

**FINAL PROGRESS REPORT FY07**

**Project Title:** Implementation of Electronic Vessel Trip Reporting,  
Biological Characterization and Continuance of the  
Standard Atlantic Fisheries Information System  
Coordination for the State of New Jersey

**Report Period Dates:** From: September 1, 2007 To: August 31, 2008

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**Submitting Partner:** New Jersey Department of Environmental Protection,  
Division of Fish & Wildlife

**Project Leader:** Peter Clarke, NJDFW ACCSP Statistical Coordinator

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## **Abstract**

The collection of fisheries dependent data in NJ is imperative to successful management of the commercial fishing industry as well as the conscientious stewardship of fisheries in the US. In the continued effort by NJ to exceed the standards set forth by the Atlantic Coastal Cooperative Statistics Program (ACCSP) and to follow guidelines outlined in the Atlantic States Marine Fisheries Commission (ASMFC) fisheries management plans (FMP), the New Jersey Division of Fish and Wildlife (NJDFW) established several programs during fiscal year 2007 project to achieve the intended goal of better data collection and thus better management decisions. Programs implemented during the FY07 period included the continued monitoring of electronic dealer reports through SAFIS, the termination of paper based dealer reports, electronic vessel trip reporting (EVTR) by state permitted fishermen, the continuation of blue crab trip level data entry, biological characterization of four commercially state regulated species, the system management of the biological tracking program, and at sea lobster landing statistics collection. These individual programs have combined to lay the base to the NJ ACCSP program.

## **Introduction**

Over the past 57 years, New Jersey ranks as one of the nations top producers of commercially harvested marine species of fish and shellfish. The NJDFW serves as the managing tool to these fisheries and has been making annual strides towards improvements in the collection of fisheries dependent data from the commercial fishing industry in part through funds received from the ACCSP. This project year focuses on several aspects of fisheries management including the continuation of electronic dealer reporting, the termination of paper based dealer reports, implementing electronic vessel trip reporting, digitizing and providing the ACCSP with commercial blue crab trip level harvest reports, biological characterization of key NJ regulated species, management of the NJ biological tracking database, and at sea observer coverage of the American lobster fishery. While few of these activities are continuance, several are new implementation programs for 2007 and as such are imperative to the successful management of the commercial fisheries in NJ.

In September 2005, the NJDFW received funds from the ACCSP to hire a statistical coordinator to implement electronic dealer reporting through the FY 2005 ACCSP grant titled, "Implementation of Phase 2 of the ACCSP for the State of New Jersey" through the auspices of the ACCSP and the Standard Atlantic Fisheries Information System (SAFIS). Peter Clarke started as the NJDFW Statistical Coordinator (Coordinator) on September 8<sup>th</sup>, 2005, and began addressing issues concerning commercial fisheries landings in NJ focusing on summer flounder, black sea bass, and scup, the only three state quota monitored species of which require specific dealer permits to buy and sell. Peter Clarke is a 100% ACCSP employee, and will remain in his position as the NJ State Coordinator. The principal biologist assigned to this project supervises the Coordinator. Five percent of his time was

charged to the ACCSP grant, while twenty percent of his time is shown in the Cost Summary as in-kind support (NJDFW).

**Electronic Dealer Reporting (eDR).** NJDFW has been carrying out the statewide support of mandatory reporting for permitted dealers of summer flounder, black sea bass, and scup since September 2005. To date, New Jersey has a total of 78 primary seafood dealers with both state and federal permits, and no dealers with state only permits. The NJDFW requires any dealer with a federal permit for summer flounder, black sea bass, or scup to possess a NJ state permit for each species intended for sale. The Coordinator provides support to both federally and state permitted dealers facilitating weekly reporting requirements in SAFIS and NJDFW paper form. Compliance monitoring is ongoing, landings comparisons between state reports and federal reports is performed weekly. The Coordinator contacts dealers found out of compliance to request reports for the appropriate week. Outreach of this type has been effective for a selective number of dealers. In August 2006, certified letters were mailed to non-compliant dealers that were unreachable over the telephone. Of the 72 dealers with both state and federal permits, 29 were reporting accurately to both SAFIS and NJDFW. Three dealers reported to SAFIS but not to NJ, and 40 were not reporting to either source. Response to the letters has been satisfactory, and compliance has increased to 100%.

