



NOAA
FISHERIES

HMS Research Priorities & Federal Funding Opportunities Overview



HMS Advisory Panel Meeting
March 2015

HMS Management-Based Research Needs and Priorities

On November 20, 2014, NMFS published the Final HMS Management-Based Research Needs and Priorities document (79 FR 69097)

- Communicates key research needs that directly support Atlantic HMS management
- Contains a list of near- and long-term research needs and priorities
- Priorities range from biological/ecological needs to socio-economic needs
- Complements the HMS Research Plan currently in draft
- Between the draft and the final, a number of additions and small changes to research priorities were made based on AP and public input

http://www.nmfs.noaa.gov/sfa/hms/documents/final_hms_research_plan_2014.pdf



Updates

- The HMS Research Working Group continues to meet
 - Identified funding sources for VIMS bottom longline survey
 - Inventoried cross-Agency HMS research funding (e.g. Science Centers, S&T, Sustainable fisheries)
 - Currently using cross-Agency funding inventory to identify HMS research gaps by species and priority
 - Continued high-level discussions with Agency leadership to incorporate HMS research needs to existing funding prioritization



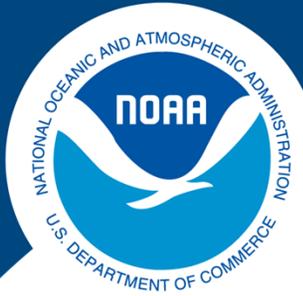
NOAA
FISHERIES

Federal Funding Opportunities Overview

Federal Funding Opportunities Overview

- Competitive grant funding opportunities are available for research, including research on HMS and HMS fisheries
 - Bluefin Tuna Research Program (BTRP)
 - Cooperative Research Program (CRP)
 - Bycatch Reduction Engineering Program (BREP)
 - Saltonstall-Kennedy (SK)





NOAA
FISHERIES

Bluefin Tuna Research Program

Bluefin Tuna Research Program

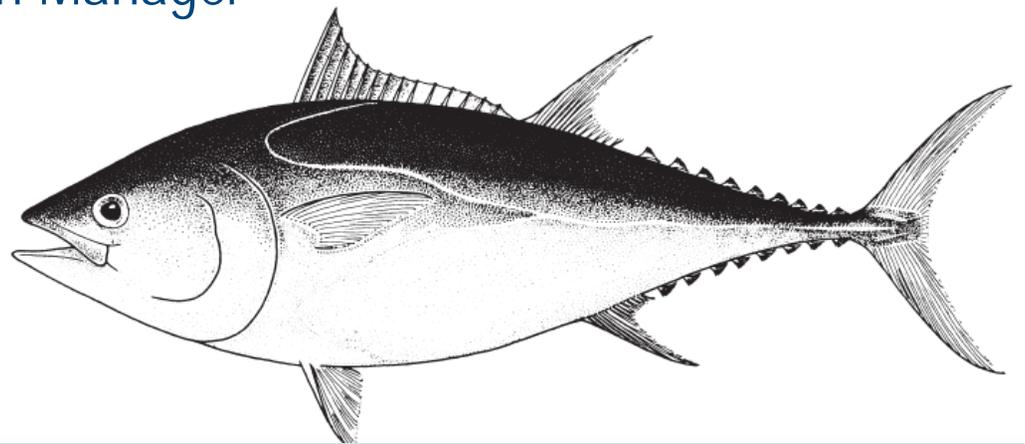
- Purpose is to provide information to aid fishery researchers, scientists, and managers to make informed management decisions about bluefin tuna
- Seeks to increase and improve the working relationship between fisheries researchers from NMFS, state fishery agencies, universities, other research institutions, and U.S. fishery interests (recreational and commercial) focusing on northern bluefin tuna in the Atlantic Ocean

Bluefin Tuna Research Program

- Priority needs, in no particular order, are for information that can be utilized in future assessments:
 1. Sampling of tissues and otoliths for studies of population genetics, age growth and fecundity, and micro-constituent or other analysis in order to characterize the stock composition of catches
 2. Large-scale, conventional and genetic tagging experiments to estimate abundance
 3. Data mining to sharpen estimates of catch, catch composition, fishing effort, and spatial aspects of catch
 4. Modeling to simulate the effects of stock mixing and efficacy of alternative management regimes
 5. Archival tagging to track individual movement in the eastern and western stocks
 6. Aerial survey of schools or other approaches to support development of fishery-independent indices of abundance

