

Tree Country

November/December 2020



the employee
newsletter of the
South Carolina
Forestry Commission

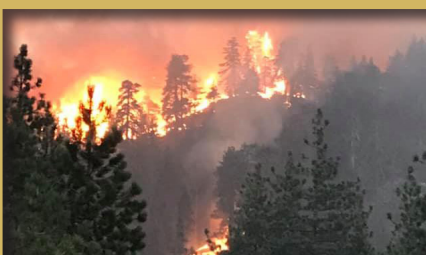
INSIDE THIS ISSUE



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Agency Assists With Sumter Warehouse Fire
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Western Fire Detail
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from the desk of

STATE FORESTER

Scott Phillips



By the time you read this column we will be closing in on the final days and weeks of 2020. I'm sure many of you are like me and have already begun looking forward to 2021 with hope and optimism.

To say that 2020 has been a challenging year would be an understatement. We have all had to improvise, adapt and overcome as the global pandemic changed our lives in ways we never expected. But even with all these changes and challenges we have much to be thankful for.

From an agency perspective, a good team and a resilient South Carolina economy are at the top of my list this year. As the pandemic swept across the globe many changes were enacted to slow the spread. These changes impacted state and national economies, how business is conducted, and our everyday lives. As changes affected the Forestry Commission our team did a great job of adapting so as to provide for the safety of our employees while giving flexibility needed to work in this new environment and minimizing the impacts on our operations.

Our state leaders adapted also, wisely pressing pause on the FY2021

budget process, which was more than two-thirds complete. A continuing resolution was passed that held agency budgets at FY2020 levels while much of the projected state surplus was set aside to create a buffer against economic uncertainty. Recent forecasts from SC's Revenue and Fiscal Affairs Office indicate that while the general fund projected revenue for FY2021 has decreased substantially, the state's budget still has a positive balance, and is predicted to grow nearly 2% in FY2022. SC's economy has taken quite a hit, but it has stabilized and appears to be recovering. This is very positive news as we head into 2021.

We have also made great strides this year. The revision of our Strategic Plan and Forest Action plan were both completed with an eye toward integrating them in a way that aligns our agency's focus. The Strategic Plan lays out our mission, vision, goals and strategies while the Forest Action Plan



The SC National Guard presented State Forester Scott Phillips a plaque Nov. 23 at the SCFC headquarters in recognition of our partnership. Present were SC National Guard Family Care State Family Programs Director and U.S. Army Sgt. Major Chet Welch, SC National Guard Family Care Programs Interim Director Major Grace Parsons, State Forester Scott Phillips, SCNG Child & Youth Program Coordinator Jerome Flippins and SC National Guard Child and Youth Programs Lead Coordinator James E. Harris Jr.



evaluates opportunities and threats, linking our strategies to actions and landscapes. Together these documents will help guide our agency and our partners forward over the next decade, and we are already starting to see their impacts.

At the November meeting of the Board of Commissioners we unveiled our first Strategic Plan Progress Report using a new dashboard format highlighting some of the performance indicators identified in our new strategic plan. This dashboard format provides our leadership an at-a-glance look at the agency's performance during the first quarter of this year. Response from the Commissioners was very positive, and as we build out our performance measures and refine this report I expect it will create even more value for our Commissioners and our agency.

Another product of the strategic planning process is the recently completed employee engagement "pulse survey." These short surveys provide frequent feedback from employees to allow the agency to better monitor employee engagement. The results of the survey completed in October were

very positive and indicate a significant increase in employee engagement compared to the 2018 employee engagement survey. We are moving in the right direction as we work to make the Commission a more desirable workplace. More information on the survey results can be found on page 3.

On the legislative front, the general assembly passed the Firefighter Cancer Health Benefit Plan. This is great legislation, as it provides additional benefits for firefighters who are diagnosed with certain types of cancer related to our profession. Working with Senator Thomas Alexander and other bill sponsors we were able to ensure Commission firefighters are covered by this important new legislation.

From a personal perspective, I am very thankful for our forestry community. As many of you are aware, my mother passed away this fall. The outpouring of support from our Forestry Commission family and friends was amazing. Each of your calls, cards, emails and texts meant a lot to me and my family. Being on the receiving end of these expressions of sympathy made me very grateful to work in tight-knit community like ours.

After the year 2020 has been, we are being blessed with a stellar gift Dec. 21. The "Christmas Star or Bethlehem Star" that will be visible this year for the first time in 800 years. See page 32 for more information.

This holiday season will be much different than any we have experienced in our lifetime. As you safely gather with your families and friends to celebrate the holidays, take a look back at all the blessings in your life and take a moment to express your gratitude. Also, remember those who are less fortunate and those who may be struggling this holiday season. When you have the opportunity I encourage each of you to lift up those who are troubled and share your blessings. The holidays are a time for giving.

Merry Christmas!

Scott



The cover photo features a beautiful stand of loblolly pines in Newberry County.

JUST FOR FUN...



See if you can find the hidden dozer located somewhere in this issue of Tree Country. (It will be smaller than the one to the left and NO, it isn't the one in the header of the Safety Message.)



State Forester Scott Phillips wishes everyone a happy and safe holiday season!

Pulse survey shows big gains in employee satisfaction, morale

In August 2020, the South Carolina Forestry Commission contracted with Strong Performance-Based Solutions, LLC to conduct a “pulse” survey of a 20% sample of our agency’s employees. As the name suggests, these brief appraisals serve as periodic pulse checks of employee engagement between what will be triennial surveys of the entire workforce, as was done in 2018. What we learned was very encouraging!

The survey was administered electronically and by mail to 70 full-time equivalent (FTE) and temporary employees. A total of 45 surveys were returned for a response rate of 64.3%, a very good return rate that perhaps hinted at the positivity of the responses. The survey included four standard employee engagement statements using a five-point Likert scale ranging from “strongly agree” to “strongly disagree.” The overall response to the survey was extremely positive on the first four questions, which were:

- Q1: Employees are proud to belong to this organization;
- Q2: I look forward to coming to work each day;
- Q3: I would recommend that a friend seek employment with the SCFC; and
- Q4: This organization is a good place to work.

These four questions appeared in the original agency-wide employee engagement study that the agency commissioned back in 2018. The responses garnered in this round of pulse surveys were measured against the original positivity rates to the same questions, and we were pleased to discover *an improvement of more than 22 percentage points*, on average, among all four.

The recent pulse survey featured one additional question that was more specific to the agency’s recently revised strategic plan:

Q5: I feel good about the direction of the new SCFC strategic plan.

