



**SOUTH ATLANTIC RED SNAPPER RESEARCH PROGRAM (SARSRP)
“The South Atlantic Red Snapper Count”**

REQUEST FOR PROPOSALS

Letter of Intent Deadline: November 16, 2020 at 5 pm ET

Full Proposal Deadline: February 1, 2021 at 5 pm ET

*Letters of Intent must be submitted to the S.C. Sea Grant Consortium
by 5:00 pm ET on November 16, 2020.*

Sponsored by the Sea Grant programs of
Florida, Georgia, South Carolina and North Carolina,
with generous support provided by the
NOAA National Marine Fisheries Service.

2020-23 South Atlantic Red Snapper Research Program (SARSRP) Request for Proposals

INTRODUCTION TO THE SOUTH ATLANTIC RED SNAPPER RESEARCH PROGRAM (SARSRP)

Purpose

On behalf of the Steering Committee (SC; Appendix A) for the South Atlantic Red Snapper Research Program (SARSRP), the South Carolina Sea Grant Consortium is seeking proposals that support the goal of generating an absolute estimate of abundance with an accompanying measure of uncertainty for the entire South Atlantic Red Snapper stock. Preference will be given to proposals that seek to produce a single absolute estimate of abundance for the entire geographic region. This estimate will serve as an independent benchmark on which to inform next year's and future stock assessments, as it will provide a more precise metric of abundance of the size of the adult (spawning) stock in the South Atlantic for use in currently planned and future spawning stock estimates.

Successful research projects should utilize at least one, or a combination, of the following three approaches: (1) Close-kin and meta-population genetics analyses; (2) Existing and possibly supplemental new South Atlantic trap-video survey data to scale-up density estimates to total abundance; and (3) A research technique similar to that pursued in the Gulf of Mexico Red Snapper abundance assessment, focusing on use of active acoustics and visual surveys. However, research methods are not limited to these approaches and other appropriate research methods could be proposed.

Research conducted through these projects will be limited to two years, extending from March 8, 2021 to February 28, 2023, with an additional six months for collective data synthesis, report writing, and outreach, until August 31, 2023. We anticipate making one comprehensive or several complementary awards, depending on the nature of the submissions and the results of the Letters of Intent (LOI) and Full Proposal review process.

Background

According to the Federal Register (Vol. 83, No. 144, pages 35,428-35,434), the legally allowed annual catch limit (ACL) of Red Snapper from South Atlantic federal waters over the last decade has varied substantially; in some years being zero. The Southeast Fisheries Science Center (SEFSC) stated in 2017 that the uncertainty in the stock assessment inhibits the ability to set a model-based ACL that can be effectively monitored. Temporary harvests were allowed from 2017-2019. The total annual ACL of 42,510 fish for the Red Snapper fishery is currently allocated 28.07% to the commercial fishery and 71.93% to recreational fishermen, which had five open days for the fishery in 2018 and 2019, with an ACL of 29,656 fish. The allocations were set using a formula based on historic and recent average landings. According to NOAA Fisheries, preliminary landings during the five-day 2019 recreational season totaled an estimated 49,674 fish, exceeding the current recreational ACL. As a result, the season length was reduced to four days in 2020. At the same time, a majority of fishermen expressed frustration at not having

more fishing days, a request that cannot be addressed by the South Atlantic Fishery Management Council (Council) until a new stock assessment, scheduled for 2021, is completed.

Prospective PIs may wish to register for and virtually attend the upcoming Snapper Grouper Advisory Panel (AP) webinar meeting, which is scheduled for November 4-6, 2020; to register, go to: <https://register.gotowebinar.com/register/3153851657831643404>. The second item on the agenda is development of a Fishery Performance Report for Red Snapper. AP members will receive a general summary of landings, economic data, life history information, and a list of discussion questions. Briefing material for the meeting will be posted on October 21 at the following link on the Council's website: <https://safmc.net/safmc-meetings/current-advisory-panel-meetings/>.

