

SSC Report

183 CFMC MEETING

Dr. Vance P. Vicente

Chairman

Scientific and Statistical Committee

2023 SCIENTIFIC AND STATISTICAL COMMITTEE MEETINGS

- 1. MAY 1-5 2023 HYBRID MEETING BETWEEN THE EBFMP-TAP AND THE SSC. Discussed in the 182 CFMC Meeting.
- 2. SEPTEMBER 27, 2023 SSC MEETING
- 3. NOVEMBER 28, 2023 SSC MEETING

SSC Meeting September 27, 2023

A. SEDAR 80 USVI Queen Triggerfish USVI ST. THOMAS-ST. JOHN

PRESENTATION: Adyan Ríos, SEFSC Caribbean Fisheries Branch, and Kyle Shertzer, SEFSC Atlantic Fisheries Branch.

B. TEN Research priority updates (SSC).

SSC Meeting September 27, 2023

A. SEDAR 80 USVI ST. THOMAS/ST.JOHN Queen Triggerfish *Ballistes vetula*.

The SSC Members discussed the SEDAR 80 Data Assessment Review, SEFSC suggested the following actions to define the RVC (i.e. Reef Visual Census) selectivity:

1. RVC domed selectivity saturate at a fixed value of 0.9.
2. Allow the model to estimate the fishery selectivity.
3. Run models with an equilibrium catch (chosen by assessors) and a sloped catch chosen by assessors) to confirm model behavior is similar.
4. Repeat the profile over the equilibrium catch.

SSC Meeting September 27, 2023

B. Research priority updates.

Top 10 priority list recommendations to help provide input to the CFMC with guidance for the IRA funds.

Proposed priority research topics from the SSC prepared from May 1-5th Joint Meeting.

1. **FISHERIES LANDING DATA** - Improve Fisheries Landing Data based on Port Landings Studies. Develop statistics-based methods.
2. **EFFORT ESTIMATION** - Develop alternate methods for estimating efforts.
3. **PREPARE FOR (h)(2) FLEXIBILITIES** - Simulations to test alternate ACLs for (h) (2) flexibility.
4. **PREPARE FOR (h)(2) FLEXIBILITIES**- Collect life history information.
5. **COLLECTION OF SOCIO-ECONOMIC DATA FOR MANAGEMENT**- Periodic systematic collection of data to provide a baseline and comparative basis for social impact assessments.
6. **EBFM (ASSESSING REGULATORY IMPACTS)**- Evaluate the effectiveness and impacts of closed areas.
7. **EXPAND FISHERY INDEPENDENT** fishery-independent monitoring and surveys.
8. Develop Species and Habitat **CLIMATE VULNERABILITY INDECES for the US Caribbean.**
9. **EBFM REFERENCE POINTS** for use in the fisheries management decision support system in the US Caribbean.
10. Continue participation in the re-initiation of the **MARINE RECREATIONAL INFORMATION PROGRAM (MRIP).**

- The SSC Members gave the Top 10 priority list a ranking of **high priority (#3).**

SSC Meeting November 28, 2023

Discussion:

A. SEDAR 80 USVI ST. THOMAS/ST.JOHN Queen Triggerfish – Adyan Ríos, SEFSC Caribbean Fisheries Branch, and Kyle Shertzer, SEFSC Atlantic Fisheries Branch. Also an OVERVIEW of the St. Croix Queen Triggerfish data and path ahead.

B. SSC Participation on various reunions/activities.

A. SEDAR 80 USVI ST. Thomas St. John: Queen Triggerfish.

1. Catches are market-driven: there could be more catch than what is already being caught.
2. The fishery-independent index of abundance is increasing and indicates that the stock is increasing.
3. SEFSC suggested that the SSC Members use *Tier 3 to develop short-term catch advice (eg. 2024-2026)*.
4. The SSC Members will determine and establish the ABC. There are still topics to discuss about characterizing the uncertainty regarding the (1) level of connectivity of new recruitments from the spawning population, (2) natural mortality and (3) the level and effort of fishing before 2000. These uncertainties will be reviewed at the next SSC meeting with the OFL projections.
5. The SSC Members decided to finalize and complete SEDAR 80 (USVI ST. Thomas/St. John and St. Croix Queen Triggerfish) at the next SSC Meeting (possibly in early March 2024).

