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Data for Assessment & Overview of 2013 MSRA Data Review at SEFSC

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July 8, 2014



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Data for Assessment & Overview of 2013 Program Review

- Quality of available data for assessments
- Overview for the management groups
- Some groups with large numbers of stocks
- Geographic and fishery complexity

- Recommendations from 2013 Review
 - progress



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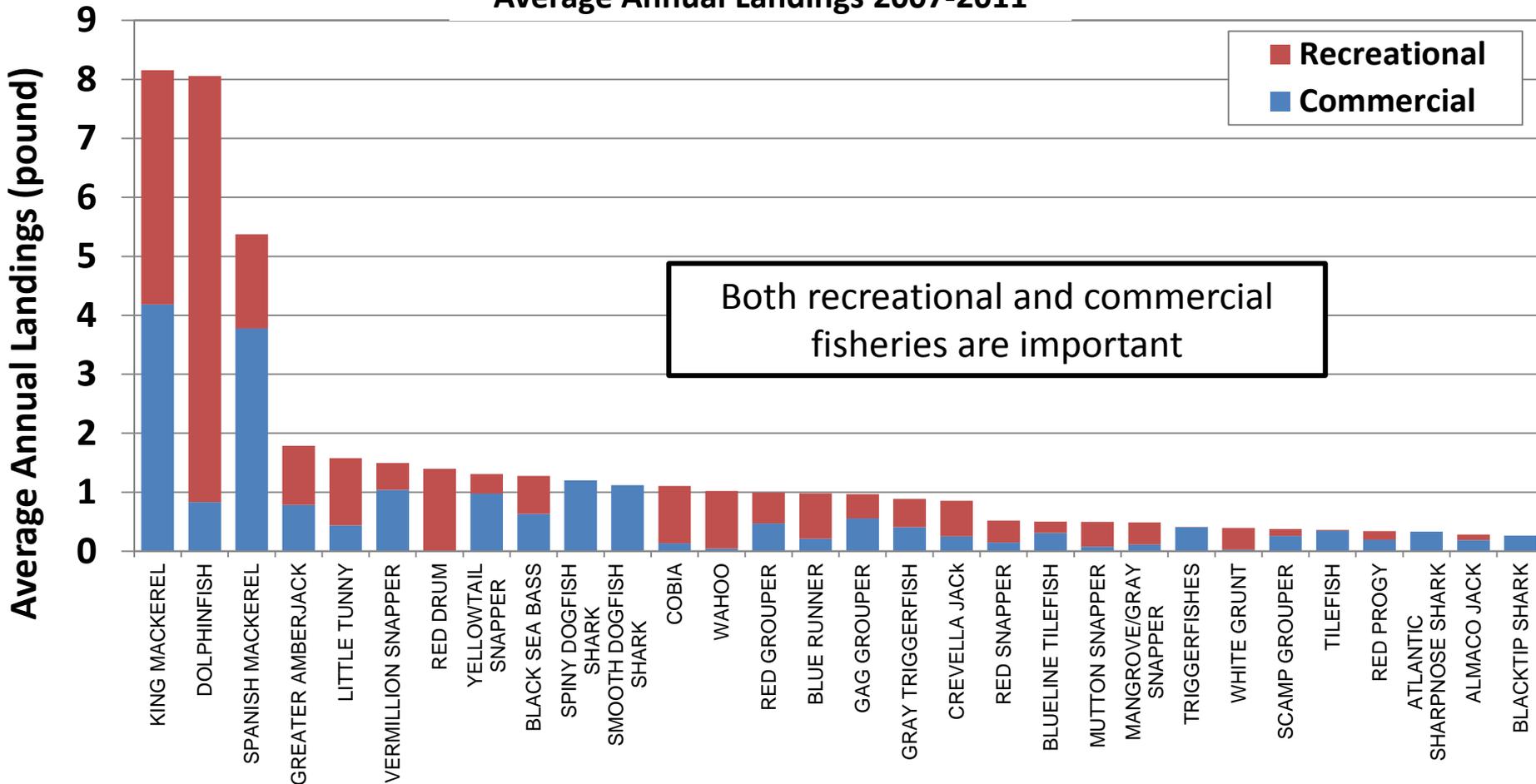
Data Available for Assessment for Managed Species

