

EXECUTIVE OFFICE

OFFICE OF THE DIRECTOR

On December 1, Chief of Staff Don Winslow chaired the Frampton Retirement Celebration Committee meeting in Columbia. Carole Collins and Sandy Rucker represented DNR at the Harry Hampton Memorial Wildlife Fund Board of Directors meeting on December 2 in Columbia.

Mr. Winslow participated in a deer meeting with staff on December 5 in Columbia. That afternoon, Mr. Winslow attended a meeting with DNR Board Member Mike Hutchins, Buford Mabry, Milton Brazell and Bill Short on advisory committee consolidation.

Director John Frampton attended the Wildlife and Freshwater Fisheries staff meeting on December 5 and participated in the presentation of service pins to Division staff. Mr. Frampton and Emily Cope met with Jason Johnson of The Conservation Fund and Senator Vincent Sheheen for a discussion of the Wateree project. Later that afternoon, Mr. Frampton participated in a conference call of the Council to Advance Hunting and the Shooting Sports.

On December 6, Mr. Frampton participated in a conference call of the Association of Fish & Wildlife Agencies (AFWA) Executive Committee for a discussion of the 2012 Association budget. Mr. Frampton met with the Law Enforcement Captains on December 7 in Columbia to discuss his future plans and answer any questions.

Special Assistant to the Director Breck Carmichael participated in a conference call meeting on December 7 of the South Atlantic Landscape Conservation Cooperative Steering Committee.

Mr. Frampton and Mr. Winslow participated in the DNR Board Meeting on December 8 in the Board Room in Columbia, with Mr. Carmichael in attendance.

Mr. Carmichael visited Lake Edgar Brown in Barnwell County on December 9 to assess compliance with Land and Water Conservation Fund and Americans with Disabilities Act requirements. On December 12, Mr. Carmichael visited Forty-Acre Rock Heritage Preserve in Lancaster County, Lake Oliphant in Chester County, and Lake Thicketty in Cherokee County to assess compliance with Land and Water Conservation Fund and/or Americans with Disabilities Act requirements. He met on December 13 with Parks, Recreation and Tourism staff to discuss certification of DNR projects funded with Land and Water Conservation Fund dollars.

Mr. Frampton participated in the AFWA Executive Committee meeting in Washington, D.C. on December 12-13.

On December 14, Mr. Winslow attended the Florence Office Christmas Luncheon hosted by DNR Board Member Randy Lowe with Board Member Mike Hutchins in attendance. That afternoon, Mr. Winslow chaired the Frampton Retirement Celebration Committee meeting in Columbia.

Mr. Carmichael accompanied DNR attorney Paul League to a meeting on December 15 at a Newberry attorney's office to discuss an easement request from a landowner adjacent to Belfast WMA.

On the evening of December 15, Mr. Frampton, Mr. Winslow, Mr. Carmichael and invited staff, family, friends and current and former DNR Board Members attended a retirement reception sponsored by the SC Natural Resources Society and hosted by Governor Nikki Haley and First Gentleman Michael Haley at the Governor's Mansion to honor Mr. Frampton's 37 years of service to the State of South Carolina at which time Governor Haley presented him with the prestigious Order of the Palmetto.

Mr. Frampton, Mr. Winslow and Mr. Carmichael participated in the Executive Office State Service Pin/Employee of the Year Recognition and Holiday Breakfast in the Board Room on December 16, with Internal Auditor Angie Williams recognized as the Executive Office Employee of the Year. Mr. Winslow later attended the Land, Water and Conservation Division Christmas Luncheon in the Styx Classroom.

Mr. Frampton participated in a conference call on December 20 of the SC Sea Grant Consortium Working Group on that agency's organization. Mr. Carmichael attended a meeting of the Enrich South Carolina Coalition in West Columbia.

Mr. Frampton met with Douglas Ford of the Senate Fish, Game & Forestry Committee and Ken Moffatt of the SC Senate, at their request, on the morning of December 28.

On December 28, Mr. Carmichael inspected a property adjacent to the DNR's Waccamaw Oliver tract in Horry County for potential acquisition. On December 29, Mr. Winslow participated in an agency discussion on the draw hunt system.

Mr. Carmichael expended time over several days during the month collecting and reviewing annual compliance inspections for conservation easements held by the DNR, monitoring progress of the Boyd's Mill Pond Reedy River Mitigation project and processing invoices from the project from Laurens County, and researching the previously referenced Horry County tract adjacent to DNR property.

Marine Resources Division

Marine Resources Research Institute (MRRD):

Program and Grant Development Activities

- The 2010 and 2011 MARMARMAP/SEAMAP Reef Fish Cruise Report was completed and submitted to NMFS.
- A proposal to monitor benthic communities in the vicinity of the Captain Sam's Inlet Relocation Project was submitted to the Seabrook Island Property Owners Association. The grant amount was \$70,367 and the overall project duration is 2012-2014.
- A letter of intent was submitted to the Regional Ecosystem Prediction Program: Center for Sponsored Coastal Ocean Research, Ecosystem Impacts of Ocean Acidification, entitled "Development of molecular and physiological models that predict oyster population responses to ocean acidification within the southeastern US." Chapman, RW, Kingsley-Smith, PR, Burnett, KG & Burnett, LE.
- Staff are preparing pre-proposals for submission to NOAA Aquaculture. Aquaculture and Stock Enhancement of Spotted Sea Trout

Publications and Outreach

- Marcel Reichert, Jeanne Boylan and Pearse Webster participated in a Data Scoping call (Dec. 1) and Indices Webinar (Dec. 14) in preparation of the Data d webinars for SEDAR 28, which will occur in Feb 2012.
- Joey Ballenger and Julia Byrd attended the Atlantic States Marine Fisheries Commission's Advanced Stock Assessment Workshop in St. Petersburg, FL on Dec. 5-9. The workshop titled "A Mock Assessment Workshop: Part 1" was the 2nd of a 3 part series training ASMFC technical committee members and state agency personal in stock assessment techniques.
- Captain Chris Brown and Michelle Pate gave two tours on the R/V Palmetto on December 6th for students from the Lake Norman Charter High School in NC.
- SEAMAP hosted a shadow student from James Island High school on November 21st. Carrie Hendrix, Patrick Biondo, Jon Richardson, and Joe Cowan showed him what we do. Pearse did a quick question and answer session with him at the end.
- Pearse Webster assisted the SCORE program's outreach effort by describing research conducted on the R/V Lady Lisa, while Captain Jeff Jacobs provided tours of the vessel.
- The report on the Kiawah Island East End Erosion and Beach Restoration Project was submitted to the Town of Kiawah. The report summarizes changes in the potential macro-invertebrate prey communities, in piping plover foraging habitats.
- Two of the ERS staff attended the Tidal Creek Summit (December in Charleston, SC) and presented a poster on some of the SCECAP data.
- Upchurch, S., J. Leffler, D. Hurley, and E. Smith. 2011. National Estuarine Research Reserve System (NERRS) Sentinel Sites Program in Georgia and South Carolina. Poster presented at Southeast Tidal Creeks Summit, December 5-6, 2011, Charleston, SC.
- Dr. Greenfield and two staff members (C. Keppler and L. Brock) attended the Tidal Creek Summit in Charleston, December 5-6th. The following was presented:
- Greenfield, D.I., Brock, L.M., Felber, J., Keppler, C.K., Bergquist, D. and J. Ragland (2011) Linking phytoplankton assemblage variability and nutrient loading with land use: A 3-year study of the Ashepoo-Combahee-Edisto (ACE) Basin, South Carolina- Poster- Tidal Creek Summit, Charleston, SC
- Submitted manuscript "Trophic morphology of banded sunfishes" to Southeastern Naturalist (Darden).
- Submitted manuscript revision "Dispersal in *Enneacanthus* Sunfishes: An Initial Test of a Wetland Regulatory Assumption" to Wetlands (Darden).
- Submitted manuscript "Genetic Characterization of the Savannah and Pee Dee River Populations of Robust Redhorse (*Moxostoma robustum*) with Conservation Implications" to Conservation Genetics (Darden and Tarpey).
- Submitted manuscript "Genetic Characterization of American Shad in The Edisto River, South

- Carolina and Initial Evaluation of an Experimental Stocking Program” to Transactions of the American Fisheries Society (Cushman, Tarpey, Post, Ware and Darden).
- Submitted manuscript “Population Genetics of Cobia *Rachycentron canadum*: Management Implications along the Southeastern U.S. Coast” to Journal of Fish Biology (Darden, Walker, Brenkert, Yost and Denson).
- Submitted Manuscript “Inshore Spawning Of Cobia (*Rachycentron canadum*) In South Carolina” to Fishery Bulletin (Lefebvre and Denson).
- Five abstracts were submitted for the Southern Division AFS meeting in Biloxi, MS (Jan 2012, Darden and Brenkert attending) – projects include red drum movement, striped bass restoration in the Ashley, robust redhorse genetics, red snapper genetics and American shad genetics.
- Submitted manuscript to Fishery Bulletin “Fishery-independent catch rates for loggerhead sea turtles (*Caretta caretta*) in coastal waters of the Southeast U.S. between 2000 and 2011: Stable to increasing trends forecasted to continue.” (Arendt MD, JA Schwenter, AL Segars, JI Byrd, JD Whitaker, and L Parker).

Progress Report and Activities

Coastal Finfish: SEAMAP and MARMAP:

- The MARMAP 2011 cruise season data has been QA/QC'd and incorporated into our MARMAP database. All 2011 reproductive samples collected by MARMAP, SEAMAP and SEFIS Reef Fish surveys have been processed and are awaiting examination. Adam Lytton, a College of Charleston graduate student, has started working on several hundred wreckfish otolith samples for use in an age and growth study on this species.
- Kevin Kolmos coordinated training for the new histology equipment on December 14, 2011 and all users should be up to date on how to use this equipment.
- The *R/V Palmetto* and *R/V Lady Lisa* are scheduled to go into the yard early next year and the vessels are expected to be back in Charleston before the start of the sampling seasons. The *Palmetto* crew has been working hard on renovating the vessel lab. Laurie DiJoy, Time Snoots, Stephen Long, and others are working with the vessel crew to make significant upgrades to the lab.

Environmental Research

- Project staff began sampling piping plover habitats (documenting elevation, habitat characteristics, and macro-invertebrate community) for the second season on the north end of Hilton Head. Sampling has or will occur in December, January, and February.
- The Bay Point (related to the Hilton Head re-nourishment and terminal groin) benthic community samples for the 6mo pre-impact and immediate pre-impact are about 75% complete.
- The SCECAP report is going through a final review before printing next week.
- The ERS section managers posting has closed and we have 12 applications. The hiring committee will begin interviews this week and next week.

Algal Ecology:

- *Routine Monitoring and Fish Kill Responses (private contract & Center for Disease Control, CDC, project)* No fish kills were reported during December.
- Staff are preparing for the final sequencing analyses of select regions of the genome for toxic blue-green algae that were found at Kiawah during September. These are follow-up analyses from previous genetic efforts in order to get more detailed population information. These detailed molecular analyses will enable us to assess population structure with very fine spatial resolution.
- Dr. Greenfield attended a meeting at the SC Sea Grant office on December 13th to finalize the job description for the part-time, temporary health specialist. This specialist will be hired through the SC Sea Grant office and based downtown, and s/he will coordinate a variety of human health and harmful algal bloom-related activities related to the grant.
- *Assessing Phytoplankton Responses to Nutrient Levels in SC Estuaries (EPA project)* Staff completed all of the autumn field sampling and experimentation. Staff also completed coordination of water sample

retrieval with DHEC for the November SCECAP sampling for water quality analyses.

Estuarine Finfish Research:

- *Striped Bass:* Staff are continuing to genotype historic genetic samples for a temporal structure comparison across South Carolina; genetic processing of the Jul-Nov 2012 samples from the Ashley River have begun; and the new North Carolina samples are being curated.
- Stocking of 2011 year class phase II striped bass has been completed. Five thousand striped bass from genetic family B were released in the brackish portion of the Ashley River at a mean size of 225 mm TL while 4,974 striped bass from genetic family H were released in the freshwater portion of the Ashley at a mean size of 239 mm TL. Both families B and H were produced at the WMC. In addition to the phase II fish produced in brackish water at the Waddell Center, 3,442 fish from genetic family T were harvested from freshwater ponds at the Dennis Wildlife Center and released in the brackish portion of the Ashley River at a mean size of 209 mm TL. A total of 468 striped bass from genetic family F were harvested from the Dennis Center and moved to the tank pad at MRRRI for release in the spring as phase III. As part of our production agreement with the freshwater section, an estimated 5,000-8,000 striped bass from families B and H are being held in ponds at WMC for release by freshwater staff in the upper lakes. Harvest of these fish has been tentatively scheduled for the week of Jan 16th.
- *Genetic Influences of Overfishing:* For the red porgy project, staff are competing the genotyping of samples to evaluate the potential of inshore/offshore genetic structure within these reef fish (initial binning analyses and marker tests are being completed); for the red snapper project, otoliths from fish sampled during 1977-1985 (provided by Jennifer Potts at NMFS) have been curated and are being genotyped.
- *Robust Redhorse:* Staff are completing the reconstruction of genetic spawning records for the first two years of the Santee restoration project.
- *Genetic Tool Development:* Staff completed the initial data analyses for the red drum telomere aging project, statistical methods to optimize the relationship between telomere length and age are being evaluated. Staff completed the AFLP screening of red drum and cobia samples for sex-specific genetic markers. No perfect diagnostic markers were located for either species, but staff are evaluating sensitivities in several primer combinations for both red drum and cobia. Staff completed the processing of the Atlantic sturgeon samples for the sturgeon telomere aging project and analyses are ongoing.
- *Cobia:* Staff are processing the 2011 cobia samples; which will be incorporated into the ongoing evaluation of stocking contribution and large-scale population structure. Additional 2011 samples have been received from Texas and Australia which are being curated; coordination for additional samples from North Carolina and Thailand are complete. Staff are conducting a preliminary global structure analysis for the upcoming SEDAR data workshop (Jan 2012).
- Data processing of cobia otoliths continues in preparation for the upcoming SEDAR 28 data workshop. Nearly 400 otoliths from SC, NC, and Florida have been sectioned and mounted. In addition, histological data collected and processed by SEAMAP staff in 2011 have been reviewed and entered into the cobia collections database.
- *Spotted Seatrout:* Staff completed the optimization of a suite of microsatellite markers to characterize the genetic population structure and genetic influences of cold winter events on spotted seatrout. Evaluation of the marker suite for parentage analysis and genetic evaluation is complete, with the final marker suite including 13 loci that are useful to evaluate population structure as well as identify hatchery released fish. Staff are genotyping otolith samples from North Carolina and Georgia to expand the geographic coverage for the structure analysis
- An additional 19 spotted seatrout broodstock were collected and moved into conditioning tanks in the wet lab. Preparations continue for juvenile spotted seatrout winter temperature tolerance experiments in the environmental chambers. Experiments are tentatively scheduled to begin the week of January 16th. HOBO continuous temperature data recorders were deployed in two outdoor ponds at WMC containing spotted seatrout in order to collect overnight pond temperature data during extreme winter weather events.
- *Weakfish Genetic Identification:* Staff have completed processing the first set of test samples with the *Cynoscion* species-specific markers for the weakfish verification project; processing of historic samples to verify identifications continues.

