



ATLANTIC COASTAL COOPERATIVE STATISTICS PROGRAM



TWENTY YEARS IN REVIEW
1995-2014

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VISION

To be the principal source of fisheries-dependent information on the Atlantic coast through the cooperation of all program partners.

MISSION

Produce dependable and timely marine fishery statistics for Atlantic coast fisheries that are collected, processed, and disseminated according to common standards agreed upon by all program partners.

VALUES

-  Accurate data are required for good fisheries management decisions.
-  Coordination and collaboration amongst the program partners are essential for success.
-  The Program must be responsive to the changing needs for fisheries data.
-  Processes must be open and transparent but confidential data must be protected.
-  Data shall be accessible and easy to use.
-  Responsibilities should be matched with available resources.

20 HIGHLIGHTS FROM THE PAST TWENTY YEARS

1

ACCSP developed the only common fisheries-dependent standards that partners can work with, not only when collecting and contributing their data to the Program, but also when using the data to manage stocks that exist in multiple jurisdictions.

2

Since 2008, over 300 custom data requests have been completed by ACCSP

Many of these requests come from program partners, however, staff has also worked with individuals from U.S. Coast Guard, Natural Resources Defense Council, Edible New Jersey magazine, as well as many universities to supply relevant data.

3

ACCSP has contributed data to over 30 stock assessments along the Atlantic coast since 1995.

4

The Data Warehouse includes commercial catch and effort data dating back to 1950, as well as recreational catch and effort data dating back to 1981.

5

Committees are composed of staff from the 23 program partners, as well as industry advisors. These advisors hold multiple seats on other regional or state advisory panels or industry boards as well.

6

The 23 program partners of the ACCSP include the Atlantic States Marine Fisheries Commission, the three Atlantic fishery management councils, the 15 Atlantic states, the Potomac River Fisheries Commission, the D.C. Fisheries and Wildlife Division, NOAA Fisheries, and the U.S. Fish & Wildlife Service.

7

In 2014, ACCSP developed the first handheld SAFIS application for reporting for-hire and commercial landings with the mobile version of the eTRIPS.

8

The ACCSP funds the collection of catch, effort, and landings data (including licensing, permit and vessel registration data); biological data; releases, discards and protected species data; and economic and sociological data. Catch and effort data (commercial and recreational) are available through the Data Warehouse. Commercial data are uploaded during the spring and the fall. Recreational data are uploaded bimonthly.

9

In 2013, ACCSP developed an application to provide a comprehensive depository that will record and track American lobster fishery effort (e.g., traps allocated, purchased, and sold).

10

In 2003, the program partners of the ACCSP created the Standard Atlantic Fisheries Information System (SAFIS), a real time, web based data entry system for dealer reported landings. SAFIS was first deployed in Rhode Island and expanded to cover NOAA Fisheries Northeast dealers in 2004.

11

Data collected through SAFIS are real time and are used by fisheries managers for quota monitoring. After a thorough quality assurance and control process these data are loaded into the Data Warehouse.

12

SAFIS includes over seven million dealer records, approximately 465,000 trip records, and over 6,700 volunteer angler records.

13

The Data Warehouse includes over 800 species, 150 areas, 140 gear codes, 100 market categories, 55 grade categories, and 30 dispositions.



14

In the past ten years, SAFIS has grown to include four distinct industry use applications - and not just for commercial landings, but also for-hire and recreational.

15

SAFIS provides many benefits to industry as an electronic reporting option. For instance, SAFIS has an integrated price board to automatically generate pricing information and allows for flexibility in creating favorites (e.g., species, gears, dispositions) so reporting is quicker and easier than ever.

17

The ACCSP supplies Florida's west coast commercial catch and effort data to the Gulf States Marine Fisheries Commission.

18

The ACCSP supplies state landings for compliance and quota monitoring to the NOAA Fisheries' Northeast and Southeast Fisheries Science Centers.

16

In May 2012, ACCSP released the latest edition of the Atlantic Coast Fisheries Data Collection Standards. This document is considered the blueprint for ACCSP and will be used to direct partner data collection over the next several years.

19

ACCSP has provided the mechanisms - and is the primary repository - for most of the fisheries-dependent data collected in many Atlantic coast states. This information is used in multiple ways to characterize the fisheries and is a critical piece in the management process.

20

Since 2007, ACCSP has been working with NOAA Fisheries and state partners to bring together landings data for the inclusion of the annual Fisheries of the United States publication. This is the biggest custom data request each year.

HISTORY OF THE PROGRAM

The ACCSP was established in 1995 through a Memorandum of Understanding (MOU) to address data deficiencies that constrained the management of fisheries along the Atlantic coast. These deficiencies included incompatibilities between state and federal data systems, a lack of standardized trip-level catch and effort reporting, a lack of universal permit and vessel registration data, and a general need for more and better data to support emerging fisheries management initiatives. The Program established four basic principles to ensure that fisheries-dependent statistics are complete, accurate, consistent, and compatible:

1. Cooperative development and implementation across jurisdictional lines;
2. Coastwide data collection standards and a single, integrated data management system;
3. Data on all fishing activities (e.g., commercial, recreational, and for-hire fisheries); and
4. Modular design for data collection and data management projects.

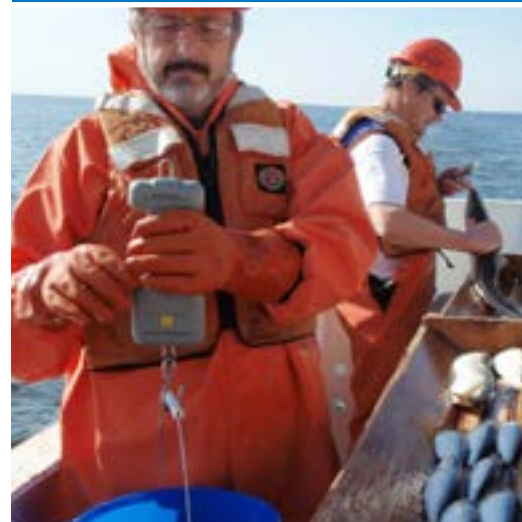
New minimum standards included the type and resolution of data that should be collected, minimum data elements with standard codes, improved timeliness of data submissions, and quality control and assurance practices.

The Program's 23 state and federal partner agencies had long recognized the need for complete, accurate, and timely fishery data. Partners especially wanted standardized fisheries-dependent data, those collected on commercial, for-hire, and recreational fishing activity. When they signed the MOU, it was not yet clear which partner would provide the ACCSP with administrative support. In the mid-to-late 1990s, funds from partner contributions from the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA) provided for a single employee and some committee work to design the program. The Atlantic States Marine Fisheries Commission (ASMFC) volunteered to host the staff and conduct the required meeting planning. The other partners agreed that ASMFC was the ideal choice since it had the flexible infrastructure to support the Program.

In the mid-to-late 1990s, after the Program officially began, funding from ACFCMA contributions supported the establishment of committees to develop the first edition of the program design. The committees also created minimum standards and operating procedures. These committees included a variety of technical committees, an advisory committee, a steering committee (named the Operations Committee), and a policy level committee (named the Coordinating Council). The minimum standards that the committees were instructed to develop were based on needs for fisheries stock assessments and management. The committees were also instructed to evaluate current practices, not necessarily preserve the status quo, and were asked to give little weight to possible cost implications. New minimum standards included the type and resolution of data that should be collected, minimum data elements with standard codes, improved timeliness of data submissions, and quality control and assurance practices.

By 1999, data collection standards were nearly complete and partners submitted their first funding proposals for implementing program standards. An increase in funding allowed the Program and partners to begin implementation. ASMFC hired permanent staff to coordinate data collection programs, continue the evolution of standards, and create and operate the Data Warehouse. Projects were also outlined for areas where standards needed additional research. As the ACCSP and its federal appropriations continued to grow with increased outreach efforts, the public became more aware of it. The Coordinating Council wished to address public concerns regarding the integrity of data collected by the same entities using it for fisheries management. Separation of the ACCSP from regulatory bodies, to the extent practical, was seen to help address those perception problems, thus the governance of the Program is independent of ASMFC.

Did you know that ACCSP is a frequent participant at many stock assessments along the Atlantic coast and has contributed data to over 30 since 1995?



In 2001, the program partners recognized the need for stronger leadership at the staff level and reorganized the Program under a Director. The Director, with guidance from the Coordinating Council, has executive authority to manage ongoing development and operation of the program and has responsibility for day-to-day operations and staff oversight. Also in 2002, the ACCSP deployed the online Data Warehouse, which provides users with coastwide, consolidated data contributed by the partners.

The Standard Atlantic Fisheries Information System (SAFIS), a real time, web based data entry system for dealer reported landings was deployed first in Rhode Island in 2003 and expanded to cover NOAA Fisheries Northeast dealers in 2004. SAFIS meant program partners could collect data from fishing constituents without the associated printing, mailing, and data entry costs. While SAFIS allowed centralized data collection, those data were, and are, still collected under the authority of the associated program partners. Moreover, those partners check and approve their data before they are transferred, ensuring that the information found in the Data Warehouse is the best available data on the Atlantic coast.

Beginning in 2007, the Program began working in cooperation with NOAA Fisheries and its state partners to bring together commercial landings data. By working with the partners to develop a comprehensive coast wide data set, the Program is able to populate the Data Warehouse at a finer resolution and provide data for inclusion in the annual publication Fisheries of the United States (FUS).

In 2009, SAFIS was expanded to add commercial and recreational vessel trip reports for many state partners. Commercial and for-hire fishermen in states that use the tool were then able to submit their data electronically. More recently, a new SAFIS application has made it possible for recreational anglers to log their fishing data and additional functionality has been added to support the integration of NOAA Fisheries highly migratory species (HMS) data collection.

All data collected that meet ACCSP standards can be integrated into the online Data Warehouse. Partners are responsible for benchmarking both recreational and commercial programs to allow maximum use of historical data while implementing the Program's standards. Benchmarking is necessary to ensure that data will be continuous, compatible, and useful for stock assessment and fisheries management purposes.

In early 2012, the Program released the Atlantic Coast Fisheries Data Collection Standards. This document was the third iteration of the program design and illustrates the collaborative process of the Program. The Standards provides direction on future improvements for Atlantic coast commercial, recreational, and for-hire fisheries statistics, as well as defines policies, data collection, and data management standards for the ACCSP.

Also in 2012, the Program conducted an extensive Independent Program Review. This review resulted in a number of recommendations intended to make the Program more efficient and improve its ability to respond to partner needs. In 2013 work began on the first mobile version of the eTRIPS, a hand held version of SAFIS for vessel trip reporting, and a strategic plan began to be developed. In early 2014, the Coordinating Council approved the 2014-2018 ACCSP Strategic Plan. The seven goals the ACCSP currently pursues to ensure user needs are met can be found on page 9.



Did you know in the past ten years, SAFIS has grown to include four distinct applications for the commercial, recreational, and for-hire industries?

"ACCSP has developed the fisheries-dependent data collection standards which are critical for comparison species along the Atlantic coast and created comprehensive, long-term, industrywide data sets."

*- Anna Webb,
Chair of
SAFIS Outreach
Group and
staff with the
Statistics Project
of MA DMF*

MAJOR MILESTONES 1995-2014

1995	MOU is signed in Charleston, SC by 23 state and federal partner agencies. ACCSP establishes Coordinating Council (policy-level group), Operations Committee (responsible for daily program oversight and management), and Advisory Committee (commercial and recreational industry advisory group).	2005	eDR is deployed by NJ DFW and DE DFW. ACCSP launches a new website to improve navigation and access to important information. ACCSP produces the First Ten Years Report in preparation for an external peer review.
1996	US FWS provides initial staff support for the ACCSP. The Operations and Advisory Committee begin meeting to discuss program policies.	2006	The Data Warehouse improves access to both confidential and non-confidential data and general usability. eDR is deployed by ME DMR. ACCSP begins work to develop an electronic trip reporting (eTRIPS) application within SAFIS to collect fishermen trip data. An external peer review panel convened to assess the governance, operating environment, goals, and priorities of ACCSP.
1997	The first technical committees begin to develop program standards.	2007	eDR is deployed by NYS DEC. Directed trip and bag limit analysis capabilities are added to the recreational queries on the Data Warehouse. First joint meeting of the Operations and Advisory Committees to review proposals. ACCSP begins working with NOAA Fisheries and its state partners to bring together commercial landings data to develop a comprehensive coastwide data set for inclusion in the annual publication <u>Fisheries of the United States</u> (FUS).
1998	The Coordinating Council approves the first edition of the Program Design, including modules for catch and effort, biological, bycatch, socio-economic, and metadata.	2008	MA DMF, NJ DFW, and NYS DEC begins to use eTRIPS. NJ DFW also began to use eLogbook for the Striped Bass Bonus Program. ACCSP staff began a concerted effort to participate in the stock assessment and analysis processes providing data to SEDAR 16 (King mackerel), SEDAR 17 (Spanish mackerel and Vermilion snapper), and SEDAR 18 (Red drum).
1999	First projects funded with \$1.5 million in ACFCMA contributions from partners. First permanent positions are established to coordinate data collection programs, continue evolution of standards, and create and operate the Data Warehouse.	2009	CT DEEP began to use eTRIPS. MA DMF begins to use eLogbook. ACCSP provides data to SEDAR 19 (black and red grouper), ASMFC American eel data workshop, and the assessment for Atlantic croaker and Atlantic menhaden workshop between SAFMC and ASMFC. Releases first annual report and metadata directory.
2001	ACCSP budget increases to \$3 million after a congressional line item is added for the Program. NC DMF, GA DNR, and FL FWCC establish routine feeds of commercial fisheries data to the developing Data Warehouse.	2010	SAFIS launches January 4, 2010. Work begins in developing a combined electronic trip and landings reporting (eI-Ticket) application within SAFIS to collect fishermen trip and dealer landings data from the Southeast partners. RI DFW and MD DNR begins to use eTRIPS and eLogbook. Improvements made in the Data Warehouse on validating and aligning data with the partners, especially with federal partners. Workshop held
2002	ACCSP budget increases to \$3.5 million. ACCSP launches the Data Warehouse. The Coordinating Council hires a Director to manage ongoing development and operation of the Program standards and responsibilities, as well as day-to-day operations and staff oversight. The Coordinating Council approves the 2002-2006 Strategic Plan.		
2003	Program partners created SAFIS eDR to meet the increasing need for real time commercial landings data.		
2004	The Coordinating Council approves the 2004-2008 Implementation Plan and approves the second edition of the Program Design. RI DFW becomes the first partner to use eDR. NH FGD, MA DMF, RI DFW, CT DEEP, MD DNR, and NOAA-NE soon follow.		



- to begin setting standards for recreational data collection along Atlantic coast in conjunction with MRIP. Staff provide data for SEDAR 21 (HMS sandbar, dusky, and blacknose), SEDAR 24 (Red snapper), ASMFC river herring data workshop, and the Northeast regional data assessment workshop for loligo squid.
- 2011** e-ITicket application goes into production. NOAA-SE began to use eDR. SC DNR, GA DNR, and NOAA-SE begins to use e-ITicket. DE DFW began to use eLogbook. Staff provide data for SEDAR 25 (Black sea bass and golden tilefish) and ASMFC American eel stock assessment data workshop.
- 2012** The Coordinating Council approves the third edition of Program Design document, known as Atlantic Coast Fisheries Data Collection Standards. ACCSP completes the second independent program review process which will guide the next strategic plan. Staff provides data for SEDAR 28 (Spanish mackerel and cobia), and SEDAR-U of vermilion snapper.
- 2013** ACCSP integrated a HMS dealer application for NOAA Fisheries. ACCSP releases survey collecting opinions and attitudes on electronic reporting from Atlantic coast fishermen and dealers. The Data Warehouse is accessible for public use. CT DEEP and NYS DEC begin to use eLogbook. Staff provide data for SEDAR 32 (gray triggerfish and blueline tilefish), SEDAR 36 (snowy grouper), SEDAR 38 (king mackerel), ASMFC black drum assessment, and the ASMFC lobster assessment.
- 2014** The Coordinating Council approves the 2014-2018 Strategic Plan. The first handheld mobile version eTRIPS is released for RI DFW. ACCSP and ASMFC approve a plan to transition to state conduct of APAIS in 2016. ACCSP and MRIP conduct a recreational Proportional Standard Error (PSE) Workshop. Staff provide data for the ASMFC lobster and black drum assessments, SEDAR 41 (red snapper and gray triggerfish), SEDAR 44 (red drum), the assessment for Atlantic menhaden workshop between SAFMC and ASMFC, as well as recommendations for improving data collection and coordination for SEDAR Procedural Workshop 6 (South Atlantic shrimp stocks).

**MANAGE & EXPAND ...**

a fully integrated data set that represents the best available fisheries data

**CONTINUE ...**

working with the program partners to improve fisheries data collection and management in accordance with the evolving ACCSP standards within the confines of limited funds

**EXPLORE ...**

the allocation of existing Program funds and work with partners to pursue additional funding

**EFFECT ...**

stronger executive leadership and collaborative involvement among partners at all committee levels

**MONITOR & IMPROVE ...**

the usefulness of products and services provided by the ACCSP

**COLLABORATE ...**

with program partners in their funding processes by providing outreach materials and other support to demonstrate the value of ACCSP products and the importance of maintaining base support for fisheries-dependent data collection programs to state partners and their executive and legislative branches as well as to all other partner agencies

**SUPPORT ...**

nationwide systems as defined in the Magnuson-Stevens Fishery Conservation & Management Act

PROGRAM PARTNERS

In 1995, the Atlantic States Marine Fisheries Commission, the three Atlantic fishery management councils, the 15 Atlantic states, the Potomac River Fisheries Commission, the D.C. Fisheries and Wildlife Division, NOAA Fisheries, and the U.S. Fish and Wildlife Service became the 23 program partners of ACCSP.