Program Goal

The overall goal of this research program is to generate an absolute estimate of abundance with an accompanying measure of uncertainty for the entire South Atlantic Red Snapper stock, to be used by fishery management as an anchor point for future stock assessments. This effort, like the much larger "Great Red Snapper Count" in the Gulf of Mexico (www.snappercount.org), is intended to serve a similar function for management of Red Snapper.

The goal of the "South Atlantic Red Snapper Count" is to determine the total number of Red Snapper two years old and older, by age class, within the jurisdiction of the South Atlantic Fishery Management Council, but tempered by the limitations of funding and time. For instance, approaches taken to determine how ages will be calculated (e.g., actual collection and aging vs. prediction with lengths) will factor into the overall efforts to be undertaken in this study.

Fisheries managers wish to know the total number of Red Snapper and where they are, regardless of where the fishery operates and the size classes of the fishery catches. It will be important to attempt to determine if Red Snapper occur in areas we have not previously examined.

Funding Available and Expectations

\$1.5 million is available to support one or more project(s) which meet(s) the goal of this Request for Proposals. Matching funds are not required, but would certainly add additional capacity to address the goals and objectives of this program.

Much has been learned from the significant work recently conducted on Red Snapper in the Gulf of Mexico; the following guidance is predominantly based on experiences from that work. However, prospective researchers should keep in mind that the amount of funding available through SARSRP is much less than that which was available in the Gulf of Mexico; proposed studies may wish to focus on mining existing information and generating (where feasible) the most critical data to achieve the desired outcome.

Geographic and Design Considerations

The spatial domain of the South Atlantic Fishery Management Council is from the Atlantic side of the Florida Keys to the Virginia-NC border (map taken from <https://safmc.net/>).

Research proposed should attempt to provide as much coverage as possible by stratifying across known biogeographic regions, the known depth range of Red Snapper (10-150 meters), and, at a minimum, across:

- Known artificial reefs. There are many known and mapped artificial reefs where Red Snapper are found.
- Known natural reefs. Natural hard bottom features are widely distributed throughout the South Atlantic.
- Unknown/uncharacterized bottom. This stratum includes all habitats that fall outside the domains of known artificial and natural reefs; *it is the least understood of the three and thus critically important to document*; it was where ~75% of the Gulf of Mexico Red Snapper were found.



Depth or other stratifications within each of these may improve statistical performance of the chosen sampling methods.

Proposals should include a component of a design planning phase to conduct power analysis to determine an overall sampling design and allocate sampling across spatial strata. The desired precision (Coefficient of variation [CV]) of the overall estimate should ideally be under 30%. We acknowledge that the level of current funding may not be adequate to support the full field work necessary to actually achieve this precision but the design planning phase will elucidate tradeoffs between precision and cost.

Sampling Methods

As mentioned above, a subset of methods are strongly encouraged to be used to meet the goal and objectives of the SARSRP: (1) Close-kin and meta-population genetics analyses; (2) Utilize existing and possibly supplement with new South Atlantic trap-video survey data to scale-up density estimates to total abundance; (3) Utilize a research technique similar to that pursued in the Gulf of Mexico Red Snapper abundance assessment, focusing predominantly on use of active acoustics and visual ground-truthing. Research is not limited to these three approaches and other appropriate research methods proposed will be considered; however, any approaches employed during the study should be acceptable to NOAA to be used in stock status determinations, fishing recommendations, and harvest specifications work, which must be the best scientific information available (BSIA).

State-supported and other studies in some areas of the South Atlantic have already been conducted using one or more of these three methods; these could be inventoried and mined.

In addition, the Gulf of Mexico Red Snapper Research Program developed and elaborated on a number of these techniques, having had the benefit of two workshops focused on approaches. A report from the second Gulf of Mexico workshop can be found at <https://www.scseagrant.org/p1-red-snapper-experimental-design-workshop-summary-report/>.