The NJDFW does not have mandatory reporting for primary buyers of all marine species. A primary buyer is classified as individuals or businesses that purchase marine products directly from fisherman. The next step needed in order for New Jersey to gain complete coverage of all commercial landings from dealers purchasing marine organisms is through the implementation of a license to buy (for dealers)/license to sell (for harvesters), providing not only landings from all permitted dealers involved with the sale of marine organisms, but also securing a source of needed revenue. New Jersey is working to obtain statutory authority to charge dealers for permits and individuals for fishermen licenses, which could provide funding for the coordinator position in the future. Staff has met with industry representatives to develop a Landing License and discuss implementation and obtaining the necessary sponsor(s) for appropriate legislation.

**Termination of Paper Based Reports.** During the early stages of FY07, the Coordinator continued to use weekly paper-based reports received from dealers for quality assurance/quality control and compliance monitoring of commercially managed species. Paper reports were compared against SAFIS landings weekly for quality assurance, and when necessary, dealers are contacted to rectify any discrepancies between the two reporting processes. The first step to transitioning entirely to web based SAFIS reporting was consistency between both reporting methods for state quota monitored species (summer flounder, black sea bass, scup).

**Electronic Vessel Trip Reporting (ETRIPS).** NJDFW initiated mandatory trip level reporting in 2006-2007 of several species as a result of compliance requirements set forth by the Atlantic States Marine Fisheries Commission (ASMFC). The

following species currently have mandatory logbook requirements mandated by the ASMFC and administered by the NJDFW through paper or telephone call in formats. Presently, the American shad commercial fishery both in the ocean and bays of NJ is under monitoring requirements including mandatory logbooks returned to the NJDFW annually. Atlantic Menhaden bait fishery harvests are collected on an annual summary basis and received from fisherman with state purse seine permits. Horseshoe Crabs trip level harvest reports are received daily through an automated call-in answering system during the allocated season. Tautog harvest reports are received through the NMFS tri-copied trip reports sent to the NJDFW. Blue Crab harvest reports are received monthly and entered by division staff through the NMFS CODES system. American eel fishermen harvesting through the use of Miniature Fyke Net licenses are required to complete daily landings reports and submit reports to the NJDFW monthly. To expedite the entry of harvester trip level reporting, NJDFW implemented the ACCSP eTRIPS system in February 2008 after several years of development and system analysis.

**Blue Crab Data Entry.** The NJDFW received a grant award in FY 2001 for the Integration of Commercial Blue Crab Harvest Data into the ACCSP. This project resulted in the Division acquiring the necessary hardware and software to process trip level fisheries landings and provide the data in an electronic format to the NMFS, which in turn incorporated the files into ACCSP's data warehouse. As part of the Cooperative Agreement with NMFS, NJ received surplus PC's and a network printer, all of which have been installed and utilized. Prior to this grant, the only blue crab harvest data available were monthly summaries generated by the NJDFW. Portions of NJDFW initial ACCSP funded grant for the reporting of blue crab harvest data were utilized for the upgrade of the NJDFW Nacote Creek field office's network and server upgrade from dial-up to a T1 connection. Now, a complete network and server exists at the facility. The NMFS is able to provide data elements that the Division are unable to collect, such as dealer prices. During the project period, regulations were adopted that required monthly reporting of the daily harvest of blue crabs. A rudimentary system to monitoring monthly reporting was established. As a result, reporting compliance increased from 50% during 1999 through 2001 to over 80% in 2003. Phone calls or letters were sent to crabbers in order to attain or clarify missing data elements and to encourage those who had neglected to report. This direct contact has improved reporting and the crabbers' perception of the Division.

