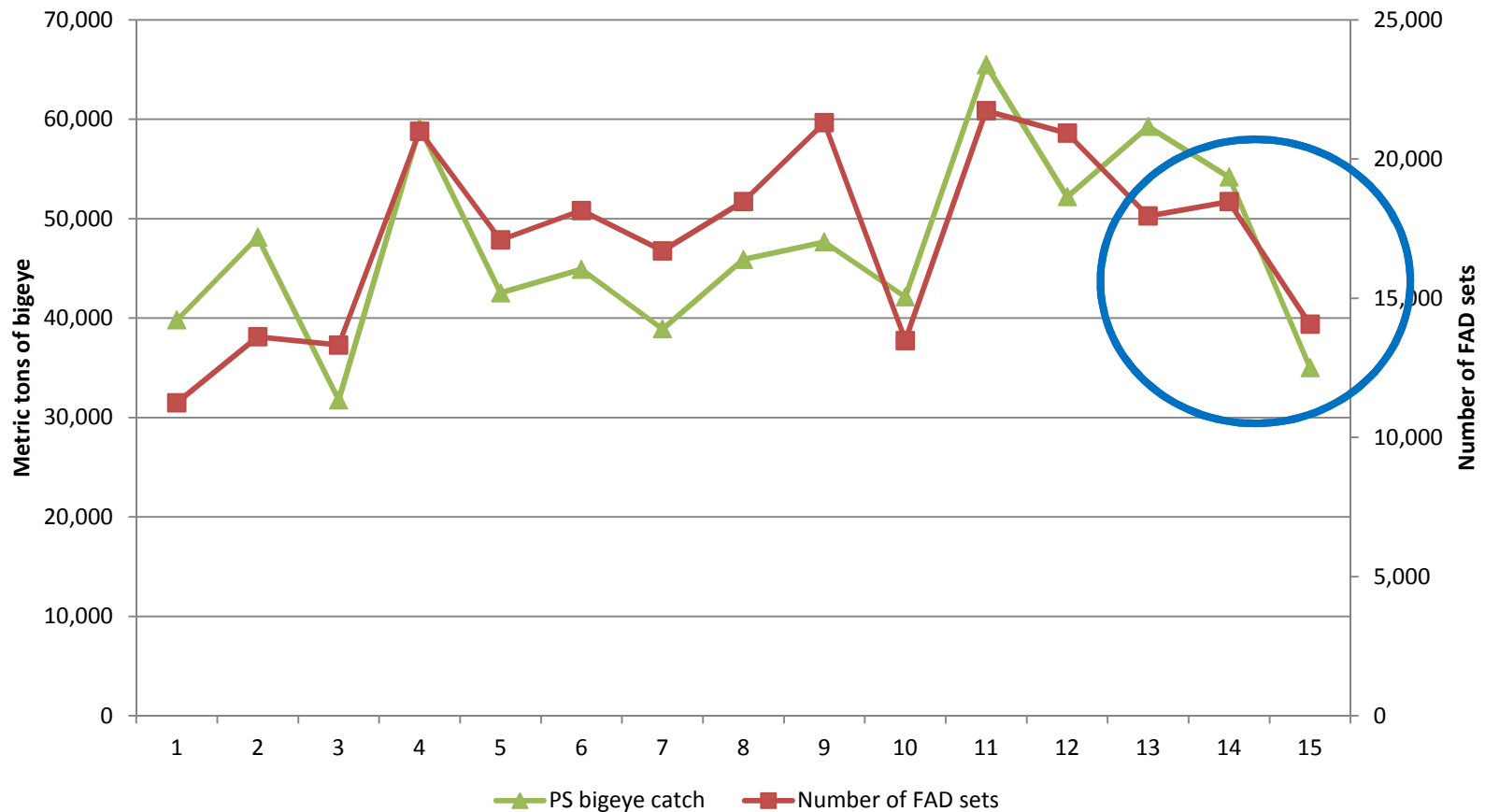
Options Studied

Option	BET Mitigation Result
Extending the FAD closure	X
Design changes to FADs	X
Operational changes to PS vessels	X
Species discrimination	X

Paper: IWG01-OP01

FAD Set Levels

Purse seine bigeye catch and number of FAD sets



Concluding Points

- No RFMO has a full system to manage FADs.
- Objective of FAD management should be to enable their use within safe biological parameters.
- Little to no acknowledged 'best practice' on how to do this.

A Comprehensive Approach

- Data collection and protocols to minimize ecosystem impacts, calibrated to the specifics of the fishery and responsive to changing conditions
- FAD tracking offers scientific data to be used in research
- Without more research, FAD set limits can manage impacts on bigeye at an aggregate level



THE PEW CHARITABLE TRUSTS

Thank you!

A report from THE PEW CHARITABLE TRUSTS | Nov 2018



Estimating The Use of FADs Around the World

An updated analysis of the number of fish aggregating devices deployed in the ocean