- *Trammel and Electrofishing surveys*: All strata (7 trammel + 6 electro) were completed successfully for the month of December. The first electrofishing trip of January was postponed due to generator problems. The equipment is now fixed.
- A group of approximately students (~12) from DePaul University (Chicago) assisted with the ACE Basin trammel trip in December (arranged by Bill Roumillat and Al Segars). Bill also took them out trawling in Charleston Harbor for fish ID work.
- Blood samples were taken from red drum in Winyah Bay as part of an ongoing masters project examining spatial and temporal variation in red drum condition (especially skin lesions).
- Ageing of flounder otoliths from 2005-2008 has been completed.
- Electrical work was completed for the installation of a chiller for the old wet lab tanks. In addition, a concrete slab to support the chiller and pump was constructed next to the settling towers on the east side of the building.

Shellfish Research:

- *National Shellfisheries Association*: Dr. Peter Kingsley-Smith has been nominated for the position of Vice President of the National Shellfisheries Association. In anticipation of the 104th annual meeting in March 2012 in Seattle, staff submitted two abstracts to present findings from the Sea Grant and SARP research projects. Dr. Peter Kingsley-Smith worked to finalize the program of talks for the special session on restoration that he will be co-chairing at this meeting.
- *Minorities in Marine and Environmental Sciences (MIMES) Program*: Updates were made to websites, posters, promotional letters and contact lists for the 2012 summer program in hopeful anticipation of receiving funding from the National Science Foundation for 2012-2014.
- *The Nature Conservancy - NOAA Oyster Castle Project*: Staff completed field sampling for baseline elevation and shoreline data, sediment composition and oyster recruitment at the Jeremy Island field sites.
- *SC Sea Grant Consortium Triploid Oyster Project*: Oysters were tumbled, reduced in density, transferred to larger mesh bags, and data collected from one of the commercial growers located in McClellanville. Oysters were deployed to the last of the grow-out locations. Final oyster data were collected also before harvesting oysters from another commercial grower. A 9 month no cost extension for year 2 funds was approved by the Consortium.
- *State Wildlife Grant restoration project*: Posters informing the general public about the abandoned crab trap online survey have begun to be distributed. Staff have agreed to work closely with the Law Enforcement Division to facilitate crab trap donations and recoveries from the wild. An annual interim report was also written and submitted.
- *Southeast Aquatic Resources Partnership (NOAA)*: Image analysis of crab trap footprints continues.
- *Saltwater Recreational Fisheries Advisory Council / Dingle Johnson Funding Oyster Reef Assessments*: Staff continues to process the photographs collected during the November and December helicopter flights used to capture imagery of harvestable oyster reefs. Maps are being generated to create “flight lines” to improve the efficiency of future flights. The culture permit maps have also been updated for the SCDNR Shellfish Management Section using revised acreage numbers from the GIS oyster data layer. The new billing cycle for culture permits will begin on February 1st.
- *Miscellaneous*: Edits to the Comprehensive Wildlife Conservation Strategies document continue. As part of a visit by DePauw University undergraduates, Dr. Kingsley-Smith gave a seminar on invasive species ecology and a tour of the SERTC laboratory and collections. Dr. Kingsley-Smith participated in a conference call to begin planning for the 2012 International Conference on Shellfish Restoration.

Sustainable Mariculture/Crustacean Monitoring:

- *Sustainable Mariculture*: The prototype commercial shrimp production raceway was harvested on December 6, thus concluding the Comparative Trial, a multi-institutional (Waddell Mariculture Center, Gulf Coast Research Laboratory, Texas A&M University, and Oceanic Institute) comparison of shrimp production systems and techniques.
- Following harvest, water from the Comparative Trial was returned immediately to the raceway, which was restocked on the following day (12/7/11), again at a density of 500 shrimp/m³. This “back-to-back” run is an effort to study the effect of water reuse on shrimp production in a commercial scale raceway.

- Post larvae for a planned study of methods to enumerate shrimp in production systems have been received and are growing in the nursery.
- As part of an existing SC Sea Grant, a workshop for potential producers, “Commercial Aquaculture of Native Shrimp for the Bait Industry”, is being organized and will be held at the Waddell Mariculture Center on January 31, 2012. It will include speakers on market surveys, disease-free post larvae sourcing, system design, biological production considerations, permits and regulations, economic analyses, and an industry roundtable discussion.
- *ACE Basin National Estuarine Research Reserve*: Implemented an environmental monitoring plan for the proposed oyster cage culture project to be situated in Fish Creek within the ACE Basin NERR.
- NERR research staff assisted SCDNR geologist Will Doar with data collection from Surface Elevation Table (SET) stations in the ACE Basin. These devices measure the relative elevation changes of wetland sediments, particularly in relation to sea level rise.
- NERR staff attended the Southeast Tidal Creeks Summit, held in Charleston, SC, and made a poster presentation.
- *Crustacean Monitoring*: Trawl sampling in December collected below average numbers of white shrimp in a wide range of sizes. Water temperature and salinity were above average, therefore some shrimp were still located relatively high up rivers. Blue crab pot sampling was completed with good numbers taken. Preparations for SC SeaFood Alliance meeting in late Feb. 2012 are commencing.

Waddell Mariculture Center:

- The Waddell Mariculture Center shipped 50 Pacific white shrimp to the Atlanta Aquarium. The shrimp will be placed into the aquarium’s touch tank.
- The Waddell Mariculture Center hosted along with the Hilton Head Island High School ROTC program a student orienteering tournament. Nine schools from 3 states attended the event. The competition was conducted on the center’s 150 acres and the adjoining 150 acre Marine Reserve.
- The maintenance department shipped its large backhoe to Savannah for repairs. Repairs are needed before the center can renovate the seawater overflow system. The center will use approximately \$2500 raised during the Taste of Waddell by the Friends of Waddell to cover the repairs.
- The center has ordered approximately \$6,500 worth of aerator motors and gearboxes. Once the aerator parts arrive, repairs to the aeration equipment will be made in preparation for the fish stocking programs. Donations made to the Waddell Fund paid for the parts purchase.

In Water Sea Turtle Project:

- Finalized presentation selection for the Foraging Habitats session (M. Arendt is session chair) and assisted Program Chair with final presentation schedule for the 1st Southeast Regional Sea Turtle Meeting on Jekyll Island, GA on 1-4 February 2012.

Submitted purchase requisitions for standard supply items purchases (for summer 2012) for four vendors as well as acquisition of a new CTD data loggers for a fifth vendor; all requisitions converted to purchase orders in a timely manner

Office of Fisheries Management (OFM):

Shellfish Management:

Commercial Management

Verification requests for legally required shellfish culture permit planting on 21 culture permits were received in December. Commercial shellfishermen planted a total of 88,226.6 BU or bushel equivalents of approved cultch or cultivation in 2011. Cultch and seed planting represented 63% of this total, an increase from 46% in 2010. This is attributed to staff efforts to encourage cultch/seed planting vs. cultivation.

Three permittees holding five permits did not complete, or did not have verified, legally required shellfish planting quotas for 2011. These three permittees have been sent pre-revocation notices for a hearing scheduled in January 2012. Three more permittees surrendered their permits to avoid revocation. The Shellfish Permit Committee will consider the disposition of surrendered permits at an upcoming meeting in January. We anticipate posting available culture permits within the next month.

Drag-dredge permit holders on state grounds were notified that they need to submit weekly harvest reports. The two active drag-dredgers (holding collectively 5 permits) have been complying with this requirement. However, it appears that they have only fished on two days, and have caught fewer than 5 bushels of oysters. This is

not adequate information to determine whether the fishery needs to be limited. Since dredging itself is probably beneficial to the environment, and to date no resource has been taken, it would appear that the activity is causing no harm.

All culture permit holders were notified of the new report card system we plan to implement in 2012.

New culture permit acreages were generated to be used for 2012 billing. Amendments were prepared for all culture permits reflecting the acreage change and new maps were generated.

The quarterly meeting of the DNR-DHEC Shellfish Committee was held at Fort Johnson. We discussed changing the timing of mariculture reporting to better facilitate renewal of DHEC permits by July 1. Mike Pearson reported that a proposal to require states to institute mandatory shellfish handling education prior to issuing permits was passed at the ISSC but will not become effective until January 2014. Additional guidelines should be promulgated before that time. A *vibrio* case was reported in Horry County but will not count against the state's Shellfish Sanitation program since the oysters were illegally marketed.

Mel Bell and Nancy Hadley met with Bill Anderson to discuss a possible mitigation plan for Cherry Grove dredging, should it be allowed to impact oyster resources. We reiterated that SCDNR does not want to see relaying of oyster resources included in the plan for this area.

Shell recycling and planting; recreational management

An oyster shell drop off location in Florence was constructed by the Coastal Conservation Association (CCA). The bin will be a DNR oyster shell recycling bin and is constructed of concrete. This is the second bin to be built up-state, the first being in Hartsville at Kalmia Gardens. There are future plans to coordinate the construction of more bins inland with CCA, next focusing on the Columbia area.

Ben Dyar met with Eddie Bellamy, the director of the Beaufort County Public Works Department, on building two new oyster shell recycling bin locations. One location will be at the St. Helena Recycling Center off of Sea Island Parkway just as you get on to St. Helena Island. The other will be at Station Creek Boat Landing up from Trenchards Inlet. Both bins will be wooden cattle-pen construction. The two bins, once completed, will bring the total drop off locations to 28.

2,704 bushels of shell were recycled this month. Bins at Murrells Inlet, Mt. Pleasant, and Ft. Johnson were cleaned out this month.

This month a total of 11 new shellfish boundary signs were put out and mapped completing two SSG's. 5 signs were put on S161 (Steamboat Creek on the back side of Edisto) and 6 signs were put on S168 on the Toogoodoo.

Mitigation Projects

Green's Oyster company delivered 29 loads of oyster shell (approx 20,735 bushels) to the Veteran's Terminal for the Maccalloy & Calhoun Park Mitigation Projects.

Grant activities

Processing of sediment samples from 6 SCORE restoration sites was completed.

ARRA (Stimulus) project: All final reports for this project were submitted to the City of Charleston.

State Wildlife Grant: Allison Kreutzer and Stephen Czwartacki held a bag dissection and bagging event for Lake Norman Charter High School. 28 students attended the bag dissection and then bagged for 1.5 hours creating 300 shell bags. We have been notified that this school will be making a donation to the SCORE program in gratitude for the many field trips we have hosted.

National Fish and Wildlife Federation: Allison Kreutzer and Stephen Czwartacki assisted Cainho Middle school in completing a greenhouse to be used for starting *Spartina* seedlings which will be transplanted behind reefs in the Cape Romain National Wildlife Refuge.

Southeast Aquatic Resources Partnership-NOAA and Atlantic Coast Fish Habitat Partnership : Staff are coordinating with Tom Salisbury to schedule a week of field work using the Discovery this year. The Discovery will transport volunteers to construct oyster reefs and plant marsh grass behind oyster restoration sites within a short distance of Bennetts Point and/or Live Oak Landing on Edisto.

Meetings and Collaborations

A planning meeting for the *Spartina* growing project (From Seeds to Shorelines) was held at Fort Johnson. Representatives from Sea Grant, Clemson Extension Carolina Clear, USFWS-Bears Bluff, Earthforce and the College of Charleston attended as well as SCORE staff. We discussed plans for a summer teachers' workshop and development of teacher resources.

Allison Kreutzer, Stephen Czwartacki, Nancy Hadley and Michael Hodges attended the Tidal Creek Summit sponsored by SC Sea Grant and NC Sea Grant.

Statistics:

General Activities

- Delinquent letters for late submission of November mandatory logbooks were mailed on December 15th (190 letters) to license holders for November reports not yet received by the December 10th deadline. The affidavit list which includes delinquent offenders for November and prior months will be generated on January 6, 2012 (80 offenders) and will be turned over to the Law Enforcement Division.
- Several data requests were completed this month including Shrimp, Spanish Mackerel, and Cobia catch/effort data, and landings from drag/dredge gears.

Commercial Trip Interview Program

- December sampling efforts provided 17 commercial trips being sampled, with 254 length frequencies with 214 associated age structures being obtained. Additionally, port agents have been sampling finfish that were landed whole by cooperating commercial fisherman in order to obtain values needed to determine if historical conversion factors used to calculate a whole weight from a traditionally landed gutted fish is accurate.

State Finfish Survey Summary

- Creel Clerks intercepted 244 fishing parties with a total of 483 anglers interviewed during the month of November 2011. Fish measured included: 77 red drum, 75 spotted seatrout, 27 southern flounder, 93 southern kingfish, 44 sheepshead, 2 Atlantic Croaker, 2 bluefish, 198 spot, 3 pinfish, 6 pigfish, 12 silver perch, 12 black drum, and 1 Florida Pompano. Otoliths were collected for the inshore fisheries section of MRD from spot and black drum.
- Deep hole shrimping intercepts and flights for 2011 were completed and data analysis will take place in winter of 2012.
- Planning continues for the 2012 Grand Strand pier survey to be conducted with the cooperation of CCU.
- The 2011 shrimp baiting mail survey was distributed mid-November and to-date OFM has received hundreds of completed surveys.
- The final report for SCDNR's National Saltwater Angler Registry grant, "Characterization of senior, gratis, three-year, and lifetime South Carolina saltwater recreational fishing license holders" was submitted to ASMFC/NMFS on December 15, 2011.

Additional activities during the month of December included: working closely with commercial seafood dealers to ensure compliance with reporting, assisting DNR's oyster shell recycling program and freezer program, distributing rules & regulations books and fish rulers to coastal businesses as requested, collecting samples and catch information from shrimp trawler captains reporting catches of tiger shrimp, and prepping/analyzing OFM's recreational fishery dependent data for the upcoming SEDAR 28 (Spanish mackerel and cobia).

Finfish Management:

Artificial Reef Management and Development

Artificial reef construction for December consisted of approximately 100 concrete ballast blocks deployed on the Charleston Nearshore Reef.

WILDLIFE AND FRESHWATER FISHERIES

DEPUTY DIRECTOR'S OFFICE:

Deputy Director

Key meetings included staff meetings to prepare the deer management legislation for review by the DNR Board, attending SC Natural Resources Society celebration at the Governor's mansion to honor Frampton, and attending staff holiday celebrations to encourage staff and deliver service pins and certificates. Prior to issuing an urban deer depredation permit in Region 1, I briefed Representative Davy Hiott and Senator Larry Martin on the situation and DNR's approach to address such. Time was also devoted to analyzing the divisions budget status, preparing for the WFF Advisory Committee meeting and planning for Frampton's retirement celebration.

Assistant Deputy Director

Reviewed and took action on various administrative and budgetary matters. Provided additional coordination of two improvement projects on DNR lands following environmental protocol. Examined proposed mitigation bank site in Horry County. Investigated procurement rules and regulations regarding hiring vendors for environmental and demolition projects. Reviewed grant report for CWCS project. Obtained contract extension on land acquisition in Barnwell County. Visited two DNR properties in Region 2. Meetings and events attended: DNR Board meeting; Enrich South Carolina meeting; trout stocking event in Lexington County; and holiday luncheon at Region 2 office.