Bluefin Tuna Research Program

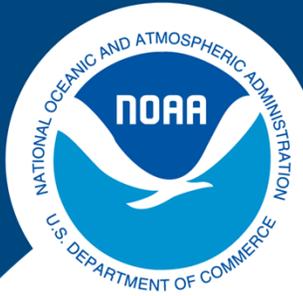
- National competition
- \$600,000 available each year
- NOAA partner required
- 1-year awards ranging from \$25,000-\$300,000
- Anticipate awarding approximately 5 projects/year
 - In 2015, approximately 10 applications
- Contact: Dax Ruiz, Competition Manager
 - (727) 824 – 5324
 - dax.ruiz@noaa.gov



Bluefin Tuna Research Program

- 2013 & 2014 awards include:
 - *Incorporation of Stock Mixing in the Assessment and Forward Projection of Atlantic Bluefin Tuna Populations* - Gulf of Maine Research Institute; Dr. Lisa Kerr
 - *Fisheries Independent Surveys of Juvenile Atlantic Bluefin Tuna* - UMass Amherst; Dr. Molly Lutcavage
 - *Biological Sampling to Determine Age, Growth and Sex of Atlantic Bluefin Tuna in the NW Atlantic*- U of Maine; Walter Golet, Ph.D.
 - *Age-Structured Simulation Model of Stock Mixing for U.S. Atlantic Bluefin Tuna Populations: Historical Stock Composition, Changing Demographic States, and Influence on Management Advice* – U of Maryland; Dr. David Secor & Dr. Lisa Kerr
 - *Integrating Spatially Explicit Information from Tagging to Improve Atlantic Bluefin Tuna Stock Assessments* - UMass Amherst; Dr. Molly Lutcavage
 - *Implementation of Spatio-Temporal Analysis Tools to Reduce Catch of Bluefin Tuna in the US Atlantic Longline Fishery* – Duke; Dr. Patrick Halpin
 - *Accounting for the Influence of Feeding Success on the Growth and Survival of Bluefin Tuna Larvae in Stock Assessment Efforts* - U of Miami; Dr. Barbara Muhling





NOAA
FISHERIES

Cooperative Research Program

Cooperative Research Program - CRP

- Background
 - Section 318 of the MSRA
 - Six regional cooperative research programs
 - National Cooperative Research RFP
 - Northeast and Southeast have dedicated budget lines
 - New England and Mid-Atlantic Councils have cooperative research-set-aside programs
- Areas of Research under Section 318: Enhancing stock assessments; Quantifying and reducing bycatch; Identifying habitat areas of particular concern; & Collecting social and economic data

Cooperative Research Program - CRP

- Areas of Research Expanded
- Fishery-dependent and fishery-independent data collection programs
- Life history, mortality, and stock identification research programs
- Tagging and biological sampling programs
- Bycatch data collection programs, including at-sea observers
- Conservation engineering, gear selectivity, and gear design studies
- Ecosystem monitoring and trophic ecology studies, including collection of environmental factors
- Studies on sea turtles, marine mammals, and protected species
- Studies to evaluate management measures and/or conduct stock assessments
- Socio-economic data collection programs
- Outreach and education activities

Cooperative Research Program - CRP

- Goals: Foster coordination, cooperation, communication and mutual respect among scientists, managers, and stakeholders; and Enhance the data upon which fishery management decisions are made.
- Contacts:
 - SEFSC: Guy Davenport, Guy.Davenport@noaa.gov
 - SERO: Dax Ruiz, Dax.Ruiz@noaa.gov
 - NEFSC: John Hoey, John.Hoey@noaa.gov
 - GARFO: Ryan Silva, Ryan.Silva@noaa.gov
 - National Coordinator: Mark Chandler, Mark.Chandler@noaa.gov

Cooperative Research Program - CRP

- Anticipate awarding approximately 8 projects/year in SE; 1-year awards ranging from \$25,000-\$300,000
- NE has set initiatives funded through CRP; often support HMS-related cruises and tagging projects
- National competition funds 7-12 projects/year; max \$200K /project
- Examples of funded HMS projects
 - Shark Life Histories/Reproductive Biology, Shark Bycatch and Discard Mortality, Stock Structure of Various Shark Species, Quantifying Post-Release Mortality/Survival , Habitat Use/EFH, Fishery Catch Characterization; Fishery Dependent Data Collection;