SEDAR 80 USVI ST. Thomas St. John: Queen Triggerfish

Summary of Modeling Results

- Discussions with stakeholders and the SSC guided **dome-shaped selectivity and steepness inputs**
- Reference model diagnostics stable but we are unable to estimate **MSY and stock status** with confidence
 - Conflicting signals across the data sources
 - Sensitivity to inputs of growth, mortality, and data component reweighting
 - Correlated key parameters
 - There are relatively few sources of data
 - **Abundance is increasing (FI-index)**
 - **Current catches sustainable**

Data Overview

- Commercial landings (annual) and composite length composition
- RVC index and observed length composition by year

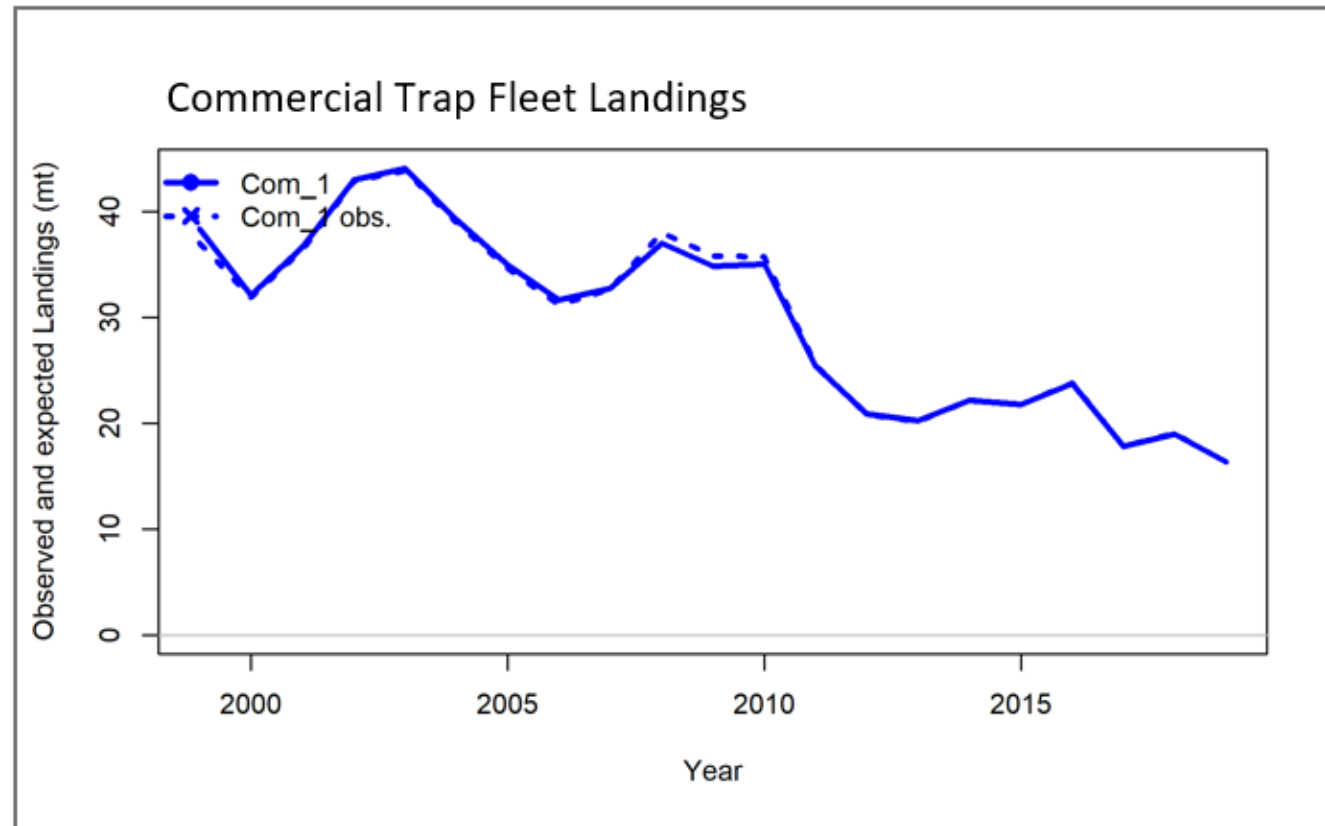
Estimated Parameters

- **Unfished recruitment (R0)**
- **Selectivity parameters**
- **Initial F (2000)**

Fixed Parameters

- Growth
- Natural Mortality
- Maturity
- **Steepness (0.99)**
- **Sigma R (0.6)**