Public Information Director

Attended the Recreational Boating and Fishing Foundation State Workshop in Phoenix, AZ, participated in apprentice license holder focus group conference call conducted by Responsive Management; continued coordination of the Classic media buy through meetings with Time Warner Cable, Clear Channel Broadcasting, and WIS TV, participated in Association of Conservation Information Board of Directors conference call, participated in SARP Communications Committee conference call, participated in fisheries coordinators conference call, continued work on bank and pier access verification in Spartanburg and Union counties, attended the helicopter trout stocking, continued implementation of the lapsed hunter and tree stand safety campaigns, participated in the Checkoff South Carolina campaign and updated DNR checkoff specific information.

Office of Environmental Programs

Permitting and Review

DNR Staff coordinated 44 DNR reviews (11 COE, 11 DHEC, 16 State Clearinghouse, 6 Misc.) of environmental permits and authorizations for the 38 inland counties.

FERC Projects

Catawba-Wateree Hydroelectric Project (FERC Project No. 2232). Staff worked with Duke Energy and NC Wildlife Resources Commission to address needed revisions and updates to the Memorandum of Agreement Concerning Habitat Enhancement and Woody Debris Management for the Catawba-Wateree Hydro Project.

Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues: DNR staff participated in KT Stakeholder Team meeting on Dec 7 and began reviewing Duke's Revised Study Plan, which was filed with FERC on Dec 22.

Neal Shoals Hydroelectric Project (FERC Project No. 2315). DNR staff participated in Dec 13 conference calls with SCE&G and other agencies to address SCE&G's proposed reservoir refill plan and to recommend actions needed to measure and monitor the extent and changes of the recent downstream sedimentation event, as well as survey the presence and recovery of fish and macrobenthic organisms. DNR provided consultation with SCE&G on various aspects of the project including plan modifications to refill the project reservoir and close the flood gate (origin of the large sand depositions) on Dec 24.

Santee Cooper Hydroelectric Project (FERC Project No. 199). DNR staff provided comments on an application to FERC for the proposed Jacks Creek Marina on Lake Marion; and related issues of DNR concern were previously addressed through USACE and SCDHEC permits.

NRC Projects

William States Lee Nuclear Project. DNR staff are currently reviewing the Draft Environmental Impact Statement and Section 404 Permit/401 Water Quality Certification Joint Public Notice and application documents for the William States Lee Nuclear Project. A Government-to-Government meeting and Public meeting will be held on January 18 and 19, respectively, in Gaffney, SC.

WILDLIFE SECTION:

Public hunts progressed as planned during the month with significant time required to administer public waterfowl hunts, youth deer and youth waterfowl hunts and mobility impaired hunts. Check stations were manned to monitor deer harvest during the Francis Marion NF hunts. During December on 17 waterfowl areas, 670 hunters including 110 youth hunters harvested 1,726 ducks. Region staff assisted with a Wounded Warrior duck hunt at Tyger River Waterfowl Area.

The first coastal black bear hunting season was held December 1 – December 15 with one female bear (197 pounds) harvested.

CWD surveillance continued during the month.

Monitoring of White-nosed Syndrome in bats continued with submission of bats for testing according to the response plan.

Regional staff conducted Conservation Easement monitoring during December.

The fawn mortality study continued at SRS.

The Sandhills Recovery Area RCW cooperative meeting was attended.

One sea turtle stranding was recorded during the month. 4 turtles are currently undergoing rehab at the aquarium.

Through the deer season, 1651 ADQP applications were processed and 63,025 tags issued.

The NWTf State Chapter board meeting was attended.

A meeting on the Sandhills RCW Coop Project was attended.

The 2011 Summer Quail Brood Survey results were posted on the DNR web.

Four bear complaints were handled in Region 1 and 2 complaints handled in Region 4.

1,665 registered guests were recorded for Botany Bay Plantation WMA during December including 4 horse groups with 7 riders.

Management recommendations were provided to 9 landowners and harvest data analysis conducted for 1 hunt club. 261 nuisance wildlife investigations conducted including 8 nuisance alligator calls with 12 site visits required. 24 man/days were spent on data analysis. Other agencies were provided assistance on 11 occasions requiring 25.75 man/days. Focus Area coordination required one day. Waterlevel management required 64 man/days. 4 environmental reviews were conducted. 3 programs were presented to 15 individuals. 8 news releases were submitted. Surveys included 1 Fall quail covey counts, Christmas bird counts and 5 misc. surveys. 4 RCW cavity trees were checked. 41 woodduck boxes were checked. One fox squirrel was trapped and translocated from private land to Botany Bay Plantation.

One hundred twenty-three site visits were conducted on Heritage Preserves. .5 acre was treated for exotic vegetation control requiring 8 hours. On Heritage Preserves, 500 acres were prescribed burned and 64.5 miles of firelanes disced. Graffiti was removed from the rock at Ashmore HP. 1.5 miles of boundary were posted and painted at Segars-McKinnon HP and the entire boundary of Glassy Mountain HP was posted and re-painted.

Field agricultural activities on WMAs included 49 acres annuals planted, 2 acres of perennials planted, 167 acres mowed, 306 acres disced, 1138 acres prescribed burned and 211 acres fertilized. 15.5 miles of fire lanes were disced, 12.1 miles of roads mowed, 24 miles of roads scraped and 3.1 miles of roads were re-furbished. 93 WMA signs were erected on 5 miles of boundary. Other signs erected during the month included 28 safety zone signs, 31 road closed signs, 12 dove field signs, 65 HP boundary signs and 42 misc. signs. 3 gates were re-furbished and 3 new gates installed. 1.5 acres of mechanical understory control with the Bobcat was conducted at Marsh WMA and 25 acres drum chopped for hardwood control. Regional staff made 3 contacts with NGOs and conservation organizations during December.

FRESHWATER FISHERIES:

Freshwater Fisheries Coordination and Administration (Chief's Office)

Attended EPA public meeting in Pickens where plans for the supplemental remedial investigation of the Twelvemile Creek PCB remedy was discussed.

Met with EPA and Upstate Forever to discuss potential for removal of Easley Central Dam.

Attended RBFF's annual marketing meeting in Arizona to discuss the 2012 fishing license marketing efforts. Participated in the Trout in the Classroom teacher workshop held in Clemson by DNR education staff. Met with USFWS service staff to discuss future operations at Orangeburg National Fish Hatchery in light of pending staff changes at the facility.

Visited the Bears Bluff National Fish Hatchery to observe Atlantic sturgeon brood stock and recently produced fingerlings.

Met with the Midlands Striper Club to discuss striped bass management on Lake Murray and up-coming changes to fishing laws.

Met with staff from GADNR to tour the Woodside I and II dam removal sites.

Conducted a Freshwater Fisheries Coordinator conference call to discuss administrative and management activities.

Participated in a Natural Resource Trustee Council conference call to discuss issues associated with natural resource damage settlement for Lake Hartwell and Twelvemile Creek.

Region I

Ran gill nets on Lake Thurmond and Hartwell to monitor striped and hybrid bass survival

Fished Trap nets on Lake Greenwood to monitor crappie population dynamics

Fished gill nets on Lake Jocassee as part of standard monitoring of sport fish populations

Collected additional fish from Jocassee as part of the triploid vs. diploid trout stocking evaluation

Finished renovations of the handicap accessible fishing pier at Calhoun Falls fishing area.

Prepared for upcoming fish attractor maintenance (got block and made contacts about picking up trees)

Continued the ongoing creel survey of the Lake Greenwood recreational fishery, and designed and initiated a creel survey on Lake Jocassee

Spent considerable time working on annual progress report

Spent considerable effort working on FERC relicensing of the Keowee-Toxaway project

Attended the Pickens County Delegation meeting at the request of the delegation

Worked with USFS to develop a habitat enhancement prescription for Moody Cove Creek

Continued trout stocking in mountain streams on schedule

Continued conducting stream habitat and water quality surveys on Jocassee Gorges streams in conjunction with the SARP/EBTJV Grant

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Region II

Region 2 personnel held an electrofishing demonstration/species identification of resident fish species in Kings Creek for Dr. Doug Raynor's Wofford College Biology class.

Region 2 Fisheries Technicians Wes Stewart and Jason Marsik performed maintenance on .9 miles of trails and 8 fisherman access areas at Lake Wallace, Marlboro County.

Region 2 Technicians performed maintenance on 1 mile of trails and 8 fisherman access areas at Mountain Lakes #1, Chester County.

Region 2 Technicians performed maintenance on .27 miles of trail and 3 fisherman access areas at Mountain Lakes #2; Chester County prior to the lake's reopening date of January 1, 2012.

Region 2 personnel inspected the trail at Lake Oliphant, Chester County and discovered the return of beaver

activity around the back foot bridge.

Biologist Stroud represented Fisheries Region 2 in a Coordinator's conference call during the month.

Biologist Stroud provided a report on the SWG activities for the year regarding tracking of robust redhorse on the Great Pee Dee River and initiated work on the annual report.

Biologist Stroud responded to pond management inquiries from four private pond owners via telephone, email, mail, &/or fax response. Two in-house water quality tests were provided to constituents during the month.

Contact with NGOs: Teresa Cook – Francis Marion University regarding stocking of Lake Coleman; Dr. Bill Rogers of Winthrop University regarding tissue samples of greenfin & satinfin shiners;

Region III

Reservoir Management

The 2011 crappie trap net sampling was completed in Lake Murray. Over five hundred fish were collected.

The second of three planned gill net samplings for STB was also completed.

Over three hundred Christmas tree were acquired for fish attractor refurbishment to begin in January.

Several on site meetings were held at Lake Brown to discuss erosion problems at one of the lake's shoreline "park" areas.

Stream Survey

Data collected during this season's segment of the Broad River fish community study was entered and analyzed bringing all data spreadsheets up to date.

Work was conducted on developing a trout mortality study proposal for the Lower Saluda River.

Other

The Region's 2011 annual report was completed and submitted.

Routine maintenance on boats and equipment was conducted

Region IV

Night electro-fishing assessment of juvenile striped bass, American shad, and white perch growth and abundance was conducted in Lake Marion.

Project personnel performed striped bass electrofishing sampling of the freshwater section of the Ashley River in coordination with the MRD Mariculture section.

Fish attractor work was conducted on Lakes Marion and Moultrie. Unsold Christmas trees were collected from Charleston and Berkeley County lots.

Winter gill net sampling was begun and all the December samples were collected and processed on time.

Annual report data analysis and write-up activities were completed and submitted.

The final corrected draft of Retention and Physiological Effects of Surgically Implanted Telemetry Transmitters in Blue Catfish was accepted for publication in the North American Journal of Fisheries Management.

11 pond owners were assisted with pond management questions and issues.

Hatchery Coordination

In December Hatchery staff certified approximately 6,000 grass carp as triploid and issued 2 permits for those fish to be grown.

Hatchery staff participated in the monthly Freshwater Fisheries Coordinator Meeting via conference call.

Staff met with USFWS Hatchery leadership to discuss past and future collaboration efforts.

Staff toured the Bears Bluff National Fish Hatchery and discussed strategies for American shad production.

A total of 58,175 trout were stocked during the month of December. A significant part of this total went into the Lower Saluda River helicopter stocking and to Lake Jocassee.

Staff at the Walhalla State Fish Hatchery are diligently caring for eggs and fry as all of the brown and brook trout eggs have hatched. Overall fish health has been good as cold temperatures have made parasite outbreaks virtually nonexistent. The final broodstock on station were spawned after Christmas and are currently incubating, as well.

Hatchery staff met with contracted engineers and the State Engineer to finalize plans for the Cohen Campbell renovation.

Outreach

Weekly trout stocking reports continue to be updated on the SCDNR website.

At Walhalla State Fish Hatchery visitation was normal throughout the period and two tours were provided to twenty-three individuals.

Cohen Campbell hatchery, Dennis Wildlife Center, Cheraw hatchery, and Spring Stephens hatchery all reported normal visitation

State Lakes

Picked up left over Christmas trees at Wal-Mart to be put in Lake Johnson.

Disassembled walkway over emergency spillway at Lake Oliphant with plans to remodel in January.

Routine maintenance at all 18 State Lakes.

Made contact with property owner of Sunrise Lake and had discussion about renewing lake property lease.

Diadromous Fishes

Efforts this month included: Weekly downloading of acoustic receivers to track sturgeon movements on the Santee, Waccamaw, Pee Dee, Edisto, Combahee, and Savannah Rivers, gillnetting for shortnose sturgeon in Lake Marion, building nets for the upcoming shad and herring season, coordinating with Bears Bluff National Fish Hatchery (BBNFH) concerning continuing Edisto River shad stock enhancement work, monitoring elver ingress at St. Stephen Dam. A biologist and technician were hired for an upcoming sturgeon project, funded by the Santee Accord, on the Santee Cooper Lakes. An annual inspection of the St. Stephen fish lift was conducted with members of SCDNR, ACOE, NMFS, and USFWS. Staff submitted a NMFS ESA report, a final report for SWG, and the diadromous program annual report. Comments were submitted concerning the NMFS biological opinion for shortnose sturgeon for SHEP. Routine maintenance was also performed on vehicles and boats.

Multi-State Sturgeon Research

Coordination between cooperating states (NC & GA) continue. Field efforts continue weekly.

Meetings and Outreach

Personnel participated in numerous conference calls and meetings concerning ASMFC shad and river herring Amendment 3, NMFS protected resources, and the Santee Accord. Public meetings were held in Georgetown and Walterboro, SC to inform commercial and recreational shad fishermen of upcoming regulation changes. Personnel also met with the USFWS, SCE&G, and Duke Energy regularly.

Research

Annual progress reports for Sport Fish Restoration and State Wildlife Grant projects were completed.

Eel traps at Wateree and Columbia dams were checked on three dates and backpack electrofishing was conducted once at each site. No eels were captured in traps at either site; however, two eels were collected while backpack electrofishing at Columbia Dam on 14 December. Nine eels were collected during 2011.

Work continued on the Thurmond striped bass telemetry project. Four deepwater, buoy-less receivers were retrieved, downloaded, and redeployed 19 December. Receiver data was processed and an annual progress report was prepared.

Work continued on our project to describe the first year growth and diet of several key fish species in the Santee-Cooper Lakes. Night electrofishing was conducted at two Lake Marion sites 20 December. During December the catch rates of most key species (e.g., American shad, striped bass and threadfin shad) were lower than the catch rates observed during summer and fall months. White perch catch rates during December were high and similar to summer and fall catch rates. The stomachs of 118 American shad collected during summer 2009 were excised for diet analysis. The stomach contents of 14 fish were examined. The most commonly encountered items were adult mayflies, midge pupae and water mites.

Otoliths from 35 hatchery-reared smallmouth bass born in 2010 were examined for OTC marks to evaluate marking efficacy in stocked fish. Each of the inspected otoliths contained an OTC mark. Otoliths from 65 smallmouth bass collected during fall 2011 electrofishing were aged and reviewed for OTC marks.

We analyzed Stream Assessment random site data in developing a conservation ranking system for SC freshwater stream fishes. Conservation Priority scores were calculated for each fish species as a function of observed weighted average statewide abundance, frequency of occurrence, and overall range size plus existing conservation designations in published comprehensive assessments. Scores provide an objective measure of species rarity and risk of population decline in streams and will be used to rank species and adjust or assign priority levels for the ongoing revision of South Carolina's Comprehensive Wildlife Conservation Strategy.

