#### **Request for Proposals**

#### Black Sea Bass Habitat Research Needs in the Mid-Atlantic

#### **Purpose**

The Atlantic Coastal Fish Habitat Partnership (ACFHP) is seeking research and/or restoration proposals to address black sea bass habitat issues in the Mid-Atlantic region (from Long Island Sound to Cape Hatteras), with an emphasis on the use of natural and/or artificial reefs and their ability to maintain and enhance fishery productivity. Projects can range from 12 – 24 months in length, and should include guaranteed monitoring for at least three years. The maximum award for an individual project is \$225,000, and multiple highly ranked projects will be considered if the amount requested totals less than the \$225,000 in available funds. All proposed artificial reef construction projects must be developed in coordination with the artificial reef manager in their respective state (contact information listed in Appendix A) to be eligible for funding.

The new proposal deadline is February 1, 2016 at midnight.

#### **Background**

ACFHP is a coast-wide collaborative effort developed in 2009 under the auspices of the National Fish Habitat Action Plan. ACFHP is comprised of fish habitat resource managers, scientists, and communications professionals from 33 different state, federal, tribal, and non-governmental agencies working together to accelerate the conservation, protection, restoration, and enhancement of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fishes.

Every fish species has specific habitat requirements that must be met in order to maintain healthy population levels. In many cases, physical structure is essential for at least part of the life cycle. Black sea bass (*Centropristis striata*) has a strong reliance on structural habitat in its estuarine and coastal distributions, though the function of structured habitat with respect to providing shelter, food, movement, reproduction, or its influence on overall fish productivity is not well understood. Additionally, the relative importance of each habitat type on size at harvest and protogynous hermaphrodite transition is not known.

For fishery managers this raises the question as to what specific substrates are essential to maintain healthy fishable populations along the Mid-Atlantic coast. Current management assumes a constant natural mortality (M), which is problematic considering the likelihood that habitat availability plays an important role in survival. Variable M translates into increased variability of fishing mortality which could have either positive or negative impacts to regional harvest targets and thresholds.

NOAA's essential fish habitat source document for black sea bass (<a href="http://www.nefsc.noaa.gov/publications/tm/tm200/tm200.pdf">http://www.nefsc.noaa.gov/publications/tm/tm200/tm200.pdf</a>) identified several important structural habitat types at various life history stages. Post-settlement juvenile black sea bass inhabiting offshore areas occur in accumulations of shell on sand substrata, complex microtopographies on exposed clay, rocky reefs, and wrecks. Juveniles within estuaries utilize habitats such as oyster reefs, mussel beds, sponges, seagrass beds, cobble, and pilings. As adults, black sea bass occupy habitats such as rocky reefs, cobble and rock fields, stone coral patches, exposed stiff clay, and mussel beds. In addition to natural structure, black sea bass in the Mid-Atlantic occupy the 130+ offshore artificial reefs in the region.

Artificial reefs have the capacity to replace some of the natural habitat degraded by anthropogenic activities such as bottom trawling, and artificial reef programs are in place in many Mid-Atlantic states. Although it is known that these structured habitats increase fish abundance and species richness in the area of placement, many questions remain regarding how the structured habitat functions with respect to providing shelter, food, movement, reproduction or its influence on overall fish productivity. The level of productivity vs. site attraction is also an artificial reef topic of debate. Optimal material, placement, height, and complexity are also not well understood.

Understanding habitat utilization by black sea bass will significantly improve the understanding of the species' life history, stock dynamics, and habitat requirements, thereby improving model accuracy. Better understanding of these structured habitats will also allow for more effective management recommendations to benefit not only the fisheries and industries, but non-fishing activities such as dredging, mining operation, and energy development as well. Beyond black sea bass, the knowledge gained on how habitat affects population ecology can be applied to the management of other structure-oriented species such as tautog.

#### Scope of Work

The applicant would be expected to develop an original research project to improve our knowledge of how black sea bass use structured habitat or develop a restoration project to enhance black sea bass habitat in the Mid-Atlantic region.

Areas of interest for research include:

- 1. Identification of natural habitats and their locations in the mid-Atlantic that can be used to refine Essential Fish Habitat (EFH) designations
- 2. Improvement of understanding of how various habitats affect productivity
- 3. Use of habitat and productivity data to improve the stock assessment process
- 4. Impact of black sea bass on prey such as juvenile lobster in New England

Areas of interest for restoration include:

- 1. Restoration of natural reef-like areas known to be used by black sea bass
- 2. Development of artificial reefs to enhance black sea bass productivity

Restoration must only take place in currently permitted sites, and funds cannot be used towards requesting permits for new sites. All other permit requirements (e.g. take permits) are the responsibility of the applicant, and should be listed along with the timeline for completion and current status.

To ensure compliance with state regulations, all applicants must have contacted their state artificial reef manager (Appendix A) prior to submitting a proposal.

Preference will be given to projects that match or leverage existing funding.

#### Eligibility

There is no restriction on who can apply for this grant; NGOs, state and local governments, academia, conservation groups, etc. are all eligible.

**Proposals must be received by February 1, 2016, at midnight.** Proposals must be in electronic format (MS Word format only) and should be emailed to the ACFHP Coordinator, Lisa Havel at <a href="LHavel@asmfc.org">LHavel@asmfc.org</a>.