FEDERAL AGENCIES NOAA Fisheries | U.S. Fish and Wildlife Service (US FWS)

COUNCILS & COMMISSIONS Atlantic States Marine Fisheries Commission (ASMFC) | New England Fishery Management Council (NEFMC) | Mid-Atlantic Fishery Management Council (MAFMC) | Potomac River Fisheries Commission (PRFC) | South Atlantic Fishery Management Council (SAFMC)

STATE AGENCIES Maine Department of Marine Resources (ME DMR) | New Hampshire Fish and Game Department (NH FGD) | Massachusetts Division of Marine Fisheries (MA DMF) | Rhode Island Division of Fish and Wildlife (RI DFW) | Connecticut Department of Energy and Environmental Protection (CT DEEP) | New York State Department of Environmental Conservation (NYS DEC) | New Jersey Division of Fish and Wildlife (NJ DFW) | Delaware Division of Fish and Wildlife (DE DFW) | Pennsylvania Fish and Boat Commission (PFBC) | District of Columbia Fisheries and Wildlife Division (DC FWD) | Maryland Department of Natural Resources (MD DNR) | Virginia Marine Resources Commission (VMRC) | North Carolina Division of Marine Fisheries (NC DMF) | South Carolina Department of Natural Resources (SC DNR) | Georgia Department of Natural Resources (GA DNR) | Florida Fish and Wildlife Conservation Commission (FL FWCC)



COORDINATING COUNCIL MEMBERS

The Coordinating Council is the governing body of ACCSP, establishing policies to guide the Program and overseeing program standards and implementation.



Mark Alexander
CT DEEP



Thomas Baum
NJ DFW



Robert Beal
ASMFC



Robert H. Boyles, Jr.
SC DNR
(Vice-chair)



John Carmichael
SAFMC



Cheri Patterson
NH FGD
(Chair)



Joe Cimino
VMRC



Edward Cyr
NOAA Fisheries



Louis B. Daniel, III
NC DMF



Paul Diodati
MA DMF



Martin Gary
PRFC

"The value of ACCSP is very well stated in the ACCSP's Vision Statement to ultimately provide the best available data for better fisheries management decisions. The greatest asset of the ACCSP is the cooperative committee process of the program partners and the ACCSP staff.



Patrick Geer
GA DNR



Mark Gibson
RI DFW



James Gilmore
NYS DEC



Douglas Grout
NH FGD



Pat Keliber
ME DMR

The ACCSP would not be where it is without the commitment of the partners and hardworking staff."



Bryan King
DC FWD



Jessica McCawley
FL FWCC



Stewart Michels
DE DFW



Chris Moore
MAFMC



Tom Nies
NEFMC

Cheri Patterson, Chair of the ACCSP Coordinating Council and Supervisor for Marine Programs with NH FGD



Tom O'Connell
MD DNR



Dave Perkins
US FWS



Bonnie Ponwith
NOAA Fisheries



Alan Risenboover
NOAA Fisheries



Leroy Young
PFBC

COMMITTEE OVERVIEWS

"It has been my pleasure to witness how ACCSP has evolved from the planning to the operational stages.

One aspect that remains constant is the commitment of the 23 partners.

Everyone involved is dedicated to decreasing the burdens of reporting on the fishing industry while also meeting the needs of fisheries managers whose job is to protect fisheries for generations to come."

- Jack Travelstead, former VMRC Commissioner and member of the Coordinating Council since 1995

Recognizing it as the only way to fully engage and address the needs of its 23 program partners, the ACCSP was established by its founding members as a committee-based organization. Committees, composed primarily of representatives from the partners, provide the framework for the collaborative processes that create and manage the standards as well as govern the Program. Technical committees create and manage the program standards with guidance from the Operations and Advisory Committees. The Coordinating Council provides general oversight to the Program and sets overall policies.

COORDINATING COUNCIL

The Coordinating Council is the governing body of ACCSP, establishing policies to guide the Program and overseeing program standards and implementation. Every fall, the Council approves the Program's budget for the following year. In 2014, the Coordinating Council approved the 2014-2018 Strategic Plan and the 2014-2018 Communications and Outreach Plan. The Coordinating Council, working jointly with the ASMFC, approved a transition plan for the Atlantic coast states to assume responsibility for conducting the catch survey component of the Marine Recreational Information Program (MRIP), namely the Access Point Angler Intercept Survey (APAIS), beginning in 2016.

OPERATIONS COMMITTEE

By providing recommendations to the Coordinating Council, the Operations Committee guides the development of program standards and serves as the review body for annual project funding priorities. The Committee, along with the Advisory Committee, reviews and prioritizes project proposals with funding recommendations forwarded to the Coordinating Council. Highlights for 2014 include work on the Long-Term Funding Considerations as well as addressing change management.

ADVISORY COMMITTEE

The Advisory Committee was established to ensure, to the greatest extent practicable, that the fishing industry perspective is considered in the development and implementation

of the Program. The Advisory Committee includes representatives from the commercial, recreational, for-hire, and academic sectors and serves an important role by providing recommendations to the Program. At least one member of this Committee also sits on each technical committee to provide industry feedback. The Committee also reviews and prioritizes project proposals with funding recommendations forwarded to the Coordinating Council. In 2014, the advisors helped to evaluate criteria for an ACCSP Annual Award of Excellence.

TECHNICAL COMMITTEES

Supporting the ACCSP are several committees that develop or revise standards, in turn, are reviewed by the Operations and Advisory Committees and are submitted to the Coordinating Council for final approval. Here is a quick synopsis of each of those committees and highlights of tasks completed in 2014.

BIOLOGICAL REVIEW PANEL

The Biological Review Panel develops program strategies and standards to collect and manage biological data (e.g., length, weight, ageing). The Panel biennially recommends target species, compiles sampling levels for biological sampling, and works with the Bycatch Prioritization Committee to integrate data collection protocols. The Panel has finalized the data elements of the biological module and determined initial data sets for uploading. The Panel is currently working with ACCSP staff on the rollout of this module.

BYCATCH PRIORITIZATION COMMITTEE

The Bycatch Prioritization Committee develops and updates data collection standards and biennially ranks fleets for data collection priority based on statutory requirements, as well as stock assessments and industry needs.

The Committee is continuing its work revising the priority matrix. The updated matrix will represent a non-overlapping sampling frame and be as quantitative as possible.

COMMERCIAL TECHNICAL COMMITTEE

The Commercial Technical Committee develops catch and effort data standards for all species commercially harvested on the Atlantic coast and is responsible for updating and maintaining codes to improve



reporting systems. In 2011, the Committee sponsored a project, "Validation of Commercial Finfish and Shellfish Conversion Factors: U.S. East Coast Cooperative Project," and the sampling phase was completed in 2013. The Committee is currently synthesizing project results and will work with the Information Systems Committee to implement new conversion factor standards.

INFORMATION SYSTEMS COMMITTEE

The Information Systems Committee guides and advises the development of information systems supporting the implementation of program standards. This past year the Committee reviewed the existing SAFIS applications. The review took into consideration new advancements in APEX 4.2, the underlying software of each SAFIS application. In doing so, each application was reviewed to update code and speed up processing. The review led to the elimination of thousands of lines of code no longer utilized.

The Committee has also been instrumental in the planning and review of three new special use applications and several policy improvements. The applications include Lobster Trap Allocation History System (Lob-STAHs), American Lobster Settlement Index (ALSI) web portal, and eTRIPS/m. The policy improvements include a data security and password hashing, Change Management Policy, Quality Assurance/Quality Control Plan, and enhanced data audits.

OUTREACH COMMITTEES

In 2014, the Data Warehouse and SAFIS Outreach Groups focused on highlighting the distinct attributes and benefits of each product, which will set the tone and content for the fresh and updated website to be launched in 2015. Both groups also worked to create new logos. The Atlantic Coast Fisheries Communications Group (a group of state, regional, and federal public information specialists and outreach professionals) came together for workshop sponsored by the ACCSP and the ASMFC in Arlington, VA in January 2015. This workshop focused on collaboration and visual communication.

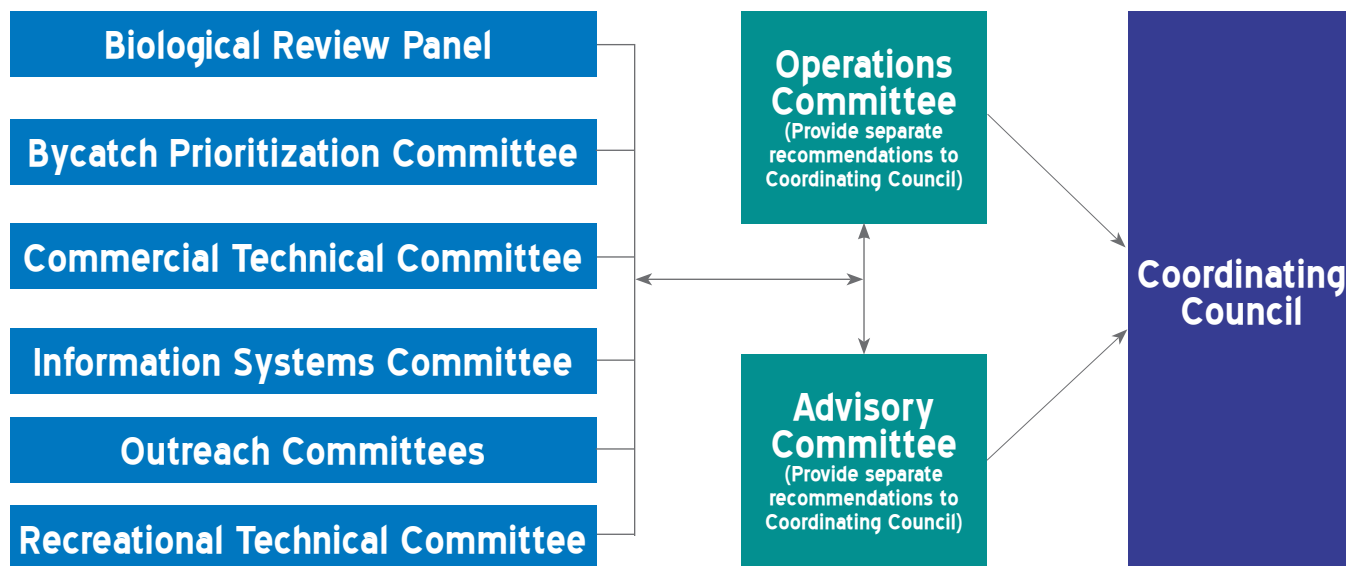
RECREATIONAL TECHNICAL COMMITTEE

The Recreational Technical Committee develops data collection standards for monitoring catch and effort of recreational and for-hire fisheries. In 2014, the Committee continued to support additional at-sea headboat sampling from New Hampshire to Florida, and sponsored the participation of five states (Rhode Island, New York, New Jersey, Virginia, and South Carolina) to review the preliminary estimates from MRIP for March through December. The Committee provided expertise to aid in the transition to state conduct of APAIS.

"ACCSP has developed and implemented comprehensive and sophisticated databases and data sets for Atlantic states targeted marine species utilizing a user-friendly searchable platform."

*- Jerry Morgan,
Chair of
the ACCSP Ad-
visory Committee
and owner of
Captain Morgan's
Bait & Tackle in
Madison, CT*

COMMITTEE STRUCTURE



Committees, composed primarily of representatives from the partners, provide the framework for the collaborative processes that create and manage the standards and govern the Program. Technical committees create and manage the program standards with guidance from the Operations and Advisory Committees. The Coordinating Council provides general oversight to the Program and sets overall policies.

Did you know that since 1999, ACCSP supports program partners in achieving fisheries data collection goals by awarding grants through a competitive process?

The competitive process is linked with data collection standards of four distinct modules: catch and effort (commercial and recreational), biological, bycatch/species interaction, and social and economic.

The data collection project objectives are varied, and may include expanding SAFIS use, obtaining data for fishery management plans (FMP), increasing sampling for MRIP, and promoting compliance of fishermen and dealer reporting.

WHAT ARE THE ACCSP DATA COLLECTION STANDARDS?

In May 2012, the Program released the latest edition of the Atlantic Coast Fisheries Data Collection Standards. This document is considered the blueprint for ACCSP and will be used to direct partner data collection over the next several years. Mark Alexander (CT DEEP), former chair of the Coordinating Council, had this to say about the process "The Atlantic Coast Fisheries Data Collection Standards are significant because they've been compiled by all of the Atlantic coast federal, state, and regional fisheries agencies. This collaboration speaks to the comprehensive nature of the data collection standards. We hope that all data collectors will use this document as a guide to collect information that can be used to make sound and thorough fisheries management decisions."

Major updates of this third edition of the Program standards include a call for more timely data, specifically:

- Changing the frequency of calculating catch and effort estimates within the recreational (private and rental boat and shore-based fisheries) and for-hire fisheries to a 1 month collection period versus the current 2 month collection period.
- Various conditions for accepting either census or survey methodology were recommended within for-hire fisheries for estimating catch and effort data.
- Collecting biological data every 30 days versus the current 6 month cycle.

The Atlantic Coast Fisheries Data Collection Standards can be found at www.accsp.org/programdocument.htm.



DATA COLLECTION PROCESSES

All data collected under the standards are loaded into the Data Warehouse according to the format and timeline in the appropriate data module standards. Presentation of historical data, including the last completed year, is available in the Data Warehouse and is updated quarterly and as necessary to meet partner data needs. Inclusion in the Data Warehouse allows access to information by fisheries managers, scientists, fishermen, and other interested parties under the confidentiality guidelines.

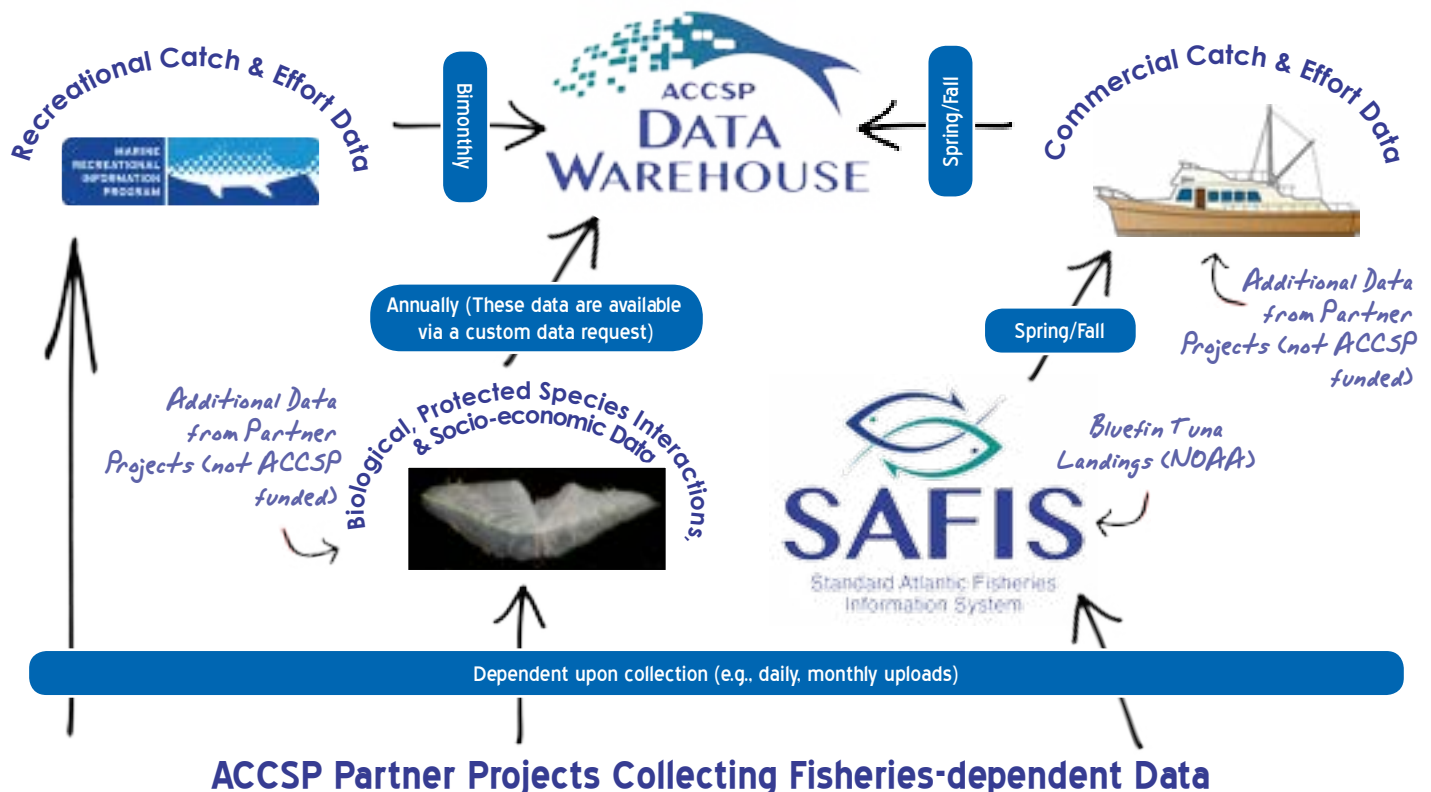
SAFIS collects information from commercial and recreational fishing sectors through various applications. Since the data collected through SAFIS are real time, the data are not available in the Data Warehouse until the following year. If a harvester in South Carolina has entered a report through SAFIS in December of 2013, that information would not be available in the Data Warehouse until the Spring of 2014, when ACCSP staff uploads preliminary data from SAFIS, as well as other program partner data sets. Final data are uploaded in the fall. Preliminary data collected under the SAFIS

applications are available to select partner personnel only. The ACCSP funds the collection of catch, effort, and landings data (including licensing, permit and vessel registration data); biological data; releases, discards, and protected species data; and socio-economic data. The catch and effort data (commercial and recreational) are available through the Data Warehouse. Commercial data are uploaded during the spring and the fall. Recreational data are uploaded bimonthly. The biological, bycatch, and socio-economic data are available via a custom data request.