Staff sorted, identified, and curated invertebrates from the Stream Assessment project and entered and updated data.

We co-authored a final report to EPA on using stream macroinvertebrates to forecast biological conditions in streams based on watershed and stream habitat features, in collaboration with Clemson University researchers.

Staff attended a public, EPA sponsored meeting regarding approaches to the supplemental remedial investigation of the Twelvemile Creek OU2 Superfund site.

We attended a meeting with staff from Auburn and Clemson Universities to discuss a collaborative analysis of relationships between coastal plain stream geomorphology and observed fish life-history traits.

Staff continued discussions with Environmental Program staff to develop the agency's position in the Keowee-Toxaway FERC relicensing process.

Staff worked on Comprehensive Wildlife Conservation Strategy revisions for crayfishes, mussels, and snails and

prepared a proposal on a rare crayfish for funding consideration by the State Wildlife Grant program.

We completed determination of dry weights for $n = 600$ striped bass juveniles. These are representative samples from 6 genetic families taken at the time of stocking in Lake Wateree in 2008. Previous work has shown that at age 1+ these genetic families returned in different proportions than those at which they were stocked. Dry weights will be used to calculate mean measures of condition for each genetic family. The relationship between returns and variables including family, condition, and stock date will be evaluated.

Final revisions to the manuscript 'Retention and Physiological Effects of Surgically Implanted Telemetry Transmitters in Blue Catfish' were submitted and accepted for publication by the North American Journal of Fisheries Management.

We worked on finalizing analyses of the data concerning the benthos of Lake Marion. Staff provided information: to a Lander University student about the Saluda-Reedy Watershed; to a Duke University graduate student about issues concerning experimental design; to a University of Guelph graduate student about DNR data sets suitable for testing predictions of a model of fish community structure.

Law Enforcement

DIVISION SUMMARY – COL ALVIN TAYLOR

Officers issued 714 summons and 1,376 warnings with 540 cases clearing court with fines totaling \$81,639.75 being assessed. A total of 1,952 hours were spent on boating patrols resulting in 3,727 boats being checked. Officers spent 230.50 hours on Homeland Security, 648.50 hours on litter patrols and a total of 413.50 hours were spent patrolling Heritage Trust Preserve properties. Officers also spent 3,160 hours on night patrols. A total of 46 JEA hours were worked.

REGIONS 1 & 2 – MAJ WILLIAM POOLE

Region 1 – CPT Jamie Landrum

Officers issued 159 summons and 255 warnings with 133 cases clearing court with fines totaling \$23,225.50 being assessed. Officers checked 839 fishermen, 1,773 hunters checked and a total of 250 hours were spent on boating patrols resulting in 464 boaters checked. Officers gave a total of 19 public presentations. Officers spent 118 hours on Homeland Security, 261 hours on litter patrols. A total of 41 hours were spent patrolling Heritage Trust Preserve properties. A total of 25 hours were spent patrolling Jocassee Gorges resulting in 3 summonses and 5 warnings being issued. Officers also spent 826 hours on night patrols. During the month there was 1 boating accident and 1 drowning reported.

Captain's Spotlight

- SGT Busha and CPL Martin followed up on an anonymous tip that a taxidermist had an illegally killed bear in his possession. Officers went to the subject's residence and noticed hawk parts hanging from a shed; officers obtained a search warrant for all buildings and discovered 4 bear hides. Officers found that 1 bear was killed out of season during primitive weapons season for deer. Subject also was in possession of wild hogs that he had transported illegally. Cases were issued for possession of bird of prey parts, transporting live hogs and the 2nd subject was charged for killing a bear out of season.
- SGT Fox and a Spartanburg Co. Sheriff's Office Deputy used Fox's personal kayaks and located the 21-month-old boy in Enoree. He had been missing for over 24 hours and only suffered from a slight case of hypothermia.
- Officer Miller and CPL Holiday charged a subject for illegally taking a bear in Union County, hunting without a license, and hunting without a big game permit.

Unit 1A (Oconee / Pickens) 1st SGT D.J. Riley

Officers issued 22 summons and 24 warnings with 37 cases cleared court with fines totaling \$6,252.50 being assessed.

- 1st SGT Riley, SGT's Hedden, Winegard and CPL Martin assisted Investigator Spires with a boating fatality where a coon hunter fell out of a john boat and drowned. Subject's body was recovered the following day.

Unit 1 B (Greenville / Spartanburg) 1st SGT Amy Staton

Officers issued 35 summons and 45 warnings with 39 cases cleared court with fines totaling \$6,324.50 being assessed.

- SGT Cartee apprehended a subject that took over the limit antlerless deer (total of 4) and failed to tag them.
- SGT Cartee apprehended a subject that took a fox out of a trap without the trapper's knowledge or consent.
- CPL Anders and CPL Jordan responded to a dive assignment at Lake Hartwell where Jordan made his first recovery.
- While on night patrol, CPL Anders caught 2 subjects that had just burglarized a local judge's barn. Greenville Co Sheriff's Office responded and charged them with burglary 1st, simple larceny, and illegal possession of a handgun.

Unit 1C (Cherokee / Union) 1st SGT John McCraw

Officers issued 12 summons and 22 warnings with 21 cases cleared court with fines totaling \$3,381.00 being assessed.

- SGT Adams and Office Miller assisted Spartanburg and Union County Sheriff's Dept. in the search for a missing 21 month old boy in the Cross Anchor area. The boy was found safe 24 hours later by SGT Fox.
- SGT Adams assisted Officer Plemmons of Chester County with 2 cases involving deer processors in Union County.
- SGT Adams and Officer Smith assisted with the TOMO deer hunt at Trophy Buck Hunt Club in Union County.

Unit 1D (Greenwood / Laurens) 1st SGT Kristie Lumley

Officers issued 45 summons and 91 warnings with 3 cases cleared court with fines totaling \$275.00 being assessed.

- CPL Vaughn and DLEO LeCroy made 1 night hunting case and CPL Welch made a shinning case.
- CPL Welch apprehended a subject for over the limit of deer, where the subject killed 3 deer. He also made a hunting deer over bait case this month and caught 1 subject hunting WMA on Sunday.
- SGT Vaughn and CPL Taylor each made a case of borrowing/lending antlerless deer tags and 1 of the subjects was hunting without license and no big game permit.
- SGT Vaughn and CPL Taylor made 1 case for the unlawful killing of a Grebe on Lake Greenwood.

Unit 1E (Abbeville / Anderson) 1st SGT Rhett Barwick

Officers issued 18 summons and 32 warnings with 16 cases cleared court with fines totaling \$3,187.50 being assessed.

- CPL Ginn and CPL Keeter made 3 hunting deer over a baited area for the month.
- SGT Owens, CPL Keeter, CPL Bensel along with USFS Hedden worked the deer decoy at Parson's Mountain WMA in 3 separate locations resulting in 4 road hunting cases.
- CPL Keeter made 4 cases for hunting hogs out of season on WMA with dogs and 1 illegal possession of antlerless deer for the month.
- CPL Bensel made 2 hunting deer out of season on WMA.

Unit 1F (Edgefield / McCormick) 1st SGT Ron Talbert

Officers issued 27 summons and 41 warnings with 17 cases cleared court with fines totaling \$3,805.00 being assessed.

- 1st SGT Talbert and CPL Cutter made 2 cases for over the limit of game fish.
- CPL Cutter made 2 hunting out of season cases.
- 1st SGT Talbert and CPL Baker made 1 case for night hunting deer where a subject ran a drop cord from his house to a red light where he had a corn pile. 1st SGT Talbert and CPL Baker made a case for trapping without a license.
- 1st SGT Talbert and CPL Baker made a case for an untagged doe.
- CPL's Baker and Bridges made a case for hunting deer over bait.

Region 2 – CPT Sandy Young

Officers issued 126 summons and 257 warnings with 130 cases clearing court with fines of \$20,587.50 being assessed. Officers checked 2,526 hunters and 588 fishermen, and a total of 309 hours were spent on boating patrols resulting in 417 boats inspected. Officers spent 3 hours on Homeland Security and 129 hours on litter patrols, and a total of 228.50 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 16 public presentations. Officers also spent 728 hours on night patrols. There were two hunting accidents during the month.

Captain's Spotlight

- Officers Hanna, Plemmons, Vissage and Ferrell worked a detail this month on deer processors which resulted in several cases being made for deer cooler violations and selling deer meat.
- Officer Britt made one case for hunting deer over bait and two cases for hunting ducks during a closed period.

Unit 2A (Chester, Lancaster, York) 1st SGT Todd Campbell

Officers issued 33 summons and 47 warnings with 22 cases clearing court with fines totaling \$3,192.50 being assessed.

- Unit 2A Officers made a total of seven deer bait cases.
- CPL Rogers made a case for unmarked commercial catfish traps on Lake Wylie.

Unit 2B (Fairfield, Kershaw, Lee) 1st SGT Joey Cobb

Officers issued 37 summons and 80 warnings with 43 cases clearing court with fines totaling \$6,500.00 being assessed.

- Officer Bessinger made a case for the Renegade Hunters Act.
- CPL Baird made a case for night deer hunting.

Unit 2C (Chesterfield, Dillon, Marlboro) 1st SGT John Hillian

Officers issued 9 summons and 14 warnings with 12 cases clearing court with fines totaling \$265.00 being assessed.

- CPL Walters made four cases for hunting ducks after hours.
- PFC David made one case for killing Birds of Prey.

Unit 2D (Darlington, Florence) 1st SGT Benjy Byers

Officers issued 14 summons and 41 warnings with 19 cases clearing court with fines totaling \$3,183.00 being assessed.

- 1st SGT Byers, SGT. Stevens and PFC Driggers made two cases for hunting waterfowl over bait.
- SGT Stevens made two cases for hunting waterfowl after hours and one case for the Renegade Hunters Act.

Unit 2E (Marion, Williamsburg) 1st SGT Bill Huggins

Officers issued 33 summons and 75 warnings with 34 cases clearing court with fines totaling \$7,447.00 being assessed.

- SGT's Kelley and McKnight both made cases for shining deer.
- Officer Oates made an antlerless deer case on Woodbury.

REGIONS 3 & 4, INVESTIGATIONS – MAJ CHISOLM FRAMPTON

Region 3 - CPT Harvin Brock

Officers issued 138 summons and 249 warnings with 116 cases clearing court with fines of \$18,379.75 being assessed. A total of 286 hours were spent on boating patrols resulting in 934 boaters checked. Officers spent 69.5 hours on Homeland Security, 152.5 hours on litter patrols and a total of 32 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 18 public presentations. Officers also spent 870 hours on night patrols. During the month there were 73 hours spent investigating hunting accidents and 6 hours spent on investigating boat accidents.

Captain's Spotlight

- SGT Bickley and CPL Bassard worked 2 baited duck ponds on opposite ends of Richland County. This diligence and dedication paid off with more than 35 waterfowl related contacts.

- 1st SGT Simmons and CPL Johnson worked a SAR and Boat Accident on Lake Murray with assistance from Lexington County Sheriff's Department Marine Patrol for 3 juveniles who capsized their Jon Boat in rough water conditions while duck hunting. 1st SGT Simmons and CPL Johnson along with L.C. Marine Patrol responded from Bundrick Island and located the boys clinging to the overturned boat and decoys in 2-3 foot waves. All were treated for hypothermia by EMS and released to their parents.

Unit 3A (Lexington/Saluda) 1st SGT Ken Simmons

Officers issued 52 summons and 91 warnings with 29 cases clearing court with fines totaling \$3,420.00 being assessed.

- SGT Derrick answered a call about two hunters in a small boat jump shooting ducks on Lake Murray. After further investigation, SGT Derrick made contact with the hunters and met with them. They gave him written statements of their actions and were charged for Jump Shooting Waterfowl and Hunting Waterfowl within 350 Yards of a Residence on Lake Murray. They were also issued warnings for Wanton Waste and Federal Stamp Violations.
- SGT's Derrick and Smith made 2 cases for Over Limit Striper, 2 cases for Undersized Striper and numerous warnings.
- During the closed season SGT's Smith and Derrick made 7 cases for Hunting on WMA during Closed Season.
- SGT DeRienzo and CPL Parrish worked seafood vendors at flea markets resulting in 2 cases for No Bill of Laden on Blue Crabs and Untagged Shellfish as well as other warnings related to seafood vendors.
- SGT DeRienzo and CPL Parrish made 3 cases for Untagged Furbearer Traps and numerous other warnings while working steel traps. One of the subjects charged was caught last year for the same violation.
- CPL Parrish worked along the Congaree and Saluda Rivers resulting in 6 cases for licenses and boating violations.

Unit 3B (Newberry/Richland) 1st SGT Dudley Britt

Officers issued 34 summons and 55 warnings with 39 cases clearing court with fines totaling \$3,612.25 being assessed.

- A subject was charged with taking an antlerless deer and warned for a 300 yard violation.

Unit 3C (Aiken/Allendale/Barnwell) 1st SGT John Bedingfield

Officers issued 7 summons and 35 warnings with 13 cases clearing court with fines totaling \$1,787.50 being assessed.

- Officer's attended the funeral of Aiken DPS officer Scotty Richardson who was murdered in the line of duty.
- Unit officer's assisted in two Wounded Warriors events.
- SGT Allen assisted in the removal of a buck that ran into the backdoor of a house while chasing a doe.
- SGT Pinckney & CPL Bowers worked possible baiting of deer violations on Crackerneck WMA.
- CPL Bowers & CPL Tyler found a missing mentally ill woman at Lake Brown.
- CPL McDaniel assisted the N. Augusta Police Department on a manhunt of an escaped prisoner.

Unit 3D (Bamberg/ Calhoun/ Orangeburg) 1st SGT Farrell Pulaski

Officers issued 8 summons and 22 warnings with 26 cases clearing court with fines totaling \$8,050.00 being assessed.

- SGT Brown apprehended 2 subjects trespassing on property near Springfield while patrolling the area.
- SGT's Herndon, Hiers and CPL Collins and 1st SGT Pulaski assisted Bamberg County on two manhunts for subject escaping and for 4 subjects for burglarizing residents. All subjects were apprehended.
- 1st SGT Pulaski, SGT's Brown and Hiers located 2 missing boaters on the Edisto River.

Unit 3E (Clarendon/Sumter) 1st SGT Gene Morris

Officers issued 37 summons and 46 warnings with 9 cases clearing court with fines totaling \$1,510.00 being assessed

- 1st SGT G. Morris was able to catch two subjects jump shooting waterfowl on the Potato Creek Hatchery WMA and called Officers J. Smith and A. Smith to assist. After further investigation the subjects were also charged for no WMA permit, over the limit of shells, and possession of buck shot.
- 1st SGT G. Morris received information on another date that subjects were hunting on the Federal Refuge in Cantey Bay. Federal Refuge Agent Chris Spivey was called and the two caught three subjects who were all teenagers. They had killed mallards and black ducks. After the investigation Officers had received information from a friend who had slipped in on an earlier date and hunted. They received GPS coordinates from him of the location. The subjects were charged with state charges for Trespassing to Hunt and the Federal Agent seized the ducks.
- Information was received during the month that some subjects were possibly jump shooting or rallying waterfowl at the Bar Pit. Officer A. Smith responded and watched the subjects from a distance. The individuals gave the Officers written statements and were charged for rallying waterfowl and a lifejacket violation.
- Sumter County Officers worked duck hunting and made 2 after hour cases and 3 hunting without a license.
- CPL Jervey also made 2 untagged doe deer cases.
- SGT Wheeler responded to a Hunting accident where a son accidentally shot his Father during a dog drive. The Father is going to survive but still remains in the hospital after the incident that occurred on December 24, 2011.