Fifty-three percent of respondents reacted positively to this statement, which we learned from employees’ comments had more to do with a lack of familiarity with the plan than a negative view of it.

The retooling of the strategic plan and its accompanying quarterly progress report was one of several of State Forester Scott Phillips’ major initiatives announced at the beginning of his tenure in January 2018.

It is important that every employee, whether they provide direct reporting on the plan or not, be familiar with the performance measures and indices that agency leadership is tracking so that we all can see how our roles fit into the larger picture of agency operations.

To that end, we invite all employees to view/download both the strategic plan and its companion document that lists all of the key performance indicators.

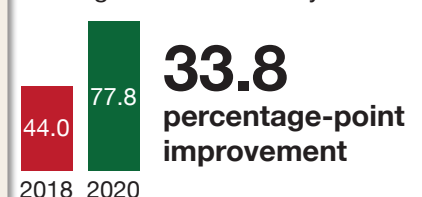
Strategic Plan
www.trees.sc.gov/docs/strategicplan.pdf

Key Performance Indicators
www.trees.sc.gov/strategicplankpis.pdf

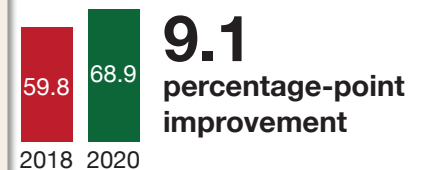
Question 1: Employees are proud to belong to this organization.



Question 2: I look forward to coming to work each day.



Question 3: I would recommend that a friend seek employment with the SCFC.



Question 4: This organization is a good place to work.





Driving Safety

Driving is one of the most hazardous things we do because we literally perform the task hundreds of times in the course of our daily lives – we tend to take it for granted. Based on recent accident trends, **vehicle accidents are the source of more deaths and serious injuries to wildland firefighters than any other single cause.**

- To be a safe driver you have to want to be one. Take a good hard look at your driving habits. Are you training yourself to do the right things the right way, like fastening your seat belt, checking your mirrors, and maintaining safe following distances?
- Inattentiveness is a major contributing factor in motor vehicle accidents within the wildland firefighting community. Since the average adult attention span is 15-20 minutes we must develop techniques that allow us to refocus our attention on our driving.
- Many things can lure our attention away from our driving such as fatigue, eating and drinking, reading directions and maps, writing, cell phone and radio use, conversation within the vehicle, and music.
 - Drive only when you are well rested and alert and avoid driving during the hours of 10 p.m. and 6 a.m. Take a 10- to 15-minute break every 2 hours.
 - Practice situational awareness; be aware of what is happening in front, behind and on both sides of your vehicle.
 - Never drive when taking medications that make you drowsy.
 - Delegate navigation and communication to a passenger or pull over.
 - By constantly moving your vision, checking mirrors, and distant road conditions, you can avoid highway hypnosis and daydreaming.
 - Avoid eating or drinking while driving.
 - When talking with passengers, keep your eyes on the road and both hands on the steering wheel. Avoid serious or argumentative conversations.
 - Switch off driving with others if multiple people are in the vehicle.
 - Do not be in a hurry; be patient.
- Safe driving starts with a safe vehicle. Something as simple as under-inflated tires can have serious consequences. Before operating any vehicle, do a walk-around to look for potential problems, make sure the lights and turn signals work, and adjust your seat and mirrors. If it is the first time you have driven the vehicle, make yourself aware of where everything is before starting on your trip.



Provided by Training & Safety Manager Stephen Patterson



This safety message comes from the National Wildfire Coordinating Group (NWCG) Risk Management Committee's Six Minutes for Safety Program. <https://www.nwcg.gov/committee/6mfs>



Human Resources

Employee News New Employees

Human Resources

- Lynn Rivers

Please welcome several new employees who started with the agency since October.



Kiki Allen

Kiki Allen is a new Dispatcher at the Pee Dee Regional Dispatch Center. Kiki started Nov. 17 and lives in Florence. She attended West Florence High School and worked at the Open Hand Nursing Agency. Kiki enjoys spending her free time with her daughter Lyric and wife Stephanie.

Carla Castro started Oct. 2 as the new Tree Improvement Program Specialist. Carla will be working out of the Niederhof Forestry Center in Jasper County. Carla is from Brazil but now lives in Hardeeville. She graduated from the Universidade Federal de Viçosa (UFV) in Viçosa, Brazil with a bachelor's degree in forest engineering and a master's degree in genetics and plant breeding. During the last few years, she was a member of the research group in Genetics and Forest Improvement (GenMFlor). Before that, Carla had internships at Klabin S/A, Aperam Bioenergia and at UFV Laboratories. She was a trainee, manager, Director of Marketing and President at Florestal Jr. Consultoria UFV. In her spare time, Carla enjoys painting, hiking, yoga, jogging, cooking, watching TV series and movies.



Carla Castro

Benefits Coordinator **Allison Doherty** is returning to the Commission working in the Human Resources Office Dec. 9. Welcome back Allison!



Leroy Henry

Leroy Henry is the new Fiscal Technician II at the headquarters. Leroy started Nov. 17 and lives in Columbia. He attended Richland Northeast High School and received his business finance degree from Columbia Southern University in Orange Beach, Ala. He retired from the Army in January 2020 after serving for 25 years. Leroy has two kids, and he is a volunteer coach for youth basketball and track.

Clay Howard returns to the Forestry Commission as a General Maintenance Technician I at Manchester State Forest. He started November 17. Clay previously worked at Manchester for four-and-a-half years. He lives in Sumter and graduated from Spartanburg Community College with an associate degree in horticulture and from Central Carolina Technical College with an associate degree in natural resource management. Besides working with the Commission previously, Clay worked as the Greenville Water Team Leader at the Greenville Watershed. He enjoys hunting, fishing and camping in his spare time. Clay also enjoys traveling when he can do all three and listening to live music.



Clay Howard



Stephanie Morton

Stephanie Morton is the new Accounting Manager. She started Oct. 19 at the headquarters. Stephanie lives in Columbia and has worked in finance in state government for over 15 years. She graduated from Southern Wesleyan University. Stephanie is very family-oriented and loves going to the beach.

Adam Smith is the new RCW Forestry Technician II at Sand Hills State Forest. He started Nov. 2 and lives in Patrick. Adam attended Clemson University and previously did an FIA internship with the Commission in the summer of 2019. He was previously a quality control technician at Canfor Southern Pine in Camden. In his free time Adam enjoys riding motorcycles and archery.



