

Spot and Croaker Traffic Light Analysis & Draft Management Framework

South Atlantic State/Federal Management
Board

February 6, 2014





Purpose

- Concern over the current annual trigger exercises for Spot and Atlantic Croaker
- Consideration of Traffic Light Analysis by Atlantic Croaker TC & Spot PRT
- Follow up from August 2013 Board Meeting



Traffic Light Analysis Advantages

- Analysis model fits well with both limited & extensive data sets for setting reference points.
- Color scheme is easy to explain to both fisheries professionals & the non-scientific community.
- Setting reference time frames over multiple generations can cover periods of population fluctuations taking into account long term increases & decreases.



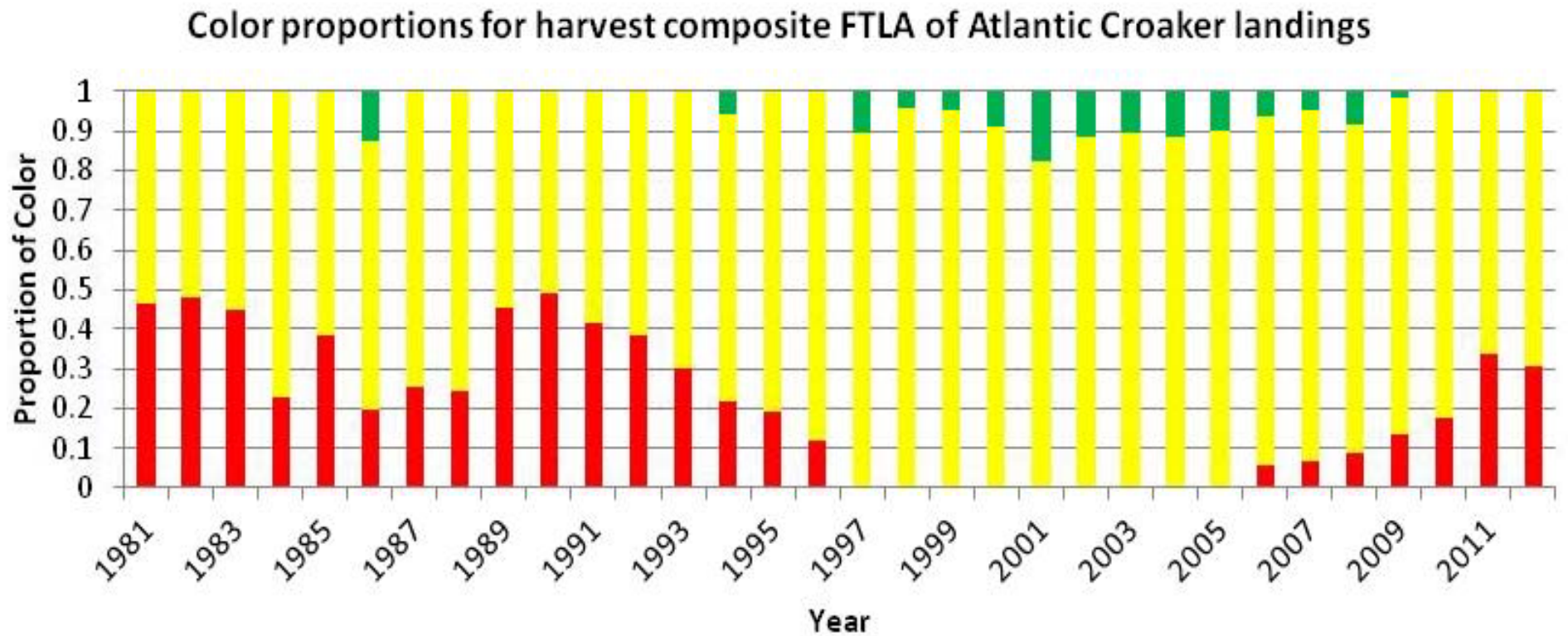
Traffic Light Analysis (TLA) Update

Atlantic Croaker

- Commercial & recreational harvest TLA show earlier indications of declining harvest rates versus the 70% trigger.
- TLA show signs of decline in landings 3-4 years before the 70% trigger.
- TLA using FI indices for both adults & juveniles were more variable than harvest trends, but overall patterns of declines was still more sensitive than the 70% trigger

