

Species:

Red Porgy

Model and Additional Data Years:

- Prior Assessment: SEDAR60 Red Porgy Standard Assessment
- Prior Terminal Year: 2017
- OA Terminal Year: 2024, adding 7 years of new data
- Apply the current BAM configuration.

Requested Data Updates (Please be as specific as possible):

- Include any new and updated information on life history, discard mortality, and steepness.
- Explore using appropriate CVs for the landings data to capture the uncertainty in the model results.

Potential Modifications to previously approved assessment (Please be as specific as possible):

- Investigate potential factors that may be contributing to the continued low recruitment of Red Porgy to inform projections including impacts of overharvesting and external environmental factors on winter spawners.
- Include abundance and catch time series to inform projection timeframes
 - Autocorrelation and partial autocorrelation functions
 - Negative correlations with Red Snapper and Red Lionfish
- Catch level projection working group topics

Is a Topical Working Group Needed? No

If Yes, Topical Working Group Topics:

- Topic 1:
- Topic 2:

Suggested Topical Working Group Process:

Is an in-person workshop requested for the Topical Working Group, or can it meet via webinar.

POTENTIAL SCHEDULE:

- Cooperators use their process to develop SoWs
- SSC reviews SoWs at April meeting, then SAFMC reviews in September, 2022
- Initial Cooperator-approved SoWs submitted to SEFSC by November 1, 2022
- SEFSC provides feedback to Cooperators via memo no later than February 1, 2023
- Cooperators/Technical review bodies review feedback and negotiate final SoWs with SEFSC
- Final SoWs provided to SEDAR Program Manager by May 1, 2023
- Assessment Species are approved at Spring SEDAR Steering Committee Meeting, May 2023.
- Terms of Reference to SSC in October, 2023 and SAFMC in March, 2024
- Data scoping workshop meet 2025

- Topical working groups (if necessary) meet 2025
- Assessment reviewed by SSC and SAFMC in late 2025/early 2026

Appendix

List of Research Recommendations:

- impacts of climate change on winter spawners
- Investigate potential factors that may be contributing to the continued low recruitment of Red Porgy, including egg production, egg quality, fertilization rate, juvenile survival, sex ratio, and size/age of sex transition
- Investigate whether Red Porgy males establish and maintain territories as part of their spawning behavior (although territorial behavior has not previously been observed, the SSC deemed the question worthy of further investigation).
- Investigate the potential impact(s) on Red Porgy of increased abundance of Red Lionfish and Red Snapper (or other piscivores found to have recent increased abundance) in the South Atlantic, including:
 - Predation of juvenile Red Porgy by Red Lionfish and Red Snapper and its potential impact on the apparent recruitment failure of Red Porgy
 - Competition for prey between Red Snapper and Red Porgy (e.g., diet composition and size range overlaps)
 - Exploring to what extent the resurgence in the Red Snapper South Atlantic population co-occurred with the decline in the South Atlantic Red Porgy population

Potential Items for a Research Track Assessment:

- Investigate temporal trends in growth, sex at age, and female maturity at age. In the previous assessments, female maturity at age was estimated for several time blocks and included in the model as a time-varying relationship. During the current assessment process, the basis for modeling only female maturity as time-varying was called into question, given that life history parameters are often linked. The decision was made to use only a single female maturity at age relationship. However, the panel judged this to be an important area of future research.