- Recreational fisheries data important for SEFSC assessments
- Complex geographic structure
- Many managed stocks
 - few with ample data
 - many with very limited data

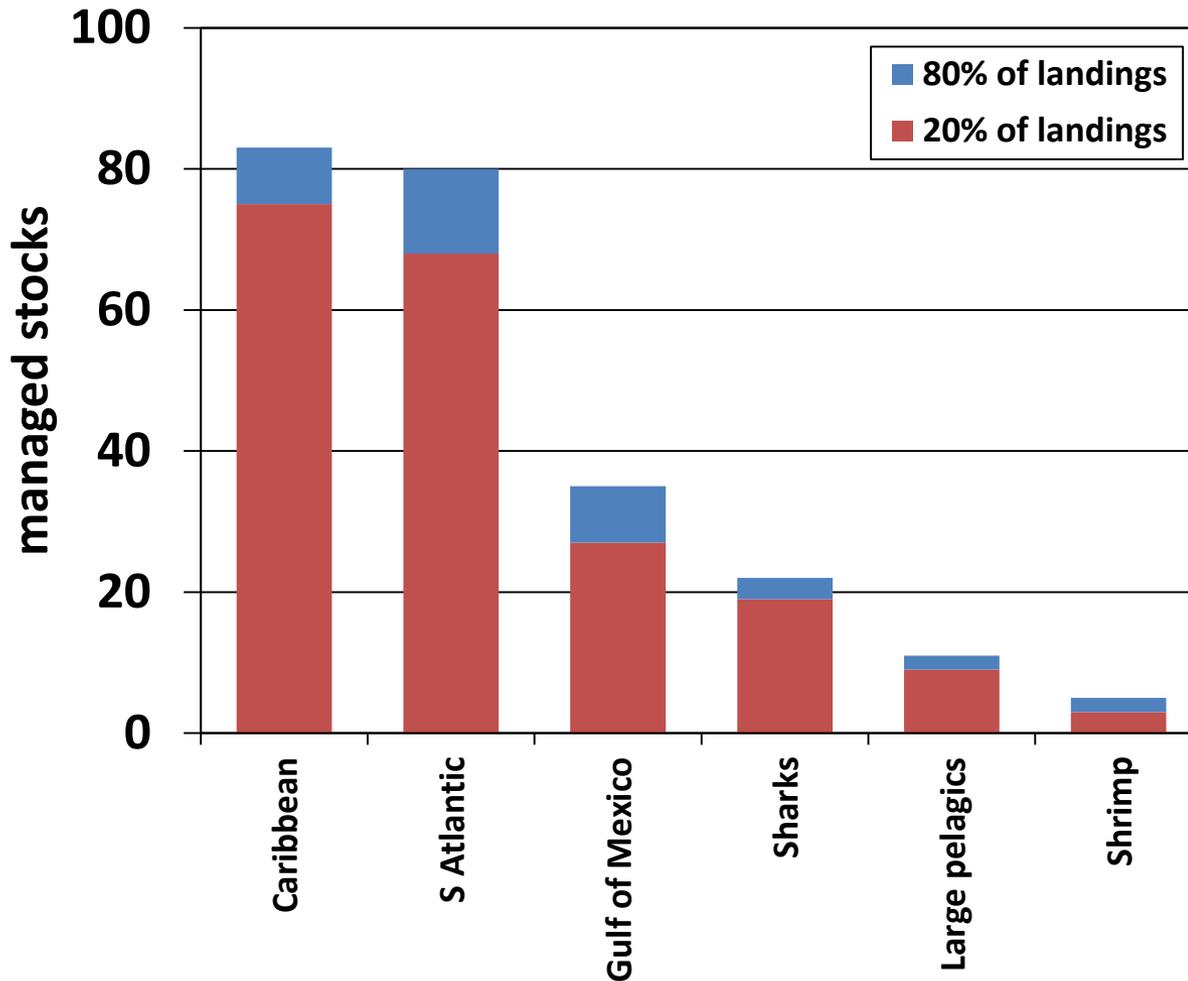
Managed Stocks

South Atlantic Fisheries

Average Annual Landings 2007-2011



Managed Stocks per Management Group



A small number of species dominate the landings in each management group.