NJ commercial blue crab and conch by-catch harvest data from 2002 through August 2008 have been processed and transmitted to the NMFS. Commercial landings data through 2007 are available to the public on the NOAA Office of Science and Technology website (<http://www.st.nmfs.noaa.gov/st1/commercial>). The Division provides the Delaware Division of Fish and Wildlife with New Jersey's annual blue crab commercial harvest from the Delaware Bay, broken down by gear type and market category. Delaware utilizes New Jersey's harvest data; along with its own harvest data to provide an annual assessment of the Delaware Bay blue crab stock. This ACCSP project has enabled the Division to provide timely and accurate data for this assessment.

**Biological Characterization.** NJDFW is currently collecting biological samples to provide division staff with data for fisheries characterization information which is implemented in stock assessment models. Presently, tautog age and growth data are being used by fisheries scientists in stock assessment models. History has proven this program useful for tautog and as such was extended in 2005-2006 to include Atlantic menhaden. The NJDFW submitted an FY06 proposal to the ACCSP for the biological characterization of four New Jersey commercial fishery species (weakfish, American eel, American shad, and Atlantic croaker). The NJDFW identified the above four species whose commercial fisheries are not adequately being sampled for biological data, as important resources managed under the Interstate Fisheries Management Program (ISFMP) of the Atlantic State Marine Fisheries Commission (ASMFC), and managed under ASMFC Interstate Fishery Management Plans (FMP).

Several items for the NJDFW aging facility have been procured under the above mentioned ACCSP grant and in-kind support including microscopes, computers, imaging analysis software, imaging cameras, and wet saws, totaling to over \$40,000. These items have been received from vendors and have been assembled in a new aging facility on the premises of the NJDFW Nacote Creek field office.

**Biological Tracking Database.** As NJ continues to expand the number of species covered under biological characterization per mandates from the ASMFC, a need for data organization was identified. Through the help from the ACCSP, a working biological tracking database for NJDFW was developed. The database consists of trip level data from which the samples were taken including details such as date, location, vessel, and gear, in addition to biological data taken from each individual sample including, weight, length, sex, age structure extracted, and age of the sample. To date, all data from 1995 to 2008 for tautog, weakfish, American shad, Atlantic croaker, American eel, and Atlantic menhaden have been entered and returned through data feeds to the ACCSP.

**Lobster Landing Statistics.** On May 9, 2006, the ASMFC issued a news release concerning the American Lobster Management Board approval of Addendum VIII to Amendment 3 to the FMP for American Lobster. The Addendum established new biological reference points to determine the stock status of the American Lobster resource. In response to this addendum, NJDFW plans to begin trip level data collection from commercial fishermen through the use of eVTR and paper based reports. Biological characterization will be implemented through at sea and port sampling.

## Methods

**Electronic Dealer Reporting (eDR).** Although there are presently no state only permitted dealers in NJ, support of dealers with both state and federal permits has been a major duty of the NJ Coordinator since the inception of his position. Several dealers in NJ refer to the Coordinator for logistical support such as quota status, quality assurance of data, and compliance monitoring responses. The NJ Coordinator

traveled to several commercial fishing facilities providing assistance to permitted dealers pertaining to data entry as needed. Additionally, the NJ Coordinator is responsible for transitioning the NJDFW from paper based dealer reports to electronic formats. Quality assurance, quota monitoring, and compliance requirements are monitored through both SAFIS and paper forms by the NJ coordinator. The continuation of SAFIS implementation includes components for web-based dealer reporting, web-based fisherman reporting, paper-based data entry by NJDFW staff, report compliance monitoring, termination of NJDFW paper based reports, and site administration (user access, look-up tables, data correction, etc). The NJ Coordinator worked with ACCSP Information System (IS) staff to update and monitor the SAFIS landings data allocated to NJ commercial fisheries quotas. All NJ Coordinator travel for dealer and fisherman support pertaining to eDR and eTRIPS data entry, meetings for the further development of NJ commercial fisheries landing statistics program, and training expenses incurred were paid by the ASMFC and ACCSP grant.

