Project FishSmart: Harnessing the Knowledge and Insights of Fishery Stakeholders

Scomberomorus cavalla

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T.F.Ihde (left) and Charter Captain John Adair

INTRODUCTION

Dissatisfaction among stakeholders with current approaches to the management of marine recreational fisheries is common. We describe a new collaborative process, inclusive of all stakeholders, to address these concerns. The FishSmart process uses a series of facilitated workshops to identify objectives for the fishery, propose both voluntary and regulatory changes ("options") to the behavior of anglers to meet these objectives, and uses a simulation model to inform stakeholders in developing consensus recommendations as to which options are most likely to achieve the identified objectives.

Project FishSmart is a collaboration of a broad range of fishery stakeholders. Participants bring a wide variety of expertise, and include anglers, angling organizations, environmental NGO's, state and federal managers and fishery scientists, lobbyists, publishers, and academics.

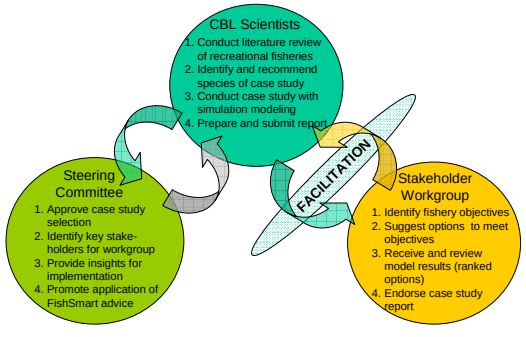
The FishSmart Process

Initial Planning: steering committee formed:
- ❑ Leaders with national perspective
- ❑ Influential in & among stakeholder groups
- ❑ Have input into the management process

Research team & steering committee:
- ❑ Identify fishery to apply process to
- ❑ Identify stakeholders for workgroup

Stakeholder workgroup meeting process:
- ❑ Identify fishery objectives (shared vision)
- ❑ Identify options
- ❑ Build simulation model with stakeholders
- ❑ Rank preferred options

Application of findings:
- ❑ Draft consensus recommendations to share with management council
- ❑ Educational & promotional efforts to inform anglers of best practice advice

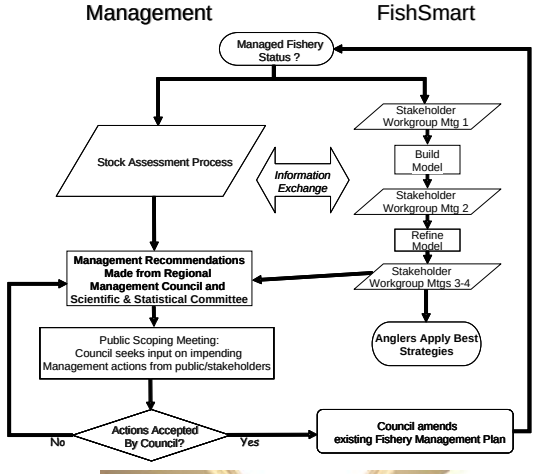


Once the target fishery was selected, a workgroup of key stakeholders was formed. Stakeholders represented include:

- Charter captains
- Commercial fishermen
- Private anglers
- Environmental NGOs
- State Managers
- State Biologists
- Tackle shop owners
- Tournament anglers
- Tournament organizers

KING MACKEREL CASE STUDY

Following an extensive review, we decided to apply the FishSmart process to the recreational fishery for the Atlantic migratory group of the king mackerel (*Scomberomorus cavalla*). FishSmart is a parallel process, complementary to the management process:



Workshop Progression

Meeting 1
- Introductions
- Determine characteristics of "ideal" fishery (objectives)
- Determine strategies to attain objectives

Meeting 2
- Refine stakeholder understanding of and preferences for modeling:
  - assumptions
  - evaluation options for simulation
  - performance measures (ranking options)
- Determine additional critical uncertainties for research team to investigate

Meetings 3-4
- Evaluate model results against agreed-on performance measures
- Further refine stakeholder-preferred options
- Summarize ranked options to report to Management Council

"Anglers apply best strategies"
Involves the promotion of the results by both the national steering committee & the stakeholder workgroup members

PROGRESSION of WORKSHOPS & FIT with the MANAGEMENT PROCESS

The progression and structure of the stakeholder workshops is largely dependent on the species chosen for study. Species with more conflict between stakeholder groups or more contentious management issues than the Atlantic migratory group of king mackerel would be expected to require more meetings and slower progress than shown here. The four meetings for stakeholders of the Atlantic king mackerel fishery spanned nine months and coincided with the stock assessment of king mackerel – the Southeast Data Assessment And Review (SEDAR) 16.

OUTCOMES OF THE WORKGROUP PROCESS

Direct:
- Positive working relationships between stakeholder groups formed
  - New understanding of other stakeholders' opinions & knowledge
  - Collaborations developed
- Tournament data gathered & scale of tournament harvest quantified for the first time
- Priority research needs/ data gaps identified by stakeholders:
  - Maturity information specific to the Atlantic stock
  - Stock information on forage species

Broad:
- Stakeholders empowered:
  - To improve scientific models with their knowledge of the fishery
  - To develop scientifically-based management advice
  - To voluntarily apply scientifically-informed workgroup findings
  - To collaborate with other stakeholders to improve the fishery
  - To participate in management
- Process allows research needs to be prioritized; simulation gives insight for best "bang for the buck"

CHALLENGES

- Representation
  - Critical to get the right members at the table who possess:
    - ❑ Knowledge of the fishery
    - ❑ Influence within and among member stakeholder groups
    - ❑ Direct input to the management process
  - Balanced representation from all stakeholder groups
  - Critical to keep the right members at the table for all meetings. This is especially difficult for members of the for-hire, commercial or business sectors (like our tackle shop owner), who lose income when attending meetings
  - If FishSmart process proactively applied to a population *not* yet in an overfished condition, process is faster but it is more difficult to maintain consistent stakeholder involvement
- Communication
  - Conveying the necessary understanding of simulation to a wide variety of stakeholders, especially what can/cannot be modeled
  - Setting performance measures (to objectively rank options); considering undesirable consequences
  - Maintaining effective communication – facilitation of meetings is critical

CONCLUSIONS

The FishSmart process is an important and effective way to incorporate stakeholder knowledge of the fishery and to empower stakeholders as partners in the management of the fisheries on which they depend. FishSmart provides managers with scientifically-informed stakeholder preferences for management, likely alleviating the dissatisfaction with the current system. Were the FishSmart process incorporated into the management system, we anticipate the challenge of maintaining consistent attendance by all members would be removed, and a proactive and positive approach to management that engages all stakeholders could potentially be made routine.

Acknowledgements: This project was supported by the Gordon and Betty Moore Foundation, Chesapeake Biological Laboratory, and the American Sportfishing Association. We especially thank the workgroup participants and steering committee members for their invaluable contributions. We also thank David Loewensteiner and Tina Stockton (CBL) who provided technical assistance and logistical support for stakeholder meetings.