Incomplete applications will not be considered.

Proposals should include:

- Executive summary (500 character limit)
- Proposed approach and scope of work, including monitoring (not to exceed three pages)
- Data management and deliverables (500 character limit)
- Statement of qualifications and staffing plan (not to exceed two pages)
- CVs for each staff member
- Contact information for three references (clients or previous collaborators)
- Project partners and match contributed (if applicable)
- Budget table (see Appendix B for suggested format)

#### **Proposal and Project Timeline**

Time Frame	Process Step
December 2015	RFP release
February 1, 2016, midnight	Deadline for proposal submissions
Mid-February, 2016	Notification of award
July 31, 2016	Interim progress report 1 due to ACFHP
January 31, 2017	Interim progress report 2 due to ACFHP
July 31, 2017	Interim progress report 3 or final report due to ACFHP*
January 31, 2018	Final report due to ACFHP*
End of monitoring timeframe	Follow-up report on monitoring results due to ACFHP*

<sup>\*</sup>Project lengths can range from 12 – 24 months plus monitoring. Interim, final, and monitoring reports will be due accordingly.

#### **Qualifications and Evaluation Criteria**

The applicant should demonstrate substantial experience in research and/or restoration. Knowledge of fish habitat is required, and an understanding of natural and artificial reefs and fisheries management are encouraged.

Proposals will be reviewed by an ACFHP subcommittee who will score projects based on the evaluation criteria in Appendix C. Funding will be awarded to the applicant(s) that has the qualifications and experience to develop a project and produce high-quality data and/or results pertaining to black sea bass habitat.

#### **Deliverables/Schedule of Payments**

Bi-yearly interim progress reports, one final report, and one monitoring report will be due to ACFHP, with the total number of reports depending on the length of the project. Funding will be administered as follows:

- 33.3% of award at project start.
- 33.3% of award at first progress report.
- 33.3% of award at project completion/final report.

ACFHP reserves the right to share project success in each report via outreach (Facebook, newsletters, presentations, etc.). Raw data should be available to ACFHP upon request.

#### **Primary Point of Contact**

Lisa Havel at <u>LHavel@asmfc.org</u>, (703)842-0740 Atlantic States Marine Fisheries Commission 1050 N. Highland St. Suite 200 A-N Arlington, VA 22201

### Appendix A

State Artificial Reef Manager Contact Information

New York

Christopher Laporta

New York State Department of Environmental Conservation

Christopher.Laporta@dec.ny.gov

(631)444-0438

205 Belle Mead Rd. #1

East Setauket, NY 11733

**New Jersey** 

**Hugh Carberry** 

Hugh.carberry@dep.nj.gov

(609)748-2022

Nacote Creek Research Station

P.O. Box 418

Port Republic, NJ 08241

Delaware

Jeffrey Tinsman

Delaware Department of Fish and Wildlife

Jeffrey.tinsman@state.de.us

(302)735-2974

3002 Bayside Dr.

Dover, DE 19901

Maryland

Erik Zlokovitz

Maryland Division of Natural Resources

Erik.zlokovitz@maryland.gov

(410) 260-8324

580 Taylor Ave.

Tawes State Office Building B2

Annapolis, MD 21401

Virginia

Alicia Nelson

Virginia Marine Resources Commission

Alicia.nelson@mrc.virginia.gov

(757) 247-2244

2600 Washington Ave.

3<sup>rd</sup> Floor

Newport News, VA 23607

North Carolina
Jason Peters
North Carolina Department of Environment and Natural Resources

Jason.Peters@ncdenr.gov
(252)808-8052
3441 Arendell St.
Morehead City, NC 28557

# Appendix B Example Budget Table

Item	Total Cost	•	Partner Funding
		Funds	
Coordination			
Travel	\$1,500		\$1,500
Project Coordinator Salary	\$3,000		\$3,000
to Monitor Contracts			
Outreach/Education	\$1,000		\$1,000
Contracted Services			
Heavy Equipment Rental	\$15,000	\$5,000	\$10,000
and Operation			
Contractual Labor	\$30,000	\$17,000	\$13,000
Design and Permitting	\$1,000		\$1,000
Monitoring			
Pre- and post- project	\$5,000	\$5,000	
physical and biological			
monitoring			
Total Costs	\$56,500	\$27,000	\$29,500

## Appendix C

Proposal Evaluation Criteria

Review Criteria	Maximum Points
Degree to which the project addresses	30
the research and/or restoration needs	
addressed in the Request for Proposals.	
Scientific and technical merit	15
Feasibility of objectives: project design	10
Are the objectives and goals clearly	
defined and measurable? Will the	
methods accomplish the objectives? Is	
the timeline reasonable?	
Feasibility of objective: budget	10
Is the budget reasonable to accomplish	
the goals and objectives? Does the	
project have matching funds? Are there	
partners involved?	
Demonstration that products will be	15
accessible and useful in conservation	
and resource management decision-	
making.	
Monitoring: Is the proposed monitoring	10
plan sufficient enough to effectively	
demonstrate the project goals can be	
achieved?	
Expertise	10