

FY 2020
Atlantic Coastal Cooperative Statistics Program (ACCSP)
Funding Request Proposal – June 10, 2019
Revised – August 12, 2019

Applicant: South Carolina Department of Natural Resources (SCDNR)
Marine Resources Division, Charleston, SC

Principal Investigator: Amy Dukes, SCDNR Statistics Section Leader

Project Title: ACCSP Data Reporting from South Carolina's Commercial Fisheries
1) 100 % Trip-Level Catch and Effort Data Collection (70%)
2) Biological Sampling for Hard Part/Aging of Offshore Species (30%)

Project Type: Maintenance Project: One-year
(No change in scope of work, continued emphasis on Electronic Data Reporting)

Requested Award Amount: \$113,846 (Excludes 5% NOAA Administrative Fee)

Requested Award Period: One-year, September 1, 2020 thru August 31, 2021, or after receipt of funds

Objective: The objective of this study is to successfully execute two ACCSP Primary Program Priorities with South Carolina Commercial Fisheries:
Catch/Effort Data Collection (70%)
Biological Sampling (30%)

Currently, SCDNR is actively engaged in collecting consistent ACCSP standardized trip-level data for 100% of all marine and diadromous commercial fisheries in South Carolina. The proposed funding would allow SCDNR to maintain compliance with ACCSP data requirements and standards through the continuation of commercial catch and effort data collection, data entry, database management, and administrative support. It will also enable the collection of biological samples, including otoliths and length frequencies, from species in the Snapper/Grouper, Pelagic, and Coastal Migratory complexes landed commercially in South Carolina. These data serve as an integral aspect of the development, implementation, assessment and maintenance of fisheries management plans for Atlantic Coastal fish stocks.

Need: It is crucial to assess comprehensive catch/effort data and to collect biological samples in order to effectively and efficiently manage fisheries. Fishery dependent data, provided by commercial fishermen, has a direct impact on fisheries management and the sustainability of the industry. The information gathered is used to evaluate the need for potential changes to fisheries regulations and to monitor commercial fishing quotas across the southeast. These data are used to support stock assessment analyses for state and federally managed species, and are responsible for the assessment of finfish stocks to identify fisheries trends and assess management priorities while meeting regulatory requirements under the Magnuson-Stevens Act. The Atlantic States Marine Fisheries Commission also needs reliable and detailed data to evaluate the effectiveness of Fisheries Management Plans.

Catch and Effort - Since 1976, South Carolina has required mandatory reporting (regulatory authority, Title 50, Section 50-5-380, SC Code of Laws) of monthly totals of commercial landings from licensed wholesale seafood dealers. Since 2003, these data have been provided on a trip-level basis. **Currently, 100% of all commercial fisheries products landed in South Carolina are required to be reported through ACCSP compliant trip-level logbooks/electronic applications.** These data are collected through a one ticket system, denoting that all fishing effort (provided by the harvester at the time of sell/purchase), pounds of catch and product values (provided by the purchaser) are obtained and reported by the licensed wholesale seafood dealer and/or bait dealers on logbook forms provided by the Agency. These logbooks were designed to be fishery/species-specific to allow detailed and complete catch per unit effort data to be recorded for each fishery type. The logbooks/electronic applications collect the following data fields: product volume (i.e. pounds, bushels), product price, disposition (i.e. gutted, whole) and market category (i.e. small, large), gear type (i.e. trawl, hook and line), area and sub-area fished (i.e. river system, port), commercial fisherman information (name and license), vessel name and registration numbers, number of crew, time fished (gear soak time), and specific information on amount of gear effort (i.e. number of nets/lines/traps, number of hooks per line, number of sets/hauls, line length). The logbooks are bound and are carbon copied, as they serve as business receipts for the harvesters, and dealers can use them as a bill of lading. Examples of three commercial trip-logbooks, Daily Crab, Offshore Finfish and Bait Dealer, are provided below in Appendix 1, 2 and 3. Currently there are 1,571 licensed commercial saltwater fishermen, 55 bait dealers, and 271 wholesale seafood dealers in South Carolina, of which 243 are reporting via paper logbook and 28 federal dealers. Commercial fishermen, wholesale seafood dealers, and/or bait dealers who fail to make accurate, timely and complete reports are subject to Law Enforcement actions, including fines and possible suspension of licenses.

Electronic data collection has continued to be a major focus in South Carolina, as National Marine Fisheries Service (NMFS) has collected electronic data from federally permitted seafood dealers since 2011 (Southeast Regional Office, SERO) and 2013 (Highly Migratory Species, HMS) in order to track species for quota monitoring. The initial outreach efforts by SCDNR have been restricted solely to federal dealers. Although the concept of electronic data reporting was not well received by the majority of dealers, the 24 federal dealers (still actively engaged in outreach and education for several new/retuning dealers) that are currently using the provided data platforms have successfully transitioned to this reporting method. A dedicated staff member was hired in October 2015 to focus on electronic data reporting, which was initially funded through ACCSP allocations in FY2014. The Commercial Outreach Coordinator's goal has been to provide outreach, education, and support to **federal dealers and fishermen** while initiating efforts to have state-only dealers utilize the electronic infrastructure. There are very few state only dealers that have shown interests or pilot tested the electronic platform. The coordinator continues to excel in this position with respect to best practices for commercial data collections, building relationships with existing federal dealers and partner agency staff, and providing technical support to dealers and federal partners with request to data requests/corrections. Additionally, work has begun with ACCSP staff to revise the existing SAFIS platform, which was developed in 2010, to ensure that all of the data parameters are updated. This process is very slow to progress giving the high demand on ACCSP staff with no increase in infrastructure. The final step, which is under developmental construction now, is to provide functional outreach tools on the agencies commercial data information website, and will include video tutorials, a frequently asked questions list, etc. for SAFIS users to utilize. **To date, 8,496 commercial trips have been collected through SAFIS which includes 187 unique commercial fisherman.** It is the Agency's intent to create a seamless transition to electronic data reporting for all dealers, while ensuring compliance and data integrity. Although electronic data collections are a priority, at this time, staff are not prepared to request that state legislation change regulations to require mandatory electronic data. As federal agencies continue to increase electronic monitoring programs for many fishing sectors, their momentum may serve as a catalyst to increase state only fishing sectors to report electronically as well. Quality of data remains the critical foundation for fisheries data collections, and provided that electronic reporting has not been well received by all, staff feel that at this time, requiring electronic data reporting would not result in maintaining the highest quality of data possible.