Region 4 – CPT Gentry Thames

Officers issued 290 summons and 638 warnings with 157 cases clearing court with fines of \$19,087.00 being assessed. Officers checked 4,057 hunters and 1,977 fishermen with a total of 1,096 hours being spent on boating patrols resulting in 1,905 boaters

checked. Officers spent 40 hours on Homeland Security and 106 hours on litter patrols. A total of 112 hours were spent patrolling Heritage Trust Preserve properties. A total of 736 hours were spent on night patrols. Officers gave a total of 14 public presentations. Officers also spent 46 hours on JEA patrols. During the month there were 9 hunting accident investigation hours and 8 boating accident investigation hours conducted.

Captain's Spotlight

- 1st SGT's Ellis, Thomas, SGT's Kinsey and Richardson concluded a 3 year federal investigation into an un-licensed commercial duck impoundment. Resulting in the operator being charged federally.
- CPL Hutson, PFC Robinson and North Carolina Marine Patrol Officers conducted a joint operation in the Little River area. Multiple cases and warnings were written as well as the gathering of valuable information on NC residents harvesting/catching seafood products NC then selling the product in SC. Federal Lacey Act charges are being considered by NC Marine Patrol on multiple subjects.

Unit 4A (Horry) 1st SGT Joe Ard

Officers issued 32 summons and 70 warnings with 26 cases clearing court with fines totaling \$3,120.00 being assessed.

- After finding a freshly shot waterfowl spot, PFC Robinson waited 3 afternoons for hunters to return and they did. PFC Robinson watched the hunters shoot several times and made 3 cases for hunting waterfowl after hours and 1 case for taking Doves out of season.
- SGT Prosser and PFC Robinson have received complaints on deer dog hunters toward the end of deer season. After long hours of surveillance, they caught and charged 5 hunters with Renegade Dog Hunting Act.
- SGT Prosser and PFC Robinson caught 2 people for hunting hogs illegally at night.
- CPL Hutson and PFC Robinson caught 2 people on WMA property shooting Quail out of season.
- CPL Floyd caught and charged 1 person for taking over the limit of Clams.
- SGT Prosser worked a hunting incident involving a man hunting a Bobcat. When the man hit the release button to close the action of his weapon, the weapon discharged and shot himself in the foot.
- CPL Chanaca caught 2 people stealing metal from a concrete plant that the Horry County Police have been looking for in other related thefts of copper and metal.
- PFC Robinson also caught 3 trespassing to hunt waterfowl and 1 untagged antlerless deer. CPL Chanaca caught 1 person for trespassing to hunt waterfowl an unplugged gun.

Unit 4B (Georgetown) 1st SGT Ryan Williams

Officers issued 64 summons and 60 warnings with 0 cases clearing court with fines totaling \$0.00 being assessed.

- SGT Pop and PFC Beacham caught 4 subjects commercially harvesting shellfish on a lease which they did not have permission. The officers were able to observe the subjects for several hours harvesting and then made a half mile walk through the mud to apprehend the subjects.
- CPL's Kaminskas, Capps, and McClellan were able to make an illegal buy of shellfish from 4 subjects. The subjects were harvesting oysters from a recreational ground and selling from their home. CPL McClellan was able to purchase directly from the subjects while undercover. The subjects were charged with Conspiracy to violate Chapter 5, No wholesale dealer's license and improper storage of shellfish.
- 1st SGT Williams and CPL Capps caught 4 subjects hunting ducks over bait.
- CPL's Capps and Kaminskas caught 3 subjects jump shooting ducks in Winyah Bay.
- CPLs Capps and Kaminskas caught 7 subjects shooting waterfowl before hours.

Unit 4C (Charleston North/Berkeley) 1st SGT Angus MacBride

Officers issued 69 summons and 155 warnings with 75 cases clearing court with fines totaling \$9,664.00 being assessed.

- CPL Ben Duncan made 8 cases for hunting closed units of the Francis Marion National Forest.
- SGT Spann apprehended an individual with a doe deer in the Carnes Cross Roads Area.
- CPL Crawford charged an individual with taking of a Seagull while duck hunting with an un-plugged gun.
- CPL Crawford charged 2 individuals, after surveillance, with wanton waste for downing unrecoverable birds in a private impoundment.
- In a joint operation with the US Forestry Law Enforcement, and after numerous complaints, PFC Day went to the Twin Ponds Rifle Range undercover, and reported back to PFC McClellan on litter violations at the facility. PFC McClellan, SGT Monnet, DLEO Dupree and USFS Officer Heitsman waited a short distance away for reports of violations from PFC Day. The accused were stopped a short distance from the facility. 7 cases were made for littering and 2 cases for open container.

Unit 4D (Charleston South/Dorchester) 1st SGT Lee Ellis

Officers issued 31 summons and 138 warnings with 8 cases clearing court with fines totaling \$705.00 being assessed.

- CPL's Ladue and Weaver caught 4 subjects in possession of 7 untagged doe deer on Edisto Island resulting in 2 cases and 5 warnings for possession of untagged doe deer.

- SGT Shelton worked numerous trespass issues in the West Ashley area resulting in a subject being caught trespassing to hunt behind West Ashley High School. The subject fled on foot and hid but was located by SGT Shelton and was cited for trespass to hunt and no hunting license.
- CPL Weaver worked navigation light issues at Dawhoo resulting in 3 citations.
- SGT Smoak and CPL Brown worked crabbing complaints at Sol Legare Landing and discovered a subject in possession of 8 whole Stone Crabs and 22 undersized Blue crabs.
- SGT Kinsey caught 2 subjects trespassing to fish on SCE&G Property.
- SGT Kinsey caught 2 subjects for trespassing after they ran from the property owner.

Unit 4E (Beaufort/Colleton) 1st SGT Michael Paul Thomas

Officers issued 38 summons and 76 warnings with 9 cases clearing with fines totaling \$1,093.00 being assessed.

- SGT Long continues to issue summons tickets for late dealer reports in Units E & F.
- CPL Henderson was involved with 27 over the limit of shrimp violations in Beaufort County. He worked with 1st SGT Thomas, SGT's Smith and Priester, along with PFC's Wallace and Godowns on 2 separate cases to make the cases. He was able to video 1 subject transfer a cooler of Shrimp to another boat.
- CPL JP Jones caught a subject hunting waterfowl over bait in Colleton County.
- CPL Jones also caught a subject trespassing to hunt waterfowl on a plantation in Colleton County.
- 1st SGT Thomas assisted S/A Jay Pilgrim with the USFWS with the take down of a commercial duck impoundment. The impoundment had been under investigation for 3 years. 1st SGT Ellis and SGTs Kinsey and Richardson also assisted with the takedown. The subjects were charged with state charges and federal violations are pending.

Unit 4F (Hampton/Jasper) 1st SGT Michael Paul Thomas

Officers issued 56 summons and 139 warnings with 39 cases clearing with fines totaling \$4,505.00 being assessed.

- CPL Pope assisted with a Veteran's Hunt on Cowden Plantation that was put on by the SCWLEOA.
- CPL Pope charged a subject for purchasing a license by fraud. The non-resident was posing as a SC resident.
- SGT Priester and PFC's Wallace and Godowns worked with Beaufort County Sheriff's Office to catch 3 subjects with 40 quarts of shrimp over the limit.
- SGT Priester, PFC's Davis and Godowns after watching subjects shoot a field, then entered and found cracked corn and wheat in the cut soybean field. Officers determined who placed the bait and charged 2 subjects for placing the bait and also for taking Doves over bait as well.
- PFC Davis and 1st SGT Thomas issued 18 warnings to dog hunters for violation of the Renegade Hunter Act.
- 1st SGT Thomas, SGT Priester, and CPL Henderson watched a subject catch 2 coolers of shrimp in one day. The subject had a boat come meet him and haul the first cooler back to the landing. The subject was stopped on the highway and 1st SGT Thomas stopped the other subject in the river.

Investigations - CPT Gary Sullivan

Officers issued 0 summons and 2 warnings with 3 cases clearing court with \$360.00 in fines assessed. A total of 7 boats were inspected. There was 1 boating fatality this month. There were 4 boating incident/accident reports submitted and processed. There were 6 maintenance request received. There were no Marine Event Permits processed; 1 dive assignment was completed.

- Spotlight-2 boats, 2 motors, and 1 trailer was recovered valued at \$40,990.00

STAFF OPERATIONS – MAJ MARK CAREY

Grants & Legislation – CPT Mike Sabaka

- Completed year end performance reports for the State Recreational Boating Safety grant.
- Attended multiple legislative meetings regarding deer tag proposal.
- Completed draft proposal for combined points systems legislation; forwarded to legislative director.

Records & Technology – Greg Miley

- Summonses processed: 655 Warnings processed: 1,626
- New suspensions processed 38 Pending suspensions: 56
- Suspensions closed: 33 Total active suspensions: 454
- Meetings with IT concerning duplicate Customer ID and SCI Transition.
- Daily corrections and rerunning SCI and Boating Internet reports to balance sales.
- Redesigned mainframe code section database and began audit of valid code sections on file for processing tickets.
- Began mainframe database modifications to implement upcoming interstate wildlife violators compact
- Changed and redesigned 62 mainframe programs and 8 data entry screens to be implemented soon.
- Reviewed contract for new computer aided dispatch CAD software.
- Attended meeting / demo for new SQL server for implementation of a new integrated LE records system

Homeland Security/EMD/Supply-- SSGT Rick Dye

- Coordinated with York County on the Lake Wylie Lake Clearing Plan.
- Coordinated with York County on the Catawba Full Scale Exercise.
- All officers were fitted for body armor & began issuing new vests.

Communications - Vandy Waller

- Installed electronics in 28 new vehicles.
- Pre-wired switches and relays for the new vehicles ordered.
- Used the new Auto Tune software to calibrate 3 mobiles and Wt's.
- Assembled electronic kits for 4 boats ordered and delivered to the factory.
- Working on a digital interference problem for Little Mountain/Santee repeater.
- Continuing the testing and upgrading of the six 4.9 canopy dish's at 4 tower sites and have them working in test mode to check and set levels.
- Total calls for service logged: 1,192
- Litter Buster Total Calls:198 Top three counties; Charleston (47); Greenville (39); Horry (23)
- Total calls forwarded to officers 994: Top three call types: Trespassing to Hunt/Fish (146); General Information Call (114); General Hunting Violation (103)
- Warrant activity for December: Statewide started month with 367, added 5, removed 1, ended month with: 371

Education – LT Billy Downer

Officers issued 1 summons and 5 warnings with 1 case clearing court with \$0.00 in fines assessed. A total of 7 boats were inspected and a total of 4 boating hours were accrued this month. A total of 30 presentations were given to the public.

Lieutenant's Spotlight

- SGT's Bass, Swink, Dawson, Brown and I assisted the Clarendon Unit in a Waterfowl Saturation of local duck impoundments on the second opening day of the Waterfowl Season. These 5 officers checked 59 hunters, issued 3 warnings, issued 1 case for No Federal Duck Stamp and assisted in 2 other License/Stamp cases.
- 1,354 students were certified in 34 Hunter Education classes; 390 students were certified in Hunter Education Internet classes; 104 CD-ROMs were mailed and a total of 159 students were certified in Hunter Education CD-ROM classes; and 55 workbooks were mailed and a total of 13 students were certified by workbook.
- 78 students were certified in 4 Boater Education classes; 27 students were certified in Boater Education Internet classes; 3 students were certified in Boater Education Video classes.
- There were 1,500 shooters at the Pickens Range and 517 shooters at the Spartanburg Range during the month. The Annual Total for the Pickens Range was 14,156 shooters and the Spartanburg Range had 6,686 shooters.

Special Detail/Training – LT Robert McCullough

- **Confiscation Sales:** 6
- **Sales/Equipment buy back:** \$ 1,660.00
- **Property Watch Activity:** 8 signed up for program \$275.00 in sign sales
- **Media/Special Operations:** MLK planning meeting at SLED HQ. Confiscation sale in Fairfield, Chester, York, Lancaster, Williamsburg and Florence Counties. Assisted SGT Swink with the destruction of old Education firearms.

Aviation - Pilots Bucky Harris, Owen Barker

- 18 flights resulting in 60.3 flight hours
- 42.4 law enforcement flight hours; 3.2 biology flight hours 14.7 SAR flight hours

OUTREACH AND SUPPORT SERVICES

EDUCATION

Aquatic Education

- Dan and Lorianne setup trout tanks, chillers and filters for Catawba Trail Elementary, Palmetto High School, Rice Creek Elementary, Brashier Middle College, White Knoll High School, Irmo Middle, Walhalla Middle, Summit Middle Parkway, Blue Ridge Middle and Pendleton High School November 28-December 2 and December 5. The Trout in the Classroom Workshop was held December 7th in the Clemson DNR Office Auditorium for 27 participants. Participants traveled after lunch for a tour of the Walhalla Fish Hatcher. This year's Trout in the Classroom program was expanded from 9 schools to 19 schools.
- Lorianne made the final edits for the Chapter 13 Staff Training Guide that includes fish descriptions and all about the new regulations that will more than likely be effective July 2012. This document will serve to train Law Enforcement Officers on the new regs. The document is waiting for final edits from the Fish Chief before going out for the bidding process.
- Lorianne held discussions with the Wildlife Forever State Fish Art coordinator on potentially partnering our existing SC Reel Art program with this national program. Right now, there are caveats with the Wildlife Forever contest limiting the artists to a set list of species, whereas SC Reel Art encourages artists to learn about all different types of species of fish that are currently found in South Carolina. Since contacts have been made through a mailout to all SC private and public school art teachers, we will not be partnering for the 2012 fish art contest.
- Lorianne met with Katie Yeoman from Chapin Middle School about the potential of starting a school fishing club. Katie received all the materials and is due to make contact again in January for further development.
- Lorianne and Amanda Londo continued to collect data on pier and bank fishing access sites across the state December 20-21 for development of the Fish South Carolina publication and photos of each pier and bank access site for the web.

Camp Wildwood

- Dan prepped and mailed the 2nd and 3rd year invitations on December 16th. Several media outlets were contacted to help publicize the program. The annual contracts were setup with the counselors and professional staff were confirmed for the 2012 camp year. Contact was made with the Garden Club of South Carolina staff to discuss the informational letter that will be distributed to the Garden Clubs throughout the state. Various Facebook groups were developed to better communicate with staff and campers.

Other

- As of January 1st, Lorianne and all the Aquatic Education programs including SC Reel Kids, Reel Art, Trout in the Classroom, Youth Bass Fishing Clubs, Family Fishing Clinics and the Fishing Tackle Loaner Program will be housed under the Wildlife and Freshwater Fisheries Division with Lorianne reporting directly to Lynn Quattro. Funding for these programs has always been provided by the US Fish and Wildlife Service Sport Fish Restoration Program so it just made sense for the project to be under this division. Dan will continue to work in Outreach and Support Services coordinating Camp Wildwood and the education activity at the Palmetto Sportsman's Classic in addition to assisting with social media, SC Wildlife Shop road shows, the video section and setup for the Classic.