While ACCSP funds many state data collection programs, some collection programs are done through the states. All of these data sets, if collected in accordance with minimum ACCSP standards, are incorporated into the Data Warehouse during the spring and fall uploads. Data collection programs of the ACCSP require verification for both self-reported and observer reported data. Field sampling and observer programs require quality assurance monitoring. Partners conducting commercial, recreational, and for-hire data collection and data management develop quality control and assurance documentation.

If a harvester in South Carolina has entered a report through SAFIS in December of 2013, that information would not be available in the Data Warehouse until the Spring of 2014, when ACCSP staff uploads preliminary data from SAFIS, as well as other program partner data sets. Final data are uploaded in the fall.

HOW DO DATA GET INTO THE DATA WAREHOUSE?



FISHERIES-DEPENDENT DATA COLLECTION PROJECTS

Below is an overview of the Atlantic coast fisheries-dependent data projects that ACCSP has funded since 1999. On the following pages you can find detailed descriptions of highlighted projects from along the Atlantic coast, including the progress for any projects that are currently being funded.

PROGRAM PARTNER	PROJECT TITLE (YEARS FUNDED)
NOAA Fisheries GARFO: Greater Atlantic Regional Office; NEFSC: Northeast Fisheries Science Center; SEFSC: Southeast Fisheries Science Center; SERO: Southeast Regional Office	<ul style="list-style-type: none"> 1999: Dealer Data Validation - GARFO; Socio-Economic Pilot - GARFO; Vessel Trip Report to Logbook Comparison - GARFO, SEFSC 2000: Development and Implementation of Regional Interactive Voice Response - GARFO; Software Application Assistance for Dealers - GARFO 2001: Data Reconciliation - Headquarters, NEFSC, SEFSC; Redesign of Greater Atlantic Region Quahog/Surf Clam Data System - GARFO; State-Federal Vessel Registration and Numbering System - Headquarters; Cooperative Dealer and NOAA Fisheries Biological Sampling - GARFO 2001, 2003, 2005: Updating Trip Interview Program - SEFSC 2002: At-sea Observer Coverage of the Shark Fishery Off Georgia - SEFSC; Biological Sampling of Horseshoe Crabs and Spanish Mackerel - GARFO, SERO; Development of Finfish Ageing Standards - SERO; Implement Recreational Fisheries Method for Monitoring For-hire Effort - MRIP; Link NOAA Fisheries Dealer and Fisherman Reports - GARFO 2002 - 2003: Sea Sampling of New England Groundfish Fisheries - NEFSC 2002, 2006: Implement of Fisheries-dependent Data Collection Program and Development of Biological Sampling Program - GARFO 2003: Expansion and Upgrade of Dock-side Fisheries-dependent Biological Sampling in the Greater Atlantic Region - GARFO 2004: Continuation and Expansion of the Roving Sampler Program - GARFO; Sampling for Hard Part/Ageing From Commercial Fisheries for Snapper-Grouper Complex and Coastal Pelagic Fisheries - SEFSC 2005: Pilot Longitudinal Telephone Survey of Recreational Fishing Households in New Jersey - Headquarters; Electronic Vessel Trip Reporting Pilot Program - GARFO 2006: Electronic Vessel Reporting by Offshore Lobster Fleet - GARFO 2007: Development and Deployment of a Prototype Reporting Compliance and Quota Monitoring Toolbox - GARFO 2011 - present: Processing and Ageing of Biological Samples from South Atlantic Commercial and Recreational Fisheries (SEFSC)
ASMFC	<ul style="list-style-type: none"> 2002: Development of a American Lobster Stock Assessment Database 2008: Conversion of American Lobster Data Warehouse from Business Objects to Oracle Discoverer 2011 - present: Observer Program for Mid-Atlantic (New York, New Jersey, Maryland, Virginia) and Rhode Island Small Mesh Otter Trawls (2012: MAFMC became a partner)
MAFMC	<ul style="list-style-type: none"> 2012 - present: Observer Program for Mid-Atlantic (New York, New Jersey, Maryland, Virginia) and Rhode Island Small Mesh Otter Trawls
ME DMR	<ul style="list-style-type: none"> 2001: Electronic Data Collection in Maine Shellfish Industry 2002: Strategic Plan for Implementation of ACCSP 2001 - present: Commercial Catch Sampling of Atlantic Herring and Other Northeast Fisheries 2003 - present: Implementation of a Mandatory Dealer Reporting System for Maine Commercial Landings According to ACCSP Standards
NH FGD	<ul style="list-style-type: none"> 2003 - 2006: Implementation of ACCSP for Lobster Dealers and Coastal Harvesters Reporting
MA DMF	<ul style="list-style-type: none"> 2001: Strategic Plan for Implementation of ACCSP Compliant Data Collection Methodology 2004-2005: Implementing Electronic ACCSP Complaint Deal Reporting in Massachusetts 2008-2009: Continuation and Expansion of Trip Level Reporting for Lobster Harvesters 2008-2013: Trip Level Reporting for all Massachusetts Commercial Permit Holders 2014: Implement of a Swipe Card Pilot Project for Massachusetts Trip Level Shellfish Transactions
RI DFW	<ul style="list-style-type: none"> 2004 - present: Maintenance and Coordination of Fisheries-dependent Data Feeds to ACCSP from the State of Rhode Island
CT DEEP	<ul style="list-style-type: none"> 2003: Upgrading Connecticut Commercial Fisheries Data Collection and Data Management System
NYS DEC	<ul style="list-style-type: none"> 2001: Attainment of ACCSP Standards for Commercial Fisheries (with Cornell University) 2002 - present: Continuation and Expansion of Fisheries-dependent Data Collection and Biological Sampling

PROGRAM PARTNER	PROJECT TITLE (YEARS FUNDED)
NJ DFW	<ul style="list-style-type: none"> 2001 - present: Introduction and Continuation of SAFIS and Biological Characterization of Commercial Fisheries (Biological component began in 2006)
DE DFW	<ul style="list-style-type: none"> 2006 - 2009: Initiating State Dealer Reporting 2011: Validation of Commercial Finfish and Shellfish Conversion Factors
MD DNR	<ul style="list-style-type: none"> 2002 - 2013: Improving Timeliness and Reporting Accuracy with Expansion of Online Reporting for Commercial Fisheries
VMRC	<ul style="list-style-type: none"> 2000 - 2004: Commercial Fishing Licensing, Permitting and Vessel Data System Re-development 2002: Biological Sampling of Horseshoe Crabs and Spanish Mackerel 2009: Upgrades to the Biological Collection Program: Sampling Equipment and Phase 3 Database Development
NC DMF	<ul style="list-style-type: none"> 2001: Metadata Collection and Management, 2002 2001: Data Reconciliation: Split with HQ, SEFSC, FL FWCC, NEFSC 2002: Recreational Use of Commercial Gear Pilot Survey 2003: Sampling of Commercial Fishery for Snapper-Grouper Complex and Pelagic Fishes; Electronic Data Submission for Monitoring Fisheries Quotas; Metadata Collection and Management 2004: Sampling for Hard Part/Ageing From Commercial Fisheries for Snapper-Grouper Complex and Coastal Pelagic Fisheries 2005: Data Maintenance and Coordination for Fish Dealer Electronic Reporting 2005 - 2009: Conduct of Telephone Survey 2006: ACCSP Data Maintenance and Coordination for Fish Dealer Electronic Reporting; Socio-economic Analysis of Commercial Fisheries 2007: Estuarine Bycatch Assessment in North Carolina Commercial Fisheries 2009: North Carolina Estuarine Gillnet Biological and Bycatch Assessment 2010: NC DMF Fishery Observer Response Team Phase I: Age Sampling of the Commercial Snapper/Grouper Fishery and Age Structure of Black Sea Bass in the Commercial Snapper/Grouper Fishery 2011: Validation of Commercial Finfish and Shellfish Conversion Factors 2012: Update Angler Contact Information for Grandfathered Lifetime License Holders in North Carolina 2014: Characterization of Bycatch in the Cobia Hook-and-line Fishery; Commercial and Recreational Fisheries Age and Sex Data Collection; Characterization of Bycatch in the Commercial Skimmer Trawl Fishery
SC DNR	<ul style="list-style-type: none"> 2001 - present: ACCSP Commercial Module in South Carolina 2007 - present: Biological Sampling for Hard Part/Ageing
GA DNR	<ul style="list-style-type: none"> 1999: Georgia Commercial Trip Ticket 1999 - 2002: Socio-economic Pilot 2001: Otolith Workshops 2002: Development of Finfish Ageing Standards 2004: Electronic Data Submission Software for Georgia Seafood Dealers; Commercial Fishing License and Boat Registration System Redevelopment 2006: Cooperative Survey Utilizing Commercial and Recreational Fishermen to Evaluate Catch, Effort, Bycatch, and Biological Information in the Georgia Blue Crab Fishery 2011: Validation of Commercial Finfish and Shellfish Conversion Factors
FL FWCC	<ul style="list-style-type: none"> 1999: Data Management Verification Mailings 1999: Comparison of Florida Trip Tickets to Southeast Fisheries Science Center Logbook 2001: Data Reconciliation for Southeast Data Sets 2011: Validation of Commercial Finfish and Shellfish Conversion Factors
Commercial Technical Committee	<ul style="list-style-type: none"> 2011: Validation of Commercial Finfish and Shellfish Conversion Factors
Recreational Technical Committee	<ul style="list-style-type: none"> 2000 - 2001: Pilot Project for For-hire Methodology and Independent Review of Methodology 2001 - 2010: Increase Sampling to Reduce Variance in Shore/Private Boat Modes 2010: Wave 1 Telephone Survey to Expand MRIP in New York, New Jersey, Delaware, Maryland, and Virginia 2003 - present: Increase At-sea Sampling for the For-hire Survey Headboat Fishery from New Hampshire through Florida)
Outreach Committee	<ul style="list-style-type: none"> Constituent Awareness Survey

FEATURED PROGRAM PROJECTS

The ACCSP supports program partners in achieving fisheries data collection goals by awarding grants through a competitive process. The competitive process is linked with the data collection standards for various modules. Catch and effort data, biological data, bycatch/species interaction data, and then social and economic was the order of priorities for data collection projects in 2014. The objectives of these projects are varied, but may include expanding data collection using SAFIS, obtaining data for FMPs, increasing sampling for MRIP, and promoting compliance of fishermen and dealer reporting.

NOAA FISHERIES

Processing and Ageing of Biological Samples from South Atlantic Commercial and Recreational Fisheries

As one of two federal partnerships in the ACCSP, NOAA Fisheries has been fundamental in the development of the Program. One of the benefits of the relationship with NOAA Fisheries is the ability to coordinate and centralize regional data sets to integrate into the Data Warehouse. For instance, one project that the ACCSP has funded has been for the Southeast Ageing Project.

The Southeast Fisheries Science Center Beaufort Laboratory works to inventory, process, and age reef fish species collected from the various South Atlantic fisheries, as well as conducting age workshops and sample exchanges with partner lab to ensure consistency in age readings. Since 2012, staff in the fish ageing lab were able to age over 43,000 fish, process another 10,000, conducted three age workshops, and built 11 individual species reference collections for interlaboratory exchanges. Species being studied were processed based on the stock assessment schedule set by SEDAR (Southeast Data, Assessment and Review). In addition, the lab continued to process samples of high priority species, such as black sea bass, vermilion snapper, red porgy, gag, red grouper, blueline tilefish, and tilefish on an annual basis. For more on how ACCSP collaborates with other aspects of NOAA, please see the National Networking section later in this report.

Atlantic States Marine Fisheries Commission (ASMFC) & Mid-Atlantic Fishery Management Council (MAFMC)

Observer Program for Small Mesh Otter Trawl Fishery in the Mid-Atlantic (New York, New Jersey, Maryland, Virginia) and Rhode Island

The ASMFC through its Management and Science Committee and Interstate Fisheries Management Program (ISFMP) Policy Board developed a list of coast-wide critical research priorities identifying the need for at-sea observer data on discards, age/length samples, and catch/effort data. In addition, a recurring high pri-

ority recommendation from stock assessments and FMPs for several species managed by the ASMFC is to increase at-sea observer coverage to obtain commercial discard and associated biological data. This project was created to address these issues and collect biological and discard data for commercially and recreationally important species from the small mesh otter trawl fisheries in the Mid-Atlantic region (New Jersey, Maryland, Virginia) and Rhode Island using at-sea observers.



This ongoing project has been supported by ACCSP since 2011. Because many of the primary species taken in small-mesh trawl fisheries are co-managed by ASMFC and MAFMC (i.e., black sea bass, scup, summer flounder, bluefish, and spiny dogfish) both organizations have decided to collaborate on this project. All observers are deployed on commercial vessels that utilize small mesh otter trawls in state and federal waters of the Mid-Atlantic and Rhode Island. The Observer Program for the Mid-Atlantic and Rhode Island contracts sea days from the NOAA Fisheries Northeast Fishery Observer Program (NEFOP) and then takes single or multi-day trips each month throughout the year. The days and time periods are adjusted by region to ensure that observer coverage is effectively applied to species of interest. The observers document the discards and collect biosamples from species of interest, which include river herring, scup, weakfish, croaker, bluefish, black sea bass, summer

Since 2012, the staff in the fish ageing lab were able to age over 43,000 fish and process another 10,000, conducted three age workshops, and built eleven individual species reference collections for interlaboratory exchanges.

DATA COLLECTION MODULES

CATCH & EFFORT

Implementation of comprehensive catch and effort data, including dealer permits, fishermen permits, and vessel registration data is currently the highest priority for the ACCSP. Statistics for the commercial fishing sector are collected by the partners for the fishing activity that occurs in their respective areas of jurisdiction. Due to the large number of commercial reporting programs on the Atlantic coast, there is a need for consistency in data collection procedures and coding by the partners.

Statistics for most of the recreational and for-hire sectors are collected by coastwide programs including MRIP the Southeast For-hire/Headboat Survey, and the Northeast Vessel Trip Reporting Program (VTR). The ACCSP supports the development of for-hire logbooks and coordination of programs to eliminate duplicate reporting.

Full implementation of the dealer, fishermen, and vessel permit and registration module is essential to managing data used for fisheries assessment, because it allows linking of data from other modules back to the trip information. It also provides comprehensive data on the numbers of participants and vessels in various fisheries.

BIOLOGICAL

Biological data, such as species, length, weight, age, and maturity are used to characterize the composition of the catch and the stock and to determine other life history characteristics. These data are an important component of stock assessments and management.

BYCATCH, RELEASES, & PROTECTED SPECIES INTERACTION

Data on bycatch and releases describe the landed and discarded or released catch. Protected species interactions data are used to determine the impact of fishing activity. Collectively, these data are necessary to manage fisheries in a holistic manner and to measure the impacts of various management strategies on stocks.

SOCIO-ECONOMIC

Federal law mandates the collection and consideration of socio-economic data related to fisheries. These data are needed to measure the value of fisheries to our nation, regions, and states, and to evaluate the impacts of fisheries regulations on fishermen, fishing communities, and the economy.

METADATA

Metadata are "corollary or descriptive information, both numeric and non-numeric, which may qualify or explain primary data." Metadata is an essential component of each module, and is critical for understanding trends in data and how to use the data for analyses. Metadata applications are needed for program documentation, statutory and regulatory histories, fishing technology histories, environmental data, and social and economic data (indices).

flounder, and spiny dogfish. All of these species are identified in the upper quartile of the ACCSP Biological Matrix.

The collected specimens are sexed, enumerated, measured, and weighed in accordance to the NEFOP protocols, and the data are submitted in compliance to ACCSP guidelines. Besides collecting biological data from samples, the observers also extract age structures. After 90 days, the data that observers collect are uploaded to the NEFOP database and then made available to ACCSP at the end of each year. Through August 2013, there have been approximately 2700 scale and 600 otolith samples collected from various species of interest which give insight to the age structure of each population. In summer 2013, a fish ageing specialist was hired at the Virginia Institute of Marine Science to process all of the samples since 2011. 2014 marks the fourth year of operation which has been running smoothly, with

253 sea days anticipated for the entirety of the fiscal year.

A preliminary sample size analyses (Wigley et al. 2013) of additional sea days provided by this observer program (beyond the NEFOP-funded days) indicate that the increased number of trips improved precision for four species groups: summer flounder/scup/black sea bass, squid/butterfish/mackerel, small mesh groundfish, and large mesh groundfish.

The greatest benefit that the ASMFC/MAMFC Observer Program provides is the biological information obtained from the discards of commercial fisheries. This supplies stock assessment scientists and fisheries managers with more precise data that can be utilized to enhance modeling and decision-making across the Mid-Atlantic region.

2014 FISHERIES-DEPENDENT DATA COLLECTION PROJECTS

PROGRAM PARTNER	PROJECT
ASMFC/MAFMC	<ul style="list-style-type: none"> Observer Program for Small Mesh Otter Trawl Fishery in the Mid-Atlantic (New York, New Jersey, Maryland, Virginia) and Rhode Island
ME DMR	<ul style="list-style-type: none"> Management of Dealer and Harvester Reporting in Maine Portside Commercial Catch Sampling and Comparative Bycatch Sampling for Atlantic Herring, Atlantic Mackerel, and Atlantic Menhaden along New England and the Mid-Atlantic
MA DMF	<ul style="list-style-type: none"> Implementation of a Swipe Card Pilot Project for Shellfish in Massachusetts
RI DFW	<ul style="list-style-type: none"> Maintenance and Coordination of Fisheries-dependent Data Feeds to ACCSP in Rhode Island
NYS DEC	<ul style="list-style-type: none"> Enhancing Dealer Reporting in New York
NJ DFW	<ul style="list-style-type: none"> Continuation of Electronic Reporting and Biological Characterization of Commercial Fisheries in New Jersey
NC DMF	<ul style="list-style-type: none"> Commercial and Recreational Fisheries Age and Sex Data Collection in North Carolina Characterization of Bycatch in the Cobia Hook-and-line Fishery in North Carolina Characterization of Bycatch in the Commercial Skimmer Trawl Fishery in North Carolina
SC DNR	<ul style="list-style-type: none"> Continuation for the ACCSP Commercial Module in South Carolina
Recreational Technical Committee	<ul style="list-style-type: none"> Increase At-sea Sampling Levels for the Recreational Headboat Fishery from New Hampshire to Florida

Other benefits from this project include:

- Obtaining discard and biological information is critical to adequately characterize the quantity, length, and age compositions of fishery catches that can subsequently be used in stock assessments;
- The catch and effort data obtained from these trips are supplied to the appropriate partner(s) to be able to validate vessel and landings information;
- A multi-state or regional program is the best approach to address observer coverage needs, given the transient nature of vessels involved in many fisheries; and
- A regional program also promotes consistency in data collection and utilization in coastwide stock assessments.