The requested funding for this project would allow SCDNR to continue to employ Fisheries Statistics Section (FSS) staff, including a Commercial Outreach Coordinator, Data Manager, Compliance Coordinator and a data entry position, as well as support for printing and postage costs associated with these data collections.

Biological Sampling - SCDNR currently conducts dock-side sampling efforts on commercially landed finfish, collecting biological samples including, but not limited to, otoliths and length frequencies. **ACCSP-compliant biological sampling data from the Snapper/Grouper complex and Coastal Migratory and Pelagic species are collected through the Southeast Fisheries Science Center (SEFSC) Trip Interview Program (TIP).** Through TIP, port agents often collect additional biological data including tissue (DNA), stomach and gonad samples from species over and above the sampling targets, as these species are of interest to SCDNR and are related to project goals under the Agency's overall mission to manage and protect South Carolina fisheries. These additional samples will be analyzed in-house under the direction of SCDNR Marine Resources Monitoring, Assessment, and Prediction (MARMAP) program staff, and will increase the amount of available data for future stock assessments. These additional samples will not utilize ACCSP requested funds except to cover the port agents' salaries and travel expenses, since these additional samples are taken cohesively.

The requested funding for this project would allow SCDNR to maintain these consistent biological sampling efforts by continuing to employ two port agents with the FSS.

Results and Benefits:

FSS staff and port agents facilitate the partnership between the commercial fishing sector and state/federal management entities to maintain positive working relationships between all parties. SCDNR will work to maintain open and effective lines of communication with all commercial fishermen, bait harvesters, and wholesale dealers to ensure that everyone understands the importance of timely, accurate and complete data submissions associated with the management of marine fisheries.

Catch and Effort - The trip-level data collected will provide comprehensive and comparable landings data, which will be used to evaluate the current effectiveness of fisheries management and to develop and set priorities for new Fisheries Management Plans in conjunction with state and federal partners and councils.

Biological Sampling - This level of biological sampling is vital for the evaluation of finfish stocks, and the resulting comprehensive and comparable dataset will be essential to set priorities for and evaluate the effectiveness of current and future fisheries regulations, quotas and management plans.

Data Delivery Plan:

All available South Carolina trip-level catch and effort data will be converted to ACCSP codes and follow all established standards. Data will be transmitted to ACCSP at minimum quarterly, followed by complete calendar year data being transmitted on or prior to typical March deadlines established by ACCSP.

Additionally, when unique data needs are requested (i.e. related to quota monitoring), SCDNR staff will work with SERO, HMS, and ACCSP staff to provide the most accurate and complete data in order to fulfill the request.

Electronic data collections of offshore fisheries products from federally permitted dealers through SAFIS and Bluefin data applications continue to be a primary focus for the Agency. Electronic data allows for better efficiency with respect to quota monitoring efforts. SCDNR staff continue to work with federally permitted dealers to insure they understand and can utilize the available electronic applications to enter and submit data in order to meet compliance deadlines. This outreach effort has resulted in improved timeliness and completeness of this data, as well as the state managed fisheries data. QA/QC checks of the offshore federal data, within the

quarterly submission timeframe, will occur in order to ensure that the provided data is accurate and complete. The SAFIS data will be loaded directly into the data warehouse on a similar quarterly basis.

Approach:

Catch and Effort Tasks

1. Collection and entry of all commercial fisheries trip-level catch and effort data through a mandatory trip ticket reporting system in accordance with ACCSP protocols and standards.
 - SCDNR will continue to employ two Data Specialists, one Data Administrative Assistant, one Data Manager, one Commercial Outreach Coordinator, and one Section Manager Leader responsible for all commercial catch and effort compliance, data entry, editing, and submission to ACCSP.
 - Individual trip tickets will be required from dealers and tracked for compliance for all commercial fisheries products landed in South Carolina.
 - Non-compliance offenders will be reported to SCDNR Law Enforcement and are subject to action. Statistics staff will assist with prosecution efforts by providing evidence in court.
 - Trip tickets will be reviewed for completeness, edited as necessary, entered and verified.
 - Trip ticket logbooks will periodically undergo a review process in order to identify areas for data collection improvements, and to ensure that dealers understand all data fields.
 - Efforts to QA/QC licensing data will continue as necessary to ensure the cohesion and integrity of FSS databases.
 - Data will be converted to ACCSP codes and transmitted to ACCSP.
2. Editing and verifying commercial fisheries trip-level catch and effort data through electronic data reporting.
 - Staff will continue to focus efforts on compliance, outreach and education to federal dealers and continue to urge state dealers to utilize the ACCSP's Standard Atlantic Fisheries Information System (SAFIS) or Bluefin platforms to report catch and effort data electronically.
 - FSS staff will examine inconsistencies and as necessary edit catch and effort data reported between mandatory trip tickets and electronic data submissions.

Biological Sampling Tasks

1. Collection of biological samples from commercially landed species within the Snapper/Grouper, Coastal Migratory and Pelagic fisheries, in compliance with ACCSP Biological Sampling standards.
 - SCDNR will continue to employ one full-time and one part-time port agent to collect age structure (otoliths) and length frequencies from targeted species.
 - Port agents will focus their efforts on intercepting commercial vessel trips at specific wholesale dealers/docks where these species are typically landed.
 - As the catch is unloaded, specimens will be randomly selected (in order to avoid sampling bias), identified to species, length recorded and otoliths collected. Otoliths will be extracted through the gill plate in a manner that the market condition of the fish is not compromised.
 - Species selection does incorporate the ACCSP Biological Review Panel species list and/or Southeast Fisheries Science Center (SEFSC) staff recommendations. Port agents do have the ability to collect biological samples for species of interest to SCDNR.
 - Port agents help to ensure that wholesale seafood dealers are completing the mandatory trip tickets both accurately and in a timely manner.
2. Biological sampling data will be edited, entered and verified in the TIP online database and submitted on a monthly basis.
 - As part of the TIP protocol, in-person interviews will be conducted at the time of biological sampling to gather necessary catch and effort information from vessel captains.