NOAA FISHERIES

- Office of Management and Budget

- Overview of the SK
- FY 2014 - 2015 Grant Process

- Daniel Namur
- National Promote and Development Manager,
 - Office of Management and Budget
- March 12, 2015



The Saltonstall-Kennedy Act

Promote and Develop (P&D)

- The Saltonstall-Kennedy Program began in 1954
- Funding is derived from a transfer from the Department of Agriculture to NOAA from duties on imported fishery products
- 30% of duties collected are made available to NOAA and placed in the Promote and Develop Account
- Since 1979, Congress has used a portion of P&D funds to offset funding for other NOAA programs in the annual appropriation
- Funds left in the P&D account after the offset remain available for the S-K Program
- NOAA runs both a competitive and national S-K program
- Funds are to be used to support the US fishing industry through Research and Development

The Saltonstall-Kennedy Grant Program

- Objective: address the needs of fishing communities in optimizing economic benefits within the context of rebuilding and maintaining sustainable fisheries and practices, and in dealing with the impacts of conservation and management measures
- NMFS seeks applications that demonstrate direct benefits to the U.S. fishing industries and encourages proposals that involve fishing community participation
- Priorities are set yearly by NOAA/NMFS
- Proposals are peer reviewed

The 2013 Saltonstall-Kennedy Grant Program

- In July of 2013, NOAA Fisheries announced the availability of funding for a 2013 Competitive S-K program
- Funds were obligated in the third and fourth quarter of FY14
- 250 applications were received
- 40 applications funded totaling ~\$10.5M

The 2013 S-K Priorities

- Aquaculture
- Optimum Utilization of Harvested Resources
- Fisheries Socioeconomics
- Conservation Engineering
- Ecosystem Studies
- Territorial Science

The 2014 - 2015 Saltonstall-Kennedy Grant Program

- NMFS has combined the FY14 and FY15 Competitive grants solicitations
- In October of 2014, NOAA Fisheries announced the availability of funding for a 2014/15 Competitive S-K program
- Funds are expected to be obligated in the third and fourth quarter of FY15
- 285 applications were received
- NMFS anticipates awarding greater than \$22M

S-K Themes and Priorities

- Maximize Fishing Opportunities and Jobs
- Improve the Cost-Effectiveness and Capacity for Observations
- Increase the Supply, Quality, and Diversification of Domestic Seafood
- Improve the Quality and Quantity of Fishery Information from the U.S. Territories

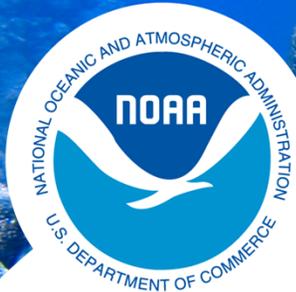
Selection Process:

How are Applications Evaluated?

- All Applications are reviewed for merit as outlined in the FFO
- The following Evaluation Criteria are discussed in the FFO:
 - Importance/ Relevance
 - Technical/ Scientific Merit
 - Qualifications of the applicants
 - Project Costs
 - Outreach and Education

Next Steps and Council Involvement

- 285 applications undergoing a minimum of 3 merit reviews
- After all reviews have been conducted applications will be placed in rank order
- A cutoff score will be determined
- Applications above the cutoff line will move to constituent panels for evaluation
- Based on the results of the panel a recommended selection package will be submitted to the Assistant Administrator of Fisheries for review and approval



**NOAA
FISHERIES**

- Office Of Sustainable Fisheries

Overview of the Bycatch Reduction Engineering Program (BREP)

Derek Orner
National Bycatch Coordinator
Office of Sustainable Fisheries



NOAA FISHERIES

BREP Overview

- The mission of the BREP is to develop technological solutions and other conservation engineering changes to minimize bycatch and reduce post-release mortality of non-target species.
 - National Standard 9 calls for minimizing bycatch and habitat impacts.
- Competitive program providing assistance to non-federal researchers since 2012.
 - Required specific NMFS collaborator in 2014.

