



Mid-Atlantic Research Set-Aside (RSA) Program 2004 Fishing Year

03-RSA-001 – Charles Borden, “*Fishery Independent Scup Survey of Selected Areas in Southern New England Waters.*” Principal Investigator – Laura Skrobe, University of Rhode Island.

Project Description: To develop a fishery independent scup survey that utilizes unvented fish traps fished on hard bottom areas in southern New England (SNE) waters to characterize the size composition of the population. Survey activities will be conducted during May – November at six rocky bottom study sites that are located offshore, where there is a minimal scup pot fishery and no active trawl fishery. Study results will expand the current understanding of the scup resource.

RSA Amount: 12,292 lbs of black sea bass,
40,000 lbs of scup

Project Period: May 1 – November 30, 2004

Award Status: **Completed:** Unvented scup pots were fished on six hard bottom areas in SNE waters during the summer of 2004. A total of 2341 scup were captured in the unvented pots. The length frequency distribution of the catch was recorded. Mean length of scup between the sampling stations ranged from 24.4 to 28.5 and a significant difference was found between certain stations. Results were compared to the NMFS 2004 spring and fall trawl data and the EIDEM 2004 trawl survey (Spring and Fall combined). The proportion of older scup (ages 3+) was higher for the pot survey than for the trawl surveys with a greater than 10 fold difference. The results of the analysis implies that the trawl gear is not adequately sampling the older, larger scup and therefore not characterizing the size structure of the scup population as a whole.

This project will again be conducted during the 2006 fishery. The results to date indicate that if the survey is continued in the long term, this scup pot survey of hard bottom areas has the potential to provide a reliable index of abundance for age 3 and older scup. A reliable index for these age groups would be a valuable addition to the current types of information used in the assessment of the stock.

03-RSA-003 - National Fisheries Institute, Inc., “*Development of a Supplemental Finfish Survey Targeting Mid-Atlantic Migratory Species.*” Principal Investigator – Eric N. Powell

Project Description: To obtain second year support for the development/refinement of a commercial-vessel based survey program in the Mid-Atlantic region that tracks the migratory behavior of selected recreationally and commercially important species. Information gathered would supplement the NMFS finfish survey databases and will include development of ways to better evaluate how seasonal migration of fish in the Mid-Atlantic influences stock abundance

estimates.

RSA Amount: 174,750 lbs of summer flounder,
120,000 lbs of scup,
281,250 lbs of *Loligo*
51,000 lbs of black sea bass,
104,816 lbs of bluefish

Project Period: January 1 - December 31, 2004

Award Status: **Completed.** Cruises were conducted for January, March and May. The first progress report covered the period January 1, 2004 – June 30, 2004, and included the cruise report for January with the report. The report for the March cruise was to be completed in mid-August; and the data for the May cruise was being entered into the NMFS database at the time this report was submitted. A total of 24 tows were made during the January 2004 survey. Fifteen tows were taken along the Hudson Canyon transect and nine along the Baltimore Canyon transect. Information provided in the report includes the station sampling protocol, gear utilized, sample processing protocol, and the results of the 24 tows. Height, weight measures were taken for the following species: *Loligo* squid, summer flounder, spiny dogfish, offshore hake, silver hake, black sea bass, *Illex* squid, monkfish, scup, rosette skate, American lobster, thorny skate, barndoor skate, clearnose skate smooth skate. Numerous tables and graphs were provided detailing information derived from the 24 tows.

The project's final report was approved on 9/29/05 and it provided the results from four research cruises during January 24-February 2, March 4-17, May 19-23, and November 15-21, 2004. The sampling protocol referenced above was followed for all of the tows on each of the cruises. A comprehensive series of graphs and tables are included with the report and they give a very clear picture of not only the abundance of species but also various measurement relationships such as the weight to length ratio of each species captured. The project's results were widely disseminated and the data entered into the National Marine Fisheries Service-Northeast Fisheries Science Center survey database

03-RSA-005 – Cornell Cooperative Extension of Suffolk County, “*Evaluation of the Effect of Vent Size and Shape on Black Sea Bass Behavior and Escapement from Pot Gear.*” Principal Investigator – Emerson Hasbrouck

Project Description: This project will implement several tasks to improve and enhance fishery information relative to the black sea bass pot fishery in the Mid-Atlantic. With the use of experimental pots and underwater video, various escape vent configurations will be investigated to help evaluate gear escapement and fish behavior. The project will also explore black sea bass mortality in pots left fishing during closed quota periods. Additionally, the project will develop a sea sampling and dockside sampling program for black sea bass and supplement the NMFS black sea bass tagging program.

RSA Amount: 71,500 lbs of black sea bass (allocated)
52,244 lbs of black sea bass (harvested) **73%**

Project Period: April 1 – December 31, 2004. Extended to December 30, 2006.

Award Status: **Active**. Performance reporting is delinquent and the completion report has not yet been received. The projects activities through March 2006 are detailed here. Researchers requested and received approval to change one vent size gear size (5.75 inches x 1.375 inches) with another (double circular 2.625 inches). This project has experienced a series of setbacks including theft or loss of pot strings as well as several incidents of pot raiding. The loss of the experimental gear which was to test the long term mortality has forced this aspect of the study to be discontinued. There were frequent incidents of the end pots on various strings being raided by divers, or cut away all together. As some of these pots contained temperature recorders the monetary loss has been significant. On top of these problems, poor weather reduced the number of hauls and delays in receiving an Exempted Fishing Permit did not allow for the completion of the RAS harvest. A total of 52,244 lbs of black sea bass were harvested from the 71,500 allocated. The lack of both funds and timely EFP has also caused the tagging portion of the project to be dropped.

Prior to the 2006 season a total of 69 string pulls were made during 11 trips which equal six complete sets and a total of 809 pot hauls. A total of 1,106 black sea bass (1002lbs), 32 scup, and 376 lobsters were caught. The data is being analyzed to chart, among other things, length frequency distribution, total numbers captured in each vent configuration, and the mean weight of black sea bass per pot haul.

The project was extended through December 30, 2006 field activities were conducted in early Spring/Summer 2006 and focused on fishing ten strings of experimental vent configuration gear with limited underwater video of fish behavior in the gear. A performance report addressing study activities conducted during October 2005 – March 2006 has been received and is under review.