Collaboration with Industry

Prospective investigators are strongly encouraged to work directly with the commercial and recreational fishing industries; indeed, work proposed (e.g., sampling design) could be significantly informed with feedback from the fishing industry. Thus, engagement with fishermen, through meetings or workshops perhaps, should be included from the start of the program, and possibly through the research effort itself (such as through a tagging study or other “citizen science” efforts), and should be included as a key component of the proposed work.

Expected Reporting Efforts

Formal SARSRP research activities will span two years. Points of contact (POC) for the research project(s) selected for funding will be established in order to track progress and to report out significant findings as they are generated. This will be in addition to the regular semi-annual reporting, which will be required under the terms of the sub-awards.

Proposals should include a reporting strategy to ensure the Steering Committee (SC) and the fishing community, fishery managers, and other stakeholders are regularly updated on the status of the project. At a minimum, investigators will be expected to provide six-month updates to the SC.

The final six months of the SARSRP (post-research period) will be used to bring together the SC, POC(s), and the research PI(s) to consolidate key results and discuss findings. Minimal travel funding should be set aside to ensure investigator participation in information synthesis, analysis, and sharing.

Eligibility

The South Carolina Sea Grant Consortium welcomes proposals from institutions of higher education. The proposal Principal Investigator(s) must be based within a Southeast U.S. state (NC, SC, GA, FL). Co-investigators, including state agencies, non-governmental organizations, and the fishing industry, may originate in any U.S. region. Federal partners may also participate as uncompensated collaborators, but may receive other types of funding to support the research. No person shall be excluded on grounds of race, color, age, sex, national origin, or disability from participation in, denied benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the South Carolina Sea Grant Consortium.

RESPONDING TO THE SARSRP REQUEST FOR PROPOSALS

Preparation and Submission of Letters of Intent (LOI)

Applicants will be required to first provide LOIs that summarize the work to be conducted, identify the proposed partners, provide an idea of the breadth of approaches which will be employed, and allow the SC to work with prospective PIs in cases where collaborations, regional approaches, and resource efficiencies can be realized. The SC will review all LOIs to determine if the proposed effort will meet the research priorities of this funding call, and then provide feedback to the applicants. Based on the merit review process led by the SC, applicants will be encouraged or discouraged to submit Full Proposals (see Preparation and Submission of Full Proposals section). Regardless of the decision of the SC, all applicants who submit a LOI will be eligible to submit a full proposal.

Instructions for Preparing Letters of Intent

Letters of Intent are due to the South Carolina Sea Grant Consortium by November 16, 2020, 5:00 pm ET via email at RedSnapperResearch@scseagrant.org with the subject line: “**2020-23 SARSRP Letter of Intent.**” To do this, please provide the following elements:

1. Point(s) of Contact for Proposed Project
 - a. For Key Personnel
 - i. Name(s) and Title(s)
 - ii. Affiliations
 - iii. Full Contact information (mailing address, phone, e-mail address)
 - b. For Additional Investigators
 - i. Name(s), Title(s), and Affiliations
2. Letter of Intent Content
 - a. Project Title
 - b. Goals and objectives
 - c. Brief summary of work to be completed
 - d. Methods to be employed*
 - e. Expected deliverables
 - f. Anticipated outcomes (some perspective on the “bias vs. precision” question)
3. Data sets needed or to be collected
4. Budget Needs (generally categorized by salaries, wages, fringe benefits; supplies and equipment, travel, other costs, and indirect costs)
5. Project Partners and Nature of Engagement

* While the three preferred methods have been recognized as effective and viable for Red Snapper population assessments, other methods to obtain an estimate of absolute abundance will be considered. If utilizing an alternative method, please describe the methodology, including limitations, and its utility to estimate absolute abundance for Red Snapper. Additional detail on the methods can be incorporated into a Full Proposal.