Jocassee Gorges Education and Recreation

- * Attended 2011 review of Upstate Master Naturalist class at Pickens County Clemson Extension office.
- * Carried revisions for updated Jocassee Gorges map/driving tour to DNR graphics section in Columbia and reviewed with them.
- * Developed story ideas for Spring/Summer 2012 issue of Jocassee Journal newsletter.
- * Fielded inquiries on recreation (roads open/closed, hunting, hiking, backpacking, paddling, etc.) in Jocassee Gorges and mountain region.

Other

- * Met with Upstate National Hunting and Fishing Day coordinating committee.
- * Helped coordinate and write stories for DNR statewide weekly news package.
- * Fielded animal nuisance calls and calls about hunter and boater education and other general phone questions.

GRAPHICS

- The Graphics section completed twenty-six jobs in the month of December. The SCDNR Christmas Card, several car data tags, Geology Post Card, retirement caricatures, Palmetto Sportsman Classic items and ADQP permit materials were among some of the items completed. The agency spent approximately \$12,300.00 on printing, signs, specialty items and publications this month. This cost is not all state funding but includes grants, nonprofit charitable donations and federal monies as well.

SC Wildlife Magazine/Wildlife Shop

- The January-February 2012 special issue, "First Light," of South Carolina Wildlife, which features photos of early morning activities at first light in the outdoors was distributed to subscribers the first week in January.
- Staff continued editing and lay-out for the March-April Issue, which will go to press the first week in February. DNR-related articles include pieces about the Youth Bass Teams Program, a successful 2011 season of Youth Dove Hunts, and the first installment of the new staff-written feature "Let Me Tell You About My Job."
- March-April issue will also include Ads for the Sportsmen's Classic and the Checkoff for Wildlife Campaign.
- Revenue figures for December 2011 -- Magazine Subscription Sales: \$25,171. Wildlife Shop Product Sales: \$44,940

VIDEO

- Wrote and got approval for Walhalla Hatchery script
- Webcast the board meeting and made DVDs as requested
- Videotaped trout stocking on Saluda River and posted highlights online
- Edited video for fisheries technician meeting
- Worked with LE on surveillance tape in upstate
- Edited new aquatic education video segment
- Included new aquatic education segment in updated license lobby video
- Webcast multi-state Land & Water meeting at State Farmer's Market

NEWS

- 22 news releases for December (weekly news package assembled and sent)
- Assisted Hal Beard in coordinating media for the annual Saluda River helicopter trout drop (WLTX, WACH, WIS, The State and other smaller weeklies attended).
- 31 media/constituent contacts for information on issues ranging from the Savannah River port to deer season.
- Daily updating of the DNR website with new or rotating news releases/photos.
- Implemented a new scheduling application (HootSuite) that allows for planned postings on DNR social media sites (Facebook & Twitter). The app can be scheduled for posts up to a year in advance along with photos and links. The application also allows for monitoring of re-Tweets and FB comments. Also utilized outside news of interest either via our news items sent from Ms Rose or Google Alerts for posting.

PALMETTO SPORTSMEN'S CLASSIC

Palmetto Sportsmen's Classic – March 23-25, 2012 – SC State Fairgrounds

Work on the Classic is progressing very well. The following is a comparison between vendors booked for the 2011 show vs. the 2012 show as of Jan. 10th.

	Jan. 10, 2011	Jan. 10, 2012
Number of Vendors Booked	*70	*232

* number does not include DNR

The Classic booked a larger number of vendors. The reason for this is that the grandfather date (the date vendors can book the same space) was moved from January 11th to July 31st. In the past, the Classic was losing many new vendors because vendors didn't have time to plan and acquire products when told in late January that they had a booth in a March show. Also, the recruiter was not able to recruit quality vendors at other shows because the major show season was over. Finally, this new grandfather date brings the Classic in line with other similar, successful shows.

Entertainment

The classic has booked very popular TV stars for entertainment this year. Lee and Tiffany from The Crush TV show on the outdoor channel will be present the entire time the show is open to the public and will sign autographs. They will also hold a seminar once per day. This is also a critical change which hopefully will increase the number of attendees and add to the

success and popularity of the Classic. In the past, the entertainment choices didn't draw the number of attendees expected. This also brings the classic in line with other similar, successful shows

PROCUREMENT

<u>Purchase Order Transactions</u>		<u>Expenditures</u>
Purchases, Quotes, Bids	61	\$ 1,036,407.11
Blanket Orders	1	\$ 1,274.82
Exempt	2	\$ 1,253.71
Sole Source Procurement	4	\$ 63,443.50
Emergency Procurement	1	\$ 7,000.00
Grant Exemptions	0	\$ 0.00
Total Purchase Orders	69	\$ 1,109,379.14
FPRs	48	\$ 25,630.55
Check Request	40	\$ 124,122.04
Minority Vendors	5	\$ 1,708.97
Procurement Card	1	\$ 229,310.96

RFQ/Bid Awards

<u>Division</u>	<u>Commodity/Service</u>	<u>Requestor</u>	<u>Req #</u>	<u>Contracts</u>	<u>Award Amount</u>
W&FWF	Trap Coyotes	Charles Ruth	5400003787	No	\$ 150,000.00
W&FWF	Crusher Run	Jeff Witt	5400003681	No	\$ 22,875.00
LE	29' Boat & Trailer	Chisolm Frampton	5400003694	Yes	\$ 16,180.00
Marine	R/V Palmetto Rep	Randy Beatty	5400003621	No	\$ 90,000.00
LW&C	Bldg. Addition	Bill Clendenin	5400002888	No	\$ 44,842.00

BOATING ACCESS

Priority	County	Project Name
1 - Completed Projects	Bamberg	Bob Cat Landing Bank Stabilization
2 - Under Contract	Charleston	Santee Coastal Blake House
	Horry	Red Bluff Landing Courtesy Dock
	Kershaw	Hwy. 1 Landing - Lugoff (Phase II)
	Laurens	Belfast Archery Range
	Laurens	Boyd's Mill Pond Boating Access
	Richland	Bates Bridge Landing Ramp Relocation
3 - Permitting & Design	Richland	Geology Building Expansion
	Aiken	Riverview Park Transient Courtesy Dock Addition
	Allendale	Highway 301 Fishing Access
	Anderson	Green Pond Boating Facility
	Colleton	National Estuarine Research Reserve Bank Stabilization
	Dorchester	Bacons Bridge Boat Ramp
	Horry	Hwy 22 and 17 Boating Facility
	Horry	Rosewood (Socastee) Ramp Repair
	Jasper	Knowles Island Fishing Pier
	Jasper	Tuten Landing Resurfacing
	Kershaw	Habitat Enhancement
	Laurens	Belfast Restroom Rehabilitation
	Marion	Hwy 301 Ramp Relocation
Marion	Shotgun Range at Marsh	
Marion	Woodberry Rifle Range	

Priority	County	Project Name
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	Pickens	Pickens Range Archery Range & Tower
	Spartanburg	James Thomason Range
	York	SC Hwy 211 Boating Access
4 - Pending Projects	Anderson	Dolly Cooper Park Canoe Access
	Anderson	Piedmont Access
	Georgetown	Rocky Point Landing
	Horry	Savannah Bluff Ramp Repair
	Laurens	Laurens City Park Archery Range
	Laurens	Reedy River Carry Down Access
	Richland	Columbia Canal Fishing Access
	Saluda	Chapells Boating Access
5 - New Project Requests	Horry	Bucksport Ramp Renovation

TECHNOLOGY

Data Base Management. Continued to develop quality assessment and editing tools to identify problems with customer identification numbers and resolve impacts to licensing and titling programs. Made changes and enhancements to the system based on user recommendation after demonstration of the prototype system to licensing and titling staff. Continued to support the geologic carbon sequestration and geothermal data management projects. Provided continuing support to South Carolina Interactive, agent POS vendor for the DNR licensing program and the Hunter-Boater Education systems. Developed and enhanced test data base to begin unit testing of licensing, POS and Internet systems licensing and titling systems. Due to continued staff shortages and demands on the QA/QC and test database development, we were unable to resume the design of internal financial records management system to interface with SCEIS including the telephone and auxiliary credit card billing systems pending resolution to the customer identification number issues. Performed weekly maintenance and updates to various database and applications programs using the DNR's development framework protocols.

Continued work with the boat titling program and the SCI, POS vendor, to implement and enhance the ImageNow electronic document management system for document and records management. Continued development of a DNR photographic document reference library and provided document management support to the diadromous fish project to evaluate the use of barcode scanning system for data capture. Due to scheduling conflicts, continued the suspension of EDMS project with the Engineering office to integrate facilities management records into the system. Continued document scanning and indexing for hydrologic well data, law enforcement violations/summons billing and aviation log applications. Provided records management and permanent archival support to the agency using record export and archive process. Added 11,258 images and 8,947 records to the electronic document repository and transferred 8,194 boating records to archive.

Continued the suspension of a major project to standardize all DNR GIS data to SC State Plane coordinate system and to establish web services for enhanced sharing of DNR data with other agencies due to changes in project priority and staff shortages. Continued project to generate Digital Elevation Models (DEMs) and 2-foot contours from county LiDAR data. Provided routine maintenance for Managed Lands, Reservoir and WMA data and applications. Continued processing of LiDAR data for counties captured during the 2010 and 2011 flights. Completed second QA/QC review of LiDAR data deliveries for all 2011 project counties and third QA/QC of 2010 project counties. Five previous counties that passed internal QA/QC were evaluated and accepted by the USGS. Provided GIS database and GPS support to the various agency programs.

Systems and Network Management. Completed test deployment of Windows 7 operating system and initiated upgrades on staff computers with Windows 7 licenses. Completed major software upgrade to ImageNow electronic document management system and conversion of old scripts to the new system. Updated data for Flood Insurance Program on agency ftp site. Sent weekly email blast to notify citizens of DNR activities. Added latest security patches and operating system service pack upgrades to agency servers. Continued to monitor and adjust VPN connections for staff at SCI to test the new licensing and titling system that began in mid-November. Continued the conversion of printers to 64-bit drivers. Added backup clients in Columbia, Clemson and Charleston. Resolved several network, email and communications issues. Provided data recovery support to the agency including recovery of deleted files and directories for 2 users. Monitored network, email and server security issues. Continued support to county auditors for mainframe access to DNR boating records. Processed mainframe daily transaction requests. Performed routine mainframe and server system maintenance functions. Researched and developed IT procurement requisitions and provided specification, installation

and configuration support for DNR staff. Help Desk staff answered 92 trouble tickets and developed specifications for four technology procurements.

GIS Applications and Web Development. Provided GIS and cartographic support to DNR staff including the generation of 12 maps for the WMA, River Conservation, Executive Office and other programs. Continued suspension of development of Internet Map Server application for species-based data storage and access because of project priorities. Provided user support for ArcMap and GPS to DNR staff. Continued the design of web pages for an integrated hydrologic/geologic well database application to provide input, editing and analysis of well data. Demonstrated prototype web site to agency staff and initiated changes after user feedback. Provided web site support for the Managed Lands, SC Shellfish, Colonial nesting birds and SC Wildlife Magazine programs. Continued to research the design and implementation of mobile web applications that would not require complete redesign of the DNR web site. Provided routine maintenance of DNR web site including news releases, publications, Board minutes and other agency web pages. Provided routine maintenance of DNR Intranet site. Created 16 new web & intranet pages and updated or modified 192 existing program web pages. Continued enhancement and maintenance of DNR managed lands and reservoir web applications. The DNR web site 173,739 visitors with the agency calendar, rules and regulations and trout book as the most viewed pages. The GIS Data Clearinghouse had 7,198 map files downloaded with LiDAR data (terrains and intensity images), Digital Orthophoto Quarter Quadrangles, hydrography, Digital Raster Graphics, Digital Elevation Models and National Wetlands Inventory as the most commonly downloaded data.

Administrative. Tim De Troye continued to work with various state agencies and local governments to increase statewide participation in the GIS Coordination Council. Jim Scurry continues to meet with South Carolina Interactive regarding the design and implementation of the licensing and titling system scheduled for March 16. Worked with the Division of State Information Technology to establish dedicated network connections between the DNR and SCI to improve bandwidth for the licensing and titling system implementation.

BOATING/LICENSING

Boating Operations December 2011

Basic Business Report

	MTD	Monthly Revenue	(previous ytd)	YTD
Watercraft - New Titles	382	\$4,748.26	\$45,370.00	\$50,118.26
Outboard Motor - New Titles	319	\$3,170.86	\$20,480.00	\$23,650.86
Watercraft - Transfers	994	\$5,715.50	\$35,046.00	\$40,761.50
Outboard Motor - Transfers	758	\$7,580.00	\$40,640.00	\$48,220.00
Internet Registration Renewals	379	\$2,990.00	\$25,400.00	\$28,390.00
DNR Office Renewals	2,272	\$22,720.00	\$54,490.00	\$77,210.00
Mail Renewals	1,297	\$12,970.00	\$98,850.00	\$111,820.00
Law Enforcement Boating Fees (Drew's Law)		\$70,233.00	\$516,822.00	\$587,055.00
Active Watercraft Registrations				362,066
Inactive Watercraft Registrations (including dropped records)				288,506
Total number of Watercraft				365,544

Permitted Marine Dealers

Jan. 1, 07 - Dec. 31, 07	318
Jan. 1, 08 - Dec. 31, 08	363
Jan. 1, 09 - Dec. 31, 09	310
Jan. 1, 10 - Dec. 31, 10	286
Jan. 1, 11- Dec. 31, 11	284
Jan. 1, 12 - Dec. 31, 12	102

Testing and conversion work continues on the Licensing, Permitting and Titling System under development by South Carolina Interactive.

