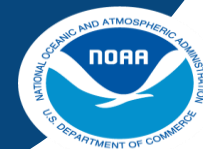


Gulf State Survey Calibrations: Overview

Richard Cody Ph.D.
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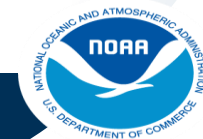
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GSMFC/NOAA Calibration Workshop 2020

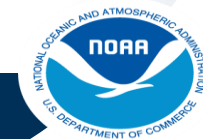
- Thanks to Gulf Council for support with Workshop logistics.
- Workshop Scope
 - State-MRIP Ratio-Based Survey Calibration methods.
 - SERO methods for converting FES based catch estimates to CHTS standard used in last assessment for development of ACLs.
 - MRIP Consultant input on methods.
 - Discussion of next steps
 - Transition Team SG
 - Transparency (Data access)
 - Research needs
 - Drivers for differences between estimates
 - Calibration updates



Background and Context

Red Snapper Workshops I-III (sponsored by GSMFC/NOAA)

- November 2013-December 2014
 - Focus on coordination among partners
 - Integration of specialized surveys into MRIP
 - Need to meet management and stock assessment needs
- Consultant Report from first workshop presented:
 - Options for survey development
 - Integrated improvements to general survey
 - Stand alone specialized “targeted” surveys

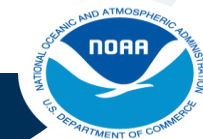


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Background and Context (cont.)

Red Snapper Workshop IV (2018) (Sponsored by GSMFC/NOAA)

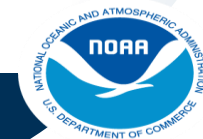
- Surveys were either certified (LA, MS, AL) or close to completing certification (FL)
- Focus was on options for calibration and producing an integrated Gulfwide catch estimate
 - Calibration would focus on conversion between current FES-based survey and state survey estimates
 - Modeling as well as simple ratio based approaches were considered
 - Modeling would take time to investigate (and may not be needed)
 - Simple Ratio based approaches could be developed more quickly
 - Already in use in certain applications
 - As more data become available, opportunity to improve and investigate modeling



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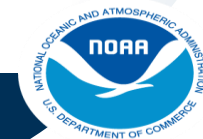
Gulf Survey Calibrations

- Transition plan required for NOAA MRIP certification:
 - <https://www.fisheries.noaa.gov/webdam/download/96469514>
- Transition plan may require development of calibrations to account for survey differences in comparisons of survey estimates:
 - <https://www.fisheries.noaa.gov/webdam/download/64689267>
- Necessary when multiple surveys are in use, to facilitate a common standard for:
 - Evaluation of annual catch trends
 - ACL Monitoring



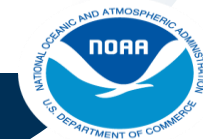
Gulf Survey Timelines

- LA Creel: 2014-present
 - FES Benchmarking (2015-2017)
 - APAIS Benchmarking (2015)
- Snapper Check: (2014*-Present)
 - Benchmarking (2018-2019)
- Tails n' Scales: (2015*-Present)
 - Benchmarking: (2018-2019)
- Gulf Reef Fish Survey: 2015*-Present)
 - Benchmarking: (2015-2019)



Gulf Survey Calibrations

- General method: Simple ratio based approach
 - Considerations include:
 - Minimum needs (e.g., ACL development, Annual catch trends)
 - Survey compatibility (e.g., alignment of estimation domains)
 - Survey coverage (e.g., geographic, temporal, sample universe)
 - Relationship of trend information among surveys
 - Applied at the domain level (ratios vary by species, area, time period).



NOAA Fisheries White Paper Options

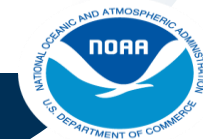
Option 1 – *NOAA Fisheries recommended approach*

- a) Use current fully calibrated MRIP Time Series for MS-FL and convert LA for assessment and management purposes (common standard).
- b) Use common standard for assessment, convert MRIP based ACLs to alternative survey standards to support state level management.
- c) Integrate MS-FL, to produce a single estimate, convert MRIP based ACLs to alternative survey standards for use in assessment and management.

Option 2 – Rescale MRIP to state survey standards for management and assessment.

Option 3 – Use MRIP to cover species not covered by state surveys.

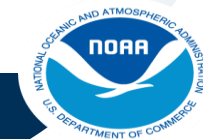
Option 4 – Continue to use CHTS based estimates and manage with the state survey standards.



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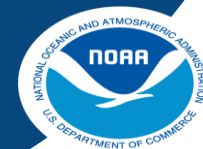
Specialized/General Survey Calibrations

- Calibrations are necessary to translate MRIP (CHTS) based ACLs to alternative survey standards for monitoring purposes.
- Calibrations support conversion of catch estimates in both directions to support management.
- Focus of this workshop is on the presentation of simple ratio based calibrations to allow conversion between MRIP survey and state survey estimates.
- Some questions we also hope to also address:
 - Are the ratio based approaches presented reasonable?
 - What is the role of the Transition Team SG?
 - What are the drivers for the differences between survey estimates?
 - As data will continue to become available, what would be a reasonable timeline to revisit/update calibrations?
 - Model based and other approaches vs Ratios
 - Coordination with MRIP



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Questions



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