Adam Smith



Trikie Walker

Trikie Walker is another new Dispatcher for the Pee Dee Region. She started Dec. 2 and lives in Darlington. Trikie was previously a fiber industry security officer. Please welcome all of the new employees when you see them!

Human Resources

Farewells

Beaufort/Jasper Sector Forestry Technician **Joey Ramsey** resigned Oct. 29.

Allendale/Hampton/Jasper Project Forester **Jeremy Crosby** resigned Nov. 20.

Human Resources

- Lynn Rivers

Retiree News

Retired Johns Island Tower Operator **Ada Acklin Glover** passed away Oct. 5.

Retired Pee Dee Pilot **Frank Brown** passed away Oct. 20.

Retired tower operator **Eleanor Ruth Farmer** passed away Oct. 20. Eleanor operated the Camden and Westville Fire Towers. She was at Westville when they closed it down.

Please keep their families in your thoughts and prayers.

WHO ARE THESE MASKED EMPLOYEES?



Hint: This person works in the woods surrounded by a city.

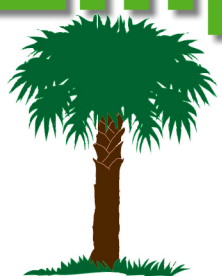
???

Email me if you have a guess, mjohnson@scfc.gov. The first one who is correct on both will win a prize.



Hint: This person works in, out and over the woods.

Employee Service Awards



SERVICE AWARDS FOR NOVEMBER

Employee's Name	Position	Location	State Service
Tonya Smith	Stewardship Forester	Pee Dee Region	10 years

SERVICE AWARDS FOR DECEMBER

Employee's Name	Position	Location	State Service
Brandon Craig	Sector FMO	Black River Unit	20 years



Greenville/Pickens Sector FMO Ray Cassell presents Fire Warden Ben Knight his 30-year pin and certificate at the Pickens office. Ben reached 30 years in February but due to the COVID-19 pandemic he didn't receive his pin until the September sector meeting.



Horry/Marion Sector FMO Brandon Craig was presented his 20-year service certificate and pin by Black River Unit Forester Ron Holt in Marion Sept. 28. Brandon started in FIA out of the Florence office working with Ron, and then later became the Florence/Dillon Supervisor and currently serves as the Horry/Marion Sector FMO.



Bamberg/Colleton Sector Forestry Warden Foch Hiott (20 years October) and Forestry Technician Ronnie Jones (30 years February) socially distanced while they received their service certificates and pins at the October sector meeting.

CURRENT JOB OPENINGS

For complete information on SCFC job openings visit <http://www.jobs.sc.gov>, search by agency for "Forestry."

www.jobs.sc.gov

Job Title: Forestry Technician I
Agency Hiring Range: Min: \$23,756.00
Location: Saluda County, South Carolina

Closing Date/Time: 12/28/20 11:59 PM
Max: \$24,944

Job Title: Forestry Technician I
Agency Hiring Range: Min: \$23,756.00
Location: Aiken County, South Carolina

Closing Date/Time: 12/29/20 11:59 PM
Max: \$24,944

Job Title: Forestry Technician I
Agency Hiring Range: Min: \$23,756.00
Location: Colleton County, South Carolina

Closing Date/Time: 12/29/20 11:59 PM
Max: \$24,944

Job Title: Forestry Technician I
Agency Hiring Range: Min: \$23,756.00
Location: Jasper County, South Carolina

Closing Date/Time: 12/29/20 11:59 PM
Max: \$24,944

Acorn Elves Taking Over

Here is an interesting new art from the Czech Republic...Dubanci. In English that means acorn elves. Several years ago, graphic designer Petr Václavek found a worthwhile autumn pastime: he makes little acorn men for the amusement of his kids and himself. The detailed figures are now becoming popular on social media.



Czech graphic designer Petr Václavek with his acorn elves.

It all started a while ago when Petr started making animals for his kids out of natural substances. He would take his children on walks in the forest near his home and the kids would come home with pockets of nuts and acorns. So he decided to make something from them to amuse his children. He started with chestnuts, but there was not enough of those, while acorns were plentiful. And so the first Acorn Men (Dubánci) were created. They have different shapes and stories and are often created on request. When the weather turned bad, the little figures dissolved in rain. But Václavek returned to them the next year and has spent most of his autumn weekends with them since. This year, he also started photographing them and publishing the photos on his Website and Facebook Page.

He uses acorns, oak leaves and twigs and occasionally also other natural substances – birch bark, cones, nutshells – anything he and his children find during strolls through the Klánovice park.

After several months, the album of acorn elves had scores of original and funny photographs and he was sad to just leave them to disappear in the on-line world so he created a calendar. After the success of the calendar, he created postcards, shirts and is always adding products.

For more information on items you can order, or to check out the cool gallery, visit: <https://dubanci.cz/english-info/>.





In an email to East Unit Forester Jeff Riggan dated Oct. 20 in regards to Cherokee/Chester/York Project Forester **Gretchen Spaulding**:

Mr. Jeff Riggan

I would like to take this opportunity to thank you and the South Carolina Forestry Commission for allowing Ms. Gretchen Spaulding to work with us on our Certified American Tree Farm # SC 3498.

Ms. Spaulding has been, and continues to be, a great asset to us in managing our tree farm. Gretchen is always willing to help and guide us in the right direction using her vast knowledge of forestry and services offered through the South Carolina Forestry Commission.

Recently Gretchen visited our tree farm to gather information for our stewardship forestry plan covering the next ten years.

As always Gretchen did a superb job in preparing our Stewardship forestry plan through 2030 and I appreciate all of her hard work, knowledge and dedication to make our tree farm a success.

Thank you and Gretchen again for a job well done.

Sincerely

Claude S Rice

CEO, CHA Holdings



In an email dated Oct. 8 from Richburg Fire Rescue Assistant Chief Melton regarding Supply Manager **Kerry Boyle's** assistance with equipment:

Over the years we have developed some tremendous relationships with various staff with South Carolina Forestry Commission. You have helped our department and our county in ways that can never be repaid!! We have bought several pieces of equipment that have added to our capabilities and has allowed us to give our community better protection in various events. I wanted to give you some feedback one of the newest members of your team that we have been working with over the last couple of years.

Yesterday we purchased a fire truck that had previously been involved in an accident at an Air Force Base in Florida. When we were on our way home, the truck caught on fire. It all appears to be very repairable and no one was hurt. I had called Kerry Boyle to let him know what happened and within 30 minutes he was standing on the side of the interstate with us. He remained on scene until the wrecker was ready to leave with the truck. He didn't have to come out and he most certainly didn't have to wait with us but he did! That speaks volumes to the compassion, dedication and values that he exhibits!! This was in no way anyone's fault and is just one of those things that happen, but the fact that he had the desire to be there shows the character and the passion the representative of your organization has. The future leadership of South Carolina Forestry is in great hands with people like him!