**Termination of Paper Based Reports.** The monitoring of NJ commercial fisheries historically was performed using paper based faxed reports submitted to the NJDFW on a weekly basis. Upon the development of SAFIS Electronic Dealer Reporting (eDR), federally permitted dealers possessing state dealer permits were tasked with the submission of two report types, one through SAFIS eDR, the second through the NJDFW paper system. The NJ Coordinator used paper reporting forms faxed weekly to the state office for monitoring three state quota monitored species (summer flounder, black sea bass, and scup) and compared the paper dealer reports to those generated through SAFIS eDR. As discrepancies arose, the coordinator addressed each issue with the appropriate party, either the dealer, the ACCSP or the NMFS in a timely manner to resolve the issue before the next reporting deadline.

**Electronic Vessel Trip Reporting (eTRIPS).** The NJ Coordinator participated in several developmental meetings for the eTRIPS program when needed to discuss specific state requirements of the system, in addition to providing feedback to the development committee. The NJ Coordinator assisted state permitted fishermen with installation of eTRIPS software at locations where computers are available for data entry, facilitating the usage of the eTRIPS system, a web based trip level reporting form. The NJ Coordinator developed and presented instructions during training meetings and individual meetings when necessary to support fishermen in the use and customization of the eTRIPS system. Assistance was provided to state permitted fishermen using the system when they encounter problems or request additional reporting capabilities and provide a communication channel between eTRIPS users and ACCSP IS staff. In addition, compliance monitoring of reporting (where mandatory reporting exists) and QA/QC analyses of the data was continued. The NJ Coordinator trained NJDFW staff on access and analyses of the data using automated eTRIPS reports. The NJ Coordinator worked to identify and complete data gaps for state-permitted dealers and fishermen and provided support for all NJ policy, technical and advisory committee members involved in the development and implementation of the ACCSP standards.

Fishermen with species-specific permits that have the opportunity to utilize the eVTR system include blue crab and American eel. Future reporting will include fisheries including American shad, Atlantic croaker, Atlantic menhaden, horseshoe crab, and American Lobster. As the NJDFW further develops our mandatory reporting protocol, more species will be added to this existing list. In December 2006, the NJ coordinator conducted a fishermen survey to assess the readiness of the eTRIP's system in the state. Interest was expressed by several commercial fishermen in NJ for an electronic reporting system for trip level harvest reports and these individuals were used during the test period of the program.

The NJ Coordinator along with NJDFW staff developed commercial fisheries statistical area charts based on the NMFS Statistical Area charts. After finalization of the NJDFW charts was completed, a copy was sent to the NMFS NERO for coordination efforts and feedback before being distributed to the NJ commercial fishing public. NJDFW area charts initially were used for the purpose of eTRIPS reporting and eventually encompass the majority of NJ's mandatory reporting requirements, including the recreational sector. Technicians on the project were responsible for key-entering paper forms during transition to web-based reporting for fishermen.

**Blue Crab Data Entry.** Blue crab data is presently being entered using the NMFS CODES system. Data feeds were provided to the NMFS on a monthly to bi-monthly basis. In the future, NJDFW staff will discontinue the practice of staff data entry of blue crab trip level harvest data for fisherman, instead implementing the newly developing ACCSP eTRIPS program, in which the potential for data entry by fishermen exists. Already, there is an expressed interest by blue crab, American eel, and Atlantic menhaden fisherman to participate in the development of an electronic based trip level data entry program. The use of eTRIPS for blue crab entry will be consistent with the other species (American eels, American shad, Atlantic menhaden, horseshoe crab, and American Lobster) entered in the eTRIPS system and will additionally help NJ meet standards set by the ACCSP.

Technicians entered paper form data reports during the transitory phase of the project. As the primary transition phase discontinues to full use of the electronic format, the technicians will be responsible for the data base management of NJDFW data.