- Catch and effort data will be compared and verified with the trip ticket logbook data. All data collected will be entered into the TIP online database following established protocols including QA/QC practices.
- Age structure samples (otoliths) will be prepared, packed and shipped to be analyzed at the SEFSC Beaufort Marine Laboratory for aging and data processing following TIP protocols.
- Once processed, these age and length samples will be used in stock assessments, primarily for age at length models and/or used to proportion unclassified finfish grouping to individual species (triggerfishes).

Geographic Location:

The project will be headquartered at the SCDNR Marine Resources Division facility in Charleston, South Carolina. Project personnel are responsible for all data collections for marine commercial fisheries from multiple ports along the South Carolina coast.

Project Accomplishments Goals and Measurement:

The success of this project will be measured by the following metrics:

Catch and Effort - SCDNR will continue to meet a data dissemination goal, which will deliver South Carolina landings data to ACCSP no more than 90 days after the end of each quarter (every three months). Biological Sampling - SCDNR will continue to achieve set TIP sampling targets yearly, with data entry into the TIP online database and delivery of collected samples monthly.

- Quality assured quality controlled data transmissions to ACCSP, submitted on time and in approved formats.
- Catch/effort and biological sample data collections program maintained through internal databases with electronic data collections from the SAFIS/Bluefin programs.
- Provide support to SC licenses wholesale seafood dealers, with focused efforts to improve data collection quality, timeliness and accuracy.
- Commercial landings from state and federal dealers will be effectively used to monitor quota species, track data compliance, verify licensed fishermen and there fishing activities, and support best management practices.

Program Priorities/ Project Component	Goal	Measurement
Catch and Effort	Collection of 100% of all SC commercial fishery products landed at trip-level in accordance with ACCSP standards.	Data entered, verified and delivered to the ACCSP no more than 90 days after the landing date.
Catch and Effort	Continuation of Electronic Data Reporting by Federally Permitted Dealers and advocate the initiation for state-only dealers.	Dealers reporting on a weekly basis, completely and accurately. NMFS SERO/HMS to enforce and regulate.
Biological Sampling	Collection of all species targeted and identified by the ACCSP Biological Committee and TIP as data deficient.	Number of samples collected by representing number of species.
Biological Sampling	Validate, enter, and edit all biological data into TIP on-line and provide samples to Beaufort Lab.	Timeliness and accuracy of data/samples provided.

Funding Transition:

SCDNR continues to have discussions with state representatives and legislators about securing reoccurring state appropriated funds to accomplish the ACCSP Catch/Effort and Biological Sampling priorities, however, at this time there is no direct long-term state funding available. Several funding proposals have been submitted to the SC Legislature for consideration; unfortunately, at this time the requested funds have not been approved. Efforts will continue to be made to attempt to procure state funding, and it is the goal of the Agency to secure state funds in the near future.

Milestone Schedule:

Catch and Effort	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Task 1 Collection of trip-level commercial catch data and related effort data in accordance with ACCSP standards.	X	X	X	X	X	X	X	X	X	X	X	X		
Task 2 Data entry, editing and verification of fisheries trip-level reporting data.	X	X	X	X	X	X	X	X	X	X	X	X	X	
Task 3 Conversion of data to ACCSP codes and data transmission to ACCSP in a timely manner.	X	X	X	X	X	X	X	X	X	X	X	X	X	
Task 4 Report writing period.											X	X	X	X
Biological Sampling	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Task 1 Collection and preparation of data on length frequencies and hard-part samples for commercially landed Snapper/Grouper, Pelagic, and Coastal Migratory species.	X	X	X	X	X	X	X	X	X	X	X	X		
Task 2 Preparation and shipment of hard-part samples to Beaufort Marine Lab in North Carolina for processing and aging.	X	X	X	X	X	X	X	X	X	X	X	X		
Task 3 Data editing (coding), verification and entry into the TIP online database.	X	X	X	X	X	X	X	X	X	X	X	X	X	
Task 4 Report writing period.											X	X	X	X

Cost Summary:**1. BUDGET FOR PROPOSAL PLANNING - FY2020**

	ACCSP Operational Costs Request		SCDNR In-Kind Contributions	
Personnel Expenses: All current staff, no new hires.	Monthly Time	Salary Funds	Monthly Time	Salary Funds
Statistics Leader (Catch & Effort, & Biological - AWD)	0	\$0	9	\$41,404
Database Manager (Catch & Effort - EH)	2.5	\$11,188	4	\$17,900
Biologist I (Commercial Outreach - JD)	3	\$9,558	3	\$9,558
Data Administrator (Catch & Effort - VG)	3	\$9,993	4	\$9,994
Biologist I (Biological - DP)	6	\$18,744	4	\$12,498
Biologist I (Biological - EM)	6	\$18,744	4	\$12,498
Total Salary Costs	\$68,227		\$103,852	
Fringe Costs (38%)	\$25,926		\$39,464	
Indirect Costs (16.47%)	\$11,237		\$17,104	
Total Personnel Expenses	\$105,389		\$160,420	
Miscellaneous Expenses				
Printing & binding (forms, surveys, tickets) SCDNR currently has 9 logbook forms necessary to collect 100% mandatory trip-level data. Printing of the logbooks is based on size and quantity ordered. The average price per book last FY was \$8.60. Typical usage of these logbooks varies from year to year. During the last fiscal year, just over 320 logbooks were distributed to dealers, with a replacement cost of \$2,608.19.	\$2,550		\$1,000	
Postage (incoming, business reply mail) The yearly fee to hold a USPS Business Reply account is \$945.00. SCDNR paid an additional \$1,856 in returned mail during the 2019 FY. Providing free return mail is an incentive for accurate and timely reporting from dealers, and has proven to be very successful.	\$500		\$2,500	
Postage (outgoing, forms, notices) This amount reflects the average amount typically spent to send mail to dealers. Monthly reminder letters are sent to delinquent dealers, and upon request, user manuals, logbook, and additional forms are sent out to dealers.	\$500		\$1,500	
Office and Sampling Supplies General supplies including envelopes (letter and large mailers), pens, printing paper, three-ring binders (for user manuals), and file organizational materials, clip boards, fin-clip vials, filet knives.	\$2,700		\$1,000	
Travel Port Agents will travel to dealers to intercept commercial fishing vessels to collect Biological samples. Current rates for SCDNR vehicles are 50.5 cents per mile. Round trip daily trips can average as high 200 miles.	\$2,207		\$6,000	
Total Miscellaneous Expenses	\$8,457		\$12,000	
Total Costs	\$113,846		\$172,420	
Total Project Cost	\$285,266			
Percentage Contribution	40%		60%	