Thank you again for all you have done to assist us and we look forward to getting this unit on the road and servicing the community! Can't wait to see what the next piece of equipment we will be able to add to our fleet, thanks to each of you!

T. Melton, Assistant Chief -NREMT

Richburg Fire Rescue



Forest Management Chief Russell Hubright received compliments on foresters from landowners in customer surveys:

Edgefield/McCormick/ Saluda Project Forester **Henry Hutto** received praise on his cost-share assistance to a landowner, "Mr. Henry was very helpful with this process."

Georgetown/Williamsburg Project Forester **GraceAnna Cooper** received compliments from two landowners in the survey: . On a Stewardship plan survey, a customer said, "I am very pleased with my plan and with our forester GraceAnna Cooper." On a Forest Management survey, a customer stated, "GraceAnna Cooper did an excellent job!"

LAUGH OUT LOUD

Age 60 might be the new 40, but 9 p.m. is the new midnight.

When one door closes and another door opens, you are probably in prison.

It's the start of a brand new day, and I'm off like a herd of turtles.

The older I get, the earlier it gets late.





SUCCESS STORIES

New Equipment Distributed Around State

Twelve new firefighting units were put into service Sept. 30. These units consisted of 11 new 10-wheel Western Star 4700 transport trucks and one new Freightliner 114SD truck-tractor to haul the 12 new Caterpillar D4K2 dozers.

An additional three new 10-wheel transports were acquired, one for each region, to address the issue of not being able to transport an enclosed-cab dozer when its transport is not operational. Since enclosed-cab dozers are larger than the open-cab dozers, they cannot be transported by the smaller transports that haul open-cab dozers.

Until now all the spare transports were the smaller type. These three new transports will replace three older enclosed-cab dozer transports, which will then become the regional spare transport for enclosed-cab dozers. This will ensure all operational enclosed-cab dozers can be transported when their transport is not operational.



A new 10-wheel Western Star transport with a Caterpillar D4K2 dozer loaded, ready to go.



Equipment

-Doug Mills

Firefighter Cancer Bill Signed

On September 28, 2020 Governor Henry McMaster signed into law the Firefighter Cancer Health Care Benefit Plan-S.1071 providing South Carolina's firefighters enhanced healthcare coverage if they are diagnosed with cancer.

On Oct. 14 firefighters from across the state joined together at the South Carolina State Fire Academy for the ceremonial bill signing. The Forestry Commission was well represented and had a tractor/plow unit and engine on hand to represent wildland firefighters. Also in attendance were Deputy State Forester Tom Patton, Assistant Law Enforcement Chief Jonathan Calore, Director of Communications and Public Information Doug Wood and Lexington/Richland Sector Forestry Technician Is Jeremy Gantt and John Gwinn.

If a firefighter is diagnosed with one of several types of cancer listed in the bill, the state will provide a one-time payment of \$20,000 upon diagnosis and \$12,000 a year to help cover out-of-pocket medical expenses.

If a firefighter dies from cancer, their family would receive \$75,000.

POLITICS

New law will give SC firefighters battling cancer some financial support



Assistant Law Enforcement Chief Jonathan Calore spoke with WIS-TV about how the bill will help wildland firefighters.



Governor Henry McMaster addresses the crowd before signing the bill.



Governor McMaster signs the bill that takes effect July 1, 2021.

CRAZY TREES

Anderson/Greenville/Oconee/Pickens Project Forester Trey Cox spotted these crazy, non-renewable trees near Spartanburg High School after the arduous walk Nov. 5. The trees were around 40 feet tall and located in front of an art/welding shop. Trey thinks they were made from recycled gas tanks.



Programs

Camden Celebrates Arbor Day Early

The City of Camden celebrated Arbor Day Nov. 6 by planting a grove of longleaf pines on the Historic Camden Foundation site.

Pee Dee Urban Forester Lois Edwards gave the history of Arbor Day and presented the town with their Tree City Award. Camden's City Urban Forester Liz Gilland dedicated the newly planted trees.

Arbor Day in South Carolina is the first Friday in December.



City of Camden Urban Forester Liz Gilland and Pee Dee Urban Forester Lois Edwards with the ceremonial longleaf before planting.

Urban Forestry

-Lois Edwards

Tree cookies from a local bakery are a Arbor Day tradition in Camden.



Charleston Holds Arbor Day Ceremony

The City of Charleston held an Arbor Day ceremony at Hampton Park Friday, Dec. 4. Urban Coordinator Frances Waite joined in with the community to celebrate the 39 years it has been a Tree City. City of Charleston Urban Forester David Grant planned the event with Charleston Trees. The event also served to honor Mayo Read, who influenced the planting of more than 1,000 trees throughout the city.



Urban Coordinator Frances Waite and Charleston Urban Forester David Grant celebrated trees at the event.



Charleston Mayor John Tecklenburg speaks about the importance of trees.

Urban Forestry

-Frances Waite

Newberry Plants Trees for Arbor Day

Piedmont Region Urban Forester Dena Whitesides assisted the City of Newberry as they celebrated Arbor Day with the planting of three European Hornbeam trees in the city's new recreational complex, which opened this past year. Newberry became a Tree City USA in 2019.

Prior to 2019, the city of Newberry has traditionally celebrated Arbor Day for several years with the planting of 1-2 trees at local elementary schools in the county. The event is also marked with an educational component sharing the history of Arbor Day and community forestry education for the fourth grade classes in each school, including the importance of trees in communities. Due to the Covid-19 issue this year, though, the city did not open the event to the public



Newberry Mayor Foster Senn (second from left) together with 4 council members plants one of three European Hornbeam trees.

Urban Forestry

-Dena Whitesides

Programs

Programs

Progeny Tests Underway Across the State

As a member of the NC State Cooperative Tree Improvement Program, the Forestry Commission's primary role is to establish and measure loblolly pine progeny tests in order to identify superior trees for our orchards and breeding program. Last year, we established three piedmont tests at Piedmont Forestry Center. This year, we will be establishing a coastal test at Manchester State Forest and a piedmont test at the Piedmont Forestry Center.

Leading the effort this year is Tree Improvement Specialist Carla Castro, who began working for the Commission Oct. 2. While Carla has been involved in establishing Eucalyptus progeny tests in Brazil, this is her very first loblolly pine progeny test.