Maine Department of Marine Resources (ME DMR)

Management of Dealer and Harvester Reporting

Beginning in January 2008, ME DMR began collecting mandatory dealer reporting at the trip-level. For the first time, detailed data were collected on all of Maine's commercial fisheries. The objective of this project in 2014 has been to continue with the implementation of the comprehensive dealer reporting regulation for all 600 plus dealers that buy directly from harvesters. Below is

a list of some of the major tasks executed by ME DMR staff to accomplish this objective.

1. Regulation Enforcement: Since 2009, ME DMR has made referrals to Marine Patrol four times a year. Many recent enforcement calls occurred during the northern shrimp and elver season as ME DMR enforced a weekly reporting regulation for all shrimp and elver dealers beginning in January 2013. Starting in January 2014, ME DMR started suspending licenses if dealers are delinquent with their mandatory reporting requirements. The 2014 elver season was the first time ME DMR used a swipe card program to collect all harvester to dealer transactions. This system allowed the ME DMR to manage individual harvester's quotas and enforce a daily compliance within the fishery. The ME DMR saw a dramatic increase in timely, accurate data.
2. Data Entry: Staff works to enter positive trip records into SAFIS and MARVIN (the database that houses all catch and sampling data for ME DMR). Also, staff typically uploads data to the Data Warehouse about every two months in order to facilitate quota monitoring. Staff also works vigorously to maintain the accuracy of the data by checking for unknown harvesters, unknown vessels, weights that exceeded a trip limit, high and low prices, wrong species-gear-disposition combinations, species

caught out of the season, and dealers who reported buying from unlicensed harvesters.

3. Outreach: In order to help industry understand the importance of accurate and timely reporting, staff often works with dealers to discuss options and provide training on software. Electronic reporting is encouraged for those still opting to report on paper. These data also are also available to scientists, private organizations, industry, academia, and/or media that may have a specific question on fisheries data in Maine.

This project helps ensure that fisheries managers have the most accurate and timely information available when fisheries-related decisions are made. A preliminary report issued by ME DMR in February 2014 showed that:

- In 2014, Maine's commercially harvested marine resources exhibited a 3% decrease in pounds landed and a 8% increase in value over 2013.
- There were 7,625 active Maine commercial fishermen in 2014 (of those, 4,233 were active commercial lobster harvesters out of 5,818 lobster license holders).
- The top five fisheries in terms of active harvesters included lobster with 4,233, soft shell clams with 2,031, elvers with 890, marine worms with 730, and periwinkles with 592.

Did you know the top five fisheries in Maine for 2013 in terms of active harvesters included lobster - 4,233, soft shell clams - 2,031, elvers - 890, marine worms - 730, & periwinkles - 592?

In the past five years the project has shown to be vital for monitoring changes in fisheries, providing knowledge of fleet characteristics, and ensuring accurate communications to NOAA Fisheries and

ASMFC about Maine landings. The Department also uses the data submitted for socio-economic reasons. This data collection is one of the best ways to monitor the health of Maine's fisheries.

Portside Commercial Catch Sampling and Comparative Bycatch Sampling for Atlantic Herring, Atlantic Mackerel, and Atlantic Menhaden along New England and the Mid-Atlantic

Since 2003, when it began as a portside Atlantic herring bycatch survey, ACCSP has provided funds to ME DMR to collect data from three important New

England fisheries (Atlantic herring, Atlantic mackerel, and river herring). What makes this project unique is its collaborative nature. Not only does ME DMR staff work closely with NOAA Fisheries observers, it also pools resources with staff from MA DMF by identifying co-occurring trips and comparing results between at-sea and portside sampling. In 2013, the partners combined databases to provide a centralized data set for better analysis. Recently, results from this project have been used by the NEFMC and MAFMC to establish river herring bycatch caps in the Atlantic herring and Atlantic mackerel federal waters fisheries. Also, catch-at-age matrices have been developed and used in assessments for Atlantic herring and mackerel, while biological samples of Atlantic herring and river herring bycatch have been used for determining important parameters for the assessment models in use. Further biological samples of herring were and are expected to continue to be important for determining spawning area closures in the directed Atlantic herring fishery.

New Hampshire Fish and Game Department (NH FGD)

Implementation of ACCSP Dealer Module in New Hampshire's Lobster Fishery

The American lobster fishery is the largest and most important commercial fishery within New Hampshire's waters. Since 1969, through the use of various reporting systems, the NH FGD has monitored the lobster fishery by collecting catch and effort data from lobster license holders. However, it lacked the thoroughness that standardization allows in assessing migratory marine stocks with other program partners. In 2003, NH FGD began instituting ACCSP's reporting standards in a phased approach utilizing the two-ticket reporting system with lobster dealers reporting lobster landings and harvesters reporting catch and effort data. In 2005, working with the NOAA Fisheries, lobster dealers that were required to report to both the state and federal agencies were then required to report once through SAFIS. In 2006 New Hampshire continued with the second phase by instituting a harvester trip-level reporting program for lobster and coastal harvest fisheries in state waters. The second phase required all harvesters landing greater than 1,000 pounds of lobster to report trip-level information. The remaining licensed harvesters reported monthly summarized catch and effort information. The reported data for both coastal and lobster harvest continued to be collected, uploaded, and used to ACCSP for use in stock assessments, fishery management decisions, and publications.



Results from the Portside Bycatch Project in Maine have been used by the NEFMC in the development of Amendment 5, and Framework 4 by the ASMFC in its updated assessment report for river herring, and in bycatch examinations for setting the river herring catch cap for the Atlantic herring fishery.

Massachusetts Division of Marine Fisheries (MA DMF)

Continue Trip-Level Reporting for All Massachusetts Commercial Permit Holders

From 2008 to 2013 MA DMF with support from ACCSP collected comprehensive, standardized trip-level catch and effort data from all commercial harvesters. State permit holders also holding a federal permit with reporting requirements, averaging about 15 percent, continued to report to NOAA Fisheries, and all others reported to MA DMF.

State reporting harvesters report one of three ways: electronically through the use of the ACCSP eTRIPS; a spreadsheet file as an email attachment; or paper submission, which is delivered by mail, email, or faxed. Paper based submissions have slowly declined over the five-year period, but still represent a significant proportion of the total. All data submitted to MA DMF is then entered directly in the SAFIS database using eTRIPS, as is done by all state-reporting harvesters participating in the current trip-level reporting program electronically. Thus all state-reported catch and effort data ends up in SAFIS, regardless of how it is submitted.

This project, which is to collect standardized comprehensive fisheries-dependent data from both dealers and harvesters, coupled together with comprehensive landings data from dealers, creates improvements in data quality, quantity, and timeliness.

This project, collects standardized comprehensive fisheries-dependent data from both dealers and harvesters and creates improvements in data quality, quantity, and timeliness. Although this project only covers the activities of Massachusetts commercial harvesters, it does include the harvest of species which are managed regionally, such as lobster, striped bass, scup, and black sea bass. Thus regional management bodies such as ASMFC benefit from having comprehensive fisheries-dependent data from Massachusetts.

Starting in 2015, MA DMF is proud to announce that funding from ACCSP will no longer be necessary for this data-collection program. Although it will be challenging to do so going forward, the importance of the data that are collected warrants the need for MA DMF to find sufficient funding on its own, in addition to working towards an efficient and cost-effective program. There have been many lessons learned during the five-year time period, particularly the importance of maintaining a “paper” option for permit holders to report.

The electronic option remained an important one and, as a result, outreach and auditing were key components to successfully maintaining that method of reporting. Lastly, having the permit holders (both federal and state) reporting to one system made the process significantly more efficient. This did not only standardize reporting for the industry in general, but also made the data available in a consistent format to both federal and state partners alike.

Did you know that ACCSP and state partners are working on a project that not only will help to address accountability and timeliness of data submitted by dealers, but it may also set the stage for electronic tracking through the seafood distribution chain to help mitigate seafood traceability issues?

Implement a Swipe Card Pilot Project for Massachusetts Trip-Level Shellfish Transactions

The MA DMF has embarked on a new project starting in 2015 to develop, with the assistance of a software contractor, ACCSP staff and funding, a new application that will use a harvester identification card with a magnetic stripe, which can be scanned to consummate a transaction when selling to a shellfish seafood dealer. Not only will this help to address accountability and timeliness of data submitted by dealers, but it may also set the stage for electronic tracking through the seafood distribution chain to help mitigate seafood traceability issues. In addition, this application will be tested in its pilot phase as a one-ticket solution, meaning dealers can collect catch and effort information from the harvesters and submit

that with required dealer information. This has the potential to eliminate a significant reporting burden by harvesters as well as improve the link between a commercial trip and the resulting sale of the catch, pieces of a two-ticket system that are often difficult to line up.

As the project started, the ME DMR was also added



to the effort, as they recently applied for ACCSP funding to build a similar project, and the Program decided to fold it into the MA DMF project. This created some challenges, but a contractor has been hired to develop the software, and the project is moving forward. Several dealers have been identified in Massachusetts and are willing to participate in the pilot. The tentative start date to test the application is June 1, 2015.

Rhode Island Division of Fish and Wildlife (RI DFW)

Maintenance and Coordination of Fisheries-dependent Data Feeds to ACCSP in Rhode Island

Throughout the past 14 years, RI DFW has strived to improve ACCSP related tasks including fishermen data, dealer data, and quota monitoring. In 2002, staff began developing a system for dealers to report data. In 2003, the Rhode Island Fisheries Information System (RIFIS) was created and tested among a small group of dealers. In 2004, RIFIS was transitioned to SAFIS with federal dealers utilizing it in 2004. By 2006, all Rhode Island dealers were reporting trip-level landings data in SAFIS. In 2010, the focus of dealer data became data quality,

and outreach was needed. This led to site visits to all new dealers for training, and to the creation of the Dealer Report Card. The report card is sent quarterly



to dealers informing them of their data quality issues and touch on topics such as timeliness of reporting (late reports), missing prices, missing vessel information, and missing fishermen information. In 2013, the report cards were improved to include grades to further demonstrate to the dealers where their data quality issues lie. The report cards have greatly improved the reporting of the dealers and RI DFW continues to utilize them to this day.

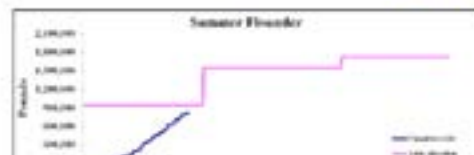
Rhode Island has also improved the data entry process. From 2001-2010 logbook data was entered and housed in a Microsoft Access Database. In 2011 eTRIPS was fully implemented by RI DFW and data was key entered directly by staff. In 2013, the eTRIPS upload feature was utilized by RI DFW, which increased the efficiency of entering logbook information into eTRIPS. Additionally in 2013, fishermen were granted access to eTRIPS for direct data entry themselves, cutting the costs of the



Rhode Island Quota Monitored Species Tracking Graph

*These are preliminary landings and are subject to change

If you have questions, contact Fish and Wildlife at 401-423-1923 or tom.rosa@dem.ri.gov

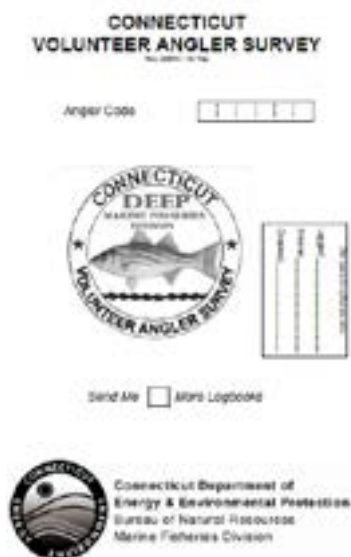


logbook printing, mailing, and data entry for the staff. In 2014, a new licensing endorsement was created, the paper logbook endorsement. This endorsement is required for all licensed fishermen who wish to report their catch and effort information through the use of the paper logbook, otherwise the fishermen can elect to sign up and utilize eTRIPS. Due to this endorsement, RI DFW has seen a great increase in the number of participants using eTRIPS. To date, there are over 650 registered eTRIPS users. To provide support to these fishermen, an outreach program was initiated giving fishermen access to training videos and presentations, the ability to attend training sessions around the state, and making in office appointments with staff for further support.

SAFIS data are valuable to the RI DFW and used for quota monitoring. Since SAFIS was implemented, Rhode Island's ability to track and monitor quota has improved greatly. Over time, Rhode Island has gone from using an antiquated interactive voice response system to solely using SAFIS data to track quota. Additionally, Rhode Island uses SAFIS data to generate Quota Monitor Tracking Graphs. These graphs are posted on the RI DFW website for all stakeholders to view. They are updated weekly and give fishermen an opportunity to see where they are in relation to the quota, and to plan their fishing activity.

Over time, Rhode Island has gone from using an antiquated interactive voice response system to solely using SAFIS data to track quota. Additionally, Rhode Island uses SAFIS data to generate Quota Monitor Tracking Graphs. These graphs are posted on the RI DFW website for all stakeholders to view (above).

Connecticut Department of Energy and Environmental Protection (CT DEEP)



eLogbook Enhances Existing Logbook Program

ACCSP supported the CT DEEP with the upgrade of its database for the volunteer angler survey/logbook program in 2013. The program has been implemented since the early 1980's and the previous database that was being used to store the information collected from the logbooks was outdated. The eLogbook application of SAFIS proved to be the right tool at the right time. Although the other ACCSP program partners that use the eLogbook application offer this tool to the public, initially CT DEEP has opted to continue to distribute and collect volunteer angler surveys and enter the data into the database.

Since a large percentage of Connecticut anglers fish in multiple state waters and land in Connecticut, it's proven challenging to control the fishing area field. Once this issue can be resolved, Connecticut anglers will have the option to enter their information directly into eLogbooks. CT DEEP will also continue to distribute the paper logbooks so anglers have the ability to take them on their trips to keep track of their catch. These logbooks were designed to match the eLogbook application to assist with the data entry process. Currently, CT DEEP is receiving logbooks from over 40 volunteers and has begun to enter these data. The staff with CT DEEP see this information as a valuable supplement to the MRIP length frequencies and catch rates. Also, the data collected are useful in the management measure analyses (e.g., minimum lengths, creel limits, and seasons) and potentially as a fisheries-dependent time series in stock assessments for the state's critical species such as summer flounder, scup, and black sea bass.

New York State Department of Environmental Conservation (NYS DEC)

Enhancing Dealer Reporting in New York

The NYS DEC has received funding through ACCSP to continue the state fisheries-dependent data collection and biological sampling since 2009. With the ability to have electronic reporting for the state, all New York state licensed dealers were required to submit dealer

reports through SAFIS effective January 2012. Much of the work that continues for NYS DEC staff is collection, review, and data entry of current harvest and dealer reports, including data quality assurance and control measures to integrate into the Data Warehouse, as well as working to scan and enter backlogged reports from 2009. DEC staff also promote online reporting and train harvesters, for-hire captains, and dealers to report through SAFIS. The funding received through ACCSP will allow NYS DEC to contribute the state's landings to coastal stock management efforts in a timely manner, as well as help to implement its reporting compliance programs.

New Jersey Division of Fish and Wildlife (NJ DFW)

Continuation of Electronic Reporting and Biological Characterization of Commercial Fisheries in New Jersey

Since 2001, several projects - which meet ASMFC fisheries management guidelines - have been and continue to be implemented by NJ DFW through funds provided by the ACCSP. Listed below is a summary of the projects tasks and accomplishments that have proved to be invaluable in proactive management of the marine resources in New Jersey.

1. **Electronic Vessel Trip Reporting and eDR:** Since its implementation in 2005, New Jersey has acquired 409 eTRIPS and 149 eDR accounts for individual commercial fishermen and seafood dealers. Staff also continues to update user accounts, provide logistical support for fishermen entering data, and supply new users with the tools necessary to report commercial landings successfully. Since its implementation a total of 353,078 trips have been recorded for New Jersey fishermen in the eTRIPS application. NJ DFW continues to implement eDR for state and federally permitted seafood dealers in New Jersey for the quota-based management of key regulated species including summer flounder, black sea bass, Atlantic menhaden, bluefish, and scup;
2. **Biological Characterization of Commercial Fisheries:** NJ DFW continues to implement biological sampling for ASMFC regulated species (e.g., weakfish, Atlantic croaker, American shad, Atlantic menhaden, and American eel) through fisheries-dependent port sampling. Also, summer flounder, black



sea bass, and river herring (alewife and blueback) are sampled through the fisheries-independent

Ocean Trawl Survey. Since its implementation in 2008, NJ DFW has collected 103,396 lengths, 23,520 hard parts, and 14,587 ages for managed species;

Did you know since its implementation in 2005 a total of 353,078 trips have been recorded for New Jersey fishermen in the eTRIPS application?

3. At-Sea Observer Program: New Jersey ACCSP staff continue at-sea observer sampling for American lobster and tautog. Since 2008, the New Jersey ACCSP staff have participated in 93 observer trips for American lobster, characterizing and measuring nearly 75,564 individual lobsters. These data are the only source from waters off the coast of New Jersey (Lobster Conservation Management Areas 4 & 5). For tautog, data are collected from two primary sources: the commercial fisheries, and the recreational party/charter boat sector. These fisheries-dependent data sources are critical to identifying trends in commercial landings and accurate management; and
4. Data Feeds: Staff maintains data feeds to the ACCSP for inclusion into SAFIS and the Data Warehouse.