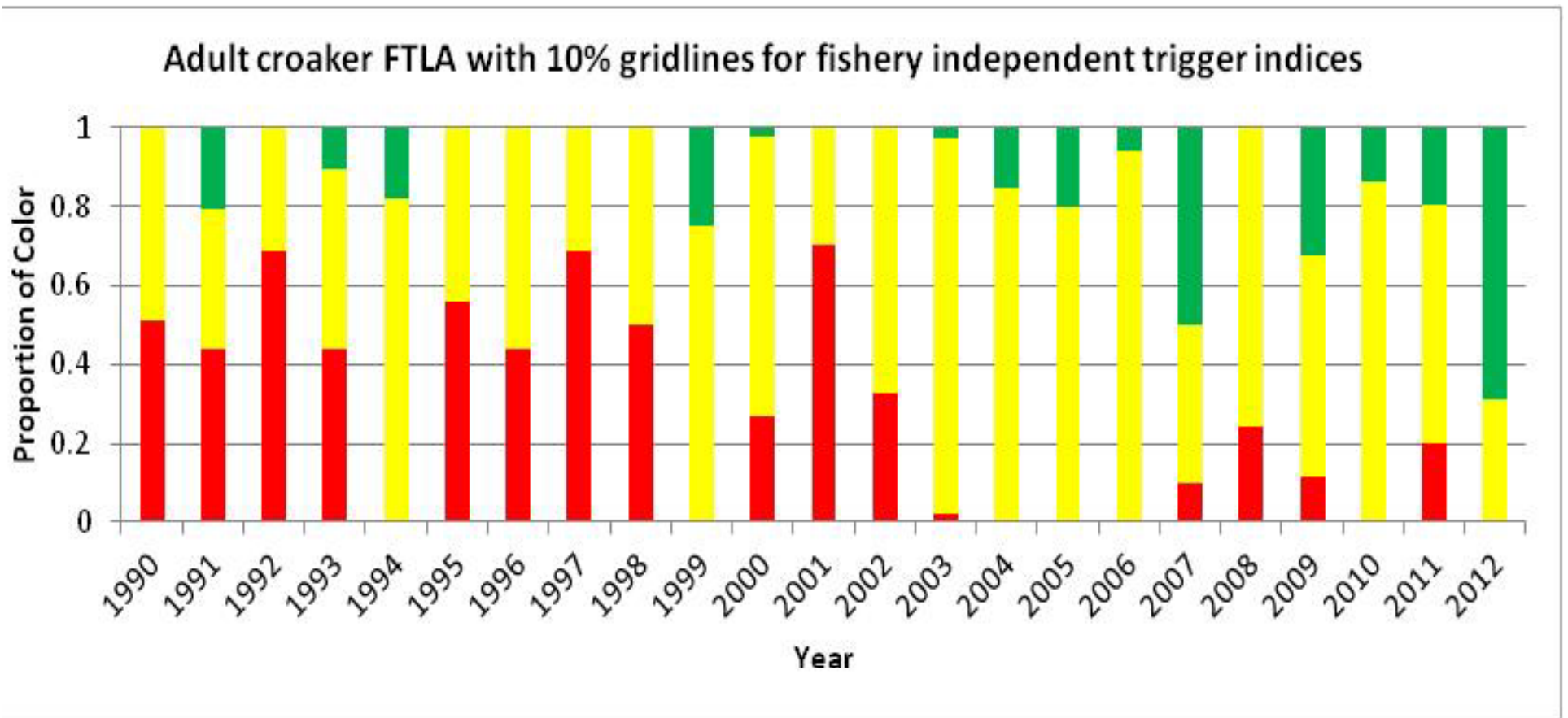
Croaker Harvest Composite Index

Combined Recreational & Commercial Landings



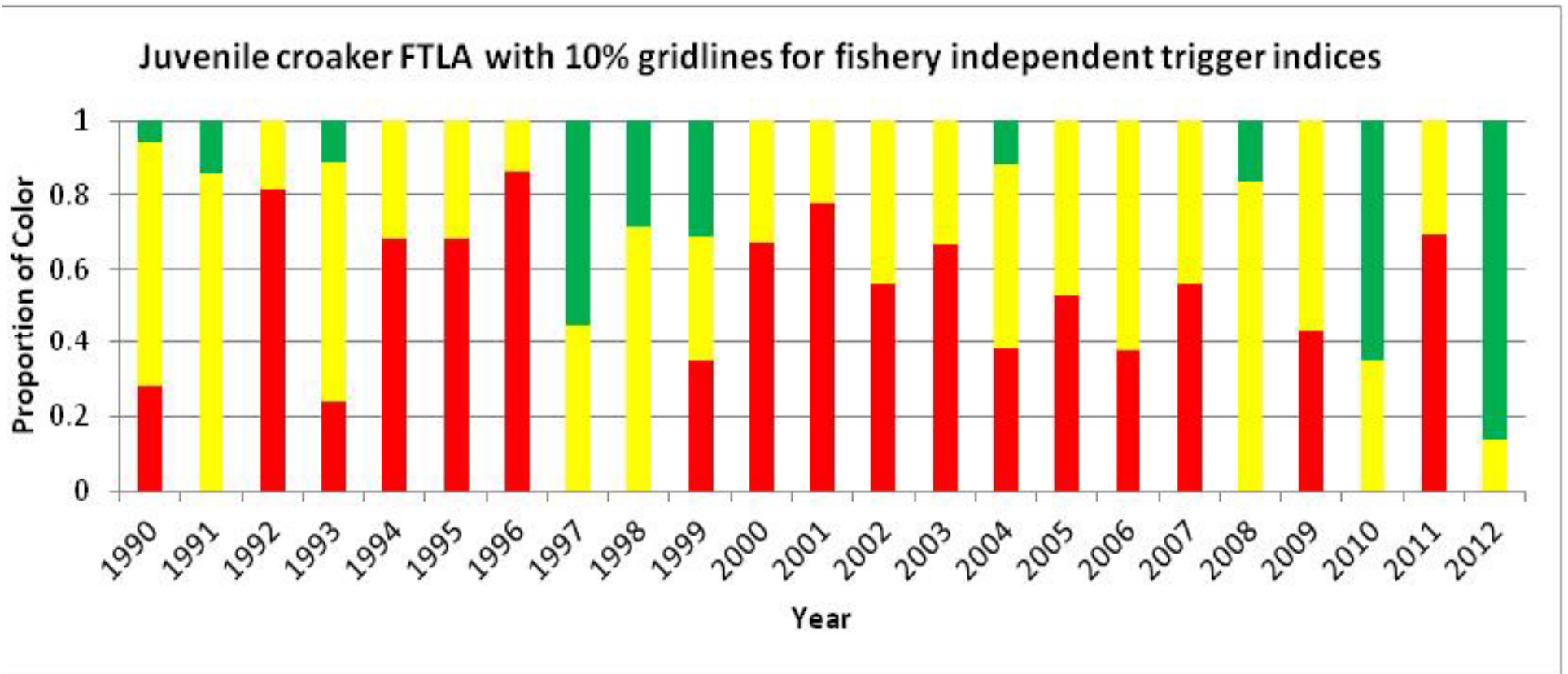
Croaker Fishery Independent Composite Index

