SSC Report 184 CFMC MEETING

Dr. Vance P. Vicente

Chairman

Scientific and Statistical Committee

2024 SCIENTIFIC AND STATISTICAL COMMITTEE MEETING

APRIL 09-11, 2024 SSC MEETING

SSC Meeting April 09, 2024

A. <u>SEDAR 80 USVI Queen Triggerfish USVI ST. THOMAS-ST. JOHN-ST. CROIX</u> PRESENTATION: Adyan Ríos, SEFSC Caribbean Fisheries Branch, and Kyle Shertzer, SEFSC Atlantic Fisheries Branch.

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

<u>Data</u>

Data used in the SEDAR 80 models included:

- 1) commercial landings, (TRAP AND DIVE)
- 2) Trip Interview Program length samples (LIMITED)
- 3) the National Coral Reef Monitoring Program's Reef Fish Visual Census (RVC) length data.
- 4) RVC data were also used to construct an index of relative abundance.
- 5) The terminal year for all assessment model inputs was 2019.

Stock Status

- 1) The stock assessments were not able to estimate the overfished status for the St. Croix or St. Thomas/St. John queen triggerfish stocks; thus,
- 2) their status remains unknown.
- 3) <u>BUT</u>, each model was able to <u>estimate short-term harvest levels</u> that would prevent overfishing (i.e., the overfishing limit [OFL]) <u>BY assuming that future recruitment will continue at recent levels.</u>
- 4) For both St. Croix and St. Thomas/St. John Queen triggerfish, the models determined that <u>overfishing is</u> <u>not occurring</u>.

Acceptable Biological Catch (ABC) Control Rule

After a discussion of the uncertainties that exist in the models, the SSC agreed to set ABCs for the St. Croix and St. Thomas/St. John Queen triggerfish stocks using

Tier 3b of the ABC control rule.

- **Under Tier 3b,** the ABC is determined from the OFL as buffered to account for scientific uncertainty (ABC = buffer *OFL), where the buffer must be ≤ 0.9.

The SSC Members have accepted the framework, the reference model, that it **is highly constrained**, and that there is a **lot of uncertainty**:

- 1. The general integrated modeling **framework of Stock Synthesis 3** is an acceptable and flexible framework for the current and future application of data from Queen Triggerfish.
- 2. The current data, life history (both determined through previous meetings), and stock assessment (as reviewed by the SSC) represent the **best scientific information available** and are useful for management.
- 3. There are many sources of uncertainty in this **highly constrained** stock assessment that need consideration in future assessments and current discussions on setting catch limits.
- 4. Several issues regarding **research recommendations** (listed below) that need strong consideration in future stock assessments.

RESEARCH RECOMMENDATIONS

Data research recommendations

- Document discards and continue collecting gear-specific commercial landings.
- Collect and investigate recreational data
- Increase the number of port-sampled length measurements.
- Continue fishery-independent survey work
- Continue examinations of growth, stock demographic studies, and connectivity patterns
- Consider an economic index concerning the decline in landings and effort
- Investigate implicit assumptions about recruitment signal, considering variability in size at age
- Evaluate bin size coarseness and consider looking at monthly trends
- Consider if a fishery-independent recruitment index (immature individuals) are feasible, given protracted tropical reproductive seasons and plasticity

Assessment research recommendations

- Investigate high steepness as related to connectivity and reproductive compensation assumptions
- Explore a multi-area assessment or MSE (Management Strategy Evaluation), considering uncertainty in local vs external recruitment
- Incorporate age and growth data directly into the model to estimate growth and propagate uncertainty
- Revisit initial catch assumptions and unknown recreational and historical catch

- SSC members suggested that the ABC control rule chosen during the SSC meeting is a precautionary approach that absorbs <u>some</u> of the uncertainty.
- This comment was made in response to a short presentation, given by Matt Damiano, on the robustness of an F_{MSY} proxy based on a spawning potential ratio (SPR) of 0.4 to nonstationary in recruitment.
- Another SSC member provided some general caution against reducing the complexity of the current assessment model framework moving forward, to avoid (additional) strong assumptions that <u>more simplistic models</u> will require.