We finished establishing the Manchester progeny test Nov. 4. Assisting in the site preparation and test layout were Manchester State Forest personnel James Douglas, Charlie Scruggs, Wayne Eaddy, Ben Kendall and Jonathan Owen. Seed Orchard Manager Chris King and Forest Products Marketing Director Edgar Arias assisted with the seedling randomization and planting. Tree planting contractor Craig Hill and his crew planted the seedlings. Thanks to everyone involved!



Tree Improvement Specialist Carla Castro with her first loblolly pine progeny test.

Forest Resource

-Tim Adams



Castro on the finished coastal progeny test. The large test contains 2,310 seedlings.



Marketing Director Edgar Arias (standing with green jacket) with Craig Hill (standing far left) and his planters begin planting the progeny test.

Programs

Programs

FIA Program Leads the Country

Recently, FIA Forest Technician II Wesley Bouknight and I were collecting Forest Inventory and Analysis (FIA) data on a plot in Pickens County that fell on South Carolina Department of Natural Resources property. During our data collection efforts we ran across a reminder of the past. More on that later.

The FIA program in South Carolina began in the summer of 1934 in the Southern Coastal Plain. The first seven inventories were periodic inventories and conducted solely by U.S. Forest Service personnel. The time frames between those inventories were between 7 and 11 years apart. Those inventories were finalized in 1936, 1947, 1958, 1968, 1978, 1986 and 1993, respectfully. Beginning in 1998, the South Carolina Forestry Commission began the current annualized inventory in a partnership with the U.S. Forest Service with inventories being completed in 2001, 2006, 2011 and 2016. South Carolina is currently on its 12th state inventory with completion expected in late 2021 or early 2022.

South Carolina is the only state in the country to be in the 12th inventory and should be the first state to complete a 12th inventory of a state.

In the early 1990s, I was involved in the 7th inventory of South Carolina as a U.S. Forest Service – Southeastern Forest Experiment Station forest technician. Plots then were variable radius with five separate points based on a 37.5 basal-area factor (BAF) for trees 5.0" DBH and larger and a co-located microplot (at point center) of 6.8 feet for all trees 1.0" to 4.9" DBH. Those plots consisted of five points, 70 feet apart, and positioned at north for points 2 and 3, 120 degrees for point 4, and south for point 5. In addition, points would be rotated in other locations at 60 degree intervals due to all 5 points had to be in the same forest condition. Now plots are four 24-foot fixed radius subplots oriented in an inverted "Y"

formation and 120 feet apart at due north for point 2, 120 degrees for point 3, and 240 degrees for point 4 and do not move despite whatever land uses they encounter (see plot diagram on right). On each subplot that falls in a forested condition, all live and standing dead trees 5.0" DBH and larger are measured within the 24 foot radius. In addition, a 6.8 foot microplot, offset 12 feet and 90 degrees from the subplot center, is used to measure all live and standing dead saplings between 1.0" and 4.9" DBH, as well as, a count of live seedlings for regeneration purposes.

When FIA began in South Carolina in 1998, the first field crews had to not only install the current fixed radius plot design, but they had to remeasure three points of the previous crew's variable radius plot so that growth, removals and mortality estimates could be calculated. This essentially was measuring two plots for each plot location. Those were generally long days since those crews did not have some of the luxuries we have today such as digital hypsometers to measure tree heights. Those crews had to pull distances from each tree with a logger's tape and use a clinometer to gather their tree height measurements. This required a lot of time and work. Current Forestry Commission employees who were involved in the initial annual inventory were **Kip Terry, Ron Holt, Brandon Craig, Doug Mills, Stephen Patterson and Wesley**. If you see one of these gentlemen, ask them about it. I'm sure they all have their share of "horror stories" from those days.

Now back to my remembrance of the

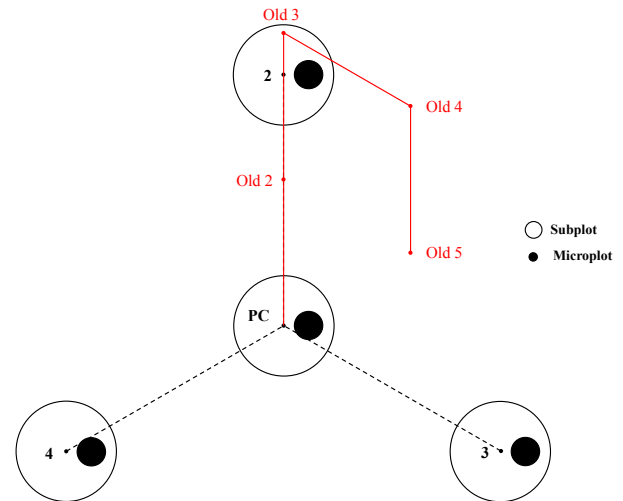


Diagram of the old plots and new plots.

Forest Inventory

- Byron Rominger



past. As Wesley and I were measuring subplot number 2, Wesley stumbled upon some old plot pins. Those pins (pictured above), which would have been the old periodic plot point 3, revealed that those pins represented

(continued next page)

(FIA continued)

the 1978, 1986, and 1993 inventories. So, it has been at least 42 years since the 1978 pin was installed! FIA has come a long way since those days, and we collect considerably more data than was collected back then. Back then, the program was more directed toward timber. Now the program is more inclusive of all ecological processes as well as timber production. Since the SCFC FIA program began, including current FIA employees, there have been 58 men and women who have been involved in collecting FIA data for the Forestry Commission's FIA program.

Other current SCFC employees who have been or are currently in the FIA program are as follows (**Bold=current**):

- | | | | |
|----------------------|----------------------|-------------------------|---------------------|
| Chisolm Beckham | Eric West | Holly Welch | Trey Cox |
| Jeff Rigg n | Gretchen Spaulding | Dena Whiteside | Michael Broom |
| Robert Lord | John Bryan | Wesley Bouknight | Steven Broom |
| Logan Bell | Todd Douglass | Adam Forbes | Drew Pressley |
| Nathen Hilley | | | |

A huge thank you to all of these who have made the program what it is today. A leader in FIA both regionally and nationally.

HSF Hosts SCiDUC Drone Practice Day

Harbison State Forest hosted a South Carolina Interagency Drone Users Consortium drone practice event Dec. 1 at the Environmental Education Center and at the gazebo.

There was a wide range of SCiDUC participants from various agencies and experience levels. Multiple stations were set up where participants could practice using the National Institute of Standards and Technology (NIST) open lane test, remote inspection, various flight exercises, and see the Forestry Commission's "Big Smokey" drone. Several SCFC employees are members of the group, including Edgefield/McCormick/Saluda Project Forester Henry Hutto, Chief Pilot Sam Anderson, Public Information Coordinator Michelle Johnson and Forest Protection Chief Darryl Jones, who is also on the Board of Directors.