The Letter of Intent should not exceed three pages in length, single-spaced with one-inch margins, and 12-point font.

Preparation and Submission of Full Proposals

Once the SARSRP SC has reviewed the Letters of Intent and the prospective PI(s) have been notified and comments provided, a Full Proposal should be prepared and submitted. To assist with the preparation of Full Proposals, we have provided detailed guidance below.

Proposals should be prepared according to the following outline and include a narrative of up to 10 pages, single-spaced, with one-inch margins, and 12-point font. Proposals will be accepted no later than 5:00 pm on February 1, 2021. Proposal forms (proposal endorsement, project summary, annual milestone chart, vitae, and budget) can be found at <https://www.scseagrant.org/proposal-and-reporting-forms/>.

Instructions for Preparing Full Proposals

The Full Proposal should be assembled according to this outline:

1. Proposal Endorsement (form)
2. Project Summary (form)
3. Narrative, not to exceed 10 pages, to include the following sections:
 - a. Proposal Title
 - b. Investigator Names and Affiliations
 - c. Introduction/Background/Rationale (Brief)
 - d. Objectives
 - e. Detailed Methods
 - f. Information Products/Deliverables
 - g. Expected Outcomes and Anticipated Benefits
 - h. Related Work
4. Data Sharing Plan
5. References
6. Annual Milestone Chart (form)
7. Vitae (form; one per PI; two-page max)
8. Budget (form)
9. Detailed Budget Justification (MS Word format)
10. Letters of Support (separate)

Full Proposal narratives should be prepared with the following anticipated metrics and outcomes in mind:

1. Provide an estimate of the absolute abundance of age-2 and older Red Snapper in the U.S. South Atlantic region, and a measure of the uncertainty of this estimate.
2. A description of the scientific and methodological approaches (e.g., close-kin genetics, fisheries-independent survey data, active acoustics, other approaches) used to generate the abundance estimate and associated uncertainty (e.g., the coefficient of variation of the abundance estimate).

3. Enhanced ability of fisheries scientists to improve confidence levels about the health and status of South Atlantic Red Snapper stock.
4. Results and analyses provided for fisheries management agencies to inform decisions about the management of Red Snapper in the region.

Submission of Full Proposals

Electronic copies (in Microsoft Word and Excel; **please do not submit PDFs**) of all Full Proposal documents must be submitted via email no later than 5:00 pm on February 1, 2021 via e-mail with the subject line “**2020-23 SARSRP Full Proposal Submission**” to:

RedSnapperResearch@scseagrant.org.

Review of Full Proposals

The following criteria and rating scales will be used to rate Letters of Intent and Full Proposals:

- A. Programmatic Justification/Clarity of Objectives (20%) – The degree to which the proposed project addresses the priorities outlined in the SARSRP Request for Proposals and how the proposed objectives address the problem or opportunity identified in the Rationale and Programmatic Justification sections.
- B. Scientific/Technical Approach/Methods/Timeline (30%) – The degree to which (1) the feasibility of the proposed methods and design of the proposed project will address stated objectives (towards meeting the <30% CV goal); (2) the use and extension of innovative, state-of-the-art methods to be used in the proposed project will advance the scientific or outreach discipline; and (3) the data sharing plan will meet the needs of the fishery management community and interested parties.
- C. Expected Outcomes and User Engagement (20%) – The degree to which the planned outcomes are clearly defined, in terms of interim and final measurable results and products, and with a reasonable timeframe for completion and delivery, and the degree to which targeted users of the results of the proposed activity have been brought into the planning of the activity, will be brought into the execution of the activity, and will be kept apprised of progress and results.
- D. Dissemination of Results (10%) – The degree to which the proposed project includes specific strategies for information delivery to and product development for identified targeted users (e.g., through the scientific literature, Sea Grant Extension and Communications products, educational efforts, etc.).
- E. Investigator’s Knowledge of Field (10%) – The degree to which the investigator(s) is (are) experienced, proficient, and recognized in their respective fields.
- F. Adequacy of Budget (10%) – The degree to which the proposed budget will adequately support the proposed work and provide the necessary and appropriate amount and distribution of funding across budget categories.