Delaware Division of Fish and Wildlife (DE DFW)

Enhancing Dealer Reporting in Delaware

The objective of this project funded through the ACCSP from 2008 to 2010 was to transition Delaware from a fisherman-based logbook reporting system to one that includes electronic seafood dealer reporting to gather better information about commercial landings. During this time, DE DFW began a successful outreach campaign to identify dealers and produced a directory listing the primary seafood dealers in the state, creating buy-in and an incentive for the dealers.

Delaware continues to encourage dealers to begin voluntary reporting, so that the state could evaluate the impact of reporting on normal business practices, and introduce the process.

Maryland Department of Natural Resources (MD DNR)

Improved Timeliness, Reporting Accuracy, and Expanding Online Reporting for Commercial Fisheries in Maryland

MD DNR was awarded funds through ACCSP since 2003 to improve timeliness and reporting accuracy by expanding online reporting for commercial fisheries. Most recently, MD DNR focused an extensive outreach effort to promote online reporting for federal and non-federal dealers, charter captains, crabbers, and fishermen. MD DNR also worked diligently to mail announcements and outreach materials explaining the benefits of electronic reporting, how to go about obtaining an account, and all reporting related notifications to interested parties. To reach interested parties, remote meetings are attended to meet watermen and train license holders how to sign-up for and use the online reporting system. As an additional step for training on SAFIS, MD DNR has worked with a contractor to create video tutorials that walk watermen through the online reporting process. The tutorials show watermen how to set up favorites or default settings, add trip reports, add negative reports, and add a charter trip reports.

To reach interested parties, MD DNR held remote meetings to meet watermen and train license holders how to sign-up for and use the online reporting system.

The continuation of online reporting will allow MD DNR to more accurately and efficiently manage particular fisheries and their respective quotas. Up to the minute data collection will help MD DNR better manage fisheries harvest, provide additional time to notify fishermen about fishery closures, and allow monitoring of individual quotas.

Virginia Marine Resources Commission (VMRC)

Biological Program Improvements in Virginia

Since 1988, VMRC has been collecting biological samples from the state's commercial and recreational fisheries. In 2008, ACCSP funded a project to enhance the biological collection program with the purchase of updated electronic measuring boards. The funds from this project were also used to modernize the current database to one with more flexibility and accessibility. This new system design proved to be more streamlined and efficient with other fisheries management processes. This new database and enhanced equipment worked to maintain the goals of the biological collection program and the data collection standards of the ACCSP.

North Carolina Division of Marine Fisheries (NC DMF)

Characterization of Bycatch in the Cobia Hook-and-line Fishery in North Carolina

There is a need to observe the recreational hook-and-line fisheries, including the cobia fishery to gain a better understanding of the finfish discards and protected species interactions that occur. The cobia fishery occurs in the spring and early summer during high levels of sea turtle activity. Discard and release information will be collected for managed species including striped bass, weakfish, red drum, Atlantic croaker, spotted seatrout, and flounder. Valuable protected species interaction data will be collected for threatened and endangered sea turtles, sturgeons, and marine mammals.

In North Carolina, valuable protected species interaction data will be collected for threatened and endangered sea turtles, sturgeons, and marine mammals.

This project expands the effort NC DMF has taken to provide extensive, standardized observer sampling statewide by greatly improving biological data quality and quantity. Regional management agencies such as ASMFC and SAFMC will benefit from the data collected through this project. In addition, this project will provide real time protected species interaction data, allowing management decisions to be made quickly and accurately to provide ultimate protection for these species.

Characterization of Bycatch in the Commercial Skimmer Trawl Fishery in North Carolina

NC DMF will conduct an onboard characterization sampling pilot study in the North Carolina commercial skimmer trawl fishery to collect biological and discard data for commercially and recreationally important species, document protected species interactions, and provide estimates of commercial effort, landings, bycatch, and discards for future stock assessments. Species

sampled in this study will include but are not limited to summer flounder, weakfish, spotted seatrout, red drum, spot, Atlantic croaker, bluefish, Atlantic menhaden, southern flounder, and striped mullet. Skimmer trawls in all areas of the state will be sampled throughout the entire 2015 shrimp season when white shrimp are abundant (approximately April through November).

Commercial and Recreational Fisheries Age and Sex Data Collection in North Carolina

In October 2014, the NC DMF began the collection of preferred structures for ageing fish (otoliths) and sex information from three species of high value to commercial and recreational fisheries in North Carolina: summer flounder, black sea bass north of Cape Hatteras, and southern flounder. Fishery management plans for these species rely on age-structured stock assessment models to determine stock status and management measures. Catch-at-age from the commercial and recreational fisheries is a critical data need for these models to track and predict cohort success and understand changes in stock age structure from year to year. It is also important to know the sex ratios of harvested fish to accurately estimate parameters in stock assessment models. This is especially true for summer and southern flounder and black sea bass, species in which males and females have different growth rates and vulnerabilities to the fisheries. The collection of fisheries-dependent age and sex data through this project will meet critical data needs, and will improve the accuracy of stock assessments and our general understanding of these species, leading to more informed management within North Carolina and throughout the region.

Through this project, NC DMF staff are being trained to collect flounder otoliths in a way that does not damage fish to be sold whole. This new way of collecting flounder otoliths will allow for continuation of this type of sampling beyond the end of the grant period. Some sex information is being collected through purchases of flounder. A portable 'light box' was built; designed to determine the sex of flounder by laying the flounder on top and shining light through the body. This device and technique are still being tested for sampling fishery catches in the field. The collection of ageing structures and sex information will continue through 2015.



South Carolina Department of Natural Resources (SC DNR)

Continuation for the ACCSP Commercial Module in South Carolina

With funds from ACCSP, the SC DNR was able to make certain that fisheries-dependent data collected from the commercial fishing industry remained accurate, complete, and consistent with the objectives of 1) the catch and effort data collection and 2) the biological sampling protocol, all set forth by the ACCSP Priorities. In order to ensure this, SC DNR actively collected data from 100% of all marine and diadromous commercially landed fisheries products in South Carolina. The state's commercial catch and effort data collection occurred through a mandatory trip ticket logbook reporting

Did you know from September 2014 through February 2015, the Fisheries Statistics Section of SC DNR tracked compliance on 235 licensed wholesale dealers, collecting over 21,812 individual trip records from 609 commercial fishermen, landing over 3.6 million pounds of commercial product and adding about \$17.3 million dollars to the South Carolina economy?

wholesale dealers, collecting over 21,812 individual trip records from 609 commercial fishermen, landing over 3.6 million pounds of commercial product and adding about \$17.3 million dollars to the South Carolina economy. Additionally, the biological sampling effort during this same timeframe resulted in samples collected from 70 commercial fishing trips amassing 1,075 length frequencies and 1,057 age structures (otoliths and spines) from 36 individual species from the snapper/grouper complex and coastal pelagic species.

system where trip-level landings data were recorded. This is a cooperative effort made by both the commercial fisherman and the wholesale seafood dealer through the state established one-ticket system.

During the project period of September 2014 through February 2015, the Fisheries Statistics Section of SC DNR tracked compliance on 235 licensed



The red snapper mini-fishing season during this same period allowed SC DNR to collect 106 whole fish or fish racks for collection of length frequencies, sex (when available), and otoliths from the recreational and commercial sectors provided an additional 18 gutted fish for the collection of length frequencies and otoliths. These data will be presented and possibly used in the August 2015 SEDAR of the red snapper stock assessment. Staff were also successful in removing hogfish otoliths through the gill plates of commercial landed fish. Working with both recreational and commercial fishermen and federal port agents, they were able to collect and process hogfish carcasses to isolate the exact extraction point to successfully remove the otolith through the gill plate. This new positive extraction technique has been shared with state and federal partners. SCDNR Fisheries Statistics Section staff continually provides additional support to other program partners in order to collect and provide a comprehensive representation of commercial fisheries and how best to manage their resources.

Georgia Department of Natural Resources (GA DNR)

Improved Data Collection and Blue Crab Study in Georgia

In 1999, GA DNR received ACCSP funding to launch the trip ticket program. These funds were used to print trip tickets, conduct outreach, and build a new landings database. Prior to that Georgia had been collecting trip level data for a decade but the effort data was of limited usefulness. By adopting the minimum ACCSP standards and making some changes to state law, Georgia now has robust landings data across all of its fisheries allowing managers to make better decisions.

In 2001, GA DNR also had the opportunity to conduct a fisheries-dependent trap-based study of the blue crab pot fishery. A sample of crabbers were issued logbooks with trap-level data fields for self-reporting, staff

These data gave Georgia's fishery managers a better understanding of spatial and temporal distribution of blue crabs and contributed to the drafting of a management plan.

conducted observer trips, and data from fixed-location traps were collected. These data gave Georgia's fishery managers a better understanding of the temporal distribution of blue crabs and contributed to the drafting of a management plan.

Recreational Technical Committee

Increase At-sea Sampling Levels for the For-hire Survey on the Atlantic Coast

The ACCSP Recreational Technical Committee sponsored a proposal to increase headboat at-sea sampling levels for the for-hire component of the MRIP survey on the Atlantic coast. With the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act, the need for precise regional estimates of the recreational fisheries have become increasingly critical. Increased sampling benefits recreational data users by improving the precision of the catch estimates and emphasizing high priority species for assessment updates. This project funded 314 additional at-sea sampling trips aboard headboats in New Hampshire, Massachusetts, New York, New Jersey, Delaware, Maryland, North Carolina, Virginia, South Carolina, Georgia and the East coast of Florida.

In 2014, ACCSP increased the sample for headboats by 73% along the Atlantic coast. The increase in sample size should reduce variances and allow for more precise estimates of recreational fisheries data. Also, improved precision of catch estimates allow for timely observed harvest and released alive information relevant to upcoming and current stock assessments. This project increases collection of biological information (e.g., lengths, weights) using discards and harvest landings and preserves the only existing coastwide time series on discard catch from headboats.

Commercial Technical Committee

Validation of Commercial Finfish and Shellfish Conversion Factors

The Commercial Technical Committee of the ACCSP received funds to begin a project to validate finfish and shellfish conversion factors. Many fisheries land products in whole form which do not require conversion (i.e., some fisheries land product gutted, filleted, fins or some other partial form of the fish). Conversion factors are also necessary for product landed in units other than weight in pounds, such as number, bushels, or dozens. Conversion factors are applied to these landed conditions or units to obtain a whole weight value in pounds. There is wide variability between conversion factors



both spatially and temporally, this collaborative project will result in more accurate data for stock assessments, quota monitoring and other data needs required by fisheries management for all regions.

The conversion factor project is a multi-partner effort between Rhode Island, North Carolina, South Carolina, Georgia, Florida, as well as the NOAA Fisheries Greater Atlantic and Southeast Regional Offices. Each participating partner has a particular species or species groups identified as a sampling priority. For example, Rhode Island is focusing on shellfish (e.g., quahogs, soft shell clams, blue mussels, and oysters) while Southeastern states have a unified interest in sampling a variety of snapper grouper species, as well as highly migratory species (e.g., sharks, tunas, and swordfish).

By December 2013, all sampling for partner projects had concluded, and final partner reports had been submitted. Data analyses of the combined partners' data, and the documentation of the standard methodology, began in 2014. The final report is currently being drafted for review and is expected to be released in 2015.

"The recreational at-sea observer survey that is funded by ACCSP, with some contributions from partner states, provides the only available source of data on size distributions of fish released by recreational anglers from Maine through Florida. This information has been very useful for improving regional stock assessments."

Beverly Sauls, former Recreational Technical Committee Chair, Florida Fish and Wildlife Commission

REGIONAL PARTNERS PROMOTE ACCSP ON THE HILL

On May 21, 2013 Robert Beal, Executive Director of ASMFC, provided testimony before the Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs House Committee on Natural Resources. This was an oversight hearing on "Data Collection Issues in Relation to the Reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSA)." A crucial part of the testimony was support of data collection and management, in particular electronic reporting through ACCSP. He stated,



"With regards to how new technologies can help fishery managers achieve better and more timely information, I will speak to the program that the Commission knows best - the ACCSP. In the past ten years, the ACCSP has made significant advances in electronic reporting on the Atlantic coast. Over time, the use of SAFIS has expanded throughout the Northeast (implemented by Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut), the Mid-Atlantic (New York, New Jersey, Delaware and Maryland) and South Atlantic (South Carolina and Georgia) to become the de-facto dealer reporting system. To date, SAFIS includes over four million dealer records, approximately 465,000 trip records, and over 6,700 volunteer angler records. Where electronic reporting has been comprehensively deployed, much of the need for more timely and accurate data in dealer and fisherman reporting has been resolved. Agencies that are using the system are better able to manage quotas and perform compliance monitoring. Improved data on the activities of individual license holders will make the creation and management of limited entry fisheries, when desired by the states, much more timely and accurate. The standardization of coding has greatly reduced the amount of time needed to create the consolidated data sets that are needed for larger scale management and assessment activities. Many agencies still are using a mixture of conventional (paper) reporting and electronic reporting. Where this occurs, it becomes impossible to have data available in anything like the time frame that an all-electronic solution provides. The data are limited by the slowest mechanism, paper. Paper reports can take several months or longer to receive and process. While they are in process, it's necessary for managers to estimate catch that is reported on paper. This can lead to errors that can have a negative impact on the fisheries and those that prosecute them. SAFIS is designed specifically to be expandable so long as data are reported within the ACCSP standard. SAFIS can be deployed to its partners at no direct cost. It is estimated that coastwide SAFIS results in as much as \$10 million in cost avoidance for data management and software development." For the entire testimony, please visit <http://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=333644>.

On July 26, 2011 Duane Harris, former chairman of SAFMC, testified before the same Committee a hearing on NOAA Fisheries "Is the Lack of Basic Science Costing Jobs". Mr. Harris was focused on bringing to light how certain 2007 amendments of the Reauthorized Magnuson-Stevens Fishery Conservation and Management Act affected marine fisheries resources in the South Atlantic. Mr. Harris spoke on the utility of ACCSP as a cost saving tool. He stated,

"The SAFMC has recommended developing a comprehensive biological sampling program. At the most basic level the program should include hiring additional port samplers to monitor commercial and for-hire fisheries throughout the region as well as increasing sampling from recreational catches. Also, the Southeast Fisheries Science Center should become part of the ACCSP. There are two additional areas we believe that NOAA Fisheries should address: First is quota monitoring. The existing ACCSP Commercial Quota Monitoring Program that operates in the states of North Carolina northward could be extended to the states of South Carolina, Georgia, and Florida at no cost for software. This ongoing Program provides automatic daily reports on species with a commercial quota. Contrast this with the existing system used by NOAA Fisheries in the southeast using black sea bass as an example: On July 6, 2011 the Council received a memo from the Regional Administrator to our Executive Director showing preliminary black sea bass landings of 139,052 pounds (45% of the quota) being landed as of June 30, 2011. On Friday July 8, 2011 we received a notice that the commercial black sea bass fishery would close on July 15, 2011, culminating in a 45 day season. This fishery will not reopen until June 1, 2012. The estimated level of landings for the season or what the revised quota was based on the commercial overage last season is still not available. It is unfair to have the fishermen pay the price for an ineffective quota monitoring program through payback of overages when the more efficient ACCSP system could have been used at no cost to NOAA Fisheries." For the entire testimony, please visit <http://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=252461>.



The Data Warehouse is an online database populated with Atlantic coast fisheries-dependent data. It is one way the data collected from the projects described in this report are organized and disseminated.

The Data Warehouse contains commercial landings from Maine through Florida from 1950 through 2014 and recreational landings from Maine through Florida from 1981 through 2014.

What makes the Data Warehouse unique is that it harmonizes data received from program partners using one integrated set of codes for variables such as species, gear, and fishing area. Also, it gives users flexible and intuitive data queries to retrieve and download the information they need.

Users of the Data Warehouse include anyone interested in Atlantic coast fisheries-dependent data, such as fishery managers, stock assessment scientists, writers, historians, commercial and recreational fishermen, students, NGOs, as well as federal, state, or local government employees. Over time, several distinct methods for gaining access to the data have evolved. The data are accessed through the 1) Login Data Warehouse, 2) Public Data Warehouse, 3) partner agency database links, or 4) by a custom data request.

In June 2013, the ACCSP released the Public Data Warehouse for open, instant access for public users. The Login Data Warehouse is available for those with login credentials (i.e., non-confidential or confidential accounts). The Login Data Warehouse is equipped with an online query tool that allows users to customize and save prebuilt queries and presents only those data that are appropriate for the account holder. Much of the data extracted from the Login Data Warehouse are used for reviewing landings history and trends for stock assessments and FMPs. Partner agencies can retrieve data from the Data Warehouse through a

direct database connection. The success of the ACCSP data systems is directly related to the ongoing support and use of the data by our partner agencies. Some state agencies, NOAA Fisheries - Headquarters, Greater Atlantic Regional Fisheries Office (GARFO), Northeast Fisheries Science Center (NEFSC), Southeast Fisheries Science Center (SEFSC), and Gulf States Marine Fisheries Commission (GSMFC) have links to the Data Warehouse for automated extraction and/or replication of data sets to their own systems for use by partner agency staff. These data are often used for reporting compliance and reviewing permitting requirements. Lastly, custom data requests are another way of accessing the data in the Data Warehouse. Anyone with a unique question or that may not be able to retrieve the data they desire from the Data Warehouse can work with staff to create a custom data request.

Many custom data requests are used to aid stock assessments. To make sound and informed decisions for fish stocks and populations, there must be a fluid data review and assessment process between all those involved. Consequently, the Program has become an integral partner in the stock assessment process due to its ability to rapidly compile and disseminate fisheries-dependent data for various audiences and providing details about particular records that were questionable. This helps the process move forward quickly. Not only does participation in the stock assessment process increase visibility for ACCSP, but the Data Team is able to see firsthand how the information in the Data Warehouse is used. During 2014, the Data Team provided commercial landings and biological data for the ASMFC lobster assessment, commercial landings for the ASMFC black drum assessment, commercial landings for SEDAR 41 (red snapper and gray triggerfish), recommendations for improving data collection and coordination for SEDAR Procedural Workshop 7 (South Atlantic shrimp stocks), and commercial landings for SEDAR 44 (red drum).