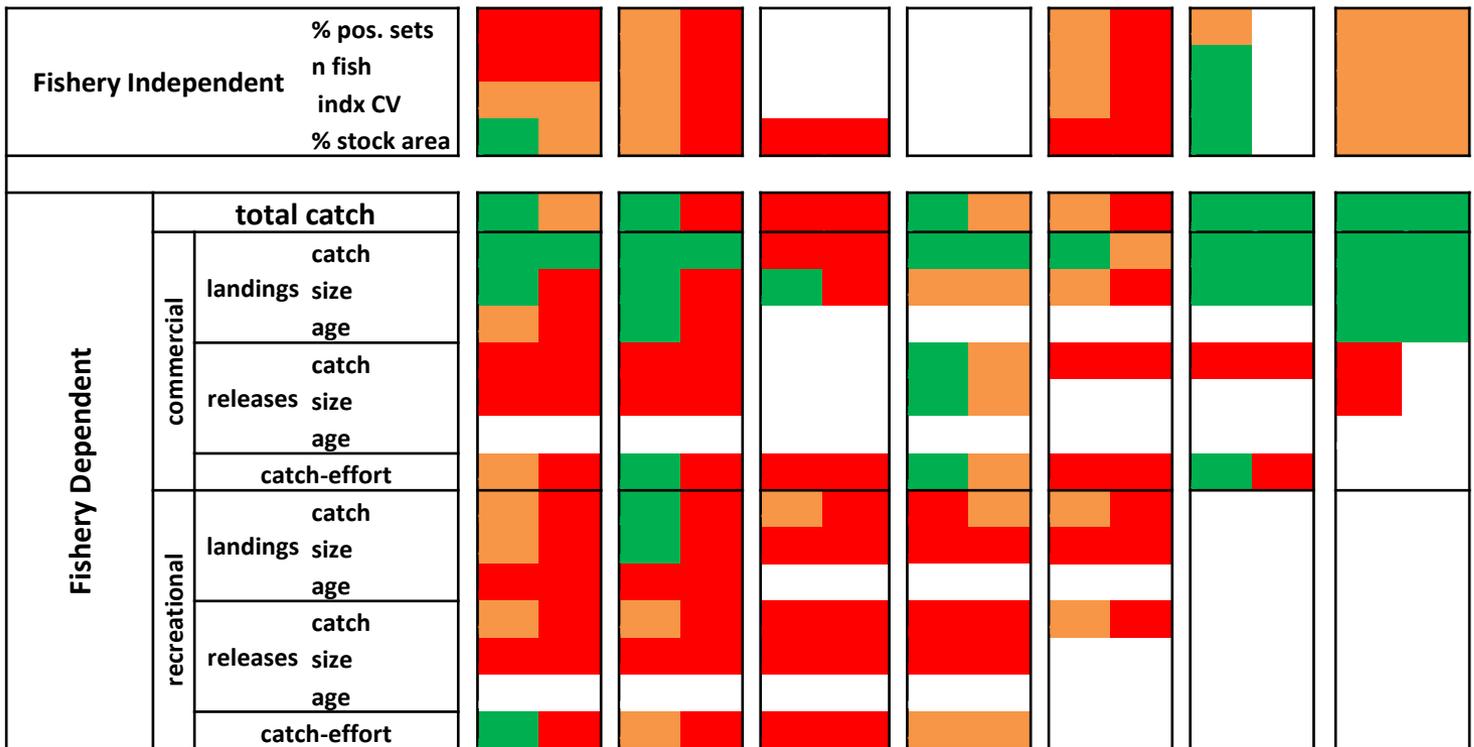
Expect better data for the dominant species because they are more frequently encountered.