Licensing Operations December 2011

Basic Business Report

	MTD Quantity	MTD Revenue	Last Year MTD Quantity	Last Year MTD Revenue
Resident Hunting Licenses	13,198	\$ 69,775.50	12,956	\$ 69,667.50
Non-Res. Hunting Licenses	3,372	\$ 201,153.00	3,338	\$ 201,707.00
Total	16,570	\$ 270,928.50	16,294	\$ 271,374.50
Resident Fishing Licenses	5,378	\$ 46,362.00	2,541	\$ 21,946.00
Non-Res. Fishing Licenses	3,479	\$ 51,338.00	1,993	\$ 30,664.00
Total	8,857	\$ 97,700.00	4,534	\$ 52,610.00
Combo. Licenses	2,757	\$ 79,771.00	2,412	\$ 70,742.00
3 Yr. Resident Hunt	48	\$ 1,189.50	61	\$ 1,711.50
3 Yr Resident Fishing	122	\$ 3,294.00	87	\$ 2,349.00
3 Yr Non-Res Fishing	17	\$ 1,734.00	7	\$ 714.00
Lifetime Licenses	465	\$ 27,651.00	390	\$ 21,181.00
L/T Disability Licenses	2	\$ -	0	\$ -
3YearDisability	134	\$ -	86	\$ -

Turkey Tags	18,311	\$ 0.00	Opens 03-15-12 Closed 01-01-12
Antlerless Deer Tags	3,348	\$ 16,740.00	Closed 11-08-11
Shrimp Baiting	9	\$ 225.00	

License Agents Numbers and Sales (Month To Date)

LicenseAgents Quantity	Manual	Point of Sale	Internet & Call Center	SCDNR Offices	Totals
	0	507	1	4	512
Total License		21,177	6,939	520	28,636
Total Revenue	\$ 0.00	\$ 278,445.50	\$ 172,430.50	\$ 9,234.00	\$ 460,110.00
% sales to agent type	0.00 %	60.52%	37.5%	2.0%	

NEW POS
AGENTS 0

**Commercial License Operations December 2011
Basic Business Report**

License Type	Licenses Sold		MTD	\$ YTD	\$ YTD Last	
	MTD	Sold Last Month			Month	\$ MTD
Commercial Saltwater Res	1054		1054	\$26,333.75	\$24,661.25	\$1,672.50
Commercial Saltwater Non	146	131	15	\$43,800.00	\$38,715.00	\$5,085.00
Commercial Saltwater Total	1200	1122	78	\$70,133.75	\$63,376.25	\$6,757.50
Trawl Res	285	281	4	\$35,618.75	\$35,006.25	\$612.50
Trawl Non	106	104	2	\$31,800.00	\$30,765.00	\$1,035.00
Trawl Total	391	385	6	\$67,418.75	\$65,771.25	\$1,647.50
Crabs Res	322	306	16	\$18,651.25	\$18,190.00	\$461.25
Crabs Non	13	11	2	\$7,050.00	\$6,149.75	\$900.25
Crabs Total	335	317	18	\$25,701.25	\$24,339.75	\$1,361.50
Shellfish Res	174	139	35	\$13,038.75	\$10,357.50	\$2,681.25
Wholesale Res	245	239	6	\$24,495.00	\$23,830.00	\$665.00
Wholesale Non	10	8	2	\$5,000.00	\$3,950.00	\$1,050.00
Wholesale Total	255	247	8	\$29,495.00	\$27,780.00	\$1,715.00
All Commercial Types Res	3052	2795	257	\$135,789.75	\$128,602.25	\$7,187.50
All Commercial Types Non	302	277	25	\$89,700.00	\$81,173.50	\$8,526.50
All Commercial Types Total	3354	3072	282	\$225,489.75	\$209,775.75	\$15,714.00

SC DEPARTMENT OF NATURAL RESOURCES
WATER RECREATIONAL AND GAME & FISH FUNDS
BALANCES OF AVAILABLE CASH AS OF DECEMBER 31, 2011

REG 1 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Abbeville	83,049.19	21,100.55	945.60	425.30
Anderson	40,643.43	133,040.71	7,886.85	1,485.76
Cherokee	193,736.07	148,665.53	5,397.14	913.80
Edgefield	65,573.29	31,764.47	541.94	1,809.71
Greenville	99,554.29	94,115.82	6,060.04	987.98
Greenwood	78,399.79	40,859.80	3,086.95	486.79
Laurens	107,563.58	44,480.25	2,338.90	4,366.46
McCormick	33,657.19	19,738.80	1,508.28	645.81
Oconee	433,697.72	309,298.59	12,578.32	504.69
Pickens	52,765.73	73,851.22	516.67	1,421.69
Spartanburg	53,676.04	141,463.85	7,744.15	2,474.77
Union	99,210.15	34,434.10	888.75	2,241.01
REG 1 Total	1,341,526.47	1,092,813.69	49,493.59	17,763.77
REG 2 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Chester	162,275.01	44,196.24	968.65	0.00
Chesterfield	52,766.41	17,082.22	1,302.41	489.18
Darlington	198,249.38	17,943.30	861.34	994.44
Dillon	162,820.11	45,568.21	2,047.00	204.82
Fairfield	56,737.51	135,478.11	3,428.89	1,792.58
Florence	412,646.97	48,102.98	1,440.66	389.04
Kershaw	230,135.64	67,784.38	1,896.50	531.45
Lancaster	257,734.45	117,178.17	6,397.33	1,441.72
Lee	105,042.78	11,000.32	109.09	417.29
Marion	118,794.42	25,456.51	389.19	322.58
Marlboro	98,677.87	24,933.87	838.84	486.76
Williamsburg	116,002.98	27,685.65	217.87	601.20
York	223,253.42	170,023.00	23,185.26	876.99
REG 2 Total	2,195,136.95	752,432.96	43,083.03	8,548.05
REG 3 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Aiken	17,778.84	54,497.44	2,703.05	532.04
Allendale	25,994.00	22,748.03	161.65	396.38
Bamberg	61,366.62	14,774.64	134.82	91.58
Barnwell	87,225.51	35,054.03	334.86	1,164.20
Calhoun	70,291.22	34,468.96	577.48	930.14
Clarendon	68,842.77	44,322.65	4,704.45	912.06
Lexington	710,101.31	114,797.01	7,648.43	5,023.23
Newberry	105,669.32	73,583.13	2,964.92	1,158.95
Orangeburg	170,586.28	104,963.03	4,880.38	1,424.16
Richland	328,313.59	94,663.87	8,184.74	681.34
Saluda	113,121.51	52,235.63	1,389.32	619.25
Sumter	165,200.14	27,153.57	1,103.79	1,812.14
REG 3 Total	1,924,491.11	673,261.99	34,787.89	14,745.47
REG 4 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Beaufort	102,561.37	84,824.92	1,338.77	3,986.26
Berkeley	404,064.74	158,048.85	7,910.18	3,395.12
Charleston	512,184.18	74,709.17	2,770.70	7,553.21
Colleton	97,101.38	51,986.40	842.09	803.62
Dorchester	268,053.53	30,577.29	1,118.15	465.05
Georgetown	18,626.91	93,210.12	1,743.17	6,228.30
Hampton	89,635.38	55,672.90	586.26	852.46
Horry	253,036.41	69,189.69	7,966.45	4,447.17
Jasper	60,396.95	70,544.92	1,443.07	2,199.57
REG 4 Total	1,805,660.85	688,764.26	25,718.84	29,930.76
AVAILABLE TOTAL	7,266,815.38	3,207,272.90	153,083.35	70,988.05

LAND, WATER & CONSERVATION

OFFICE OF DEPUTY DIRECTOR

Ken Rentiers attended the S.C. Farm Bureau Annual Conference and Big Farm Show, Myrtle Beach (12/1-12/2). He met with LWC Advisory Committee Chairman Simpson (12/6). Ken attended the DNR Board meeting (12/8). Attended the State Water Plan Stakeholder's meeting @ S.C. Farmers Market (12/15). LWC staff meeting & awards presentation (12/16). Participated in conference call with Georgia EPD, TNC and Corps- Savannah re: Comp II study (12/29).

HABITAT PROTECTION AND ENVIRONMENTAL CONSERVATION SECTION

River Conservation

Broad Scenic River Project:

Staff began reviewing the Draft Environmental Impact Statement issued on Dec 14 by NRC for the Duke Energy proposed Lee Nuclear Station.

Edisto River Basin Project:

Staff participated in Friends of the Edisto (FRED) conference call on Dec 19 in which the group approved a resolution to oppose a proposed interbasin transfer of wastewater from Saluda County and related increases of wastewater discharge to the North Fork at Batesburg-Leesville.

FERC Hydro Projects:

- Catawba-Wateree Hydroelectric Project (FERC Project No. 2232). Staff worked with Duke Energy and NC Wildlife Resources Commission to address needed revisions and updates to the Memorandum of Agreement Concerning Habitat Enhancement and Woody Debris Management for the Catawba-Wateree Hydro Project.
- Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues: DNR staff participated in KT Stakeholder Team meeting on Dec 7 and began reviewing Duke's Revised Study Plan, which was filed with FERC on Dec 22.
- Neal Shoals Hydroelectric Project (FERC Project No. 2315). DNR staff participated in Dec 13 conference calls with SCE&G and other agencies to address SCE&G's proposed reservoir refill plan and to recommend actions needed to measure and monitor the extent and changes of the recent downstream sedimentation event, as well as survey the presence and recovery of fish and macrobenthic organisms. DNR provided consultation with SCE&G on various aspects of the project including plan modifications to refill the project reservoir and close the flood gate (origin of the large sand depositions) on Dec 24.
- Santee Cooper Hydroelectric Project (FERC Project No. 199). DNR staff provided comments on an application to FERC for the proposed Jacks Creek Marina on Lake Marion; and related issues of DNR concern were previously addressed through USACE and SCDHEC permits.

Other Rivers-Program Staff Activity:

- River Management Society -- Staff participated in a RMS National Board conference call on Dec 1. Staff continued planning and participating in committee teleconference calls to organize the April 2012 RMS symposium to be held in Asheville.
- Beach Sweep / River Sweep -- Staff completed compilation of cleanup results reported by the volunteers (Site Captains) who led the Inland Sweep of rivers and lakes in September.

Heritage Trust

Data Management:

Information and data requests - Five requests for verification of known occurrences in the vicinity of project sites were received and answered from:

- URS Corporation for a housing development project in Cowpens,
- Janet Steele, a consultant, as part of baseline documentation for three conservation easements, and
- Carolina Gas Transmission for a natural gas pipeline relocation project in Dorchester County.

Two requests for GIS location data of rare, threatened, and endangered species were received and processed from:

- International Paper for state wide data to be used in certifying forested tracts to FSC Forest Management standards, and
- NC Department of Environment and Natural Resources for data on *Hexastylis naniflora* (Dwarf-flowered Heartleaf) for a USFWS status survey. This plant is endemic to the Piedmont of the Carolinas and is listed for protection under the US Endangered Species Act (USES).

Technical Guidance - Element occurrence records for all USESA plant species are being reviewed as part of the US Fish and Wildlife grant to survey SCDNR lands. These records will be adjusted so that similar information is located in the same data fields across all the records, making comparisons easier. A range map for Henslow's sparrow was updated for

the five-year update of the Comprehensive Wildlife Conservation Strategy. One person was assisted with problems accessing the protected web site.

Heritage Survey:

Approximately 50 specimens were processed to include species identification, vouchers listed, and collection numbers assigned for quick reference.

A new URL (Universal Resource Locator) address was established for the A.C. Moore Herbarium at USC at <http://herbarium.biol.sc.edu>. With this migration the web site now enjoys its own dedicated server which allows for increased flexibility, stability, and potential for new web-based information tools unique to taxonomic specimen collections as reside in museums and herbaria. Underway is the establishment of a Symbiota node called "Flora Carolinian." Funded by National Science Foundation (NSF), Symbiota is open source content management system that facilitates retrieval of biological specimen information from a diverse array of distributed resource databases. By visiting just one site <http://herbarium.biol.sc.edu/floracaroliniana> users will be able to retrieve the compiled records data from both Clemson and USC, home institutions to the state's two largest herbaria.

Trial runs are being conducted using 'smartphone' devices for both navigation and relocating archival data points and boundaries. These data can be stored at non-public URLs and then readily accessed by GPS-enabled 'smartphones' on demand. Below is online Google Map of Peachtree Rock Heritage Preserve augmented to show the property lines, plus point data for known locations of rare plants and animals. By 'mousing-over' a dot, the user sees "Plant" or "Animal," and then clicks to see species name and date last observed at that location, and population size and reproductive status if available. Built-in map features such as continuous update of mouse lat/long, a ruler, and a choice of background image will make it relatively easy for field crews to distinguish new from existing occurrences.

Aquatic Nuisance Species Program

Technical

Staff prepared 2012 Aquatic Plant Management Plan draft for submittal to the Aquatic Plant Management Council in January.

Staff cooperated with the US Army Corps of Engineers and University of Georgia during a routine hydrilla, Stigonematales, and Avian Vacuolar Myelinopathy survey on Lake Strom Thurmond. Staff erected and maintained aquatic nuisance prevention signs throughout the state, and performed yearly maintenance and service to equipment.

Outreach

Staff cooperated with a local Eagle Scout with planning and distribution of aquatic nuisance prevention signs and literature on Lake Murray. Staff met with the herbicide application contractor for an annual review and planning meeting.

CONSERVATION DISTRICTS

Statewide Projects

Staff and conservation district commissioners participated in the State Water Resources Summit.

Technical

Conservation Technical Assistance continued in **Orangeburg, Calhoun, and Bamberg Districts.**

Outreach

Jonathan Williams attended the **Bamberg District** board meeting and Young Farmers meeting in **Orangeburg District**. Marc Cribb participated in district events in **Aiken, Lexington, and Saluda Districts.**

Conservation Districts

Abbeville District's Arbor Day programs were attended by 3,077 Abbeville County School District students in grades K4-8. Soils program was presented to eighteen 3rd grade students at Westwood Elementary. The John C. Calhoun Elementary K5 students enjoyed a wildlife program that included making pine cone bird feeders.

Anderson District, along with the USDA-NRCS and Clemson Extension 4-H, presented an Arbor Day Program and planted a tree for 5 Anderson County Elementary School 4th graders. There were more than 325 students educated on the importance of trees and how to plant a tree. At the end of each presentation, each fourth grade group assisted in planting an evergreen tree on school grounds. Each child received a copy of The Forest Fun Book, compliments of the SC Forestry Commission.

Barnwell District started their 2012 Affiliate Membership drive. Commissioner Sullivan contributed an article to a local newspaper asking people to make litter awareness a daily and year-round effort by “stashing their trash” instead of littering our highways. District staff presented programs on Endangered Wildlife, Life in a Fish Bowl, and Stewards of the Land for 26 third grade students at Barnwell Primary School.

Beaufort District and NRCS met with owners about a proposal for a manure composting shed and erosion control improvements for the Okatie Watershed 319 Grant. District education staff has been busy teaching environmental science to a class of 6th grade students. They also made recycled ornaments for Festival of Trees and won first place for “Beautiful Beaufort, Under the Sea”. The district is receiving an RC&D Youth Grant of \$1,750 for “ACE Basin Alive! The District is also partnering with Beaufort County, Sea Grant, Clemson Extension, and other agencies to celebrate World Ocean Day in June.

Charleston District advertised an Invitation for Bids for Installation of Residential Septic Systems in the Sewee to Santee Watershed Project. This project was funded wholly or in part by the US EPA under a Section 319 Grant through the SC Department of Health and Environmental Control.

Lancaster District held two Arbor Day programs at Buford Middle School and Indian Land Elementary School. The District presented an eastern redbud tree to the schools, which was planted on the school grounds. The District received a grant from the South Carolina Soil and Water Conservation Society for Indian Land Elementary School’s Arbor Day event. Buford Middle School won the conservation district’s annual Arbor Day contest and the school planted the tree in memory of a student. The staff gave the DNR Hunter’s Education test to 3 people. 2011 Conservation Contest Winners were announced for the Poster Contest “Soil to Spoon” and for the 2011 Fall Conservation Photo Contest. Amanda Roberts and Elizabeth Hunter, Earth Team Volunteer, did a soils presentation for eighty 5th graders at McDonald Green School. Staff gave a soils presentation for seventy 4th graders at Erwin Elementary School. Nancy Fleming, Associate Commissioner and Elizabeth Hunter have helped prepare goodie bags for the students and other mailing this past month. Lexington County Council presented a “**Resolution**” to **Lexington District** proclaiming Friday, December 2, 2011 as **ARBOR DAY** urging all citizens to celebrate Arbor Day and to support efforts to protect our trees and woodlands. Six schools participated in an Arbor Day program that involves 690 fourth grade students. Teachers were provided resource information to develop classroom activities. The trees were donated to the schools by the Palmetto Pride Organization, through a grant arranged by the district.