**Biological Characterization.** The sampling of the four (4) commercial fisheries was conducted in the following manner. The NJ Statistical Coordinator identified by gear type and month the annual landings of each species. Effort, either at sea or dockside, was assigned appropriately and in most cases, in accordance with guidelines already defined in many ASMFC FMPs. A brief summary for sampling each species follows. The number in parentheses next to each species is that species' ranking on the ACCSP Biological Priority Matrix (BPM) which lists 94 species for FY 07. The NJ coordinator, senior biologist, and technician I positions collected all fish samples, processed and read all otoliths and computerized all biological data in the required

ACCSP format. The senior biologist received the necessary training to process and read all the targeted 1,450 otoliths. New Jersey coordinated with NMFS-NERO during the sampling program to avoid any duplicity in sampling other species. All data obtained was entered in the ACCSP biological characterization tracking program (BioTrack).

Weakfish (BMP rank 15) - ASMFC FMP guidelines required the sampling of 3 ages and 6 lengths per metric ton of weakfish landed in each State's commercial fishery. Based on New Jersey's previous commercial weakfish landings, 463 weakfish ages were required, as well as 926 lengths. Bureau personnel processed and all otoliths.

American Eel (BMP rank 14) - Developing a reliable estimate of the commercial landings in New Jersey is an important data component for the American eel ASMFC stock assessment. Sampling for length, weight, and collecting otoliths was implemented as dealers and fishermen were identified. The FMP for American eel recommended the sampling of 200 eels per life stage per gear type per State. New Jersey does not have a glass eel or silver eel fishery and the only gear type utilized in the commercial eel fishery is the eel pot. Thus, New Jersey targeted 200 yellow eels from the eel pot fishery for aging.

American shad (BMP rank 5) – Due to the closure of the ocean intercept fishery, effort in Delaware Bay increased. Consequently, in addition to the existing mandatory log book reporting of all New Jersey American shad permittees, NJ needed to obtain biological data, primarily from the spring gill net fishery. The target number of American shad for aging was 250 fish based on the magnitude of the landings in a small area during the spring gill net fishery.

Atlantic Croaker (BMP rank 26) – The ASMFC FMP for Atlantic croaker received increased attention since the recent stock assessment peer review and public hearings. A compliance requirement for States to obtain biological samples on their commercial fisheries was anticipated. Since New Jersey has substantial commercial landings for Atlantic croaker, we anticipated sampling the trawl and gill net fisheries during the summer and fall. Following the sampling requirements of the weakfish FMP, the New Jersey target sample size for Atlantic croaker was 500 fish from the commercial fishery.

**Biological Tracking Program.** The ACCSP in conjunction with the NJ coordinator developed a biological tracking program through a MS Access platform for the entry of biological data collected by the NJ Statistical Coordinator.

Biological samples taken for the purpose of stock assessment models were processed as described under the Biological Characterization section of this proposal. Data collected from each sample was initially recorded on paper data sheets and later transferred to electronic format (BioTrack) by data entry clerks (technicians on the project). After data was successfully entered and quality control practices were

performed, the NJ coordinator supplied data feeds to the ACCSP for integration into the ACCSP Data Warehouse. This method has allowed stock assessment committees, technical committees, and operations committees to view the status of the NJ biological sampling program.

**Lobster Landing Statistics.** As per the ASMFC Addendum VIII to Amendment 3 to the Interstate Fishery Management Plan (FMP) for American Lobster, the NJDFW began conducting data collection of American lobster through trip level harvest reports from state permitted lobster fisherman.

The NJ Coordinator conducted at sea and port sampling to describe the lobster fishery in NJ in terms of total landings and biological characterization. Methods used were modified from the ASMFC FMP and included length, sex, shell hardness, shell condition, cull status, egg development, pot location, pot type, bait type, and pot construction.