Darryl led the effort for the practice day. The event was also a great way to network with other state agency drone users.



Protection Chief Darryl Jones shows two SCiDUC members how the drone operates.



Chief Pilot Sam Anderson holds up a SCiDUC t-shirt that was handed out to participants.



"Big Smokey" drops a ping-pong ball for aerial ignition.



Edgefield/McCormick/Saluda Project Forester Henry Hutto flies his drone around the course.



Three of the courses that pilots could fly to test their flying skills. Pilots had to fly over and around targets and take photos of the target to score.

Programs

Programs

Smartphone Upgrades for Suppression Unit Operators

A major project implemented this year was the migration of suppression unit operators from Verizon flip phones to AT&T/FirstNet smartphones. FirstNet is a nationwide wireless broadband network for first responders being built and deployed through a first-of-its-kind public-private partnership between the federal government and AT&T. FirstNet offers public safety a communications network built and customized to meet their needs.

FirstNet coverage is greater than commercial AT&T service. FirstNet certified devices are equipped with a FirstNet SIM card are modified to increase their coverage compared to other cellular devices. Earlier testing by our Communications Managers have seen significant differences in coverage between regular AT&T devices and FirstNet devices. This is why we are conducting coverage tests between FirstNet devices and Verizon as there could be a significant improvement over current commercial services in an area.

Verizon announced it will be turning off their 3G/CDMA network by the end of the year. Areas that have Verizon coverage today may not when this older network is shut down. Our communications staff needs to compare Verizon's 4G signal strength in those areas to FirstNet to determine if converting that individual to a Verizon 4G smartphone would be beneficial. AT&T has been adding towers to fill in current coverage holes to achieve a minimum 95% "average" nationwide coverage when fully deployed over the next several years. More than 2,500 sites across the country have been added so far, and more than 10,000 are currently underway.

The goal was to have FirstNet smartphones operational statewide (i.e. in the hands of the suppression unit operators) by the end of October, if not sooner. With the COVID-19 pandemic, the migration process was delayed by several months. That delay was beneficial, as it took a significant effort to set up these new smartphones with the state required mobile device management solution, setting up email accounts and other apps on the phones before deployment. It took a great amount of planning and effort by IT Manager Scott Drafts and IT Technician III Vickie Davis in setting up the various user accounts and new email addresses needed for 145 suppression unit operators' FirstNet smartphones to get them all rolled out over a few days.

Administrative Assistant Lenora Stukes and Special Projects Coordinator Lloyd Mitchell were a great help in getting all these devices and accessories ordered and coordinating those orders with AT&T/FirstNet. Once orders were processed and phone numbers assigned to each suppression unit operator, Dispatch Operations Coordinator Libby Martin and Coastal Communications Manager Mike Thomas updated the agency's computer aided dispatch system, the dispatch communications console system and paging software with the new FirstNet phone numbers now associated with these 145 individuals.

AT&T provided us with support personnel to help in the setup of each smartphone. This process began with the Pee Dee Region smartphones the last week in September. Coastal and Piedmont Region were completed October 6. Distribution included protective cases and pouches for the smartphone.

Matt Kelly was the lead AT&T/FirstNet Support person helping us in setting up the 145 smartphones. He noted he never had a deployment of so many devices go as smoothly. He said he and his team have worked with many state agencies and other organizations with large deployments. He was very impressed with Scott and Vickie having all the accounts done before they started. His team was also impressed with them standing by to address any issues that did come up during the activation phase and resolving them in a timely manner keeping the process moving forward. His team completed 80 smartphones in a single day. We would have never been able to accomplish such a task in just a matter of days without AT&T's support staff help. It was a GREAT TEAM effort by a very small group of individuals!

We have a number of employees that this will be their first smartphone. It will be a challenge for them to learn to use over a flip phone. We expect their immediate supervisor to do basic training on their operations and critical apps that will help them in their job. If we see a trend in questions, we will develop an FAQ sheet or send emails out to help address common ones.

Thank you for everyone's help with the deployment of this major project.



Pictured are the Coastal Region smartphones lined up for the setup process.

Technology

- Jeff Baumann

Agency Assists With Sumter Warehouse Fire

Personnel from the Clarendon/Sumter Sector assisted the Sumter Fire Department in the containment of a fire at a recycling warehouse that broke out Oct. 27 on Fulton Street off South Lafayette Drive in Sumter.

The building, formerly the VB Williams Furniture Plant, was engulfed in flames around 10 p.m. Oct. 27. It was being used as a recyclables warehouse and stored recyclables such as soda bottles, other plastics and tires. The fire was so massive that smoke from it could be seen from satellites.

Crews fought the flames back from threatening nearby homes and neighboring structures and continued to work hot spots Oct. 29 while high winds associated with Hurricane Zeta whipped smoke from the rubble.

The 500,000-square-foot warehouse fire brought first responders from across the state. The Sumter Fire Department was assisted by crews from Shaw Air Force Base, Clarendon County, Lexington County, Columbia, S.C. State Fire and other state agencies such as SLED and the S.C. Forestry Commission. About 55 from across the state worked together through a statewide cooperative plan.

Sector Fire Management Officer Donna Green, along with Forestry Technicians Butch Lowder and Jordan Barnette on bulldozers, worked to separate burning cardboard from portions that weren't yet ablaze.

Smoke and firefighting efforts continued for days. The fire is under investigation.



Lowder and Barnette use their dozers to separate burning cardboard from portions that weren't yet ablaze.



A Commission dozer pushes its way through the muck to spread debris out to be extinguished.

Photos provided by Clarendon/Sumter Sector Fire Management Officer Donna Green.



Firefighters applied Class A firefighting foam on the burning piles to help extinguish it, as the Forestry Commission separated the piles.



Dozers work to break up the smoldering material for firefighters.

Programs

Wood Magic Gets a New Sawmill

South Carolina Forestry Commission and Forestry Association of South Carolina personnel took part in a training session covering safety, operation and maintenance of a new Wood-Mizer LT15GO portable band sawmill Oct. 7 at Harbison State Forest.

After 20 years of faithful service, the old portable circular sawmill used as part of the Board Cuttin' learning station at the Wood Magic Forest Fair bit the (saw) dust in 2019, and the FASC and SCFC held a year-long fundraiser to purchase the new model.

Many thanks to @Wood-Mizer for providing the training to our staffs!