SEDAR 80 USVI ST.Thomas St. John: Queen Triggerfish

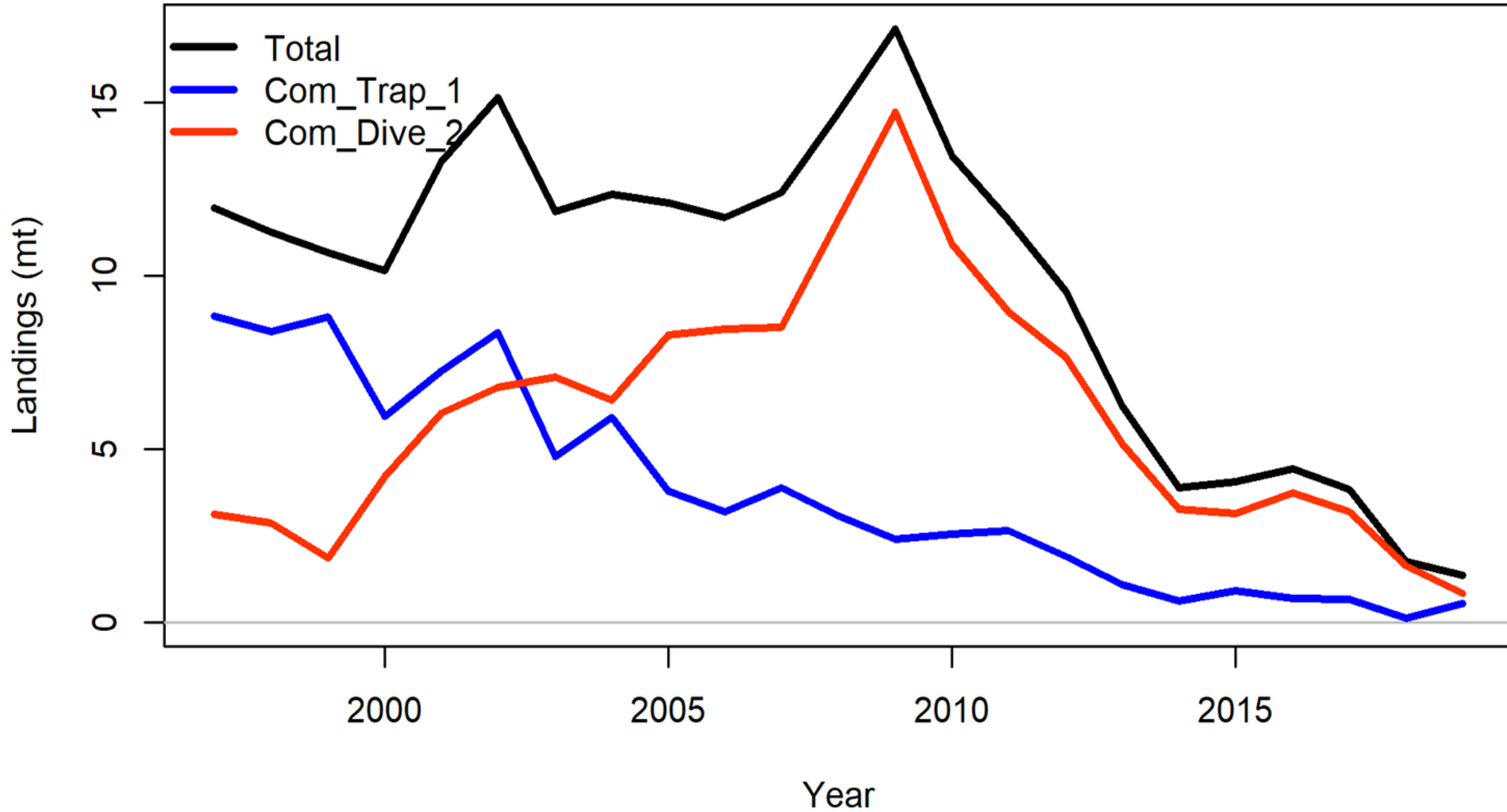


SEDAR 80 USVI ST. Thomas St. John: Queen Triggerfish

Management Summary

- Current catch limits for St. Thomas and St. John Queen Triggerfish
 - SYL 205,621 lbs
 - ABC 102,810 lbs
 - ACL 97,670 lbs
- Recent years of catch:
 - 2019 35,971 lbs
 - 2020 38,152 lbs
 - 2021 39,740 lbs
- While the results across the model runs suggest that catch could increase above current levels, it is unclear by how much.

ST CROIX QUEEN TRIGGERFISH OVERVIEW



The Acceptable Biological Catch (ABC) is the catch reduced below OFL to account for scientific uncertainty (catch with less than a 50% probability of exceeding the true OFL).