## Results

**Electronic Dealer Reporting (eDR).** Utilizing the SAFIS eDR system allowed the NJ Coordinator the ability to closely monitor when specific harvest quotas were close to being reached, and provide ample time to notify fishermen and dealers when the fishery was closing before exceeding set quotas. Further, the implementation of SAFIS eDR in New Jersey has provided complete state/federal landings for commercial fisheries, improved the timeliness and availability of data monitoring for quota management, and has improved the accuracy of data received. Additionally, SAFIS largely reduced the reporting burden for federally permitted dealers in New Jersey and provided an easier reporting mechanism for dealers who are already automated. Continuation and maintenance of electronic dealer reporting through SAFIS is imperative for the improvement of New Jersey's commercial fishery landings data collection.

The continuation of the ACCSP coordinator for NJ is necessary to work with ACCSP staff, seafood dealers, and commercial fishermen to implement the system and ensure proposed objectives are met in a timely manner. Implementation of SAFIS requires states to provide the human interface with dealers and fishermen, which will be accomplished by the Coordinator. The coordinator also updated NJ's fishermen and vessel database in order to have it meet ACCSP standards. As a member of the ACCSP Commercial Technical Committee and eDR Redesign Subcommittee, the NJ Coordinator attended several meetings both in person and through conference calls to assist and participate in the further development of the eDR system.

**Termination of Paper Based Reports.** The goal of this objective was to eliminate the need for commercial seafood dealers to double report through both paper and eDR

methods. In order for this to be accomplished, the NJ SAFIS coordinator and NJDFW staff needed to be confident that SAFIS eDR was meeting the requirements of the states reporting system. On February 18, 2008, a letter effectively discontinuing the need for paper reports was sent to all NJ permitted seafood dealers.

**Electronic Vessel Trip Reporting (ETRIPS).** New Jersey DFW currently is utilizing SAFIS eDR as the primary method of capturing commercial landings data through mandatory dealer reporting of summer flounder, black sea bass, and scup. These are the only three types of dealer permits available to seafood dealers in the state, limiting the amount of data that can be collected for other specific species on a mandatory level. In order to capture the extensive remaining data on species harvested in state waters, the NJDFW determined that by using existing language present in the commercial fisheries regulations, paper based vessel trip reports and eTRIPS could be implemented. The initial application of what is now known as eTRIPS Phase I in NJ was released in June 2007 and was used exclusively by NJDFW staff to enter existing paper reports. The application was used for a total of 2 months at which time it was determined that a second version of eTRIPS was needed specifically tailored to data entry personnel. After an extensive reassessment of eTRIPS Phase I and Phase II, a second version was released to fishermen in April 2008 and shortly thereafter was being used by several to enter harvest reports. Presently there are a total of 450 positive and Negative reports submitted by 31 fishermen using NJ miniature fyke nets for American eels and crab dredge and crab pots for harvesting blue crabs.

**Blue Crab Data Entry.** New Jersey's initial ACCSP funding was a cooperative agreement with NMFS, where commercial blue crab and conch by-catch data were provided to NMFS each month for the year 2002. It has been vital to continue providing blue crab and conch by-catch daily trip-level data, since prior to 2002, NMFS was able to obtain only monthly summary harvest for these fisheries.

Through NMFS MODEW/CODES, blue crab and conch by-catch trip-level data have been immediately available to state and federal fishery managers, stock assessment biologists and other authorized users. Currently blue crab data is being entered through the MODEW/CODES program, which will no longer be used when eTRIPS Phase II is in place. The eTRIPS Phase I program has encouraged fisherman to enter their own landings data alleviating the duties of NJDFW staff to perform data entry, facilitating the task of data management and quality control. Additionally, commercial trip level data has been available to authorized users of the eTRIPS program on a timely schedule without the need to wait for data transfer.

As result of this previous project, NJ instituted regulatory reporting requirements for blue crabs, which greatly improved compliance. A license holder can be denied a commercial blue crab license the following year if not in compliance with the reporting requirement. During 2002, monthly compliance reporting rose above 80% and close to 95% (when late reports were included).