Newberry District sponsored Ruby Raindrop and Sammy Soils in the Newberry Christmas Parade. They also attended the Prosperity Christmas Parade made a special appearance in the Whitmire Christmas Parade. The District made a presentation during Reuben Elementary School’s Environmental Club Meeting. The 2012 Annual Affiliate Membership Drive is underway as well as our Annual Soil Sampling Program which is celebrating its 12th year.

Oconee District continued to implement Classroom visitation programs with the Oconee County School District. The District office is also involved in the planning of the Chattooga River Festival scheduled for June 22-24, 2012 and will highlight and promote the conservation of the Chattooga River, its watershed, natural resource conservation and public use access.

Orangeburg District sponsored an Arbor Day Essay Contest for the 5th graders. The winners of the 2011 Arbor Day Essay Contest were: St. James-Gaillard Elementary and Whittaker Elementary School.

Pickens District publicized and participated in a public meeting on PCB contamination of Twelve Mile River held by EPA. The meeting was to discuss EPA’s plans to investigate PCB contamination exposed in floodplains following the removal of the Woodside dams near Cateechee, SC. The plan includes initiating a Remedial Investigation of contamination and a Risk Assessment to human health based upon the findings.

Richland District co-hosted the Richland Farm-City Week Awards event with approximately 190 people in attendance. 40 awards were presented to Richland County students, teachers, and schools for their work in conservation. The District also sponsored an Arbor Day Celebration at Forest Heights Elementary featuring guest educator Tim Womick. A white oak tree was planted after the Celebration through funding from an Arbor Day Grant from the SC Soil and Water Conservation Society. Through the Conservation Station, the District sponsored conservation education programs for 70 students. District staff members continue to mentor twelve Green Steps projects at seven schools. Staff participated in the Rural Resources Coalition Meeting and began collaborating with NRCS to promote EQIP sign-up, certified organic produce, and sustainable agriculture in Richland County.

Spartanburg District staff led guided hikes on the nature trail at the historic Price House, and held a wildlife program for 7th and 8th graders at McCracken Middle School. Staff also organized a recycling program for Hendrix Elementary after-school environmental club, and assisted Chapman Elementary with the Green Steps Schools program.

York District assisted two kindergarten classes in planning a spring planting project. District staff judged water conservation projects for 21 teams of pre-engineering students at Northwestern High School and provided technical assistance to two schools establishing outdoor learning spaces. The District contracted to become grantee on a conservation easement; conducted Arbor Day programs at three schools; provided trees and participated in tree planting ceremony at 2 schools; and rented no-till drills to 2 users to plant 108 acres.

EARTH SCIENCE GROUP
South Carolina Geological Survey
Geological Information

STATEMAP: Twenty-four (24) holes were drilled in support of Georgetown mapping project; 8 were drilled in the town limits to support the sinkhole investigation. Visits also were made to Georgetown (Georgetown County, Region 4) to observe F&ME contractors drill adjacent to a number of sinkholes. Recovered samples were examined in their logging facilities in Columbia; Will Doar subsequently logged 7 (523 ft) of the F&ME cores. To further address the problem, plans were revised to include mapping Georgetown North quadrangle (Region 4) this year.

Outsource Mapping: Mapping focused on delineating faulting on Little Pinnacle Mountain, north of Highway 276, and in Oil Camp Creek, west of River Falls Road (Cleveland quadrangle, Greenville County, Region 1). Oblique movements along northwest-striking faults move Six Mile nappe rocks down-to-the-east against Table Rock gneiss (Walhalla nappe) in Oil Camp Creek. Reconnaissance also was done in the northwest corner of Table Rock quadrangle (Greenville County, Region 1).

Coastal Projects: The Coastal Change Project is awaiting an organizational planning meeting between cooperating partners. SET stations in the ACE Basin NERR were measured. One of the station piers is damaged and needs repair before it can be measured. Several people from DNR-MRD also went out to see and learn about the SET array.

EMD Hazards Map: A paper on the 1913 Union Earthquake, authored by Pradeep Talwani and Scott Howard, was submitted to *South Carolina Geology*.

CO2: Portions of Clubhouse Crossroad cores were delivered from the USGS. Core material includes Triassic red beds, which will be analyzed for their hydrologic properties. Work continued on a manuscript, titled *The Early Triassic Eagle Mills series rift basins*, that interprets geodynamics of the South Georgia rift basin. The different rift basins that make up the series also were compiled from the literature into a single graphic.

Broad River Project: The Soil and Water Assessment Tool (*SWAT*) model was selected to serve as the primary delineation, load and flux model for the Broad River Project. A variation of the model will be used and is called *ArcSWAT*, which is supported by the USDA (free). *ArcSWAT* works as an extension in *ArcGIS* and can be used to measure the impact of human development and land management practices. 30-year climate normals for the Broad River Watershed were downloaded and used to run a preliminary simulation with the numerical model *HydroTrend*. Preliminary results are in good agreement with observed data for water discharge; however, there is no sediment data to verify computed results. Kerry Castle contacted three USC students who have shown an interest in working on the Broad River Project. Dr. Castle also set up a meeting with Steven Langford, MacIntyre Sand Company, scheduled a tentative field visit to Lockhart (Union County, Region 1), and monitored the excess sediment situation at Neal Shoals dam.

General: Two earthquakes occurred in South Carolina; both were in the Summerville area (Region 4). Earthquakes also continue to occur around Mineral, Virginia. Construction related to the renovation of the Core Repository is complete; inspection for R&I needs to be finished before the area is used. Minor repairs to the drill rig included a hydraulic line and rewelding of cracks in frame. Mr. Doar attended a meeting in Georgetown to discuss the sinkhole problem; gave a talk at Palmetto Bluff in Beaufort County (Region 4) about the mapping, geology, and side projects that have grown out of the mapping of the Low Country; and is working on 2 manuscripts, one with Ralph Willoughby and the other with Art Schultz (Savannah River studies).

Digital Products and the Digital Information Group (DIG)

General: A Georgetown sinkhole map and cross section were created. Earthquake updates were made to webpage. Recent news stories also were added to the SCCO2 webpage. Web statistics show page requests per day were up 30% in 2011 over 2010. 305 downloads of map layers (85) and education material (220). Fifteen (15) maps and publications printed upon demand. OFR-49 (REE Elements in stream sediments) was converted to a digital format. Updates also were made to OFR-159 (Chesnee quadrangle, Cherokee County, Region 1)). Erin Koch solved a problem of exporting *Shapefiles* to *MaPublisher* with help from Avenza.

STATEMAP: The Cleveland map product (GQM 33, Greenville County, Region 1) is being updated.

Data Preservation: Keyonia Gallman continued to scan drill-hole logs, reports, and site maps into the Document Management Workflow. A total of 3558 records are in the Document Management System; 715 have been QA/QC'ed and are complete. New QA/QC Workflow was added to Geology Drawer in Image Now to store the finalized drill log records.

CO2: A database meeting on December 12 discussed structure of top tabs, flow, functionality, and minor changes that have been made. Other issues discussed included calling on SDE layers to auto-fill required fields, guest interface set-up, and advance search queries.

Geothermal: Suggested changes were made to the geophysical log dataset and all datasets were grouped into a state-wide file. URI's were added per request of the Arizona Geological Survey. A data set for geophysical logs also was submitted to the Arizona Geological Survey and reviewed. Corrections will be made prior to final submission.

EMD Hazards Map: A new graphic product was produced in addition to Geologic Hazards Map. Bids have been made, and maps are ready for printing.

Outreach

General: New South Carolina Geologic Map postcards were received and began to be distributed. General information was provided to more than 20 customers.

Hydrology Section

Water Planning: The Hydrology Section prepared a presentation describing the direction of Water Planning in South Carolina. Deputy Director Ken Rentiers gave the presentation at the December 15 *South Carolina Statewide Water Resources Management Summit*, hosted by the South Carolina Natural Resources Society.

Savannah River Basin: The Hydrology Section continued working with DHEC, Georgia EPD, and the Nature Conservancy to resolve issues that are delaying the finalization of a cost-sharing agreement with the USA Corps of Engineers that would initiate a study to evaluate the Corps' current drought contingency plan for the its Savannah River lakes.

ADR Network: Approximately 75 Coastal Plain ADR wells were field checked; data were downloaded, manual measurements were made, and equipment checked at each well.

Potentiometric Mapping: Final edits were made to drafts of the November 2009 Black Creek and Middendorf aquifer potentiometric map reports. Brenda Hockensmith, Scott Harder, Andrew Wachob, and Joe Gellici, assisted by Geological Survey personnel, measured water levels in numerous wells screened in the Middendorf aquifer for a new November 2011 potentiometric map report.

Nuclear Licensing: Mr. Harder reviewed the draft Environmental Impact Statement developed for the licensing of Duke Energy's Lee Nuclear Plant, specifically reviewing the Broad River streamflow statistics and the water-balance model used to assess water needs during low flows. Comments currently are being finalized and will be provided to the Environmental Office.

Websites and Databases: 245, new well reports that were received from DHEC were sorted and processed. Maps showing the locations of wells in Region 2 (Florence, Sumter Counties), Region 3 (Allendale, Bamberg Counties), and Region 4 (Colleton County) were produced. A meeting was held with the Geological Survey and SCDNR-IT staff to review and discuss efforts to develop a comprehensive Oracle database containing well data.

Outreach: Hydrologic information or assistance was provided to 27 customers. Ms. Hockensmith attended an advisory group meeting regarding the Charleston Harbor Deeping Project held at the USA Corps of Engineers – Charleston Division to discuss the availability and sources of existing data and where data gaps exist that require further investigations.

Flood Mitigation Program

Outreach: After Maria Lamm met with the Ali Kahn, Floodplain Manager for City of Columbia, and Gerald Lonan regarding Lake Katherine and the City's moratorium on additions in the Special Flood Hazard Area (SFHA) of Lake Katherine, it was determined that their limited study with No-Impact Certifications would not meet the Letter of Map Revision (LOMR) requirements. Mrs. Lamm processed the extension for the Community Assistance Program (CAP) grant; and followed up on Community Assistance Visits (CAVs) for Port Royal (Beaufort County, Region 4), Myrtle Beach (Horry County, Region 4), and Pickens County (Region 1). Joy Sullivan, along with Mrs. Lamm and AECOM (mapping contractor), attended and provided assistance at the Greenville County (Region 1) PDCC (Preliminary DFIRM Community Coordination) meeting, as well as the first ever Risk MAP open house that immediately followed. Mrs. Sullivan continues the completion process of the Greenville County PDCC Meeting minutes in preparation of providing to each Greenville County municipality, as well as those communities that were not in attendance. She also 1) provided a statewide notification via the Flood Mitigation list serve of the scheduled Certified Floodplain Manager (CFM) exam to be proctored by SCDNR on January 23, 2012, 2) coordinated with the SCDNR Webmaster in uploading the preliminary Flood Insurance Rate Maps (FIRMs) for Greenville County (Region 1) and Orangeburg and Clarendon Counties (Region 3) to the DNR website for public review under the Expanded Appeals Process of Risk MAP, and 4) sent out the quarterly Flood Mitigation Program Newsletter, *The Mitigation Minute* via the list serve. Karen Jones assisted the Town of Clio (Marlboro County, Region 2) in its ordinance adoption process for their successful admittance into the National Flood Insurance Program (NFIP), as well as followed up with 21 communities throughout the state on their Community Assistance Telephone Contact (CAC-T) process. Andy Brandenburg made a CAV visit to Goose Creek municipality, as well as Charleston and Dorchester County offices (Region 4), and a CAC visit to Kiawah Island (Region 4).

Compliance and Ordinances: 23 ordinance reviews were completed for communities involved with CAV/CACs (Community Assistance Visit/Contact) and application to the NFIP (National Flood Insurance Program). Mrs. Sullivan provided assistance to the Town of Turbeville (Clarendon County, Region 3) in preparation of joining the NFIP.

Mitigation Activities: Mr. Brandenburg continued to provide assistance to Edisto Beach (Charleston County, Region 4), and Richland County (Region 3) in the implementation of various flood mitigation activities to structures located within those communities. Along with Mrs. Lamm, he submitted Mitigation and SCDNR technical assistance grant applications to FEMA for them.

General: Mrs. Sullivan continues to study for the upcoming CFM exam. Staff made 37 updates to the FEMA CIS (Community Information System) database. In addition, there were 298 technical assistance contacts (phone calls and

emails) for the month of December. Ms. Jones and Mrs. Sullivan continued to update the website.

Other Activities: C.W. Clendenin gave a brief presentation on *Geologic Mapping* at the *South Carolina Statewide Water Resources Management Summit* hosted by the South Carolina Natural Resources Society on December 15. He also attended the annual meeting of the South Carolina Mining Council.

Partnering:

Furman University

SCEMD

South Atlantic Alliance – SAA

USGS – Earth Surface Processes

SCDHEC-OCRM

University of South Carolina -ESRI

Team

STATE CLIMATE OFFICE

The SCO answered 30 information requests with three invoiced for \$75 and twelve media interviews were provided. The Assistant State Climatologist for Service assisted SCDNR Law Enforcement with one accident investigation. Special weather summaries were prepared for the severe weather event of December 6-7, the heavy rains of December 20-27 and the hard freeze of Dec 29. He completed the 2011 SC Year in Review Annual Weather Summary which is available online at http://www.dnr.sc.gov/climate/sco/ClimateData/yearly/cli_sc2011review.php. Weekly he prepared a weather summary that is published online and provided SC USDA -NASS with the December 2011 agricultural weather summary. The office distributed four rain gages to CoCoRaHS network of volunteer rainfall observers courtesy of the Harry Hampton Fund. The rain gauges are being used to enhance South Carolina's grassroots rainfall monitoring program (CoCoRaHS).

The Severe Weather Liaison continued work on the Southeast Temperature and Precipitation change study, extending the trend analysis through 2010 for 65 stations in Georgia, South Carolina and North Carolina. The project will be completed and made available to the public in January. He continued routine support for the Electric Cooperative of SC, Inc. by providing monthly temperature and heating degree day data.

The State Climatologist participated in the Carolinas Integrated Science and Assessment (CISA) monthly conference call (12/2). She met with Dr. Terry Ferguson from Wofford College to discuss weather station installation at the Goodall Environmental Center in Spartanburg County.

She participated in a conference call with State forest extension staff to discuss opportunities for climatologists in the Southeast to provide climate outreach and expertise in support of forest extension efforts (12/6). She met with two SCDNR Board Members to discuss revisions to the SCDNR Climate Change Impacts to Natural Resources report. She participated in a conference call with CISA and Ken McDermond, Coordinator, South Atlantic Landscape Conservation Cooperative to discuss collaboration on future climate workshops in South Carolina (12/9). She provided a drought update presentation at the South Carolina Statewide Water Resources Management Summit (12/15).

During the SCDNR Board Meeting, Mr. Frampton distributed the SCDNR Climate Change Impacts to Natural Resources report requesting the Board's consideration and approval.