Data for Assessments

- Fishery independent
 - Indices of abundance
 - Size, age
- Fishery Dependent
 - Recreational, Commercial
 - Landings, discards
 - Size, age
 - Catch-effort
 - Indices of abundance
 - Effort trends

Quality/Quantity of Data for Assessment

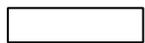
	South Atlantic	Gulf of Mexico	Caribbean	HMS pelagic	HMS sharks	Shrimp	Menhaden
	80% 20%	80% 20%	80% 20%	80% 20%	80% 20%	Gulf S Atl	Gulf S Atl
n stocks	12 68	8 27	8 75	2 9	3 19	4 4	1 1



 Good

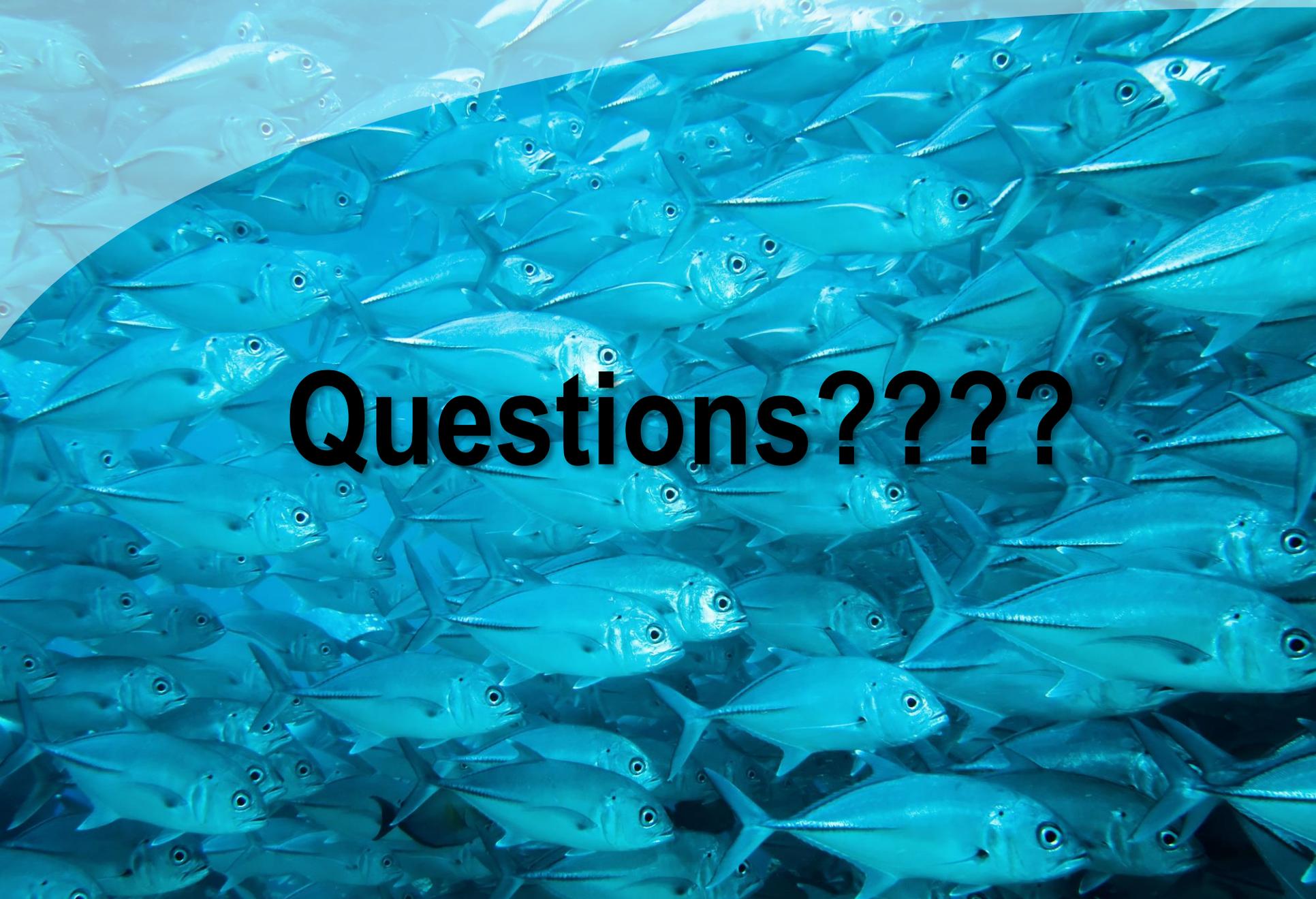
 Fair

 Poor

 no data

Data for Assessments

- Data needed from many species in many areas – diverse sampling environments
- Good-fair data for primary species
 - commercial fisheries – landings, size age
 - recreational catches (landings and releases)
- Fair-poor data for
 - recreational size and age
 - commercial releases
 - secondary species
 - Caribbean
- No ages: Caribbean, sharks and large pelagics



Questions????





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Results of MSRA Data Review

- Fisheries-Dependent Data Collection Programs
- Fisheries-Independent Data Collection Programs
- Observer Programs
- Biological Sampling
- Caribbean Data Collection Programs
- Information and Data Management
- Cross-Cutting Issues

Fisheries-Dependent Data Program Recommendations

- Evaluate electronic data technology
 - E-reporting by dealers, headboats and shrimp boats
 - E-monitoring of shrimp bycatch of smalltooth sawfish
 - Evaluating possible designs and use of electronic logbooks by HMS and SE vessels
 - Working with councils on planning for a charter boat electronic logbook
- Streamline biological data flow
 - Creating additional links to biological data systems to further automate data flow
 - Initiating (TIP) / enhancing (SHRS) automation of data collection
- Web access to fisheries-dependent data