**Biological Characterization.** During the FY07 project period, a total of 7,278 length samples and 2,082 age samples were taken for all species. As of October 2008 a total of 7,230 samples have been processed for aging and 6,606 samples have been aged and include samples from 2004-2008. A summary table of specific samples taken during the project period is found below.

**NJDFW 2007 Biological Characterization At-Sea and Port Sampling**

SPECIES	Lengths Taken	Ages Taken
AMERICAN LOBSTER	0	0
ATLANTIC MENHADEN	630	630
ATLANTIC CROAKER	340	340
AMERICAN EEL	237	0
AMERICAN SHAD	7	0
TAUTOG	471	317
WEAKFISH	566	549

**NJDFW 2008 Biological Characterization At-Sea and Port Sampling**

SPECIES	Lengths Taken	Ages Taken
AMERICAN LOBSTER	4838	0
ATLANTIC MENHADEN	710	710
ATLANTIC CROAKER	559	460
AMERICAN EEL	461	461
AMERICAN SHAD	36	34
TAUTOG	265	165
WEAKFISH	137	135

**Biological Tracking Program.** The ACCSP and ASMFC have established species specific biological sample size goals for each partner state based on the total annual landings for each specific species. In order to effectively track each species that is sampled and determine progress made while sampling is underway, the ACCSP has developed a biological tracking program. NJDFW provided data-feeds to the ACCSP for development of the tracking program, using tautog data as the test species to determine elements needed for the program. The addition of all species sampled will provide not only NJ with accurate sampling records, but also the ACCSP and partner states. In addition, the NJ Statistical Coordinator created a detailed summary table for each species covered under the NJ biological sampling matrix including statistical area, season, and gear type to be sampled. This approach has allowed the state sampling program to fully utilize time and effort for each sampled species targeting areas and times when needed to attain the target sample size.

**Lobster Landing Statistics.** The NJDFW began at-sea lobster trip coverage in Lobster Management Areas 4 and 5 in February 2008 as per Addendum VIII and XII to Amendment 3 to the FMP for American Lobster. During the project period a total of 8 directed lobster trips were made aboard commercial lobster vessels in these statistical areas accounting for 4,877 samples taken. Data recorded during each trip included carapace length, sex, shell hardness, shell condition, cull status, egg development, pot location, pot type, bait type, and pot construction. The sampling effort made during FY07 marks the first of its kind in NJ waters within Management Areas IV and V in eight years. Sampling had been sporadic at best within the coastal and adjacent offshore waters of NJ. In 1975 the NJDFW initiated a study of the nearshore American lobster populations in the southern portions of Management Area III and the northern portion of Management Area IV. This study was expanded in 1977 to include the canyon slope waters of Management Area III off New Jersey. In 1980 this study concluded and remained dormant for twenty years by the NJDFW. In 2000 a similar study was briefly conducted but lasted no more than six months before it too was terminated. The state of Rhode Island conducts lobster observer coverage in Management Area III currently and has been doing so since 1990. It will be imperative for the NJDFW to continue at sea observer coverage of the American lobster fishery off NJ in the future to determine trends in distribution and abundance. Since sampling began in February 2008, eight observer trips were made with commercial lobster fishermen, six occurred in LMA 4 while two occurred in LMA 5. A total of 4,877 lobster have been sampled consisting of 3,293 females and 1,584 males of both legal and sub legal categories. The average catch per unit effort for trips occurring in LMA 4 is 1.8 lobsters per trap on an average five day soak and in area 5 is 0.5 lobsters per trap on an average five day soak.