WHAT DATA ARE IN THE DATA WAREHOUSE?



The goal of program partners is to advance the implementation and maintenance of trip-level reporting for all fisheries. At this time, the catch and effort data module is the most complete. Catch and effort data are available in the Data Warehouse from 1950 through 2014.



Data Warehouse users can also query or request recreational catch and effort data. The 2004 - 2014 data have been updated in conjunction with the new MRIP estimation methodology released in early 2012. This includes both the public estimates and the advanced queries for catch frequency analysis and directed trips.



Users have access to available biological data via custom data request. These biological data include information on American lobster from 1981 - 2014 and Atlantic herring from 2002 - 2013.

Socio-economic data are available as well via custom data request.

FOUR WAYS TO ACCESS THE DATA WAREHOUSE

LOGIN DATA WAREHOUSE

1

An online query system that allows access to data specialized for each non-confidential or confidential account (released in 2002).

There are currently 730 non-confidential and confidential accounts. In 2014, there were 11,000 queries in the Login Data Warehouse.

PUBLIC DATA WAREHOUSE

2

An online query system for instant access to non-confidential data (released in June 2013). This new public feature for the Data Warehouse increases accessibility for less frequent visitors.

In 2014, there were 1,300 queries in the Public Data Warehouse.

CUSTOM DATA REQUESTS

3

Specific queries are run by staff for program partners, universities, NGOs, & media. Since 2008, over 325 custom data requests have been completed.

In 2014, staff worked with program partners, the U.S. Coast Guard, National Resource Defense Council, as well as many universities to complete 63 custom data requests.

PROGRAM PARTNERS

4

Fishery data systems of the Atlantic and Gulf coasts are cooperative and interdependent.

State agencies, GARFO, GSMFC, NOAA Fisheries, NEFSC, and SEFSC link to the Data Warehouse for automated extraction and/or replication to their own systems.

STATUS OF PARTNER COMMERCIAL CATCH & EFFORT DATA

1950	Atlantic coast fisheries agencies begin continuous and comprehensive reporting of annual landings summaries.
1978	Collection of federal data in the South Atlantic improves to monthly summaries.
1986	FL FWCC is the first state partner to begin collecting trip reports for all fisheries.
1989	GA DNR begins collecting mixed trip reports and monthly summaries.
1990	Collection of federal data in the Northeast and Mid-Atlantic improves to monthly summaries.
1993	VMRC begins collecting trip level state harvester reports for all fisheries.
1994	Collection of federal data in the Northeast and Mid-Atlantic, including North Carolina, improves to trip level. NC DMF begins collecting trip level dealer reports.
1995	CT DEEP begins collecting trip level state harvester reports for all fisheries.
2001	GA DNR begins collecting trip reports for all fisheries.
2004	SC DNR begins collecting trip level state harvester reports for all fisheries.
2006	NH FGD, RI DFW, CT DEEP, VMRC, and SC DNR begin collecting trip reports for all fisheries.
2007	ME DMR, MA DMF, and MD DNR begin collecting trip reports for all fisheries.
Today	Collection of trip level federal and state dealer reports for all agencies. Three states do not require trip reports for all fisheries.

HOW WE PROTECT CONFIDENTIALITY

Along with data dissemination comes the responsibility of protecting confidentiality. The Program strives to achieve the right balance between confidential and available data. Confidential data are data that can lead to the identification of the contributing individual or individuals. Federal and state laws prohibit disclosure of confidential data. The Program uses the "rule of 3" for commercial catch and effort data. The "rule of 3" requires three separate contributors to fisheries data. This precludes the identity of a single contributor. In some cases, annual summaries by state and species may still be confidential because only one or two dealers process the catch. Alternatively, if there is only one known harvester in a state, the harvester's identity is implicit and those data are confidential.



Each partner is responsible for maintaining the confidentiality of its data, as well as deciding who has access to its confidential data. Program partners grant individuals access to their data housed in the Data Warehouse.

FISHERIES OF THE UNITED STATES

Since 2007, the Program has worked in cooperation with NOAA Fisheries to bring together commercial landings data for the annual publication *Fisheries of the United States* (FUS). By working with partners to develop the FUS data sets, the Program is able to populate the Data Warehouse at a finer resolution to further support the ACCSP mission. In the spring of 2014, staff compiled and submitted approximately 30 data sets to NOAA Fisheries, including SAFIS dealer reports through an open and collaborative process led by ACCSP. These data sets were obtained in the spring as preliminary and were updated as final data in fall 2014. The process has been expedited because partners have elected to use SAFIS, which compiles many data sets into a single data set. With the implementation of SAFIS, data are more readily available – a benefit to partners when it comes time for reviewing data during stock assessments and developing fishery management plans. For the FUS compilation process, the Data Team provides data from Maine to Georgia directly to NOAA Fisheries Headquarters, while data from Florida are provided directly to NOAA Fisheries. It is important to recognize that ACCSP does receive data sets directly from Florida and incorporates those data into the Data Warehouse during the commercial catch and effort data load process, however, those data sets are not submitted by ACCSP as a part of the FUS process.




UNIQUE WAYS OF USING ACCSP DATA

One of the many services ACCSP provides to its customers is the ability to call upon the Data Team to process custom data requests. Many of these custom data requests are submitted as a part of the Atlantic coast stock assessment process described earlier in this section. Also, the compilation of FUS described above is the largest custom data request completed annually by the Data Team. Over the years there have been some very thought-provoking and curious uses of the data which are shared below.

- In 2014, ACCSP worked with the Louisiana Legislative Auditor to supply annual summaries of Eastern oyster landings for Maryland for 2010-2013.
- In 2013, ACCSP compiled data on the number of active fishermen and the average age of the fishermen for inclusion in an article for the Edible Jersey publication. These data are also valuable when determining the socio-economic impacts of various management and industry regulations.
- In 2013, ACCSP provided aggregated trip data by geographic zone to the Bureau of Ocean Energy Management. This information was used to facilitate the discussion of the potential for oil and chemical spillage from wind energy farm projects off the Atlantic coast.
- In 2011, ACCSP was sought after by filmmakers Nancy Goetzinger and Tom Ramsay to provide up-to-date fisheries-dependent data on the Chesapeake Bay for their film "Life on the Edge: America's Atlantic Coast." The Chesapeake Bay was featured as both a remarkable wildlife habitat and a vital commercial resource in the 56-minute production. Goetzinger worked with the Data Team to understand what type of commercial fishing information would be relevant, therefore forming her custom data request. The information includes numbers from 2010 and is reflected in the narration of the film.
- In 2009, ACCSP worked with the Environmental Defense Fund to compile market values of striped bass for Maryland, Virginia, and North Carolina for a report looking to analyze price trends for those states.

WHAT CAN YOU SEARCH IN THE DATA WAREHOUSE?



• 32	Dispositions
• 57	Grade Categories
• 107	Market Categories
• 146	Gear Codes
• 842	Species
• 1,445	Area Codes
• 11,786	Dealers
• 74,471	Vessels
• 80,914	Fishermen
• 59,442,643	Landings Records

HOW ARE THE DATA LOADED INTO THE WAREHOUSE?

Annual Commercial Catch & Effort Data Load Process

Commercial catch and effort data are loaded into the Data Warehouse by the Data Team twice a year. The preliminary load of the previous year's data occurs from February through April. These data are considered preliminary due to known late reporting issues, but are still a good measure of landings. During the final load of the previous year's data, from August through September, updates are made to previously submitted data sets and late reports are added. Once this final load process is complete, the previous year's data are a robust and complete measure of landings.

A. Identify Data Sets & Consolidate Participant Files:

The data load process begins each year when approximately 30 data sets are identified and individual participant files (e.g., dealers, fishermen, vessels) are submitted to ACCSP staff by the program partners. Staff then load the participant files for each data source and merge those data to remove duplicate entries and maintain a history of the individual permits.

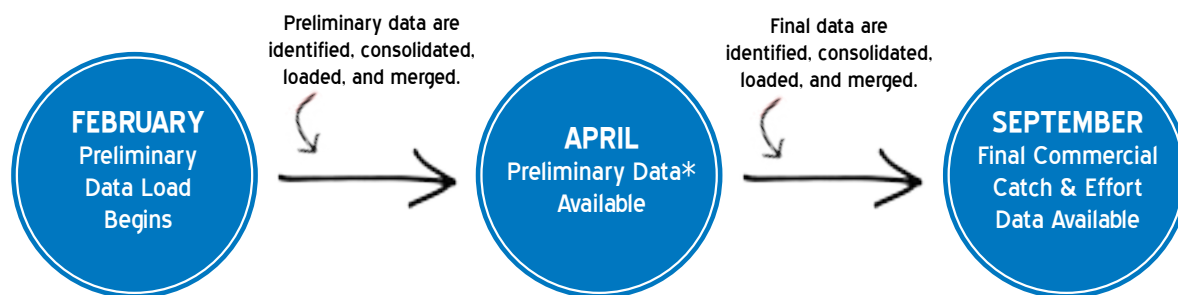
B. Load Initial Data: Next, program partners submit trip-level data sets including dealer landings, as well as harvester and fishermen catch records. Before data submission, program partners are responsible for the first round of quality assurance and control measures. Each partner has its own unique set of measures. These submitted trip-level data sets include references to the previously loaded participant files (see Identify Data Sets & Consolidate Participant Files). At this point, the Data Team completes an initial load of the data sets. If the participant information is not linked, the landings are entered as "unknown." During this step, data sets are considered initial because there may be records that indicate dealer and fishermen information for the same fish being landed. However, this information is merged in the next step.

C. Merge Dealer and Fishermen Data & Load

Secondary Data: Due to variations in reporting requirements along the coast, in some cases the most accurate accounting for landings is a combination of dealer and fisherman reports. Therefore, the Data Team has written software (customized to program partner requests) to merge records for five states that have both fishermen and dealer data reporting requirements. During this step, the Data Team completes a secondary load of all of the merged data. Also, there is a second round of quality assurance and control measures, as ACCSP staff validates poundage, price, and conversion factors.

D. Views are Refreshed: Once the process is complete, there is a refresh of the Data Warehouse, including the preliminary data sets from the previous year, conducted in April and then again in September incorporating final data sets from the previous year. At either point in the process, confidential and non-confidential account holders can view the previous year's consolidated data sets in the Data Warehouse. Both the preliminary and final data sets are submitted to NOAA Fisheries for inclusion within the fisheries databases of the Northeast Fisheries Science Center, Southeast Fisheries Science Center, and Headquarters. The data are also incorporated in the annual FUS document. Once preliminary or final data sets are uploaded to the Data Warehouse, quality assurance and control queries can be run by members of the Commercial Technical Committee. If it turns out that partner data sets from any year need to be updated, those new data sets are integrated into the Data Warehouse after merges. If significant changes are incorporated to data sets, a refresh to the Data Warehouse will occur and partners are notified so that they can update the data in their systems.

COMMERCIAL CATCH & EFFORT DATA LOAD TIMELINE



*Preliminary data are recognized as incomplete data due to known late reporting issues, however they are also considered a good measure of landings for the previous years data.

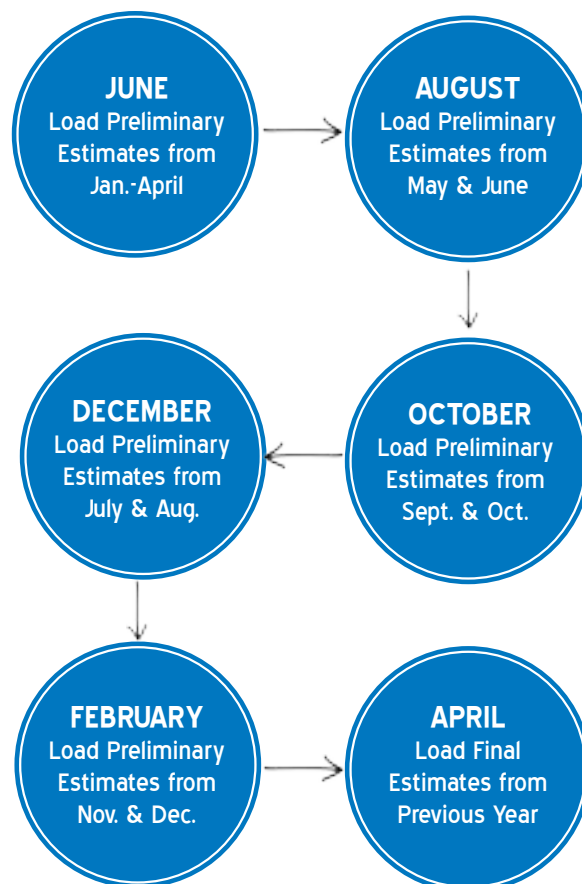
2014 COMMERCIAL DATA SETS

SOURCE	DATA SET
SAFIS	<ul style="list-style-type: none"> Dealer reports: ME DMR (state and federal), NH FGD, MA DMF, RI DFW, NYS DEC, NJ DFW, DE DFW, MD DNR, VMRC MA DMF swordfish canvas eTRIPS: MA DMF (American eel), NYS DEC (all except specific listed below), NJ DFW (Blue crab and tautog)
NOAA Fisheries	<ul style="list-style-type: none"> Bluefin tuna and ocean quahog/surf clam ITQ (CODES): ME DMR, NH FGD, RI DFW, CT DEEP, NYS DEC, NJ DFW, DE DFW, MD DNR, VMRC, MA DMF Wreckfish ITQ Golden Crab
ME DMR	<ul style="list-style-type: none"> Supplemental & harvester records
NH FGD	<ul style="list-style-type: none"> Coastal harvester & lobster supplemental
CT DEEP	<ul style="list-style-type: none"> Dealer reports (SAFIS), VTR, eTRIPS (provide merged data to ACCSP)
RI DFW	<ul style="list-style-type: none"> Horseshoe crab & lobster supplemental, aquaculture
NYS DEC	<ul style="list-style-type: none"> Hudson River shad, shellfish data, striped bass tag reports
NJ DFW	<ul style="list-style-type: none"> Fishermen & dealer reports for eel and menhaden
DE DFW	<ul style="list-style-type: none"> Trip level finfish & state level shellfish
MD DNR	<ul style="list-style-type: none"> Fishermen & monthly dealer reports, eel data from crabbers
PRFC	<ul style="list-style-type: none"> Fishermen reports
VMRC	<ul style="list-style-type: none"> Fishermen reports
NC DMF	<ul style="list-style-type: none"> State trip reports
SC DNR	<ul style="list-style-type: none"> State trip reports
GA DNR	<ul style="list-style-type: none"> State trip reports
FL FWCC	<ul style="list-style-type: none"> State trip reports

The data set for the recreational catch and effort data is the information gathered from MRIP. Recreational catch and effort data are loaded into the Data Warehouse by the Data Team one week after they are released by MRIP. MRIP releases data 45 days after each collection period, known as a “wave” is complete. Each wave is a two month interval (i.e., January and February = wave 1, March and April = wave 2, May and June = wave 3, July and August = wave 4, September and October = wave 5, November and December = wave 6). While the Data Warehouse stores the same information as MRIP, ACCSP provides added value to that information with time-saving tools (such as exporting pivot tables and the ability to email workbooks), attractive reports tailored to user needs, and the ability to create a query with a uniquely fine-tuned level of detail for Atlantic coast fisheries.

*Annual
Recreational
Catch &
Effort
Data
Load Process*

RECREATIONAL CATCH & EFFORT DATA LOAD TIMELINE



Updates from previous months are also included in loads for each two month period.



In 2003, the program partners created SAFIS to meet the increasing need for real time commercial landings data. With this system in place, ACCSP diversified from just a data storage program to include data collection. In the past ten years, SAFIS has grown to include four distinct applications - not just for commercial landings, but also recreational. While SAFIS enables data to be transferred directly into the Data Warehouse, those data are still collected under the authority of the associated program partners.

It is important to recognize that while SAFIS applications function independently, all are kept within the same database and share standards and codes that are ACCSP compliant. Some of the many benefits of implementing SAFIS in your agency are:

- Provides up-to-date information on species caught and the impact on fisheries and quotas across state and federal jurisdictions;
- Allows confidential access to data-of-record by fishermen and dealers;
- Fulfills state and federal reporting requirements through online data entry and eliminates duplicative reporting;
- Has the ability to collect highly migratory species data;
- Has an integrated price board to automatically generate pricing information;
- Allows for flexibility in creating favorites (e.g., species, gears, fishermen, dealers, and disposition) so reporting is quick and easier than ever; and
- Management tools facilitate maintenance of partner-specific data such as participants, permits, and vessels.

SAFIS FOR FISHERIES AGENCIES

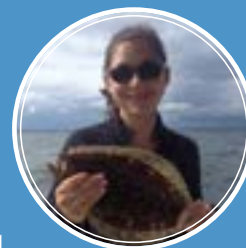
Along with the SAFIS applications for the public (e.g., harvesters, dealers, anglers) are applications for fisheries management. The SAFIS Management System (SMS) is a web based application that provides administrative tools for management information such as user accounts, participants, or permits. It is often used to monitor quotas. Below are two examples of how SMS is an important feature for managers along the Atlantic coast.

"Without ACCSP MA DMF would be hard-pressed to collect comprehensive, trip-level data in the manner that it does. This information is used in multiple ways to characterize the fisheries that occur in Massachusetts, and is a critical piece in the management process. Previously, information was collected only about specific fisheries, and it wasn't always done in a standardized way. Now the information is comprehensive, standardized, and it is also available to all other program partners as well."



Tom Hoopes,
Chair of the
ACCSP Operations
Committee and
Program Leader for
the Management
Information Systems
and Fisheries
Statistics Program
of MA DMF

"ACCSP has created applications that allow state and federal partners to feed fisheries-dependent data into a single repository with all data being held to the same standards. Additionally, all data housed by ACCSP is subject to quality assurance and quality control protocols. These features allow managers to query fisheries-dependent data on a coast-wide basis and provide a certain level of confidence in the data being used which is essential for coastwide and regional stock assessments."