 - Developing portal to access landings data with additional datasets planned for future development



Fisheries-Dependent Data Program Recommendations

- Evaluate changes in catchability over time
- Characterize bias in logbook discard information
 - Comparisons during SEDARs for 4 primary Gulf stocks
 - SEFSC will participate in the upcoming SAFMC shrimp bycatch estimation workshop
- Standardize TIP methodologies
 - TIP methods have been standardized between samplers and data collection partners



Fisheries-Dependent Data Program Recommendations

- Increase recreational catch sampling
 - MRIP increased dockside sampling in 2014
- Improve MRIP and Texas recreational information
- Develop reliable estimates of recreational discards
 - Increased at-sea sampling in GOM for discards by Southeast Region Headboat Survey staff
 - Existing levels of at-sea sampling on for-hire vessels by FLFWC



Fisheries-Independent Data Program Recommendations

- Evaluate allocation of resources
 - A comparison of plankton grid versus random sampling is being evaluated
- Evaluate contribution of each survey for providing abundance indices
- Simulate sampling intensity to improve CVs



Fisheries-Independent Data Program Recommendations

- Evaluate the use of acoustics and enhance habitat mapping
 - Acoustic data are collected using ME70 and EK60 on NOAA ships
 - Several projects are underway to archive, process and develop habitat mapping products
- Integrate multiple technologies
 - Testing of gliders and AUVs are being conducted for augmentation of current sampling methods



Observer Program Recommendations

- Expand observer coverage
 - Maintained existing observer coverage in all programs
- Evaluate observer program coverage
- Evaluate impact of uncertainty in estimated bycatch on stock assessments
 - SEFSC will participate in the upcoming SAFMC shrimp bycatch estimation workshop