Adult Index



Croaker Fishery Independent Composite Index

Juvenile Index

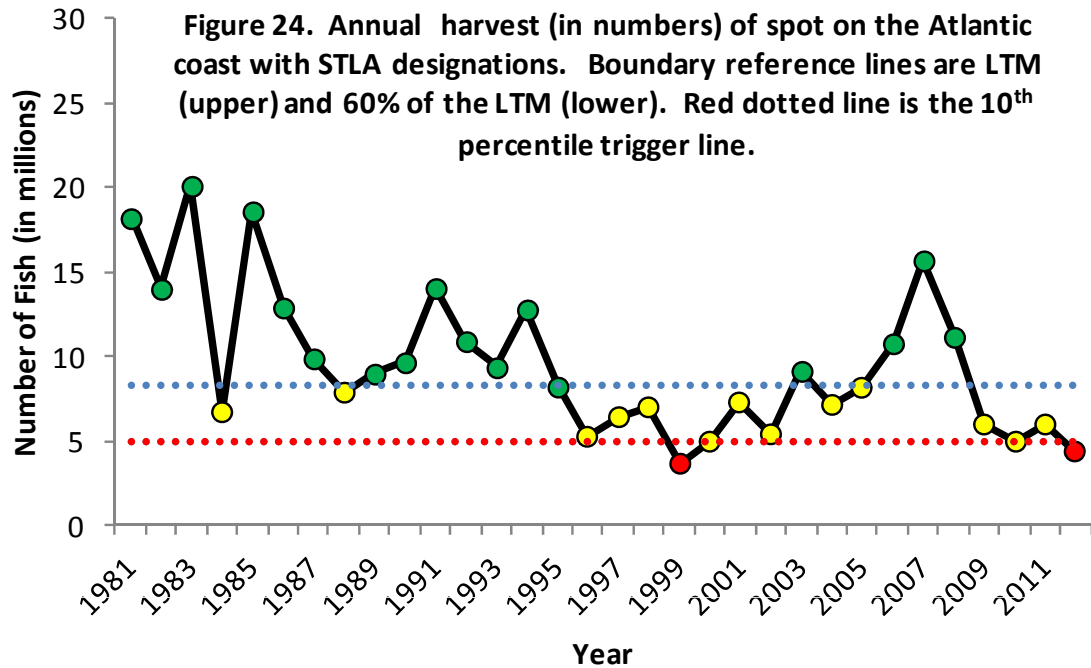




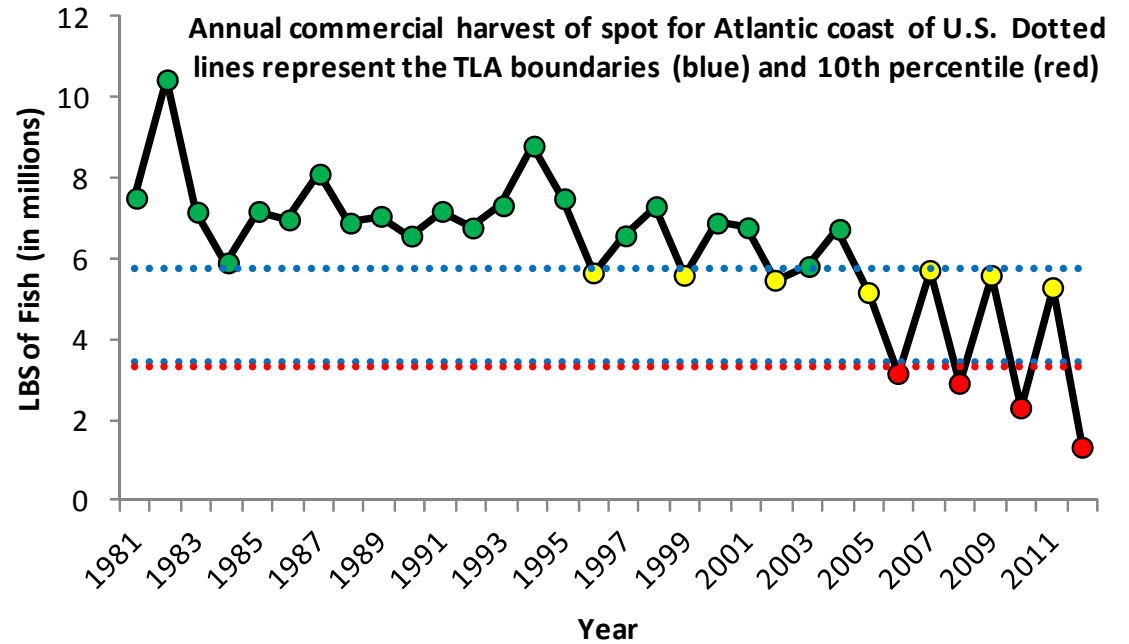
Traffic Light Analysis (TLA) Update

Spot

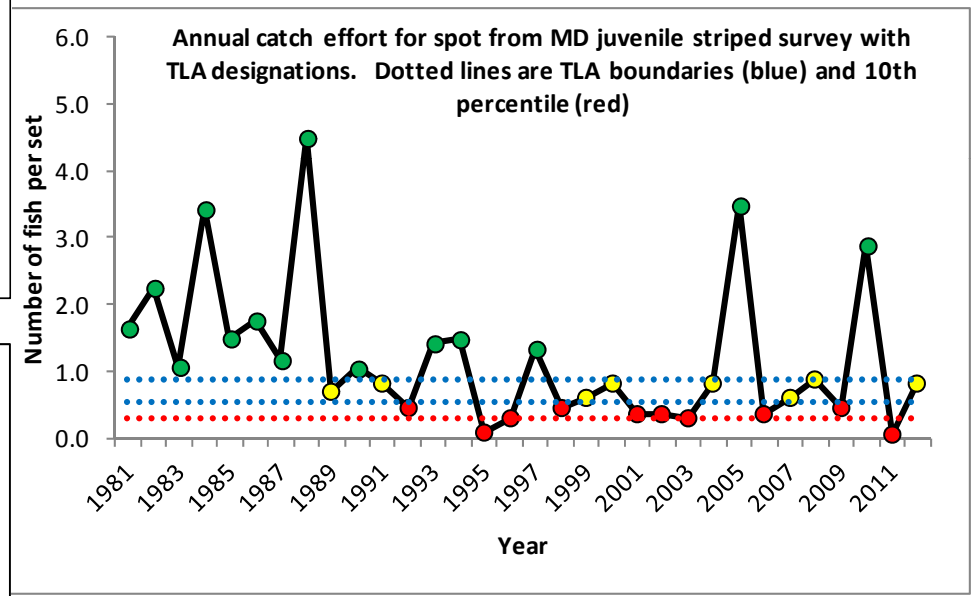
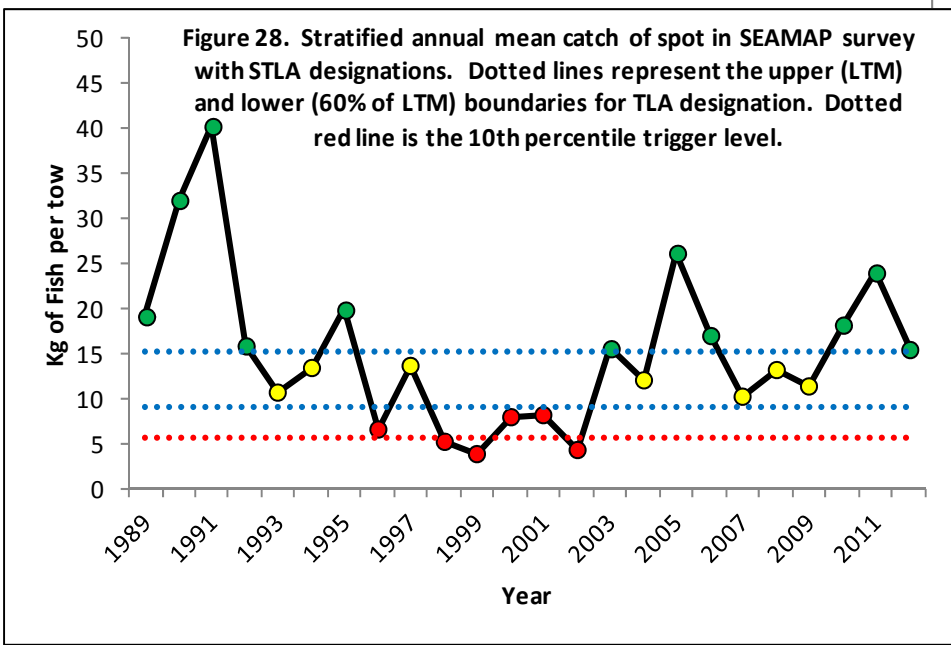
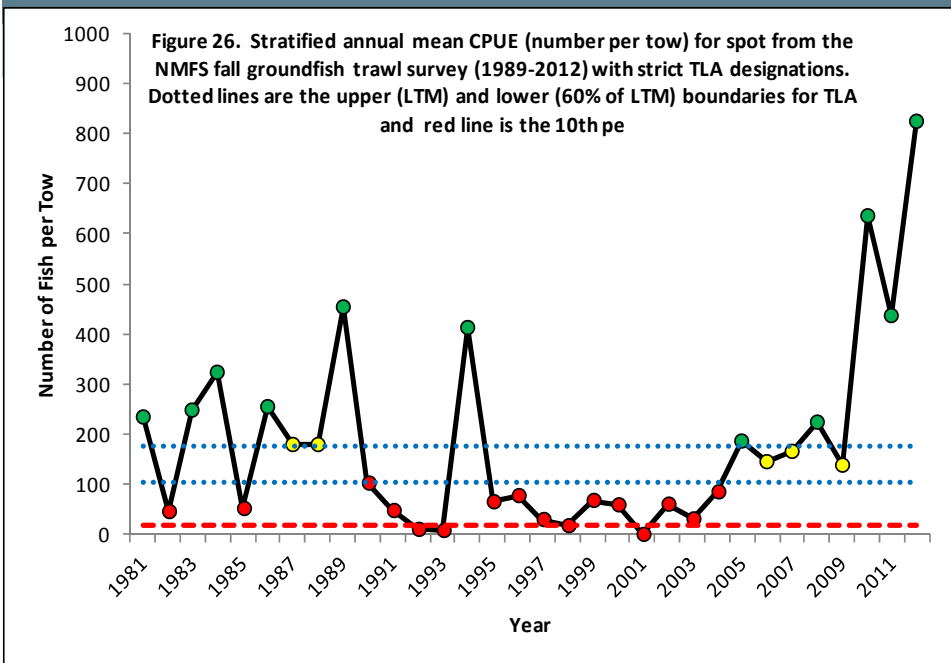
- Commercial & recreational harvest TLA is much more indicative of change than the 10th percentile trigger.
- TLA works better for examining year to year changes.
- The current 10th percentile trigger was rarely tripped in most of the indexes and when it did, it occurred at some of the lowest values for each index.