Motion: The SSC moves to accept the catch at FSPR 40 as the ABC for 2024

-ABC St. Thomas – St. John (97,809 lbs.) for Queen Triggerfish

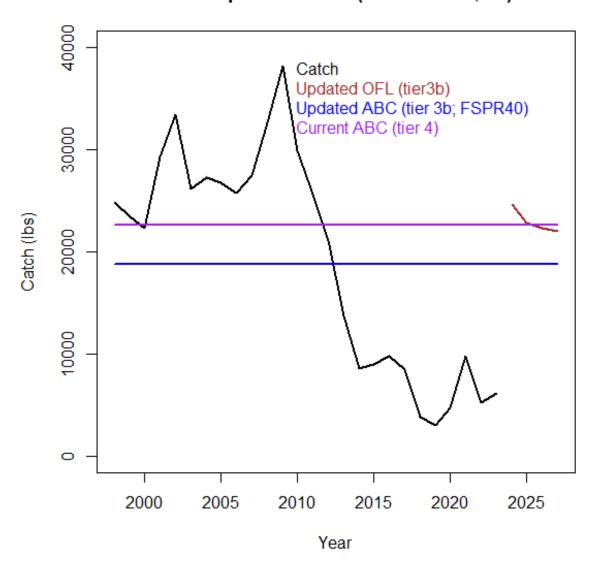
-ABC St. Croix (18,808 lbs.) for Queen Triggerfish.

Votes: 8 yes, 1 abstention, 1 absent; by majority the motion carries.

STTJ Reported Catch (commercial, all)

Catch Updated OFL (tier3b) Updated ABC (tier 3b; FSPR40) Current ABC (tier 4) Catch (lbs) Year

STX Reported Catch (commerical, all)



B. AMERICAN FISHERIES SOCIETY

This symposium is co-organized by members of the U.S. National Oceanic and Atmospheric Administration's (NOAA) Pacific Island Fisheries Science Center (PIFSC) and Southeast Fisheries Science Center (SEFSC) in Honolulu, Hawaii.

Objective: We propose an innovative session of full-length presentations, lightning talks, and a panel discussion that will provide a broad forum to share ongoing research, challenges, successes, and future directions in fishery-dependent data collection, scientific survey activity, community engagement, assessment science, and management of these unique island fisheries.

Link: 154th Annual Meeting of the American Fisheries Society

Deadline abstract: April 26, 2024.

For more information and details, contact Matt Damiano, at matt.damiano@noaa.gov

C.SEDAR 91 Caribbean Spiny Lobster

| SSC Member | Data Workshop (Nov 13-15, 2024; St. Thomas) | Assessment Workshop (All virtual. 1 day of ~3-4hrs. Weeks of: Jan 27, 2025, Feb 24, 2025, March 24, 2025, April 21, 2025) | Review Workshop (~3 days; August 2025; Miami) |
|--------------|---|---|---|
| V. Vicente | | | X* |
| R. Appeldoom | | | |
| M. Schärer | X | | |
| J. García | X | | |
| W. Keithly | | | X |
| J. Cruz | X | | |
| T. Gedamke | | X? | |
| E. Williams | | X | |
| J. Cope | | X | |
| T. Seara | | | |

^{*}Chair

D. Eighth National SCS Workshop (2024) August 26-28 at Boston

SSC Member Volunteers? 3 Delegates and 1 Staff.

| SSC Member | Delegate | SSC Member | Delegate |
|--------------|----------|-------------|----------|
| V. Vicente | X | J. Cruz | Х |
| R. Appeldoom | | T. Gedamke | Х |
| M. Schärer | | E. Williams | |
| J. García | | J. Cope | Х |
| W. Keithly | | T. Seara | |

E. Revision ACL Rainbow Runner

Summary of recommendations:

- 1. The SSC requested to have only one (recreational and commercial) ACL for Rainbow Runner.
- 2. Tell the Council to consider adding the Rainbow Runner to the reporting list.
- 3. Have a long ACL for the Rainbow Runner.
- 4. Insist on the data collection for recreational fisheries.
- 5. Think about the potential of species that can be developed into a full-blast fishery.
- 6. The Council is thinking of having a workshop on ciguatoxin fish.
- 7. Regarding changes seen in the environment this species is seen more often than before (e.g. changes in temperature, oceanography, sargassum, and number of fisheries associated with the fishery).

F. Other Business: Queen Conch ESA Final Listing SECTION 7 and SECTION6 INVOLVEMENTS RECOVERY TEAM (INVOLVE FISHERS)
CRITICAL HABITAT DESIGNATION