2. BUDGET – FY19 – Approved By ACCSP

	ACCSP Operational Costs Request		SCDNR In-Kind Contributions	
Personnel Expenses: All current staff, no new hires.	Monthly Time	Salary Funds	Monthly Time	Salary Funds
Statistics Leader (Catch & Effort, & Biological - AWD)	0	\$0	9	\$40,590
Database Manager (Catch & Effort - EH)	4	\$17,548	4	\$17,548
Biologist I (Commercial Outreach - JD)	6	\$19,308	3	\$9,654
Data Administrator (Catch & Effort - VG)	3	\$9,798	4	\$13,064
Data Coordinator I (Catch & Effort - SM)	5	\$14,080	4	\$11,264
Biologist I (Biological - DP)	6	\$18,378	4	\$12,252
Biologist I (Biological - EM)	6	\$18,378	4	\$12,252
Total Salary Costs	\$97,490		\$116,624	
Fringe Costs (38%)	\$37,046		\$44,317	
Indirect Costs (28.55%)	\$27,833		\$33,296	
Total Personnel Expenses	\$162,370		\$194,237	
Miscellaneous Expenses				
Printing & binding (forms, surveys, tickets) SCDNR currently has 9 logbook forms necessary to collect 100% mandatory trip-level data. Printing of the logbooks is based on size and quantity ordered. The average price per book last FY was \$9.12. Typical usage of these logbooks varies from year to year. During the last fiscal year, just over 300 logbooks were distributed to dealers, with a replacement cost of \$2,736.	\$2,000		\$1,000	
Postage (incoming, business reply mail) The yearly fee to hold a USPS Business Reply account is \$965.00. SCDNR paid an additional \$1,598 in returned mail during the 2018 FY. Providing free return mail is an incentive for accurate and timely reporting from dealers, and has proven to be very successful.	\$1,000		\$1,500	
Postage (outgoing, forms, notices) This amount reflects the average amount typically spent to send mail to dealers. Monthly reminder letters are sent to delinquent dealers, and upon request, user manuals, logbook, and additional forms are sent out to dealers.	\$500		\$1,500	
Office and Sampling Supplies General supplies including envelopes (letter and large mailers), pens, printing paper, three-ring binders (for user manuals), and file organizational materials, clip boards, fin-clip vials, filet knives.	\$1,000		\$1,000	
Travel Port Agents will travel to dealers to intercept commercial fishing vessels to collect Biological samples. Current rates for SCDNR vehicles are 50.5 cents per mile. Round trip daily trips can average as high 200 miles.	\$2,000		\$8,000	
Total Miscellaneous Expenses	\$6,500		\$13,000	
Total Costs	\$168,870		\$207,237	
Total Project Cost	\$376,107			
Percentage Contribution	45%		55%	

BUDGET NARRATIVE
(Requested Funding Period, FY20)

Project: ACCSP Data Reporting from South Carolina's Commercial Fisheries
1) 100 % Trip-Level Catch and Effort Data Collection
2) Biological Sampling for Hard Part/Aging of Offshore Species
FFO#: NOAA-NMFS-SE-2020- TBD
Project Period: 1 September 2020 – 31 August 2021
1 Year Funding: \$113,846
Prepared by: Amy Dukes (PI)

Personnel (Salaries) \$68,227: Five SCDNR employees' salary time will be utilized with these funds. The five current employees are: Database Manager, for 2.5 months (\$11,188); Commercial Outreach Coordinator, for 3 months (\$9,558); Wildlife Biologist I (Port Agent) for 6 months (\$18,744); Wildlife Biologist I (Port Agent) for 6 months (\$18,744); and a Data Compliance Administrator for 3 months (\$9,993).

Fringe Benefits \$25,926: The current SCDNR fringe benefit cost is set at 38% for salary employees. These rates are within the maximum range set forth by NOAA.

Contractual: \$3,550: The contractual budgeted funds will be used to cover expenses to the grant associated with monthly cell phone charges, printing, copying, and freight charges. A primary function of this project will entail the printing of carbon copied logbooks that will be distributed to licensed individuals to collect data. During last fiscal year, 320 logbooks were distributed to dealers, with an average price of \$8.60 per book.

Supplies and Materials \$2,700: General office supplies including envelopes (letter and large mailers), pens, printing paper, three-ring binders (for user manuals), and file organizational materials will be purchased with these funds. In addition, postage paid envelopes are distributed through a business reply account with the US Postal Service. These funds will cover the yearly accounting fees and postage, both to and from licensed individuals.

Travel \$2,207: Vehicle mileage is to be covered under this category. Staff will travel to seafood docks to collect catch and biological data. The current SCDNR travel rate is 50.5 cents per mile.

Indirect Charges \$11,237: The current SCDNR indirect cost is set at 16.47% which is only applied toward salaries and wages.