Current Spot Trigger Indices with 10th Percentile and TLA boundaries



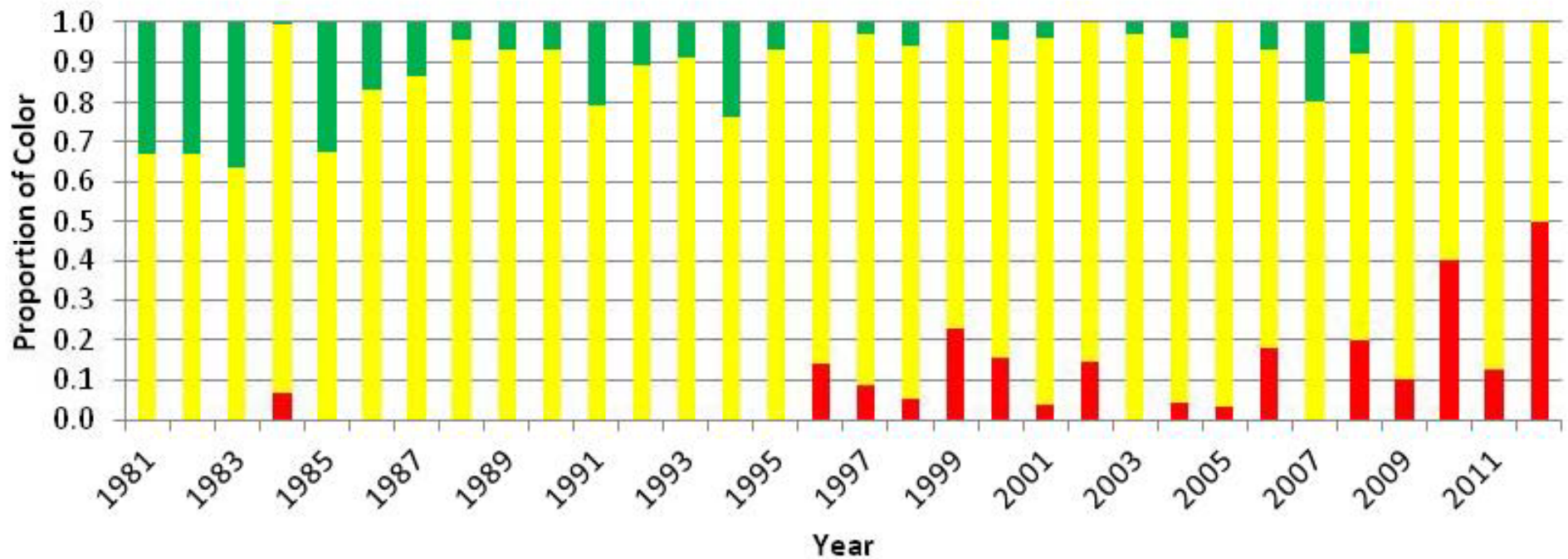
Current Spot Trigger Indices with 10th Percentile and TLA boundaries



Spot Harvest Composite Index

Combined Recreational & Commercial Landings

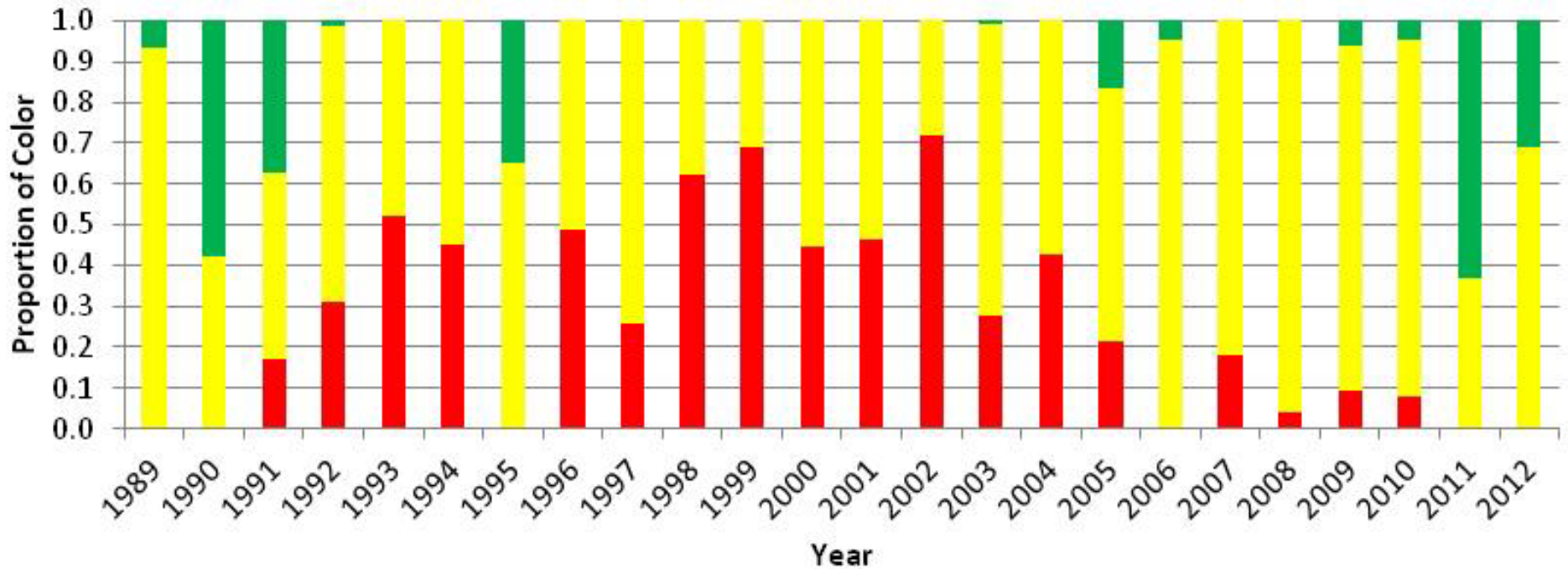
Annual FTLA color proportions for composite commercial and recreational harvest of spot for the Atlantic coast of the United States using a 1989-2012 reference period.



Spot Fishery Independent Composite Index

Adult Index

Annual FTLA color proportions for composite index of NMFS and SEAMAP surveys using a 1989-2012 reference period.