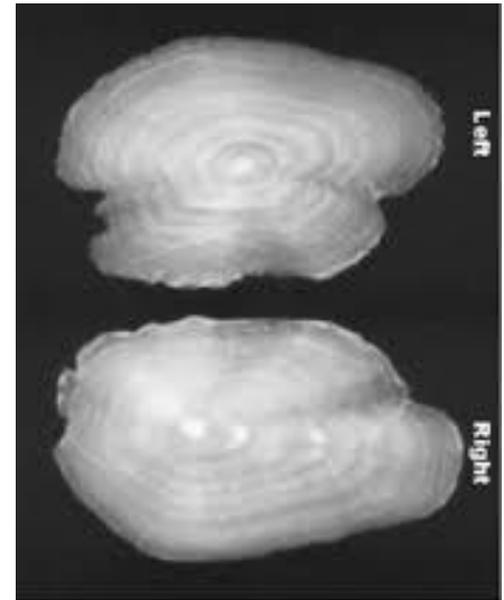
Biological Information Recommendations

- Coordinate biological data collection with partners
 - Ongoing through participation with ACCSP and GSMFC
 - Workshop to be conducted on South Atlantic data collection 2015/2016
- Increase sampling and analysis for food, habitat, growth, and reproduction information
 - Stomach content information is being collected and processed on SEAMAP groundfish trawl surveys
 - Reproduction information is collected on resource surveys
- Increase frequency and spatial range for age information
 - Increased age sampling of discards in the GOM by observer programs as funding permits



Biological Information Recommendations

- Emphasize age validation and aging workshops
 - Routinely carried out in the Gulf of Mexico and recently expanded in the South Atlantic
 - Age validation study conducted on gray triggerfish
- Encourage micro-constituent analysis
 - Panama City carried out micro-constituent analysis for red snapper and bluefin tuna



Caribbean Data Collection Recommendations

- Develop strategic data sampling plan
 - Funding pilot catch monitoring program
 - The FY15 President's Budget initiative includes an initiative to improve data collection in insular areas
- Assess current fishery-independent sampling programs
- Evaluate the feasibility of a SEFSC Caribbean laboratory
- Evaluate increasing long-term staffing to support Caribbean data collection
 - Invested in short term increases in resources/equipment needed to build the capacity in the region
- Improve collection of biological information
 - Funding sampling design pilot studies
 - Funding equipment needed to expand biological sampling processing



Caribbean Data Collection Recommendations

- Improve Caribbean dockside monitoring and catch composition information
 - Territorial initiative enhanced sampling in PR 2013/14
 - Will develop effort and catch sampling methodology and support dockside data collection
- Evaluate augmenting stock assessments with reef-visual, remote sensing, and trap captures
 - 2012-2013 reef-visual survey in USVI
 - 2014 reef-visual survey in PR
- Increase recreational data collection
 - Pilot studies underway in USVI
 - New MRIP methods to be applied in PR in 2015



Information Management Recommendations

- Enhance data storage and backup capabilities
 - Improvements to IT infrastructure are being made to enhance data storage and backup capabilities
- Improve cooperation in information technology with state partners
 - Improvements in IT for fisheries-independent data management are being shared with state and university partners
 - Worked with ACCSP and GSMFC to improve cooperation and data sharing
- Improve information technology infrastructure and personnel
 - Analysis of infrastructure carried out in 2013 by outside company
- Establish Oracle as the SEFSC-wide database standard