Totals: \$113,846

BUDGET NARRATIVE
(Approved Funding Period, FY19)

Project: ACCSP Data Reporting from South Carolina's Commercial Fisheries
1) 100 % Trip-Level Catch and Effort Data Collection
2) Biological Sampling for Hard Part/Aging of Offshore Species
FFO#: NOAA-NMFS-SE-2019- TBD
Project Period: 1 September 2019 – 31 August 2020
1 Year Funding: \$168,870
Prepared by: Amy Dukes (PI)

Personnel (Salaries) \$97,490: Six SCDNR employees' salary time will be utilized with these funds. The six current employees are: Database Manager, for 4 months (\$17,548); Commercial Outreach Coordinator, for 6 months (\$19,308); Wildlife Biologist I (Port Agent) for 6 months (\$18,378); Wildlife Biologist I (Port Agent) for 6 months (\$18,378); a Data Compliance Administrator for 3 months (\$9,798); and a Data Coordinator for 5 months (\$14,080).

Fringe Benefits \$37,046: The current SCDNR fringe benefit cost is set at 38% for salary employees. These rates are within the maximum range set forth by NOAA.

Contractual: \$3,500: The contractual budgeted funds will be used to cover expenses to the grant associated with monthly cell phone charges, printing, copying, and freight charges. A primary function of this project will entail the printing of carbon copied logbooks that will be distributed to licensed individuals to collect data. During last fiscal year, 350 logbooks were distributed to dealers, with an average price of \$8.17 per book.

Supplies and Materials \$1,000: General office supplies including envelopes (letter and large mailers), pens, printing paper, three-ring binders (for user manuals), and file organizational materials will be purchased with these funds. In addition, postage paid envelopes are distributed through a business reply account with the US Postal Service. These funds will cover the yearly accounting fees and postage, both to and from licensed individuals.

Travel \$2,000: Vehicle mileage is to be covered under this category. Staff will travel to seafood docks to collect catch and biological data. The current SCDNR travel rate is 50.5 cents per mile.

Indirect Charges \$27,834: The current SCDNR indirect cost is set at 28.55% which is only applied toward salaries and wages.

Totals: \$168,870

Maintenance Projects History for Primary Program Priorities: Catch and Effort (white), Biological Sampling (grey) – Beginning in 2011, the funded proposal included both Primary Program Priorities.

Funding Fiscal Year	Amount	Time Period	Results/Comments
2001	\$132,228	1 June 2001 – 31 May 2002 (extended thru 31 May 2003)	Implementation of ACCSP Commercial Module
2003	\$94,760	1 June 2003 – 31 May 2004 (extended thru 30 April 2006)	Continuation of ACCSP Commercial Module
2004	\$39,532	1 June 2004 – 31 May 2005	Biological Sampling. Grant money was awarded in August 2004. State hiring freeze in effect. One year no-cost extension awarded in May 2005.
2005 and 2006		1 June 2005 – 31 May 2006 (extended thru 30 November 2006)	Biological Sampling. State hiring freeze still in effect, lifted in Sept. 2005. Port sampler hired Oct. 2005. Award period extended to Nov. 2006.
2006	\$60,990	1 May 2006 – 30 April 2007 (extended thru 30 April 2008)	Continuation of ACCSP Commercial Module
2007	\$34,958	1 May 2007 – 30 April 2008	Biological Sampling. Grant money was awarded in August 2007.
2008	\$42,261	1 May 2008 – 30 April 2009	Biological Sampling.
2009	\$0	1 May 2009 – 30 April 2010	Biological Sampling. No proposal submitted, approved for a 6-month no cost extension
2009	\$0	1 May 2009 – 30 April 2010	Continuation of ACCSP Commercial Module. No proposal submitted, approved for a 6-month no cost extension to spend remainder of funds
2010	\$92,098	1 July 2010 – 30 June 30 2011	Catch and Effort data collection from the Commercial Module
2010	\$54,091	1 July 2010 – 30 June 2011	Biological Sampling.
2011	\$191,807	1 July 2011 – 30 June 2012	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.
2012	\$186,558	1 July 2012 – 30 June 2013	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.
2013	\$163,627 * Post budget cut	1 July 2013 – 30 June 2014	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.
2014	\$175,716	1 July 2014 – 30 June 2015	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.
2015	\$165,824	1 July 2015 – 30 June 2016	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.
2016	\$161,504	1 July 2016 – 30 June 2017	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.
2017	\$163,221	1 July 2017 – 30 June 2018	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.
2018	\$168,870	1 July 2018 – 30 June 2019	Catch and Effort data collection from the Commercial Module and Biological Sampling efforts.

ACCSP - Ranking Criteria Summary – Full Ranking Process

Proposal Type – Maintenance, no change in scope of work

Primary Program Priority – This proposal contains two Primary Program Priorities that fit the current ACCSP Program Design.

- Catch and Effort (70%) – SCDNR collects data from 100% of all commercial fisheries products landed in this state on a trip-level basis, following standardized data elements and code formats required by ACCSP. **Increased efforts to improve and further promote electric data reporting.** Metadata is not collected.
- Biological Sampling (30%) **(to be considered during the Project Quality Factors)** – SCDNR collects biological samples, including length measurements and otolith collections, from many species within the Snapper/Grouper complex, Coastal Migratory and Pelagic species. Twelve of the species sampled fall within the ACCSP Biological Sampling Priority Matrix.
- Data Delivery Plan - Data will be transmitted to ACCSP quarterly, ensuring that all SC trip-level catch and effort data has been converted to ACCSP codes and follow all established standards.

Project Quality Factors –

- Partners – Although this proposal does not have a multi-state partnership, it does have a regional impact. The South Atlantic Fisheries Management Council makes recommendations to NMFS-SERO based in part by SCDNR fisheries data collections, both independent and dependent data. The Catch and Effort data and Biological Sampling data provided to ACCSP impacts these regional recommendations.
- Funding Transition – SCDNR continues to have discussions with state representatives and legislators about securing reoccurring state appropriated funds to accomplish the ACCSP Catch/Effort and Biological Sampling priorities, however at this time there is no direct long-term state funding available. Several funding proposals have been submitted to the SC Legislature for consideration, unfortunately at this time, the requested funds have not been approved. Efforts will continue to be made to attempt to procure state funding, and it is the goal of the agency to secure state funds in the near future.
- In-kind Contribution - The agency does utilize other funding sources to offset the non-existent state funds, which represents the 55% in-kind contributions.
- Data Improvement – Through the initiation of electronic data collection, primarily from dealers that handle offshore fisheries products, SCDNR will be improving the timeliness of data. QA/QC checks of the data prior to SAFIS data loads to the warehouse will continue in order to ensure accurate and complete data.
- Secondary Program Priority – Biological Sampling (see above).
- Impact on Stock Assessments – The Catch and Effort data collected and provided to the ACCSP Data Warehouse is suitable to be provided for future stock assessments. In addition, the finfish lengths measured and otoliths collected through Biological Sampling efforts are also provided for stock assessments.