Draft Management Framework

- North Carolina Blue Crab example
- Adjustments & Modifications

Croaker Management Framework

Characteristic	Moderate management level (30% red)		Elevated management level (60% red)	
	<u>Recreational</u>	<u>Commercial</u>	<u>Recreational</u>	<u>Commercial</u>
Adult abundance	Catch limit: X numbers/day limit (coastwide)	Catch limit: 8" minimum (coastwide); X pounds/day limit (coastwide)	Catch limit: 9" minimum (coastwide); X numbers/day limit (coastwide)	Catch limit: 9" minimum (coastwide); X pounds/day limit (coastwide)
	Closures: state specific areas closure for 20 days after May 1 & before Oct 1	Closures:	Closures: state specific areas closure from Aug 1-Sept 1	Closures: state specific areas from Sept 1-Nov 1
	Gear Modifications:	Gear Modifications:	Gear Modifications:	Gear Modifications: gillnets prohibited from August 1-30
Harvest	Catch limit: X numbers/day limit (coastwide)	Catch limit: 8" minimum (coastwide); X pounds/day limit (coastwide)	Catch limit: 9" minimum (coastwide); X numbers/day limit (coastwide)	Catch limit: 9" minimum (coastwide); X pounds/day limit (coastwide)
	Closures: state specific areas closure for 20 days after May 1 & before Oct 1	Closures:	Closures: state specific areas closure from Aug 1-Sept 1	Closures : state specific areas from Sept 1-Nov 1
	Gear Modifications:	Gear Modifications:	Gear Modifications:	Gear Modifications: gillnets prohibited from August 1-30

Spot Management Framework

Characteristic	Moderate management level (30% red)		Elevated management level (60% red)	
	<u>Recreational</u>	<u>Commercial</u>	<u>Recreational</u>	<u>Commercial</u>
Adult Abundance	Closures: May 1- June 15	Closures: NA	Closures: Sept 1- Oct 15	Closures: Sept 1- Oct 1
	Minimum Size Limit: X"	Gear Modifications:	Minimum Size Limit: X"	Gear Modifications: gillnets prohibited from Sept 1-30
Harvest	Closures: May 1- June 15	Closures: NA	Closures: Sept 1- Oct 15	Closures: Sept 1- Oct 1
	Minimum Size Limit: X"	Gear Modifications:	Minimum Size Limit: X"	Gear Modifications: gillnets prohibited from Sept 1-30



Conclusion

- **Interim management measures, not to replace stock assessment**
- **Harvest Percentage Reduction Option**
- **Feedback needed from the Board**



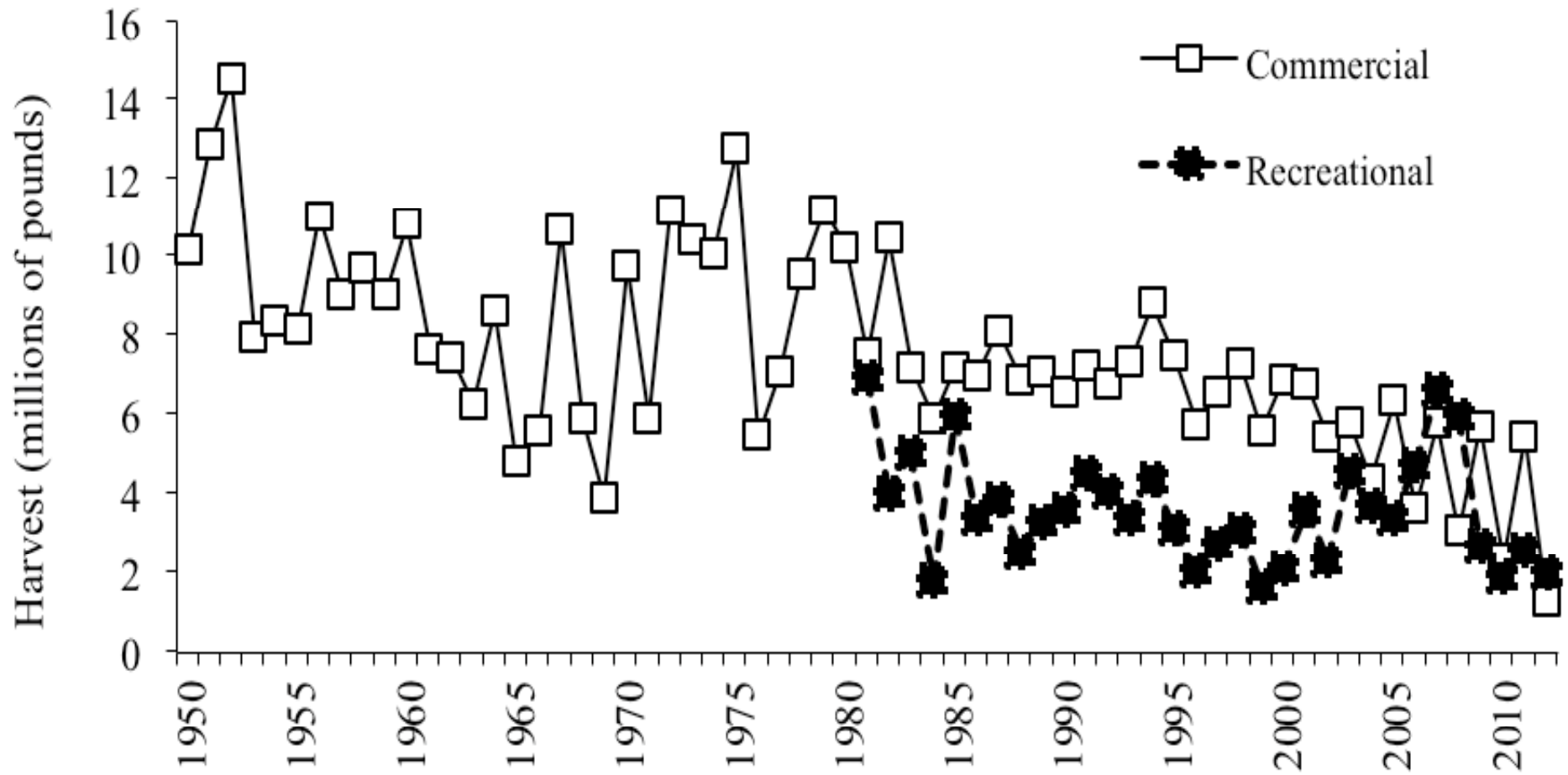
Spot FMP Review

South Atlantic State/Federal Management
Board

February 6, 2014



Status of the Fishery





Recommendations

- Research and Monitoring
 - High Priority
 - Develop stock assessment analysis appropriate to current data
 - Continued state monitoring and reporting on the extent of bycatch and fishing mortality
 - Evaluate the effects of mandated bycatch reduction devices



State Compliance and *De Minimis*

- The PRT finds all states compliance reports are consistent with the Omnibus Amendment
- De Minimis Requests
 - Criteria
 - South Carolina and Georgia
 - PRT finds these states meet *de minimis* criteria



