

End-To-End Review of New England Groundfish Stock Assessments

Monitoring Recommendations

Massachusetts Marine Fisheries Institute

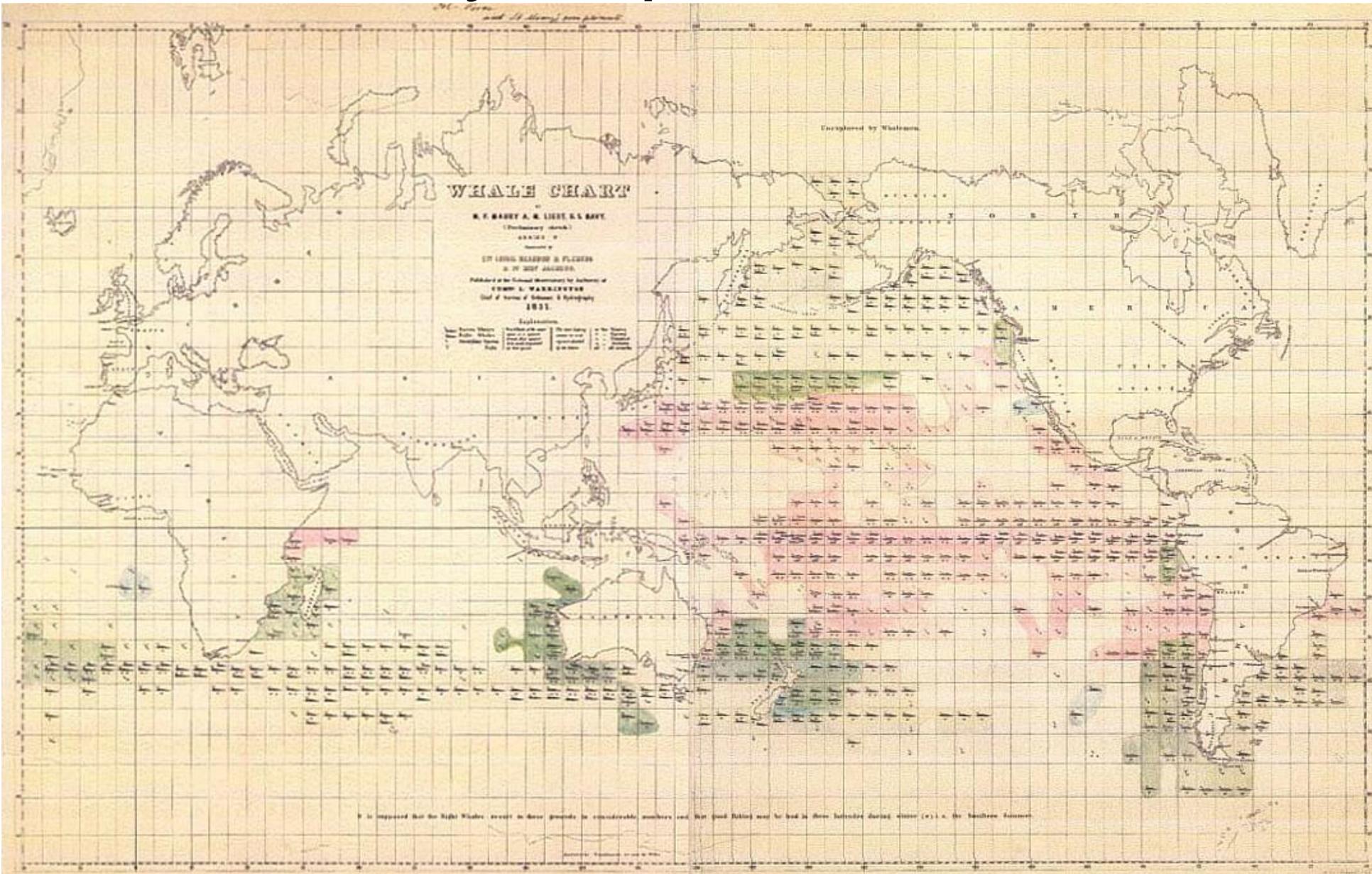
Promoting sustainable
fisheries through
education and research

Steve Cadrin

MFI Workshop, February 24-26 2014

New Bedford, MA

Fishery-Dependent Data



End-To-End Review

- MFI hosted an integrated series of technical workshops intended to recommend improvements to groundfish science for supporting fisheries management.
- The end-to-end review was designed to be more comprehensive than routine stock assessment reviews, with greater consideration of how data collection programs support stock assessment on the ‘front end’ and how stock assessments support the needs of fishery management on the ‘back end.’