Education

-Doug Wood



Assistant Education Coordinator Beth Foley and Education Coordinator Matt Schnabel are happy to have a new, safer sawmill for Wood Magic.



Georgetown Sector Forestry Technician Jonathan York saws a board on the new sawmill.

Headquarters Annual Christmas Tree Decorated

Headquarters' staff have put up and decorated the agency's annual Christmas tree in the lobby. This year's tree is a white pine.

Thanks to Construction & Property Manager David Owen, Administrative Assistant Lenora Stukes, Maintenance Technician Carter Cummings and Director of Administration Cathy Nordeen for decorating the tree!



Administrative Assistant Lenora Stukes and Maintenance Technician Carter Cummings place ornaments on the tree.



Programs

Greenwood Zone Staying Busy with Burning and Projects

The Greenwood Zone has stayed busy the past few months with prescribed burning, when the weather permits, and painting the Saluda office.



Edgefield/McCormick/Saluda Project Forester Henry Hutto flew his drone over a site-prep prescribed burn in Laurens County where Sector FMO Colton Webb talks with Abbeville/Greenwood/Laurens Sector Forestry Technician Brian Parnell.

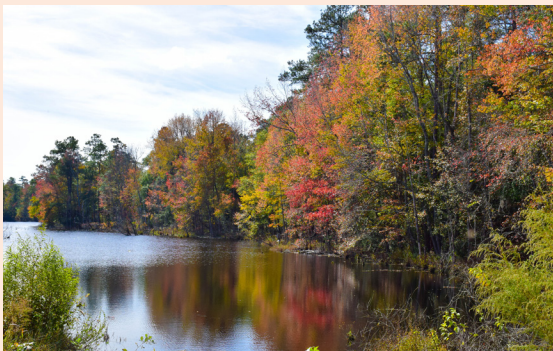


Edgefield/McCormick/Saluda Sector Forestry Technicians Tony Ashley (left) and Derek Adams (right) paint the baseboard and walls of the Saluda office.

Piedmont West
-Colton Webb

Photos from Edgefield/McCormick/Saluda Sector FMO Colton Webb.

FALL COLORS



The hardwoods on Campbell's Pond at Manchester State Forest were popping Nov. 6.



Forest Health Coordinator David Jenkins captured a rainbow of the colors of fall in maple leaves while working on the Foothills Trail in Oconee County one weekend.

Memorial Ceremony for Operation Seeking Nevaeh

A ceremony was held Friday, October 16 to honor Nevaeh Adams and to remember the team effort that located her remains one year ago.

A monument to remember Nevaeh and her recovery effort was placed on "The Hill" at the Waste Management Landfill so that we will never forget this precious child and the efforts off all entities that worked to take her home.

"Seeking Nevaeh" was a different kind of assignment for our SCFC incident management team. This was an assignment to assist the Sumter Police Department and SLED to locate the remains of a 5-year-old girl. Police believe the child was killed and her remains put in a dumpster at an apartment complex in Sumter back in August 2019. Investigators immediately went to area landfills and tracked down garbage trucks that may have transported trash from dumpsters in the area of the crime.

It was determined that one truck from Sumter had left the Sumter Landfill prior to the Sumter police making it to the landfill. The truck made its way to the Waste Management Incorporated Landfill on Screaming Eagle Road in Richland County. Waste Management officials and personnel from the National Center for Missing and Exploited Children were able to narrow down a possible area within the landfill to begin digging and sorting through garbage to hopefully locate Nevaeh.

It took several weeks of planning and site work preparation to be able to start



IMT members attending the anniversary service were Harbison State Forest Administrative Specialist Lisa Hart, Equipment Manager Kerry Boyle, Piedmont Regional Forester Mike Bozzo, Construction and Property Manager David Owen, and Assistant Law Enforcement Chief Jonathan Calore.

the tedious process of sorting through the 4 million pounds of garbage. The process of sorting through the garbage was very labor intensive and hot. Each day Monday through Friday there would be three crews of 8-12 people that would have on full PPE of Tyvek Hazmat suits, steel shank rubber boots, two layers of gloves, a full face respirator and a hard hat. Each team would make three cycles down into the pit during the day sifting through garbage. The length of cycles would depend on the temperature outside and could last as long as 45 minutes and be as short as 15 minutes. The hotter the temperature, the shorter the cycle.

After each cycle in the pit, the crew would come up and go through decontamination and would rehydrate while the next crews were down in the pit. There were 32 different agencies involved in the physical searching process. The majority of the searchers were brought in through Firefighter Mobilization, and State Fire provided the decontamination station and personnel to man the station. Security was provided by 10 different law enforcement agencies. The SCFC IMT provided the daily Incident Action Plan (IAP), ran the morning briefings and afternoon hotwash, logistical help,



The Nevaeh monument placed on the "Hill" at the Waste Management Landfill.

site safety and personnel accountability. The SCDOT provided personnel and equipment for the excavation of the pit and spreading of the garbage so that the crews could sort through looking for items of interest and possible remains of Nevaeh. There were 60-80 personnel on site each day and this mission lasted almost 6 weeks from Sept. 17 - Oct. 21 of 2019.

As with any mission assigned to our IMT whether it is fire, flood, or any other mission it is all about process, process, process; from tactics meeting to planning meeting, C&G meetings, IAP production, and briefings. These things are what make an IMT like ours successful at managing complex situations.

Thank you to the 31 different SCFC employees that assisted with this very meaningful mission!



Jonathan Calore gets a thumbs up on his remarks about the mission from Sumter Police Chief Russell Rourke while SC DOT Secretary of Transportation Christy Hall looks on.

Programs

Programs

Tree Planting Project in Latta Community

After almost two years of planning, an inspired tree planting effort in Latta was celebrated Nov. 2 with all the partners who were involved in this community project.

Latta's streets had been lined with large, mature oaks damaged by past storms and years of utility pruning. The trees were a threat to the citizens due to large branches falling on the sidewalk and road, which had become eyesores. The property owners on Church Street loved their trees but knew something had to be done, so they formed a group to address the situation. After much planning and seeking funds, this challenging project was proposed.

One of the most impressive things about this particular tree-planting project was all the partners involved. Each contributed funds and labor to the total project cost of \$130,000. The Forestry Commission got involved and helped secure a Recovery Community grant from the Arbor Day Foundation, which finds corporate sponsors to fund community tree planting projects. In this case Fed Ex contributed \$25,000 toward the project.

Latta selected to replace the oaks with Trident maples on both sides of Church Street since they are planted under electric lines. Trident maples are smaller trees, and Duke Energy approved them. Gator Bags were placed at each tree to ensure the trees are watered. The trees were properly planted, and now the community is caring for their street trees, ready to reap all the benefits of their new urban forest.