Questions



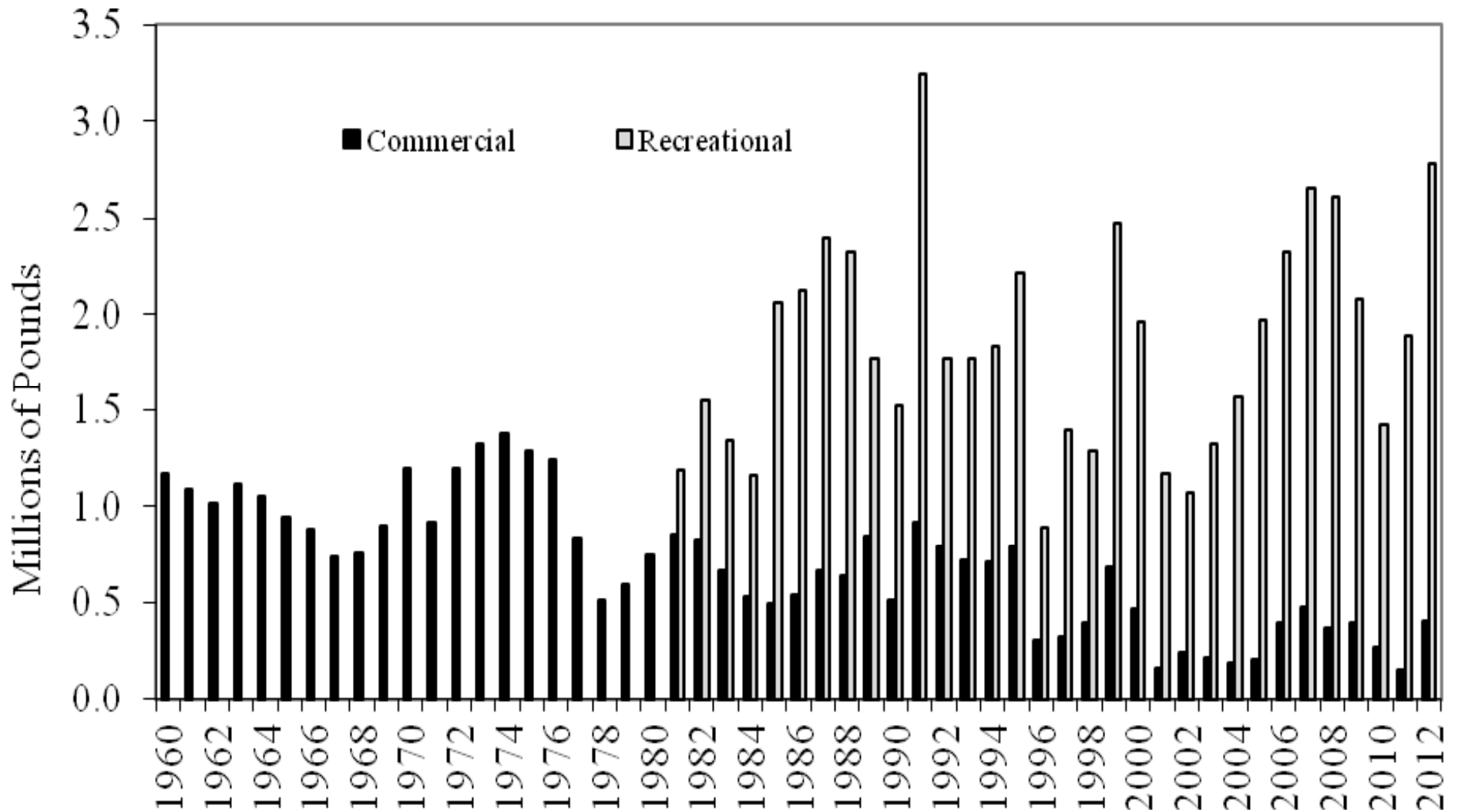
Spotted Seatrout FMP Review

South Atlantic State/Federal Management
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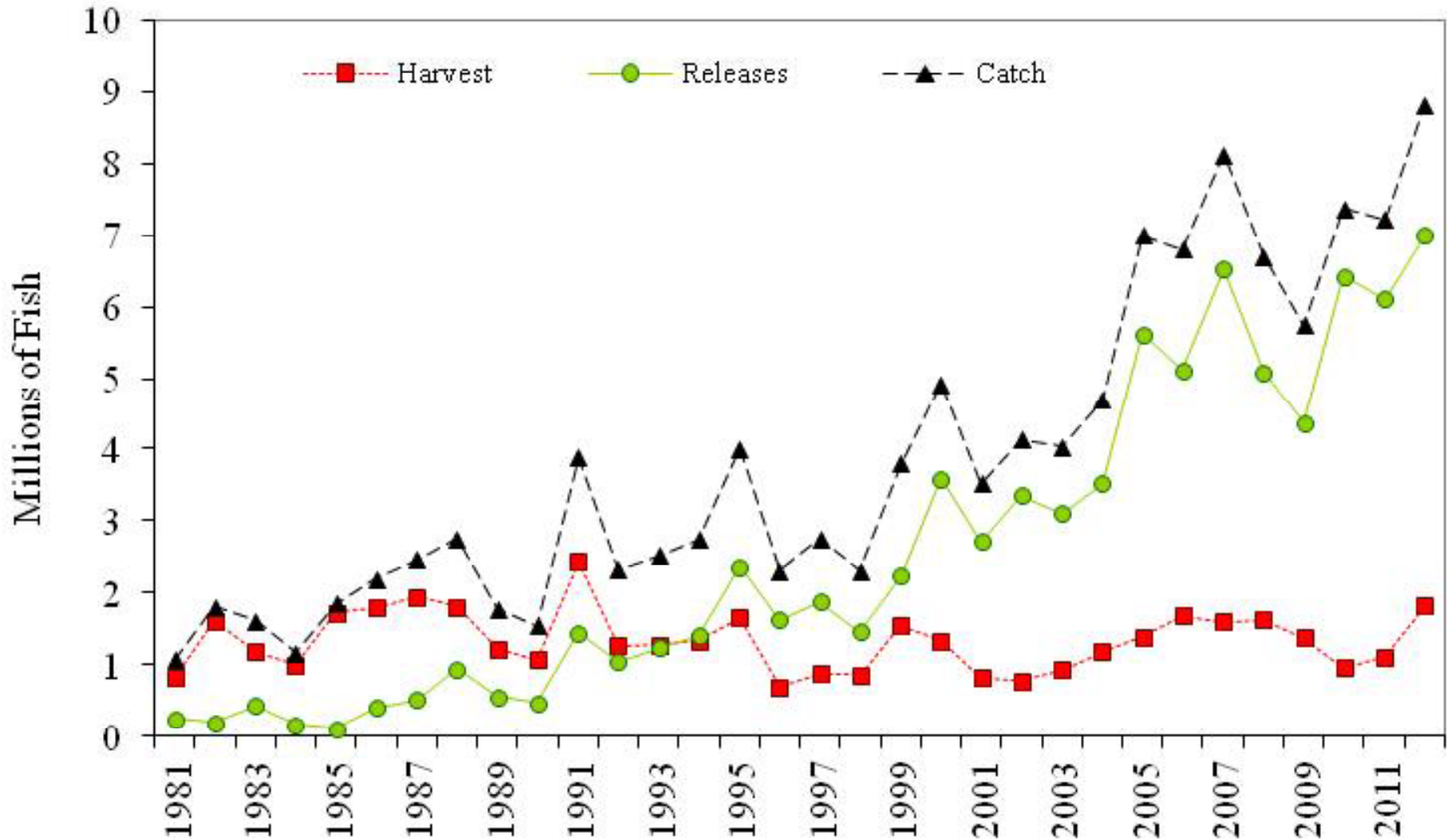
February 6, 2014



Status of the Fishery



Status of the Fishery





Recommendations

- Research and Monitoring
 - High Priorities
 - Continue state-specific stock assessment
 - Collect data on size & age of released fish
 - Work on stock structure on a regional basis
 - Medium Priorities
 - Identify essential fish habitat requirements
 - Work to better understand environmental factors and impacts



State Compliance and *De Minimis*

- The PRT finds all states compliance reports are consistent with the Omnibus Amendment
- De Minimis Requests
 - Criteria
 - New Jersey
 - PRT finds that New Jersey meets *de minimis* criteria