Cross-Cutting Recommendations

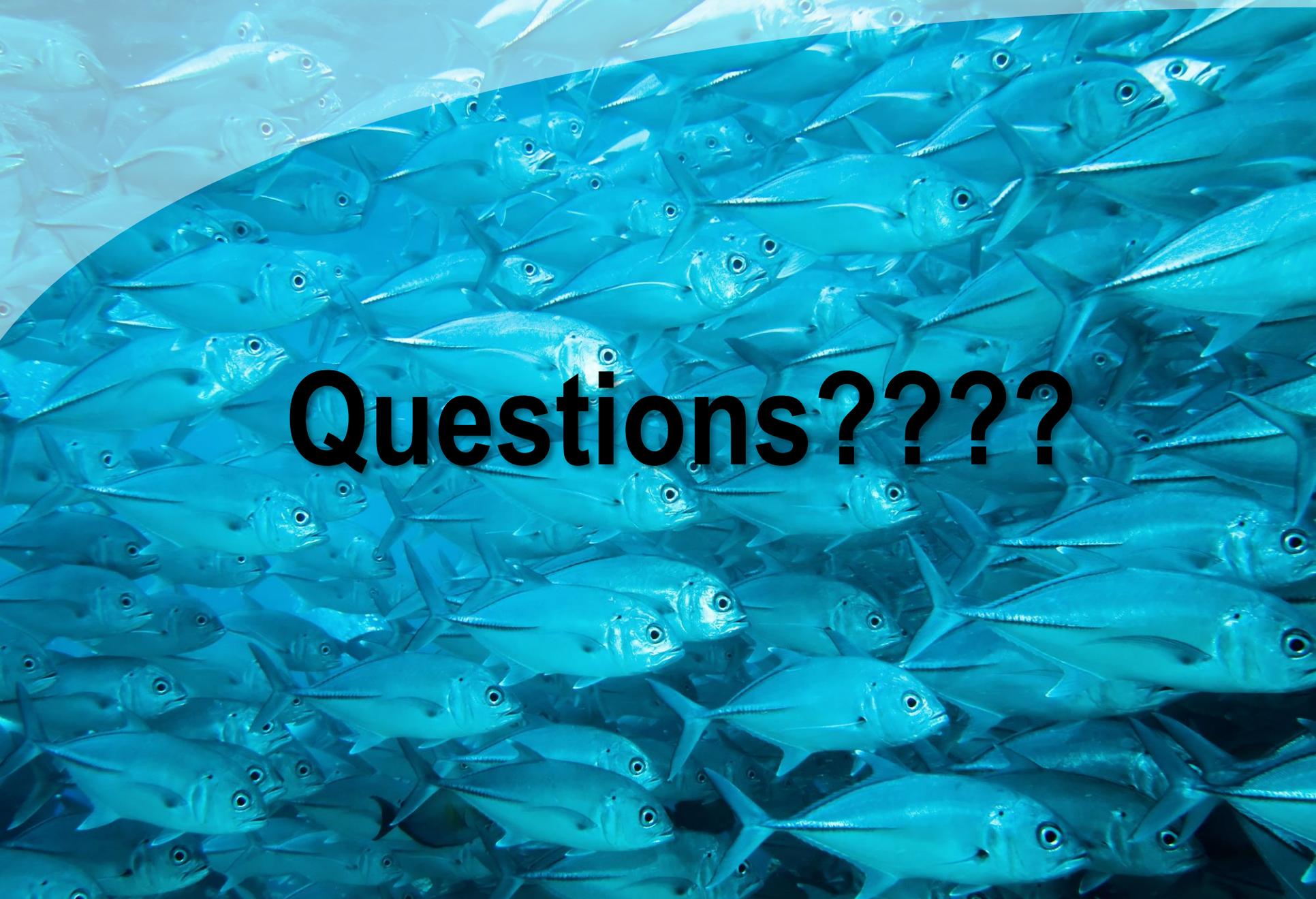
- Conduct sensitivity analyses of stock assessments to data streams
 - Study to examine sensitivity of stock assessment outcomes to data inputs has been funded
- Improve regional e-data systems and information technology
 - Electronic effort recorders have been developed and implemented
 - Electronic reports are required for federal dealers and headboats
 - Electronic logbooks are under development for reef fish and HMS vessels
 - Electronic data collection implemented on fishery independent surveys, being enhanced / developed for fishery dependent sampling
- Increase resources and the number of permanent staff



Cross-Cutting Recommendations

- Evaluate spatial aspects
- Evaluate information flow and identify information bottlenecks
 - Data monitoring systems being modernized, integrated, and streamlined
 - Developing portals to deliver data to assessors and other users





Questions????