## **Discussion**

**Electronic Dealer Reporting (eDR).** Electronic dealer reporting in NJ has been underway since May 2004 when all federally permitted seafood dealers were required to utilize the ACCSP system. Since the majority of seafood dealers with NJ state dealer permits also possessed federal dealer permits, the NJDFW essentially had full dealer coverage. There were only a handful of dealers in NJ that needed to be brought into compliance with the regulations of the NJDFW and subsequent ACCSP reporting standards which was accomplished early during fiscal year 2005. Since that time, electronic dealer reporting in NJ has been operating at a level that was previously not met. The use of SAFIS eDR has allowed fisheries managers the ability to monitor quotas successfully on a daily basis rather than weekly or monthly. One of the most significant improvements for future SAFIS eDR programs should be live/real time data availability instead of the current two to three day time delay.

**Termination of Paper Based Reports.** One of the major goals at the outset of the FY07 project year was to discontinue the use of the paper based reports submitted by commercial seafood dealers holding state dealer permits, and begin using the SAFIS

eDR system as the exclusive method of quota monitoring for NJ commercial fisheries statistics. In February 2008, this became a reality with the issuance of letters to all permitted NJ seafood dealers stating that “the NJ Division of Fish and Wildlife will no longer utilize FAXED dealer reports as a method of reporting. All dealer reports should be filed electronically through the Standard Atlantic Fisheries Information System (SAFIS)”. By discontinuing the use of these paper reports, the NJDFW no longer monitoring commercial quotas piecemeal using several disparate sources but instead accessing SAFIS warehouse and pulling data from a single standardized source.

**Blue Crab Data Entry.** Data entry of blue crab commercial harvest in New Jersey has greatly increased the NJDFW grasp on the blue crab fishery. Data spanning from 1999 to 2008 has been entered and released to the NMFS, additionally, data from 1950 to 2007 can be found on the NMFS statistical website for public use.

**Biological Characterization.** Sampling of four (4) commercial fisheries was initiated during the FY07 project period and encompassed dockside sampling of American shad, American eel, Weakfish, and Atlantic croaker. Sampling targets were identified by gear type and month for annual landings of each species. Effort, either at sea or dockside, was assigned appropriately as designated in the appropriate species FMP’s. While not every sampling target was met during the project period, several of the species targets were either closely met or exceeded (see below tables).

**NJDFW 2007 Biological Characterization At-Sea and Port Sampling**

SPECIES	Target Age	Target Length	Lengths Taken	Ages Taken
AMERICAN LOBSTER	0	0	0	0
ATLANTIC MENHADEN	360	360	630	630
ATLANTIC CROAKER	500	500	340	340
AMERICAN EEL	200	200	237	0
AMERICAN SHAD	250	250	7	0
TAUTOG	200	200	471	317
WEAKFISH	1000	1562	566	549

**NJDFW 2008 Biological Characterization At-Sea and Port Sampling**

SPECIES	Target Age	Target Length	Lengths Taken	Ages Taken
AMERICAN LOBSTER	0	0	4838	0
ATLANTIC MENHADEN	350	350	710	710
ATLANTIC CROAKER	400	400	559	460
AMERICAN EEL	200	200	461	461
AMERICAN SHAD	250	250	36	34
TAUTOG	200	200	265	165
WEAKFISH	625	441	137	135

**Biological Tracking Program.** The NJ biological tracking program has aided significantly in the standardized entry of biological characterization data from dock side and at-sea-sampling collections. The NJDFW now has the ability to quickly and accurately pull biological sampling data from a single source without the need to track data through different files and owners.

**Lobster Landing Statistics.** At-sea-observer trip coverage for the commercial American lobster fishery began in February 2008. This initial year of sampling is considered exploratory for the program and as such has allowed the NJ Coordinator the plasticity in changing aspects along the way to accommodate several different situations. It has taken several trips to finalize the methodology needed to successfully sample at sea on commercial lobster vessels. To date, 8 trips have been made resulting in the collection of over 4,800 lengths and sexes of American lobster in coastal and offshore NJ waters. Improvements in LMA coverage will continue to be a primary goal of the NJ Coordinator during current and future project periods.

**Summarized Budget Expenditures**

Salary:	\$155,501.20
Misc. Supplies:	<u>\$3,665.80</u>
Total:	\$159,167.00