Questions

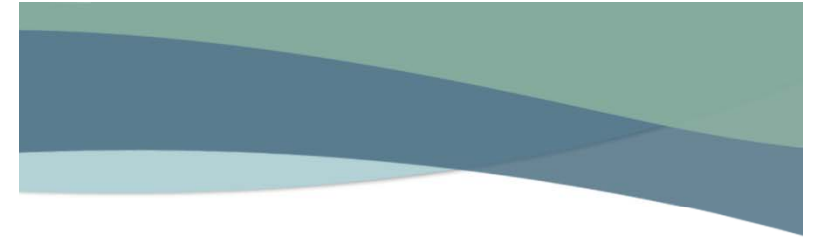
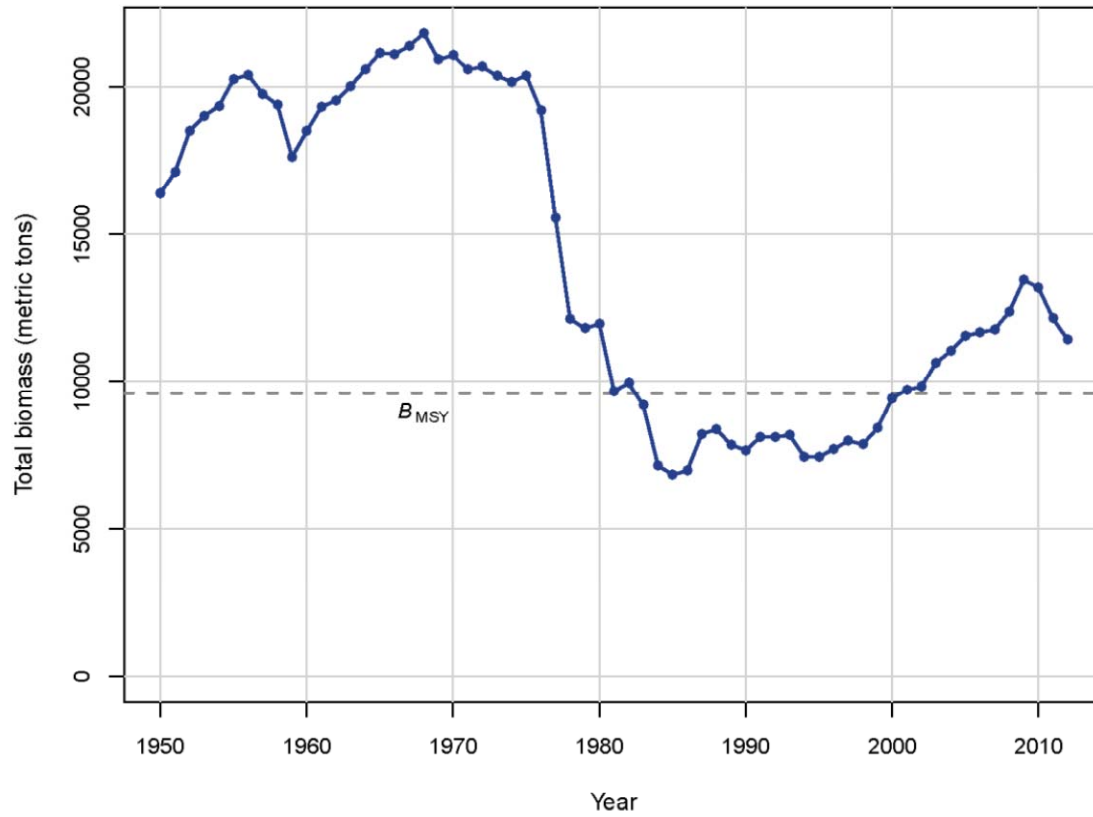