National Environmental Policy Act (NEPA)

NEPA requires that Federal agencies consider the environmental impacts of major Federal actions significantly affecting the quality of the human or natural environment. All research projects must furnish sufficient information to assist Sea Grant in assessing the environmental

consequences of supporting the projects. Applicants will be required to cooperate with Sea Grant in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. Failure to do so shall be grounds for not selecting an application. An abbreviated **Environmental Compliance (NEPA) Form and any necessary permits** will be required if the application is selected for funding.

Proposal Selection and Funding Cycle

SARSRP proposals should be prepared for a 2.5-year period, where the research will be performed commencing March 8, 2021 to February 28, 2023, and the final reporting, synthesis, and dissemination will occur from March 1 to August 31, 2023. Key dates, starting with release of the RFP:

Disseminate Red Snapper RFP and Guidelines	October 16, 2020
Letters of Intent (LOIs) Due COB at Consortium Office	November 16, 2020
Review of LOIs (SC)	November 17-27, 2020
Comments Provided to Proposers; Invitation for Full Proposals	November 30, 2020
Full Proposals Due at Consortium Office, Signed and Endorsed	February 1, 2021
Written Reviews of Full Proposals	February 1-19, 2021
Technical Review Panel Evaluation of Full Proposals	Week of February 15, 2021
Notification of Successful Proposers	February 22, 2021
Successful Proposers Prepare Written Rebuttal to Reviews; Complete NEPA Forms	Week of February 22, 2021
SARSRP Sub-awards Processed by S.C. Sea Grant Consortium	March 1-5, 2021
Start Date for SARSRP Research Projects	March 8, 2021
SARSRP Research Projects Conducted	March 8, 2021-February 28, 2023
SARSRP Research Project Semi-Annual Reporting	Oct 1, 2021; April 1/Oct 1, 2022
SARSRP Project Final Reporting and Synthesis	April 1-May 31, 2023
SARSRP Research Findings Meeting; Dissemination of Results	June/July 2023

For Additional Information

At any time during the development of the LOIs or Full Proposals, prospective investigators may contact the following people for discussion and more information:

- **Florida:** Holly Abeels, habeels@ufl.edu
- **Georgia:** Bryan Fluech, fluech@uga.edu
- **North Carolina:** Scott Baker, bakers@uncw.edu
- **South Carolina:** Graham Gaines, graham.gaines@scseagrant.org
- **NOAA SEFSC:** Erik Williams, erik.williams@noaa.gov

Post-Award Requirements

1. Each lead PI will be required to submit an annual progress report to the South Carolina Sea Grant Consortium, following the guidelines stipulated by that program.
2. Each lead PI will be required to complete and submit annually to the S.C. Sea Grant Consortium a Department of Congress Research Performance Progress Report (RPPR, OMB Form 0690-0032).

3. Each lead PI will be required to provide a twice-yearly video-conference briefing on the progress of the project to the SARSRP Steering Committee.
4. Each research team will be required to provide a final video-conference briefing to the SARSRP Steering Committee, and submit a 20-25 page summary document of the major findings and recommendations from the project. This can occur during the final six months of the 2.5-year program period.

To ensure that findings are broadly disseminated, each lead PI will be required to share their research findings with staff at a meeting (in person or virtual) of the South Atlantic Fishery Management Council and the SEFSC in the final quarter of the project. In addition, the research team will be expected to collaborate with Sea Grant extension to develop education and outreach products. PIs should include adequate funding in the budget to accommodate these activities. In addition, PIs should plan on publishing their results in peer-reviewed literature.

NOAA Data Sharing Requirement

All NOAA-funded research projects, data, and information collected and/or created under NOAA grants and cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner, except where limited by law, regulation, policy, or by security requirements.