Other Factors –

- Properly Prepared – This proposal follows the guidelines under the ACCSP Funding Decision Process Document.
- Merit – These funds are essential to continue seamless commercial catch/effort and biological data collections in SC until reoccurring state appropriate funds can be established. A delay or stoppage in these data collections may be unfavorable for fisheries management and regulations.

ACCSP - Ranking Criteria Summary – Abridged Ranking Process

Achieved Goals – This project has and will continue to meet and endeavor to exceed established project goals. SCDNR staff diligently and consistently work with ACCSP staff to ensure quality data is provided in a timely manner in a clean format which is consistent with established data standards.

Data Delivery Plan - Data will be transmitted to ACCSP quarterly, at minimum, ensuring that all SC trip-level catch and effort data has been converted to ACCSP codes and follow all established standards. Any data refresh, based upon continuous QA/QC efforts by SCDNR staff, will be provided as necessary.

Level Funding – This proposal is the first in the “Step Down” process to reduce and eventually eliminate funding on long-term Maintenance project. The submitted proposal does match the maximum step down amount allowed in year 6, with a 33% reductions from previously funded project.

Properly Prepared – This proposal follows the guidelines under the ACCSP Funding Decision Process Document.

Merit – These funds are essential to continue seamless commercial catch/effort and biological data collections in SC until reoccurring state appropriate funds can be established. A delay or stoppage in these data collections may be unfavorable for fisheries management and regulations.

SOUTH CAROLINA TRIP TICKET (DAILY CRAB POT)

2-

DEALER NAME:	CRABBY JOE INC.		
DEALER NUMBER:	570345678		
FISHERMAN NAME:	MARY JOE CRABBE	TRAP ID #	T0001
FISHERMAN ID # or CUSTOMER ID #	11CEM55090		
NO. OF CREW: (INCLUDE CAPT)	1	VESSEL NUMBER:	SC475DH
TRIP START DATE:	07 / 01 / 15	UNLOADING DATE:	07 / 01 / 15
NUMBER OF TRAPS PULLED:	50	SOAK TIME (HOURS):	24

CIRCLE WATERBODY WHERE MOST OF CATCH WAS MADE

020	Ashley River	300	ICWW: Prices Inlet-Sullivan	420	South Edisto
030	Broad River	310	Little River	430	St. Helena Sound
050	Bulls Bay	330	May River	490	Stono River
070	Calibogue Sound	370	Murrells Inlet	510	Waccamaw River
110	Charleston Harbor	130	North Edisto	530	Wando River
090	Combahee River	410	Port Royal Sound	550	Winyah Bay
100	Cooper River	450	Santee River	241	Atlantic Ocean
290	Folly River	470	Savannah River		

SPECIES	CODE	VOLUME	UNITS (circle one)	UNIT PRICE	TOTAL
#1 (Lg. Males)	7001	4.2	BU LBS DZ	70.00	294.00
#2 (Lg. Females / Sm. Males)	7002	35	BU LBS DZ	1.50	52.50
#3 (Sm. Females)	7003	6	BU LBS DZ	50.00	300.00
MIXED #2 & #3	7004		BU LBS DZ		
JUMBO	7005		BU LBS DZ		
UNGRADED	7000		BU LBS DZ		
PEELERS	7028		EA DZ		
STONE CRAB CLAWS	7180	1	LBS	2.00	2.00
WHELKS	7750		BU LBS		
FLOUNDER	1209		LBS		
CATFISH	0660		LBS		
(List Species)					
				Bait 2 flats	-20.00
				Total	628.50

Dealer/Fisherman Use

SC Dept. of Natural Resources, Fisheries Statistics Section, PO Box 12559, Charleston SC 29422-2559 (843) 953-9313 FAX (843) 953-9362

WHITE SCDNR

YELLOW DEALER

PINK FISHERMAN

Appendix 2. Example of the logbooks used by SCDNR, Offshore Finfish Trip Ticket.

5. **XXXXXX**

SOUTH CAROLINA TRIP TICKET (OFFSHORE FINFISH)				DEALER NAME: FISH R US				DEALER NUMBER: 570123456			
FISHERMAN NAME: JOHN WANNAFISH				FISHERMAN ID # OR CUSTOMER ID #: 11WHJ55090							
NO. OF CREW (INCLUDE CAPT): 4		VESSEL NAME: WANNA FISH		VESSEL NUMBER: 676543							
TRIP START DATE: 07 / 01 / 2014				UNLOADING DATE: 07 / 06 / 2014							

CIRCLE ALL GEARS CODES USED AND FILL IN INFO.		# OF LINES	# OF HOOKS PER LINE	TOTAL LBS FISHED	# OF SETS	SURFACE LONGLINE BOTTOM LONGLINE	# TRAPS USED	# TRAPS	# DEIVERS	# HOURS	# OF SPEARS	# OF DEIVERS
631	ROD & REEL (seam)											
613	DANIEL REEL	4	3	52								
636	ELJECTHAMATI											
660	THOOL	1	1	4								
665	MAKEDIEL THOOL											
490	CELL NOT	LENGTH (YR)		TOTAL SOAK TIME (HRS)		HOURS FISHED						

CIRCLE AREA WHERE MOST OF CATCH WAS MADE											
337	< 60 MILES OFF GTTOWN TO CAPE FEAR (50000's)	3377	> 60 MILES OFF PAN SHOALS (50000's - 90000's)	3477	< 60 MILES OFF SOUTHPORT - MORRISHEAD CITY	3776	< 60 MILES OFF CHARLESTON (60400's - 60000's)	3776	> 60 MILES OFF CHARLESTON - CHAS. HUMP	3176	BLAKE PLATON