Spanish Mackerel FMP Review

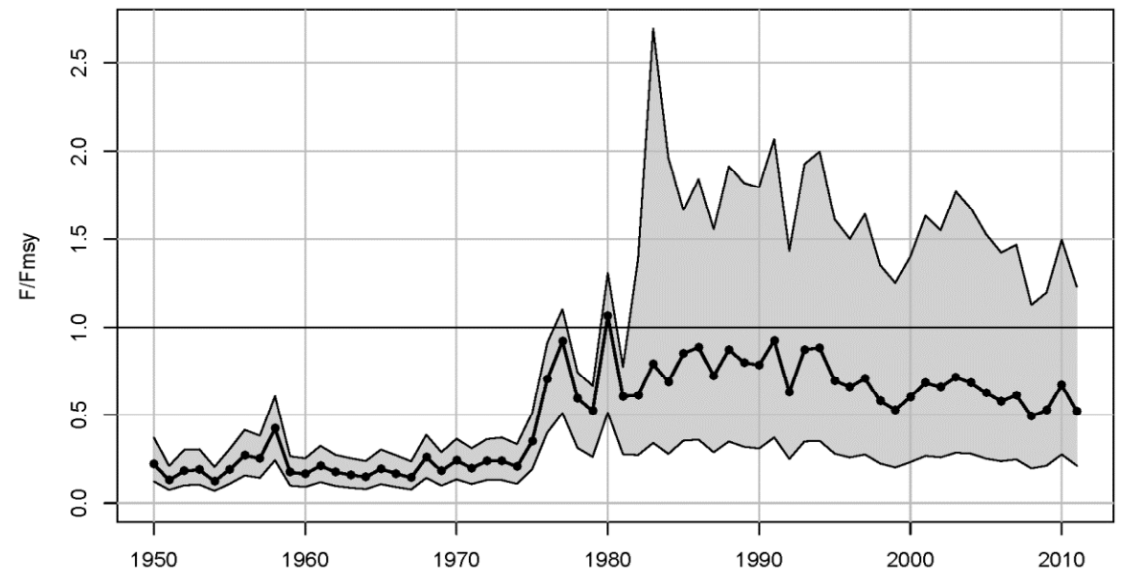
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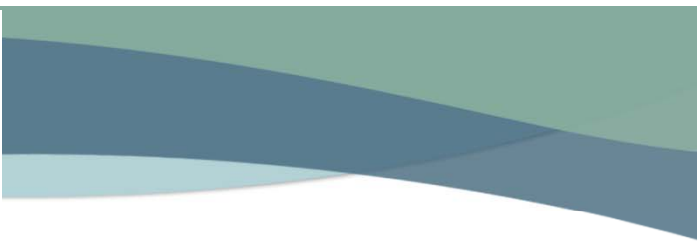
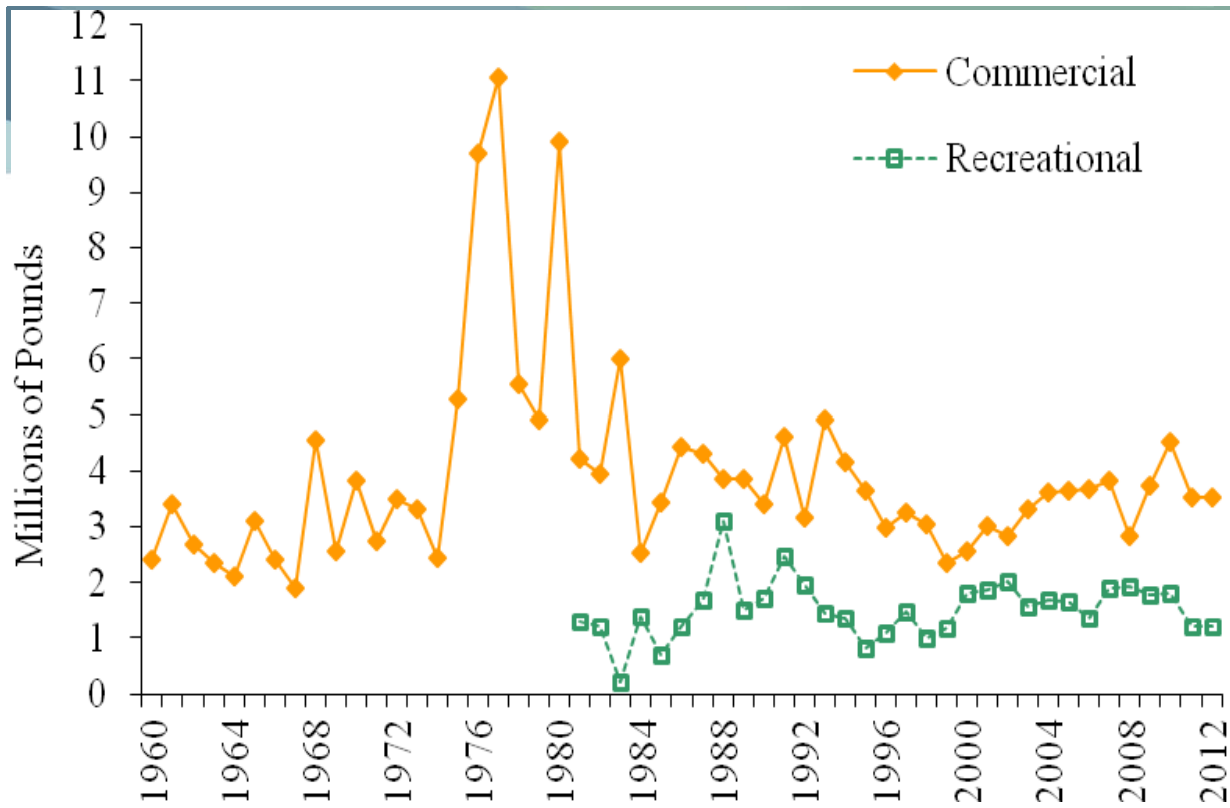
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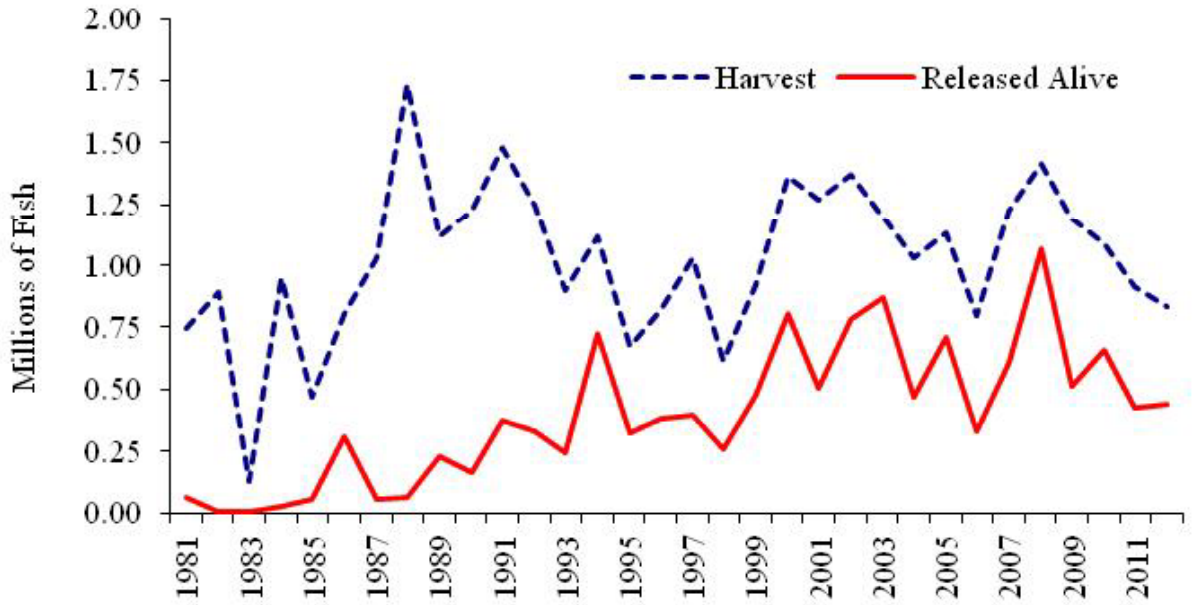


Status of the Fishery





Status of the Fishery





Recommendations

- Research and Monitoring
 - High Priority
 - Length, sex, age, and CPUE data for improving stock assessment accuracy
 - Evaluation of weight and length at age
 - Development of FI methods to monitor stock size
 - Medium Priority
 - Yield per recruit analysis




State Compliance and *De Minimis*

- The PRT finds all states compliance reports are consistent with the Omnibus Amendment
- De Minimis Requests
 - Criteria
 - New York, New Jersey, Delaware, and Georgia
 - PRT finds these states meet *de minimis* criteria



Questions



Virginia Proposed Commercial Red Drum Measures for 2014

South Atlantic State/Federal Management
Board

February 6, 2014





Background

- Amendment 2 (2002)
 - Requirements for state compliance
 - Management Measures
 - Spawning Stock Ratio of 40%



VA Commercial Landings

Year	State Landings (lbs)	Coastwide Landings (lbs)	Percentage of Coastwide
2008	4,910	234,503	2.09%
2009	8,315	201,908	4.12%
2010	3,634	235,435	1.54%
2011	4,369	96,323	4.54%
2012	2,609	77,513	3.37%



VA Proposal

- 2013 Measures
 - Slot limit: 18"-26"
 - Possession limit: 3 fish
- Proposed Measures
 - Slot limit: 18"-25"
 - Possession limit: 5 fish



Technical Committee Review

- Proposal reasoning
 - Reduce Discards
- All TC members were in agreement that proposed measures don't pose significant risk to maintaining the SPR of approx. 40%
- Questions centered on flexibility in Amendment 2



Next Steps

- Consider approval of VA's proposed changes to commercial Red Drum measures in 2014



Questions?

Static Spawning Potential Ratio for the Northern Region (NC-NJ)

(a) Increasing minimum size limit (maximum size = 27")

Bag Limit	18	19	20	21	22	23	24
1	40.6	43.3	46.4	49.6	52.0	54.1	57.6
2	37.6	40.4	43.5	46.7	49.5	52.2	56.4
3	36.2	38.9	42.1	45.4	48.4	51.4	55.9
4	35.3	37.9	41.1	44.7	47.8	51.1	55.9
5	34.9	37.5	40.8	44.2	47.5	51.0	55.8

(b) Decreasing maximum size (minimum size limit = 18")

Bag Limit	21	22	23	24	25	26	27
1	60.3	56.9	54.3	50.8	48.0	44.9	40.6
2	59.5	55.5	52.4	48.4	45.4	42.0	37.6
3	59.3	55.1	51.5	47.3	44.1	40.7	36.2
4	59.3	55.1	51.3	47.0	43.4	39.8	35.3
5	59.3	55.1	51.3	46.9	43.0	39.4	34.9