- The workshops were funded by the MFI, MA Div. of Marine Fisheries & the SMAST Dean's office.



End-To-End Review Workshops

- A scoping meeting was held to identify current challenges to implementing a more effective science and management system, and topics were prioritized based on importance and feasibility of progress:
 - **Fishery Monitoring and Survey Selectivity;**
 - Incorporating Environmental Change in Assessments and Management; and
 - Overfishing Reference Points and Uncertainty Buffers.
- The workshops were coordinated so that they form an integrated review.
- The expected outcome was a series of recommendations to improve the scientific basis of management for groundfish fisheries.

Fishery Monitoring and Survey Selectivity

- Initially, the scope of the workshop included technical review of sampling designs and the needs of science and fishery management.
 - Those issues were addressed by the NMFS review of data collection programs (August 2013)
 - Revisions to data collection program are being considered
- The revised scope was to complement that review with input from the fishing industry on current protocols and uses of monitoring data by the fishing industry and recommending program revisions to better meet the needs of science, management and industry.

NEFSC Data Collection Program Review

www.nefsc.noaa.gov/program_review/agenda2013.html

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NEFSC Stock Assessment Data Collection Program Review Agenda, Documents, and Presentations

Papers will be added and linked as they become available.

- [Download PDF version of agenda](#)
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Date	Time	Topic and Related Documents	Presenter/Lead (click name to launch presentation)	TOR
Tuesday August 6	8:30	Review and Schedule, Day 2	William Karp	
	II. Fishery Dependent			
	8:45	Overview	Paul Rago	5,6
	9:00	Vessel and Dealer Data <ul style="list-style-type: none">• Dealer & vessel reporting documents	James St. Cyr/ Anthony Conigliari	5,6
	10:45	Break		
	11:00	Port Sampling <ul style="list-style-type: none">• Dockside biological sampling documents• 2013 NEFSC biosampling requests (Excel file)	Gregory Power/Susan Wigley	5,6
	11:30	Marine Recreational Information Program (MRIP) <ul style="list-style-type: none">• MRIP Background Documents	Gary Shepherd	5,6
	11:45	Lunch		

Short-Term Recommendations

- Communication of the objectives, general design, protocols and uses of each data collection program as well as how they are linked is needed for all data users to understand the current system and how it can be accessed and improved.
- More timely availability of information is needed for management of all fisheries (e.g., sector management).

Short-Term Recommendations

- Data needs to be more accessible to all users.
 - Access to non-confidential information should be easy for anyone.
 - Data sharing exceptions should be granted for sector management, bycatch avoidance or catch optimization.
 - 3rd party organizations should be considered for quick analysis of confidential data.
 - Data applications that will improve collaboration with the fishing industry, including increased benefits of participation in monitoring programs, should be explored.

Short-Term Recommendations

- The At-Sea Monitoring Program should be designed to primarily meet the additional needs of sector monitoring.
 - Secondly, at-sea monitoring should be compatible with the Northeast Fisheries Observer Program.
 - Both at-sea monitoring and the Northeast Fisheries Observer Program should be cost-effective.
- The objectives, design and protocols of at-sea monitoring should continue to have input from the fishing industry to support sector management and to meet at-sea monitoring standards.

Short-Term Recommendations

- More biological sampling is needed (including maturity, age) in some recreational fisheries, particularly those with access to groundfish closed areas.
- Collection of maturity data from commercial fisheries (e.g., observers and study fleets) should be evaluated.
- A more precise approach to determining location of catch from unobserved trips is needed.

Long-Term Recommendations

- The current objectives and system requirements need to be defined and the system needs to be revised to meet those needs.
- A more integrated system of collection programs would be more efficient.
- Simplification, stream-lining and cost-effectiveness should be considered.

Long-Term Recommendations

- Streamlined electronic reporting with efficient data entry and processing would be an improvement over logbooks.
 - Challenges with acceptance and training associated with new and emerging technologies will need to be confronted.
 - Acceptance of new technologies and higher quality data reporting need to be incentivized (e.g., additional allocations, similar to the Scottish Cod Conservation Program, or removing discards from allocations).

Long-Term Recommendations

- Contracting software development to private industry should be considered as an option.
- Lessons from the entire groundfish sector monitoring system should be considered in the design of monitoring programs for all northeast fisheries.

Conclusions

- The current fishery monitoring system is designed to meet many objectives,
- ... and the current system was developed based on a sequence of changing needs,
- ... but the system has not been evaluated for its performance and cost efficiency in meeting current and near-future needs.
- Improvements are needed to support the increased needs of timely fishery monitoring and more effective fishery management in general (e.g., sector management).