Nicole Lengyel,
Chair of the
ACCSP Biological
Review Panel
and the Bycatch
Prioritization
Committee and
Principal Biologist
with RI DFW

POSITIVE REVIEWS FROM INDUSTRY ON ELECTRONIC REPORTING

In the fall of 2012, the ACCSP brought together fishermen, dealers, and fisheries managers to better understand the potential pros and cons of electronic reporting. Electronic reporting by fishermen and dealers clearly has its advantages. Fisheries managers have access to more timely data, allowing them to better monitor catch and more closely manage quotas. Scientists benefit from more detailed and precise data. Lastly, law enforcement officials can more easily keep an eye on reporting compliance.

The first initiative of the ACCSP-convened group was to design a survey, which was distributed from December 1, 2012 to July 14, 2013, to collect attitudes and opinions on electronic reporting systems through the eyes of industry.

"Fishermen and data managers both appear to have strong opinions on electronic reporting programs, so this project was begun to describe those opinions and better understand their basis," explained project leader John Carmichael, Science and Statistics Program Manager for the SAFMC.

Overall, the survey illustrated that there are significant pluses for fishermen and dealers no matter how they report electronically through SAFIS, file upload, or trip ticket, for example.

The survey question with the most compelling set of responses was: "If you have experience with electronic reporting, please share with us the key advantages." After reviewing the over 1,950 responses ACCSP received, it became evident that industry members too thought there was quite a bit to gain by using electronic reporting options.

The following is a compilation of survey responses from industry on the values of electronic reporting options.

1. *Electronic reporting reduces stress:* With electronic reporting, there is no more searching around for old paper reports. The data are easily accessible and readily organized to quickly print out for your records. This at-your-fingertips information is useful when it comes time to do your taxes at the end of the year.
2. *Electronic reporting increases confidence in your reporting:* Once you've entered a fishing report, you immediately receive a confirmation that your information has been submitted to keep for your records. Also, by reporting when you find it convenient, you can minimize errors.
3. *Electronic reporting is reliable:* Electronic reporting initiatives are designed to obtain the most accurate information from you. If reporting program finds conspicuous errors, they flag them before you submit a report so you can correct them. For dealers, SAFIS has an integrated price board that dynamically adjusts its prices through time.
4. *Electronic reporting is secure:* The data you report are kept on external servers, providing a measure of security in case your computer crashes. As one respondent said, "It's a great feeling knowing my data are backed up in a database."
5. *Electronic reporting is quick:* Data are saved in the system so that when you go back in to enter new report information, you don't have to reenter basic information. As one respondent said, "All of my information is already saved into my favorites. All I do is enter the date, species, pounds, and hit save and I am done!" Also, each state and federal system is designed to gather the information that is relevant to your area, so there is no unnecessary data entry. In addition, electronic reporting eases the burden of fumbling around with a large vessel trip report book every day.
6. *Electronic reporting is convenient:* Electronic reporting can be done from the comfort of your own home or from the field. As one respondent said, "I report at the end of each day so there is no need to scramble to get a paper report done all at once. Doing an 'all-at-once' paper report requires gathering all the slips from the week, which can be quite insane." SAFIS is the only web based electronic reporting system that is available from any computer and can be used without downloading additional software.
7. *Electronic reporting is economical:* Electronic reporting is an efficient way to enter and store information and, with increased efficiency, comes an increase in your bottom line.
8. *Electronic reporting is a priceless business tool:* With the ability to assemble and examine records quickly, you can easily review your catch history when planning future trips. As one respondent said, "What's fantastic from a business perspective are the reports I can quickly generate to review how well -- or not well -- we've been doing lately." The data entered into SAFIS can even be downloaded and shared in other formats such as Excel spreadsheets.

"It's a great feeling knowing my data are backed up in a database."

"What's fantastic from a business perspective are the reports I can quickly generate to review how well -- or not well -- we've been doing lately."

"All of my information is already saved into my favorites. All I do is enter the date, species, pounds, and hit save and I am done!"

Industry Survey Respondents

Since the survey was distributed, ACCSP has been working with the state and federal partners along the Atlantic coast and nationally to coordinate and improve electronic reporting options.



ELECTRONIC DEALER REPORTING (eDR)

eDR is a web based application that allows dealers to enter an electronic dealer report. Fields that must be entered for a completed report include fisherman, port, date landed, time landed, date purchased, vessel number, species, disposition, gear, quantity, and price. eDR has a unique price board feature that allows for the price of a species to be saved for 14 days. It will automatically be adjusted to all reports for that time frame and can be incorporated to any incomplete reports. After 14 days the price must be re-entered. When reports are completed electronically an interactive report can be made to view progress and history of landings.



ELECTRONIC TRIP REPORTING (eTRIPS)

eTRIPS is a web based application that compiles catch and effort data from fishermen. Trip reports, or logbooks in some fisheries, provide catch and effort data from a permitted fishing entity (fishermen or a vessel) or a single vessel. Trips may be categorized as commercial, party/charter, or recreational.

This application allows fishermen to create trip reports after entering in the required fields in the trip, effort and catch categories. Similar to the eDR application interactive reports can be made to illustrate progress and history of catch and effort.



SINGLE TRIP TICKET DEALER REPORTING (e-1TICKET)

e-1Ticket is a web based application providing the ability to collect all of the same data collected through a 2-ticket system. However the harvester and dealer report the different data on a single form and simultaneously create a dealer report. Best for program partners whose harvesters and dealers interact routinely at the point of sale.

VOLUNTARY RECREATIONAL LOGBOOK (eLogbook)

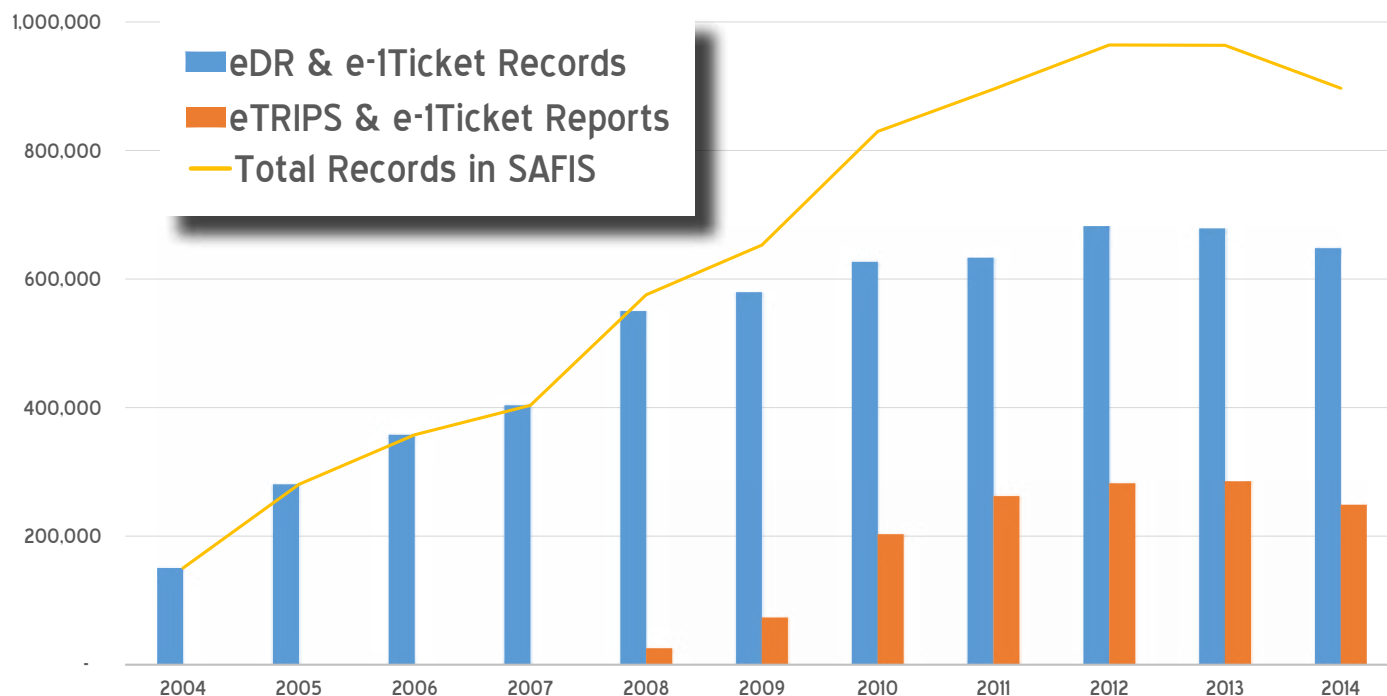
eLogbook is a web based application that collects data from private recreational anglers on a voluntary basis. eLogbook formulates summaries of information on all species caught by the angler. This valuable tool is a way to provide narrow strategies for any given set of conditions and is a more efficient way for anglers to take a look at the past and save the daily entries.



THE TIMELINE OF SAFIS IMPLEMENTATION

2004	RI DFW became the first partner to use eDR. NH FGD, MA DMF, RI DFW, CT DEEP, MD DNR, and NOAA-NE soon follow.
2005	NJ DFW and DE DFW began to use eDR.
2006	ME DMR began to use eDR.
2007	NYS DEC began to use eDR.
2008	MA DMF, NJ DFW, and NYS DEC began to use eTRIPS. NJ DFW also began to use eLogbook for the Striped Bass Bonus Program.
2009	CT DEEP began to use eTRIPS. MA DMF began to use eLogbook.
2010	RI DFW and MD DNR began to use eTRIPS and eLogbook.
2011	NOAA-SE began to use eDR. SC DNR, GA DNR, and NOAA-SE began to use e1Ticket. DE DFW began to use eLogbook.
2013	CT DEEP and NYS DEC began to use eLogbook.
2014	RI DFW began to use eTRIPS/m.

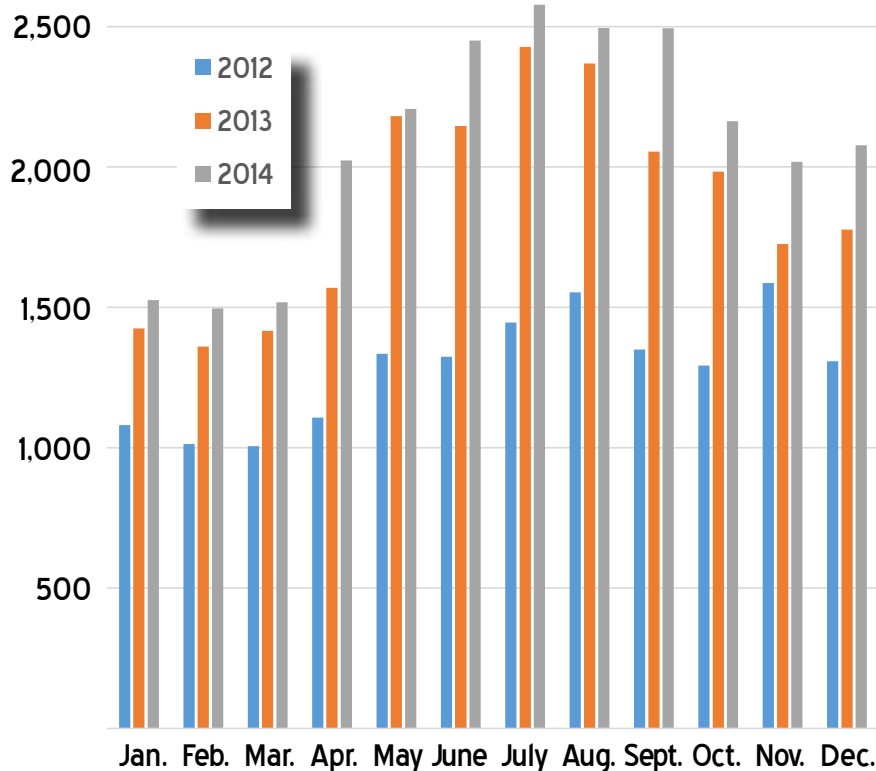
TOTAL NUMBER OF SAFIS RECORDS



This chart indicates the total number of records in SAFIS that are available to managers for quota monitoring and compliance. This figure represents fishing activity only and is not a reflection of active participants or total poundage. These data are made publicly available in the Data Warehouse after a thorough quality assurance and control procedure during the annual data load process. Each year over 30 data sets from the Atlantic coast are loaded into the Data Warehouse in this manner. This process is described earlier in this report. e1-Ticket records are listed in two categories because this application allows for one trip ticket to be created and ultimately makes a corresponding dealer record automatically. There were approximately 7 million records in SAFIS at the end of February 2015.

TRENDS IN SAFIS USE

This chart indicates the increased number SAFIS logins over the past three years (2012-2014). It also indicates the annual trend when users login during the year.



IMPROVED SYSTEMS AVAILABILITY

The ACCSP staff are constantly evaluating, upgrading, and maintaining critical components to enhance the security and reliability of all of the Program's systems, such as SAFIS and the Data Warehouse.

This year there were several major upgrades and enhancements to the ACCSP systems. The most significant upgrades included installation of two new servers for the SAFIS database and web applications. The migration of the SAFIS database to a faster and more reliable server resulted in significant performance gains. ACCSP also upgraded the server handling backup systems and file and print server roles. This new backup server allows jobs covering all critical systems to be completed in far less time when compared to the same jobs running on older servers. Other upgrades enhanced the reliability and security of remote virtual personal network and WiFi connections used by staff and guests.

PARTY & CHARTER BOAT CAPTAINS REPORT WITH TABLET TECHNOLOGY

Beginning in 2014, commercial and for-hire captains in Rhode Island are now able to enter their trip reports using a mobile version of eTRIPS, known as eTRIPS Mobile (eTRIPS/m). This application was developed and integrated into SAFIS by ACCSP at the request of RI DFW and the Rhode Island Party and Charter Boat Association. eTRIPS/m captures catch and effort data from the captains. Trip reports, or logbooks in some fisheries, provide catch and effort data to the state or federal agencies and are used in fisheries management and assessments. Trips can be categorized as commercial or for-hire.

Rick Bellavance, Captain of Priority Too and President of the Rhode Island Party and Charter Boat Association, describes the innovative ability to report on a handheld device by stating, "ACCSP's new mobile reporting application will revolutionize the way fishermen provide fisheries-dependent data. The software, designed with extensive input from active and experienced fishermen, is easy to use and saves time. It's the latest tool available to improve data quality and timeliness - a goal of fishermen everywhere."

The eTRIPS/m application will increase data accuracy and make data available immediately to fisheries managers improving their ability to respond to changes in the fishery in a more timely way. John Lake, Principal Biologist with the Rhode Island DFW Marine Fisheries, is enthusiastic about the launch of eTRIPS/m as a management tool because he recognizes that there will be more flexibility in the management of the party and charter boat sector in state waters (0-3 miles from shore). He explains, "Every year, it's a delicate balance to create realistic recreational regulations on species for party and charter boat operators that are also not too liberal for general recreational anglers. This type of trip level data collected from the mobile application greatly aids in the accounting of catch and analysis of how the regulations are working."



SPECIAL USE APPLICATIONS

In addition to the existing SAFIS applications, ACCSP has been working with its committees and program partners to develop several new applications or initiatives. Here is a sneak peek on these new developments that are currently in production or in the testing phases.

SAFIS - HIGHLY MIGRATORY SPECIES

In January 2013, the HMS component of SAFIS was implemented. This component was added in tandem with the requirement from the NOAA Fisheries HMS Management Division for dealers to submit HMS data electronically. Specifically, this final rule requires all federal dealers (except those reporting Atlantic bluefin tuna) to report receipt of Atlantic sharks, swordfish, and BAYS (bigeye, albacore, yellowfin, and skipjack) tunas through electronic reporting programs. In order to minimize the impact to dealers, the HMS Division elected to utilize existing systems, such as SAFIS, wherever possible. This means that dealers that were already reporting electronically (from Texas to Maine) continue to use the systems they already utilize with some modifications to cover additional HMS reporting requirements. The shift to electronic reporting for HMS dealers of these quota-managed species provides more timely data for use in monitoring landings.



"Electronic dealer reporting for Atlantic sharks, swordfish, and BAYS tunas will allow for HMS data to be submitted in a timelier basis -- which is critical for more real time quota monitoring. ACCSP has helped incorporate the new HMS dealer reporting requirements into existing electronic reporting programs like SAFIS, which eases the burden on dealers and allows them to report in one place. Behind the scenes, ACCSP has also been integral in developing more streamlined data transfers and data views between regions, helping with the processing of data and monitoring things like dealer reporting compliance."

Jackie Wilson,
Fisheries Management Specialist with the
NOAA Fisheries HMS Division

LOBSTER TRAP ALLOCATION HISTORY SYSTEM

The Lobster Trap Allocation History System (LobsTAHS) will provide a comprehensive repository that will record and track American lobster fishery effort (traps allocated, purchased, and sold) throughout established Lobster Conservation Management Areas (LCMA). The centralized database will allow the program partners timely access to accurate effort data in both state and federal waters including:

- Number of permitted fishermen;
- Number of allocated traps;
- Number of trap tags purchased;
- Areas experiencing highest effort;
- Number and magnitude of trap tag transfers; and
- Traps removed from the fishery through conservation taxes.

AMERICAN LOBSTER SETTLEMENT INDEX

The American Lobster Settlement Index (ALSI) was made available in March 2014. The ALSI is an annual survey of American lobster nursery grounds in the coastal northeast U.S. and Atlantic Canada. The survey is supported by participating marine resource agencies and academic institutions, and gathers data not only on newly settled, young-of-year lobsters, but older juveniles and associated crabs and fishes, as well. Sampling is conducted by diver-based suction (airlift) samplers or vessel-deployed passive postlarval collectors. Approximately 70 sites are sampled annually. Data are compiled from all regions annually and disseminated to the participants, industry groups and interested parties.