The requirement has two parts: (1) environmental data generated by a research project must be made available after a reasonable period of exclusive use, and (2) the grant proposal must describe the plan to make the data available.

All applicants are required to complete a one-page Data Management Plan (DMP) in their full proposal (see Appendix B for more details). Funds may be allocated for data management activities. The DMP is not part of the 10-page project description. Even if no data will be produced, a DMP is required that states: "No data are expected to be produced from this project." Data Management Plans are not required at the Letter of Intent stage.

The lead PI is responsible for the DMP of the entire project. The lead PI may assign different roles and responsibilities to co-PIs with respect to the management of data. The lead PI is also responsible to provide a contingency plan for management of data in case of departure of key personnel from the project. The lead PI is also responsible for reporting in the Annual and Final Reports on the data management, preservation, and access for the whole project. Please note that DMPs will be considered during the merit review process.

Process/Budget Questions?

If you have any questions about the LOI or Full Proposal preparation process, please contact Ryan Bradley, S.C. Sea Grant Consortium Assistant Director for Administration at ryan.bradley@scseagrant.org or Susannah Sheldon, S.C. Sea Grant Consortium Research and Fellowships Manager at susannah.sheldon@scseagrant.org.

Appendix A
SARSRP Steering Committee Members

NMFS

Southeast Fisheries Science Center – Erik Williams

Southeast Fisheries Science Center – John Walter

SA Fisheries Management Council

SE – Myra Brouwer

Sea Grant

NC – Scott Baker, NC Sea Grant College Program

SC – Graham Gaines, SC Sea Grant Consortium

GA – Bryan Fluech, Marine Extension and Georgia Sea Grant

FL – Holly Abeels, Florida Sea Grant College Program

State Fisheries Agencies

NC – Steve Poland, NC Department of Environment and Natural Resources

SC – David Whitaker, SC DNR-Marine Resources Division (retired)

GA – Carolyn Belcher, GA Coastal Resources Division

FL – Luiz Barbieri, FL Fish and Wildlife Commission

Industry Reps

NC – Jack Cox, Crystal Coast Fisheries, Morehead City

SC – Mark Marhefka, Abundant Seafood, Mount Pleasant

GA – Deidre Jeffcoat, Miss Judy Charters, Savannah

FL – Jimmy Hull, Hull's Seafood, Ormond Beach

Gulf of Mexico Reps

MS/AL – LaDon Swann, MS/AL Sea Grant Consortium

TX – Greg Stunz, Texas A&M University - Corpus Christi

Appendix B
Sea Grant Data Management Plan Form

Title of the Proposal (required answer):

Name of the lead PI (required answer): Sea Grant requires that the lead PI serve as the data steward.

Contact Information (required answer):

Dataset Description(s) (required answer): What data will the dataset(s) contain? This includes descriptive details on data types, inclusion of metadata, data format(s), collection times / date ranges, etc. What name(s), if any, will be designated to the dataset(s)?

Do you agree to release all data no later than 2 years after the end-date of the project? (required answer):

Issues (required answer): Are there any legal, access, retention, etc. issues anticipated for the dataset? If yes, please explain.

Data Size: What will be the estimated size of the dataset? Please report estimated number of MB, GB, TB, etc., collected.

Data Format: What format will the dataset utilize? (i.e., Excel file, model code, audio/video recording, etc.)

Ownership (required answer): Who will own the dataset, if not the lead PI?

Post-Processing: What post-processing and QA/QC will this dataset undergo? Who will be responsible for performing this post-processing and QA/QC to prepare the dataset for its deposition into a repository?

Preservation Plan (required answer): What data repositories will be used to host the dataset? If none, how will the data be preserved?

Products: Will any information or data products be developed from this dataset? How will the related costs be supported? Which organization(s) will be producing these products?

Other Comments: Are there any additional comments related to the data that will results from your SARSRP-funded study?