Other Business: SSC NOVEMBER 28, 2023 COMING MEETINGS

- Eight National SCS Workshop (2024) August 26-28 at Boston: [Eighth National SCS Workshop \(2024\)](#)
 - The topic of the National SCS is Applying Acceptable Biological Catch (ABC) Control Rules in Changing Environment. The SSC will recommend to the CFMC that the following SSC members attend the National Meeting: Jason Cope, Vance Vicente and Todd Gedamke. It was suggested to ask Tarsila Seara if she wants to attend.
 - The Southeast Fisheries Science Center (SEFSC), can put together a brief presentation for the benefit of the SSC Members for the next SSC meeting in the spring to introduce the topics and the work being done by the SEFSC. This topic will be added to the agenda for the next meeting.
- SSC Participation for SEDAR 84 (yellowtail snapper for Puerto Rico and St. Thomas/St. John and spotlight parrotfish for St. Croix): [SEDAR 84 Caribbean Yellowtail Snapper and Stoplight Parrotfish – SEDAR – SouthEast Data, Assessment, and Review \(sedarweb.org\)](#)
- The SEDAR 84 Life History Data Webinar will be held on Friday, December 1, 2023 at 9:00 am eastern time. It will be the review of the summary statistics for the age and reproduction information, and discuss additional analysis that may be needed. [Register for SEDAR 84 US Caribbean Yellowtail Snapper and Stoplight Parrotfish Life History Data Webinar](#)

SSC Members to participate in the SEDAR 84:

- Data Workshop (January 23-25 at Verdanza Hotel in SJ, PR) are, as proposed by the SSC:
 - Juan Cruz, Michelle Schärer and Jorge García;
- for the Assessment Workshop:
 - Walter Keithly Richard Appeldoorn and Juan Cruz; and
- for the Review Workshop:
 - Vance Vicente, Jason Cope and Erik Williams.

SEDAR 74, SEDAR 82, SEDAR 84, SEDAR 85, SEDAR 86

- **summary of current and recently completed SEDAR assessment projects**
- **SEDAR 74** – Gulf of Mexico Red Snapper: The assessment development stage has required more time than was originally scheduled and the analytic team requested several additional webinars to complete the assessment modeling work. The Review Workshop (originally scheduled for April 2023, then July 31- August 4, 2023, then November 6-10, 2023), will now be held December 12-15, 2023, with the final report scheduled for release in January 2024.
- **SEDAR 82** – South Atlantic Gray Triggerfish: The Data Workshop report was released in January of 2023. The Assessment process is ongoing with a series of webinars scheduled from March 2023 to November 2023. The Review Workshop was scheduled for October 2023, however the lead analyst requested additional webinars, so is now scheduled for early 2024. The assessment completion date is to be determined at a later time.
- **SEDAR 84** – Caribbean Yellowtail Snapper and Stoplight Parrotfish: **The Data Workshop** was scheduled for October 25-27, 2023, but issues with data availability, and complications in finding a hotel for the meeting, the workshop to be postponed to January 2024. **Assessment webinars** will now be held April – August 2024. The Review Workshop is scheduled for December 2024 and the assessment should be completed in March 2025.
- **SEDAR 85** – Gulf of Mexico Yellowedge Grouper: No Topical Working Groups were originally scheduled for this assessment, however, the analysts discovered issues that they would like to receive feedback on from the SSC before completing the assessment, so a Topical Working Group was appointed in July 2023. The assessment was scheduled to be completed in September 2023, but will now be released in November 2023. SEDAR Steering Committee Overview Document October 2023.
- **SEDAR 86** – South Atlantic Red Grouper: The assessment is underway. No Topical Working Groups were organized for this assessment. The SEFSC submitted a request to the South Atlantic SSC to discuss changing the spatial structure of the model. The assessment was scheduled to be completed in December 2023 but will have to be delayed due to the recommendation to transition the operational assessment to a Benchmark to accommodate the Center request.

B. SSC Participation.

- 1. Eighth National SCS Workshop (2024) August 26-28 in Boston.

The topic of the National SCS is Applying Acceptable Biological Catch (ABC) Control Rules in Changing Environment. The SSC will recommend to the CFMC that the following SSC members attend the National Meeting: Jason Cope, Vance Vicente and Todd Gedamke. It was suggested to ask Tarsila Seara if she wants to attend.

SSC MEMBERS: MAY 2023

Jorge R. Garcia-Sais

Richard Appeldoorn

Juan J. Crux Motta

Todd Gedamke

Erik H. Williams

Michelle Scharer

Vance Vicente

Walter Keithly

Tarsila Seara

Jason Cope