The time series has been sustained and expanded over 25 years, and is the largest-scale assessment of lobster nursery habitat of its kind. It has also been

the springboard for a variety of research projects, contributing to numerous peer-reviewed publications and technical reports. It has been used to forecast local trends in the abundance of adult lobsters in nearshore trawl surveys and provided valuable insights into both pre- and post-settlement processes influencing lobster population dynamics. The ALSI web portal aims to make the regionwide data set more available to the participants and stakeholders for purposes of research and stock assessment.

"This database is necessary for state and federal agencies to keep accurate, historical records of any and all transactions in order to monitor the progression of trap transfers within the fishery. This project provides evidence that ACCSP has great vision for the long-term health and viability of our nations fisheries."

Bonnie
Spinazzola, former
Executive Director
Atlantic Offshore
Lobstermen's
Association

NATIONAL NETWORKING

The Program takes an active role in collaborating and advising on national fisheries-dependent data collection programs. These networks bring together interstate Commissions, state fishery agencies, NOAA Fisheries, and regional councils to improve data collection and dissemination at the national level. Staff members serve on a number of different committees providing input in much the same way that the program partners participate in ACCSP.

MARINE RECREATIONAL INFORMATION PROGRAM (MRIP)

MRIP is a recreational data collection and analysis program instituted by NOAA Fisheries, participating state agencies, and regional FINs that is designed to collect recreational data used for fisheries management.

The Program received funding from MRIP to do essential research on the effects of various proportional standard error (PSE) levels (i.e., a measure of the accuracy of the estimates) on stock assessments and management decisions. A simulation model was completed as a baseline for a workshop planned for 2014. A workshop was convened in September, 2014 to evaluate levels of recreational data precision that would best support stock assessment results and fisheries management actions. Presentations reviewed a simulation model developed for this project, and supporting information on the current use of precision measures by the Councils, Commissions, and states. The Management Strategy Evaluation (MSE) model used simulated data to investigate the effect of varying input PSE levels (e.g., .2, .3, .4, .5, .6, .8, 1.0) on three generalized species having slow, medium, and fast growth over various exploitation histories.

Over 50 individuals from state and federal fisheries agencies had in-depth discussion on the effects of PSE in assessments and management. The surprising feedback from participants was that stock assessments appear to be more capable of utilizing data with a higher PSE than previously considered. The group supported developing broad guidance on using data within ranges of PSE for stock assessment. There was also general agreement that management actions should be aligned with the precision of the data and the ability to measure the outcome of fishery management actions.

In addition, the Program has worked to secure funding from MRIP for a project that will look at reducing duplicative reporting in the for-hire fisheries.

ACCSP staff plays an integral role in this program, with Mike Cahall, Program Director, serving as a member of the Operations Team which provides overall guidance to the technical efforts of MRIP; Geoff White, Data Team Leader, serving as a member of the Information Management Team; and Ann McElhatton, Program Manager, serving as a member of the Education and Outreach Team.

FISHERIES INFORMATION SYSTEM (FIS)

FIS is a collaborative project, led by NOAA Fisheries, which works with its partners (NOAA Fisheries Regions and the Fisheries Information Networks) to improve fisheries-dependent data collection and dissemination at the national level. The Data Warehouse is the Atlantic coast system for fisheries-dependent landings for FIS. The following are the current goals of FIS as outlined by NOAA Fisheries:

- Expand and adapt data collection to meet current and future needs;
- Build and integrate information management systems within and across region;
- Establish regional and national standards (minimum guidelines) for data collection, management and dissemination to ensure high quality, completeness, timeliness, and accessibility; and
- Implement and maintain effective partnerships to support collaboration among stakeholders, and to leverage investments across regions and the nation.

The Program has been awarded funding to upgrade its end user query system and to establish working relationships with other data distribution entities (such as NOAA Fisheries Regions) to better coordinate data distribution. Mike Cahall, Program Director, is a member of the Program Management Team which provides overall guidance to FIS. Karen Holmes, Software Team Leader, is a member of the Electronic Reporting Program Specialty Group and Geoff White, Data Team Leader, is a member of the Fisheries One Stop Shop (FOSS) Program Specialty Group. The FOSS application is produced by FIS. This application is intended to provide public access to U.S. commercial and recreational non-confidential landings (three or more vessels or companies) information for U.S. vessels, as well as U.S. landings in foreign ports.

INTEGRATED FISHERIES CONNECTION

ACCSP data systems are used for many national data systems and also rely on other national data systems for the dependable and timely set of Atlantic coast marine fishery statistics.

This comprehensive and collaborative exchange of information is what permits the ACCSP data systems to be of such great value to the people that have committed to these data sets. Currently, the ACCSP data systems receives data sets from NOAA Fisheries - Headquarters, NEFSC, SEFSC, and the HMS Management Division of NOAA Fisheries. Conversely, the ACCSP provides data to partner data systems including NOAA Fisheries - Headquarters, GSMFC, NEFSC, and SEFSC. See the below image for more detail on each of the data sets provided.



Southeast Fisheries Science Center

- ACCSP receives wreckfish individual fishing quota and golden crab data
- ACCSP supplies state landings for compliance and quota monitoring



Headquarters

- ACCSP receives commercial catch and effort data from 1950 - 2006 and recreational estimates from 1981- present
- ACCSP supplies Atlantic coast landings from 2007 for FUS and web queries for FOSS



Northeast Fisheries Science Center

- ACCSP receives commercial catch and effort data from 1950 - 2006, ocean quahog, and surf clam data
- ACCSP supplies state landings for compliance and quota monitoring



Highly Migratory Species Division

- ACCSP receives bluefin tuna landings
- ACCSP supplies other tunas and sharks

The success of ACCSP data systems is directly related to the ongoing support and use of the data by our partner agencies.

The fishery data systems of the Atlantic and Gulf coasts are cooperative and interdependent.



Gulf States Marine Fisheries Commission

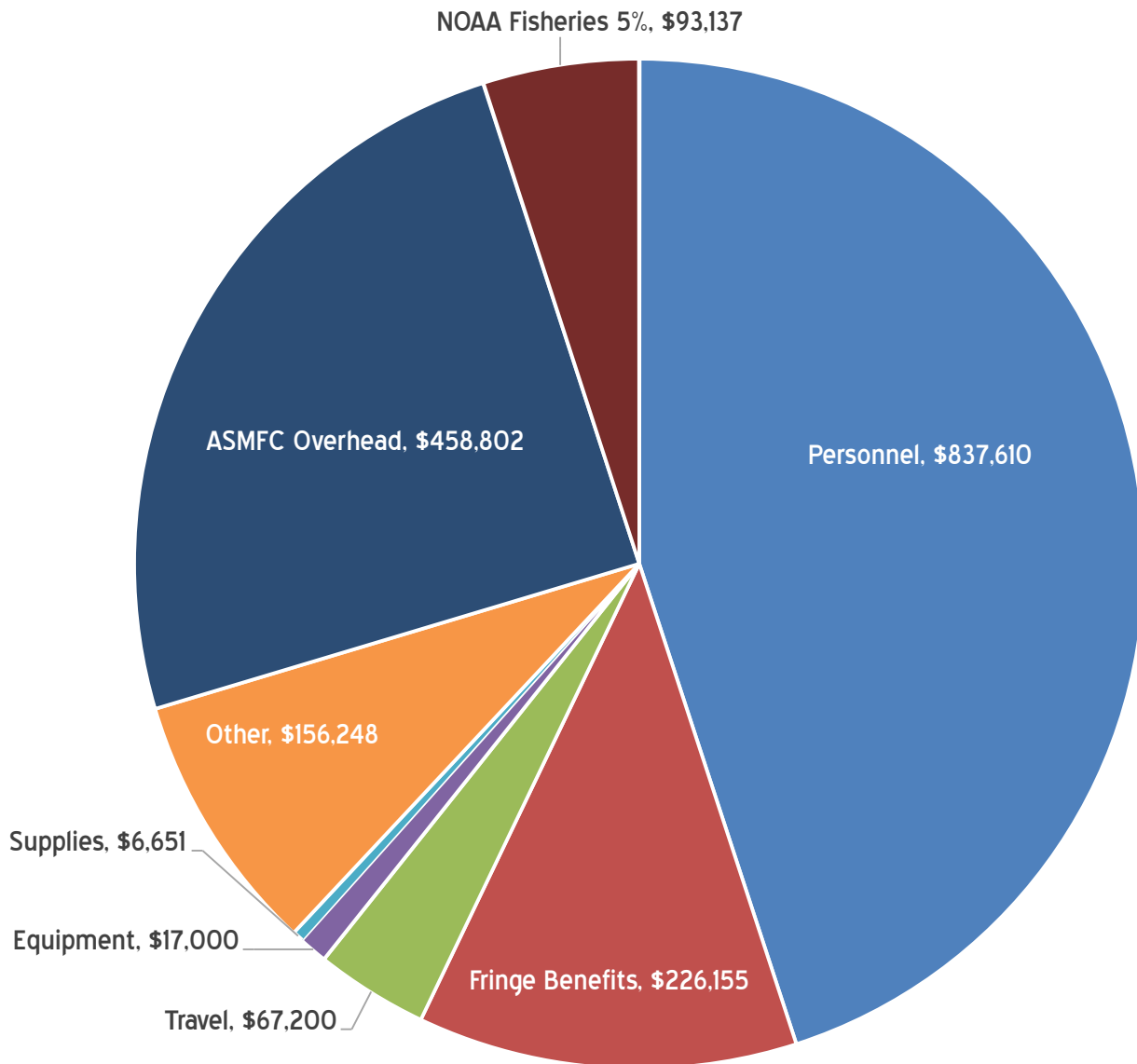
- ACCSP supplies Florida west coast commercial catch and effort data

2014 FINANCIALS

As in previous years, a majority of the funds that are allocated to the Program are distributed to program partners for data collection projects.

The remaining funds, collectively known as the Administrative Grant, account for slightly less than 45% of the overall budget (detailed in the chart below). The administrative grant budget allocates funds for staff support, information systems resources, committee travel, and various outreach projects. For 2014, personnel were the majority of the administrative budget followed by committee travel, and information systems. Overhead charged to the Program covers office space, utilities, and administrative support provided to the Program by ASMFC.

2014 ADMINISTRATIVE GRANT BUDGET



LOOKING FORWARD

The upcoming year looks to be an exciting one filled with opportunities for collaboration and cooperation. Most prominently is our plan, along with ASMFC, to be taking on the task of administering APAIS, a component of MRIP, which has been administered by NOAA Fisheries through a third party contractor. Previous experience in the Gulf of Mexico has shown that state conduct of the survey results in better data and better buy-in for harvesters and program partners. For the balance of 2015, staff and program partners will finalize plans and actually begin the transition process. For the Program, this means additional staff will be hired and additional equipment to handle the data processing will be acquired and installed. The transition is scheduled for January 1, 2016.



We continue to work on deployment of SAFIS eTRIPS/m. This is complemented by the ongoing effort to complete the software needed to allow these reports to be used by NOAA Fisheries as federal vessel trip reports, cutting down on duplicative trip reporting. Tentatively, we expect to deploy the tool in North Carolina, Massachusetts, and Rhode Island during the upcoming year. It will also be used in a vessel tracking project sponsored by the Northeast Regional Ocean Council.

For the past few years, the NOAA Fisheries Regional Office and Science Centers have been working on data management visioning projects. The Greater Atlantic Regional Office published their Strategic Plan which includes an improved partnership with ACCSP. This enhanced relationship will result in better data collection, distribution, and availability for the entire Atlantic coast. It will present its own set of challenges, but the potential benefits would vastly outweigh them. I look forward to closely working with both regions on this important initiative.

As always, we'll continue to fund partner projects, and we anticipate continuing to implement recommendations from the 2012 Independent Program Review. In addition, work continues on rebuilding the end user query interface for the Data Warehouse as well as our website using funding from NOAA Fisheries.

Regards,

Michael S. Cahall
ACCSP Director

ATLANTIC COASTAL STATES TO COLLECT RECREATIONAL INTERCEPT DATA FOR MRIP

Beginning in 2016, all coastal states from Maine through Georgia will transition to conducting APAIS to collect information on marine recreational fishing catch and effort data in their own waters. Over the past decade several states (e.g., Maine, New Hampshire, Massachusetts, North Carolina, South Carolina and Georgia) have successfully improved data quality, and stakeholder confidence in that data through greater state involvement in APAIS data collection.

Based on these successes, the states, through the ACCSP and the ASMFC, approved a plan to transition to state conduct of APAIS in 2016. The approved plan details the transition from a NOAA Fisheries contractor to ASMFC/ACCSP and state conduct of the APAIS. Under this plan, NOAA Fisheries will retain primary accountability for APAIS and will be responsible for survey design, catch and effort estimation, and public dissemination. ASMFC/ACCSP will act as the central coordinator of the state conducted APAIS and be responsible for data entry, compilation, quality control checks and edits, as well as formatting and delivery of intercept data to NOAA Fisheries. States will manage field collection, which will be conducted by state employees in accordance with APAIS standard data collection protocols.

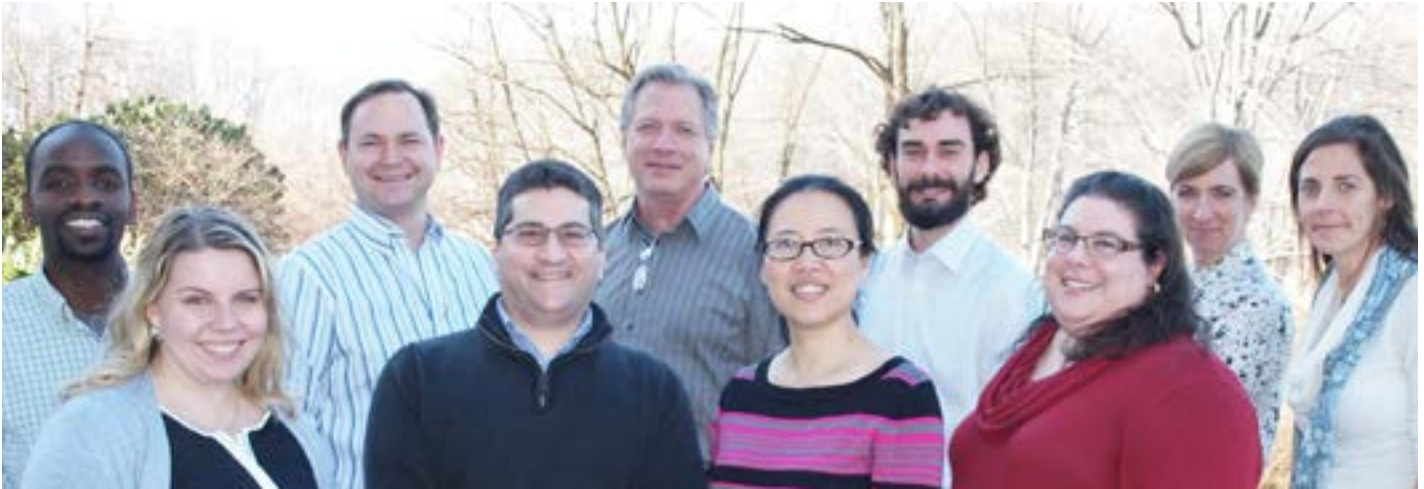
The goals of the state conduct of APAIS are to:

- Build more cooperative ownership of recreational data and the data collection program
- Support field data collection via state staff with vested interest in fisheries
- Maximize angler participation and minimize refusal rates
- Improve and maximize data quality and efficiency of data collection

"The states, ACCSP and ASMFC are very appreciative of the hard work and dedication provided by Geoff White and the ACCSP Recreational Technical Committee in developing the APAIS transition plan," stated Cheri Patterson, ACCSP Coordinating Council Chair from New Hampshire. "Through their efforts, the plan establishes a solid framework for the states and NOAA Fisheries to better meet the needs of fishery stakeholders, scientists and managers."



STAFF



Pictured (left to right): Nico Mwai, Elizabeth Wyatt, Geoff White, Ed Martino, Michael S. Cahall, Jennifer Ni, Joseph Myers, Julie Defilippi, Karen Holmes, and Ann McElhatton

The ACCSP staff is separated into three teams to effectively advance the goals of the Program.

PROGRAM STAFF

Program staff is dedicated to maintaining ACCSP standards and handling administrative aspects of the Program, including outreach. This also includes monitoring the program projects that are funded each year.

- Michael S. Cahall, Director
- Ed Martino, ACCSP/ASMFC Information Systems Manager
- Ann McElhatton, Program Manager
- Elizabeth Wyatt, Program Assistant

DATA TEAM

The Data Team works with partners to identify, transform, and audit data sets so they can be included in the Data Warehouse. They also provide data services to partners by designing custom data requests and participating in data intensive fisheries activities, such as stock assessments.

- Geoff White, Data Team Leader
- Julie Defilippi, Senior Data Coordinator
- Joseph Myers, Data Coordinator
- Jennifer Ni, Information Systems Specialist

SOFTWARE TEAM

The Software Team designs and builds SAFIS applications for program partners, as well as internal systems that the Program manages or that support Program activities.

- Karen Holmes, Software Team Leader
- Nico Mwai, Fisheries Programmer

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Cover: Fishwallpapers.com; Page 6: ASMFC; Page 7: MA DMF; Page 12: ACCSP; Page 14: Ben Longstaff, Integrated Application Network (IAN); Page 18: NOAA Fisheries; Page 21: ME DMR; Page 23: Ben Longstaff, IAN; Page 24: NJ DFW; Page 26: NC DMF; Page 27: SC DNR; Page 28: Caroline Wicks, IAN; Page 31 (left to right): NEFMC, US FWS, NOAA Fisheries; Page 33: NOAA Fisheries; Page 38 (clockwise starting from upper left): Free stock image, ASMFC, SAFMC, ME DMR; Page 40: ACCSP; Page 41: NOAA Fisheries; PAGE 45: NOAA Fisheries; Fish bullet graphic: IAN; Background and border fish graphic: ACCSP



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