Code	KIND	SIZE	HP	GEAR	LBS	BOAT PRICE	TOTAL	Code	KIND	SIZE	HP	GEAR	LBS	BOAT PRICE	TOTAL	
1423	Gag Grouper	U	CP	613	975	2.90	2827.50	4473	Golden Tilefish	S	S	CP				
1424	Scamp	U	CP	613	295	2.90	855.50	4475		M	M	CP				
1416	Red Grouper	U	CP	613	26	2.35	61.10	4471		L	L	CP				
1412	Black Hind Strawberry	U	CP	613	34	2.85	96.90	4470	Ungraded	U	CP					
1414	Snooky Grouper	S	S	CP	613	150	2.55	382.50	1070	Cobia	U	CP				
1414		M	M	CP	613	321	2.65	850.65	1090	Dolphin	U	CP	660	80	2.30	184
1414		L	L	CP				4710	Wahoo	U	CP					
1414	Ungraded	U	CP					1940	King Mackerel	U	CP					
1415	Yellowedge Grouper	U	CP					0180	Barracuda	U	CP					
1422	Black Grouper	U	CP					1817	African Pompano	U	CP					
1425	Yellowmouth	U	CP					2420	Roundfish	U	RP					
1426	Yellowfin Grouper	U	CP					1142	Hai	U	RP					
	Other Grouper	U	CP					1590	Hake	U	RP					
3777	B-line	3/4 - 1	S	CP				4321	Swadfish	100+	I	CP				
3776		1 - 2	M	CP				4322		50-99	L	CP				
3775		2 - 46	L	CP				4323		26-49	M	CP				
3765	Ungraded	U	CP					4327	Chunks	U	CP					
3702	Red Porgy (Pink)	U	CP					4320	Ungraded	U	CP					
3764	Red Snapper	U	CP	613	38	2.90	110.20	5131	Wreckfish	U						
3763	Marlin Snapper	U	CP					0195	Barracuda	U						
3767	Yellowtail Snapper	U	CP					4635	Yellowfin Tuna	U	HC	660	42	2.90	121.80	
	Other Snapper	U	CP					4638	Blackfin Tuna	S	HC					
3790	Hogfish	U	CP	613	7	2.55	17.85	4656	Tuna, unclassified	M	HC					
3355	Black Seabass	S	S	RP				2905	Shortfin Mako Shark	L						
3353		M	M	RP				3495	Blacktip Shark	U						
3351		L	L	RP				3903	Spiny Dogfish	U						
3351		XL	XL	RP				3518	A. Sharpnose	U						
3360	Ungraded	U	RP					3511	Smooth Dogfish	U						
3308	Katefish Porgy Gold	U	RP					3485	Blacknose	U						
4441	White Grouper	U	RP					3481	Fintooth	U						
4560	Triggerfish	U	RP					3475	Shark Fin	U						
5260	Mixed Fish	U	RP						Other Shark	U						
1810	Atlantic Jack	U	CP					Albacore 660 220 40 88.00								
1812	Giant Amberjack	U	CP					TOTAL								
1817	Banded Rudderfish	U	CP													
4474	Grey Tilefish	U	CP													

Dealer/Fisherman Use

SCDNR COPY

Appendix 3. Example of the logbooks used by SCDNR, Bait Dealer Trip Ticket.

0000001

SOUTH CAROLINA BAIT TICKET

FISHERMAN NAME: Lady Fishalot		FISHERMAN ID# Or CUSTOMER ID #:		03FTL79240	
NO. OF CREW (INCLUDE CAPT): 2	VESSEL NUMBER: 999999	VESSEL NAME: Sea Robin			
TRIP START DATE: 06 / 04 / 16		UNLOAD DATE: 06 / 04 / 16			

CIRCLE GEAR USED AND FILL IN INFORMATION

810 HANDLINES (ROD & REEL) 545	TRAPS	820 HAUL SEINE
# OF LINES	# TRAPS USED 30	LENGTH OF NET (FT)
# OF HOOKS PER LINE	# HAULS 1	TOTAL SOAK TIME (HRS)
TOTAL HOURS FISHED	TOTAL SOAK TIME (HRS) 48	

	TOTAL LENGTH OF NET(S)	TOTAL SOAK TIME (HRS)	955 BY HAND	876 BOTTOM LONGLINE
982 HAND CAPTURE			760 GIG	883 FISH TROTLINE
703 DIP NET	FEET		733 CAST NET	880 CRAB TROTLINE
425 SET SHAD NET	FEET		HOURS ACTIVELY FISHING	# OF SETS
465 DRIFT SHAD NET	FEET			# OF HOOKS PER SET
401 HERRING GILL NET	FEET			TOTAL SOAK TIME (HRS)
400 GILL NET	FEET			LENGTH (FEET) - FISH GEAR ONLY

CIRCLE WATERBODY WHERE MOST OF CATCH WAS MADE

245 Atlantic Ocean	290 Folly River	470 Savannah River
020 Ashley River	300 ICWW - Princes Inlet - Sullivan	420 South Edisto
010 Black River	310 Little River	430 St. Helena Sound
030 Broad River	330 May River	490 Stono River
050 Bulls Bay	370 Murrells Inlet	510 Waccamaw River
070 Calibogue Sound	330 North Edisto	530 Wando River
110 Charleston Harbor	390 Pee Dee River	550 Winya Bay
090 Combahee River	410 Port Royal Sound	
100 Cooper River	450 Santee River	