BREP Funding Availability

- \$2.5M Annually
 - One-year awards with the possibility of renewal.
- Partner with Habitat Conservation
- Partner with International

BREP 2014 Grant Priorities

1. Developing innovative and effective technologies, gear modifications, and/or improved fishing practices in commercial and recreational fisheries to reduce bycatch impacts.
2. Reducing post-release mortality, including barotrauma and predation, in commercial and recreational fisheries including target and non-target species.
3. Determining the degree and nature of interactions, and developing techniques to reduce interactions, between fishing gears and corals, sponges, and other structure-forming invertebrates.

BREP Selection Process

1. Initial Evaluation—to determine compliance with requirements.
2. Pre-Proposals—encouragement of a full proposal from this stage is based primarily upon management applicability, technical merit (realistic and timely objectives and appropriate design) and relevance to Program Goals.
3. Full Proposals
 - *Technical Review*
 - *Panel Review*

2012 Projects

Fiscal Year 2012 Projects

NOAA allocated \$2.44 million to the BREP in 2012. These projects are being implemented across the country and address a wide variety of topics—fish listed under the Endangered Species act (ESA), marine fish, sea turtles, seabirds, and marine mammals. Research is focused on improving fishing practices and developing innovative gear technologies to reduce bycatch. This report summarizes the outcomes of projects funded with the 2012 grants.



2013 Projects

Fiscal Year 2013 Projects

In September 2013, NOAA Fisheries awarded 16 grants totaling \$2.39 million under the BREP. These projects are being implemented across the country and address a wide variety of topics, including fish listed under the ESA, marine fish, sea turtles, seabirds, and marine mammals. Research is focused on improving fishing practices and developing innovative gear technologies to reduce bycatch. Results for the projects funded with the 2013 grants will be available next year.



2014 Projects

- Vast Array Corp. – *Pilot project to test prototype devices to reduce leader line length on pelagic longline bycatch.*
- Mote Marine Laboratory – *Reducing post-release mortality from commercial fisheries bycatch in large coastal sharks.*



Bycatch Reduction Engineering Program

2013 Annual Report to Congress





Importance Of Bycatch Reduction

Bycatch occurs when fishing operations discard fish or interact with marine mammals, seabirds, or sea turtles. Bycatch can have significant biological, economic, and social impacts on fisheries. Reducing bycatch can improve the recovery of endangered marine mammals, sea turtles, seabirds, and fish. Coastal communities benefit by reducing bycatch of species that are valuable targets in other fisheries. In support of our mission to sustainably manage the nation's fisheries, NOAA's National Marine Fisheries Service (NOAA Fisheries) has been investing in technological and engineering solutions to reduce bycatch, and in 2012 began funding external partners from state governments, academia, and the fishing industry.

Overall Summary Of External Grant Program

The mission of the Bycatch Reduction Engineering Program (BREP) is to develop technological solutions and change fishing practices to minimize bycatch and reduce post-release injury and mortality of non-target species in our nation's fisheries. BREP grants have addressed bycatch of sponges, corals (deep and shallow), and non-target fish in commercial and recreational fisheries. The BREP also strengthens cooperation and collaboration between NOAA Fisheries and the fishing industry by giving priority to research projects that have strong management application through interactions with the fishing industry.

continued on page 8

Highlights

In September 2012, NOAA's National Marine Fisheries Service (NOAA Fisheries) awarded 14 grants totaling \$2.44 million under the Bycatch Reduction Engineering Program (BREP). NOAA awards BREP grants to researchers around the country to address four priority needs: reducing protected species bycatch, improving fishing practices, innovative and improved fishing gear and technologies, and reducing post-release mortality. Highlights from this year's projects include:

- Researchers in Florida are developing timed-release chemical shark repellants that could reduce shark bycatch by 18 to 35 percent depending on the type and intensity of repellent used.
- In the North Pacific, researchers have found that by using illumination they can reduce Chinook salmon bycatch by attracting them toward escape areas in Pacific hake midwater trawl nets.
- In the Northwest, researchers found that using a sorting grate that allow the smaller, target fish (Pacific hake) to pass through leads to a 26 percent reduction in widow rockfish bycatch.

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

http://www.nmfs.noaa.gov/by_catch/bycatch_BREP.htm