CODE	SPECIES	VOLUME	UNITS (CIRCLE ONE)	UNIT PRICE	TOTAL	FISHERMAN USE
7000	Blue Crab		BU LBS OZ			
7190	Fiddler Crab		BU LBS OZ			
7750	Whelks		BU			
7811	Mussels		BU			
7472	Clams		BU			
7890	Oysters		BU			
7899	Periwinkles		LBS			
8145	Jellyfish		LBS			
1970	Whiting		LBS EA			
4060	Spot		LBS EA			
0925	Atlantic Croaker		LBS EA			
2670	Pinfish		LBS EA			
3112	Silver Perch		LBS EA			
2341	Mullet		LBS EA			
3340	Spanish Mackerel		LBS EA			
2370	Mud Minnows	17	LBS EA	6.00	102.00	
1141	Eel		LBS EA			
2210	Menhaden		LBS EA			
3470	Threadfin Shad		LBS EA			
3474	American Shad		LBS EA			
1340	Gizzard Shad		LBS EA			
1730	Hickory Shad		LBS EA			
1689	Herring		LBS EA OZ BU			
0660	Catfish		LBS			
7301	Shrimp		LBS			

SC Department of Natural Resources, Fisheries Statistics Section, P.O. Box 12559, Charleston, SC 29422-2559 (843) 953-9313 FAX (843) 953-9362
14-10185

Principle Investigator: Curriculum Vitae

Name: Amy Whitaker Dukes

Position: Fisheries Biologist III
Office of Fisheries Management
Fisheries Statistics Section

Phone: (843) 953-9365 Voice
(843) 953-9386 Fax

Professional Address:
217 Fort Johnson Road
Charleston, SC 29412-9641

E-mail: DukesA@dnr.sc.gov

EDUCATION:

Spartanburg Methodist College (SMC),
Spartanburg SC
Associate in Science, Biology
August 1994 to May 1996

Coastal Carolina University (CCU),
Conway, SC
Bachelor of Science, Marine Science
August 1996 to May 1999

CAREER-RELATED EXPERIENCE:

Jan. 2008 Department of Natural Resources, Charleston, SC
To present Marine Resources Division in the Office of Fisheries Management:
Serves as the Fisheries Management Section Leader, participating in data collection, management, and administration activities associated with the Fisheries Statistics Section

Supervises, coordinates, and oversees daily operations in the collection of both commercial (Trip ticket Program, Trip Interview Program) and recreational (For-hire logbook, MRIP, special projects/programs) fisheries dependent catch/effort data collections and biological sampling efforts; including but limited to establishing and standardizing operational procedures for field sampling and administrative activities, constituent education and outreach activities, data management (compliance, entry and QA/QC), transmission of data to state/federal/partner agency fisheries managers/data users, Commercial and For-hire License and Permit coordination and support, Law Enforcement coordination and support (Magistrate Court Appearances), report writing, grant submissions and administration (applying for funding opportunities, budgeting and allocations) for approximately \$1 million dollars in state and federal funds. Directly supervise 7 staff, collaborate and assist in funding 17 employees. In addition, duties include serving as the agencies representative to several state and federal committees and working groups associated with the funding agencies including but not limited to the National Marine Fisheries Service (Fisheries Science Center), the Atlantic States Marine Fisheries Commission, the Atlantic Coastal Cooperative Statistics Program (Vice-Chair of the Operations Committee, Commercial Technical Committee), and the Atlantic Coastal Fisheries Cooperative Management Act. Active participate with the South Atlantic Fisheries Management Council meeting/discussions, and serves as a panelist with SEDAR Stock Assessments.

Serves as the Tournament Coordinator for the SC Governor's Cup Billfishing Series. The three goals of the Series are conservation, education, and research. All related activities ensure that the goals are met and often exceeded. Fundraising and management of the 501-c-3 funds.

Sept. 2000- Department of Natural Resources, Charleston, SC
To Jan 2008

ACE Basin National Estuarine Research Reserve (NERR): Participation in comprehensive research activities within the ACE Basin NERR. Manage data collection, sampling instrumentation, and compiling of databases in support of the Reserve's participation in the System-Wide Monitoring Program (SWMP). Responsible for entry,

verification, editing, and statistical analysis of all data; assist with compellation of technical reports; preparing and delivering of presentations at conferences and workshops; and managing the ACE Basin NERR research budget.

Feb. 2000- Department of Natural Resources, Charleston, SC
To Sept. 2000

Marine Resources Division in the Office of Fishery Management: Assisting in the execution of an East Coast fin fish management plan. Anadromous species of American Shad and both Atlantic and Shortnose Sturgeon were collected, evaluated, tagged and released. Knowledgeable in the principles and practices of fish, statistical analysis, equipment maintenance and boat handling. Additionally, American Eel (elver) Young of the Year Survey; responsible for project set-up, daily sample collection, database management and analysis. (Currently the PI of this project)

Sept. 1999- Department of Natural Resources, Charleston, SC
To Feb. 2000

Marine Resources Research Institute: Sorted plankton samples to collect and identify three species of post-larval Peneaus shrimp. Responsible for continuation of project organization and data management.

UNDERGRADUATE EXPERIENCE (established the principles and practices that propelled my career):

Jan. 1997 Peer-Mentoring Program, Coastal Carolina University, Conway, SC
To May 1999

Co-instructor with the Dean of Sciences for a three hour, fall semester class. Served as a mentor and advisor for freshman Marine Science students throughout their first year of study.

May 1997 - Sea World of Florida, Orlando, FL
To Aug. 1997

Internship, Marine Education Instructor and Animal Care Assistant.

Dec. 1996 Coastal Carolina University, Coke and Topsail Islands, NC
To Dec. 1997

Undergraduate research assistant for a NSF grant-funded project to examine the long-range effects of hurricane damage/erosion on coastal barrier islands and marsh ecosystems. Conducted pre and post hurricane on-site surveys of sediment core sample collection. Analysis and results for the project were presented through reports and oral presentations.

EQUIPMENT KNOWLEDGE:

Outboard Motor Boats
Fishing Gear (Gill, Fyke, Trammel and Trawl Nets, and Electrofishing)
Biological Sampling procedures (length, otolith and gonad removal)
YSI and Nutrient data loggers/samplers

ADDITIONAL SPECIAL SKILLS:

Grant Principle Investigator
Certified Federal Grant Project Leader for USFWS
Microsoft Office Products
Excellent Communication Skills to Diverse Audiences