This is a fine example of what a small community can do if it is committed to civic pride and realize what trees can do for a town. Latta will benefit economically, socially and environmentally from their urban forest.



Neighbors, corporate partners, city, county and state leaders gather to celebrate the new trees to Latta's urban forest after pulling together to make the tree planting project happen. Senator Kent Williams attended.



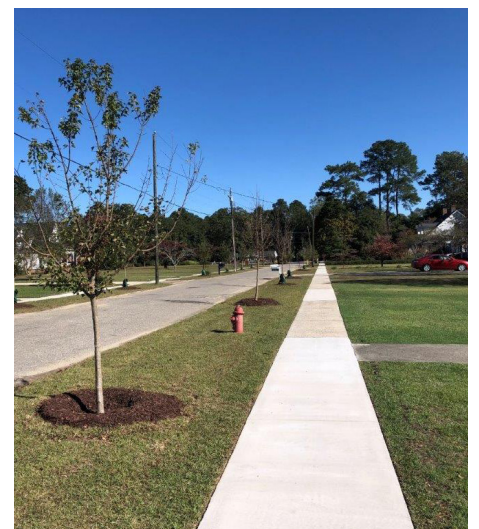
Pee Dee Urban Forester Lois Edwards was instrumental in the project.



Local business owner Mike Griffey was the driving force behind the project.



Properly planted Trident maple tree with Gator Bag for watering on Church Street in Latta.



Trident maples line Church Street in Latta after the tree-planting project.

Urban Forestry

- Lois Edwards

Programs

Programs

New Tree Identification Trail at Harbison State Forest

During the cleaning of the maintenance shed at Harbison State Forest, a cache of unused tree identification plaques was discovered. Twenty-two of those plaques have now been installed in the wildlife habitat garden and on the Learning Trail that begins and ends at the Environmental Education Center. The wildlife habitat garden is behind the Environmental Education Center and is certified by the SC Wildlife Federation. The Learning Trail is a ¾ mile, highly-used hiking-only trail that has four outdoor classrooms with forestry education displays and is used for forest ecology hikes during school programs.

Now the general public will have a chance to learn some of the tree species on Harbison State Forest. Reforestation Manager/Stewardship Program Coordinator Chisolm Beckham assisted the education staff in verifying the identification of the trees and also discovered some additional species that needed plaques. More plaques are being created and when finished, the Learning Trail will showcase over 30 different tree species. Next time you come to Columbia for a meeting, please check out the new addition to the Learning Trail.



(above left) Education Corodinator Matt Schnabel installs a tree identification plaque on the trail. (above right) Assistant Education Coordinator Beth Foley confirms the identification of the tree.

Education

- Matt Schnabel

Species on the trail.

1. American sycamore
2. Bald cypress
3. Black cherry
4. Blackjack oak
5. Eastern red cedar
6. Flowering dogwood
7. Fringetree
8. Hawthorn
9. Loblolly pine
10. Longleaf pine
11. Mockernut hickory
12. Pignut hickory
13. Post oak
14. Red maple
15. Shortleaf pine
16. Southern magnolia
17. Sweetgum
18. Water oak
19. White oak
20. Willow oak
21. Winged elm
22. Yellow hawthorn

To be added

23. American hornbeam
24. Black gum
25. Green Ash
26. Northern red oak
27. Parsley hawthorn
28. Persimmon
29. River birch
30. Sugarberry



A sample of what the plaques look like.

Hunts Resume at NFC With Covid-19 Restrictions

The Forestry Commission held its first deer hunt of the season Oct. 22 at Niederhof Forestry Center under Covid-19 precautions. Covid-19 affected the Military Appreciation Hunt in several ways. Instead of the usual 8-10 hunters plus QDMA auction winners, only five South Carolina National Guard soldiers were allowed to hunt, and instead of the normal two-and-a-half day hunt, it was limited to one afternoon. Masks were worn when around others, and items being used were sanitized after every interaction. Chairs were distanced six feet apart.

Even with the Covid-19 restrictions, the hunt was a success, with four of the five guardsmen harvesting deer, and all five saw deer while on the hunt. Jeffrey Crosby with the 741st Unit out of Allendale harvested an 8-point buck and a 170-pound hog. Erik Vonnessen of the 133rd Military Police Unit in Timmons ville also harvested an 8-point buck. Steven Porter and Nick Lyons harvested does.

Steven Porter of Gaffney was very excited to be deer hunting. He just returned Sept. 30 from a 13-month deployment to Kuwait and Iraq and had been looking forward to it since his wife entered him in the SCNG draw for the hunt.



Participants of the hunt (Guardsmen on first row, SCFC personnel on back row) masked up for the Military Appreciation Deer Hunt #1 Oct. 22. Below, two bucks, two does and a hog were harvested.



Jeffrey Crosby harvested an 8-point buck and a 170-pound hog on the hunt.



Erik Vonnessen harvested a nice 8-point buck on the hunt.

South Carolina Firsts

This milestone occurred in South Carolina and was the first of its kind in the United States.

First patent for a mechanical refrigerator – May 6, 1851

Dr. John Gorrie (1803-1855), who was born in Charleston but spent his adult life in Florida, received a patent for a mechanical device capable of producing blocks of ice the size of bricks. Gorrie installed a mechanical refrigerator in the US Marine Hospital in Apalachicola.

Second Military Appreciation Hunt Held at NFC

Niederhof Forestry Center hosted the last Military Appreciation deer hunt of the season on Veteran's Day, Nov. 11. Even rain couldn't dampen the spirits of the six hunters as they were excited to be outdoors and thankful that the hunt was still on with Covid-19 numbers rising again. The six hunters harvested an eight-point buck and a nice doe and wild hog, enjoyed good food and fellowship, and their time outdoors.

Billy Nowlen, Tree Farmer and owner of Shady Dale Farms, donated \$1,000 to the SC National Guard Family Readiness Group on behalf of the Forestry Commission. Billy has supported the outreach hunts for eight years and stepped up when QDMA couldn't have an auction, due to Covid-19, and he made the donation to the Family Readiness Group. Billy also provided lunch for the group. Randy Horton of the BBQ Grill in Ridgeland supplied the food. The BBQ Grill has been closed for several months due to Covid-19, but Randy, his wife and young daughter took the time to prepare all of the food.

QDMA normally donates 50% of the proceeds, up to a maximum of \$1,000, from the hunt auctioned off at their national event (Whitetail Weekend). The maximum donation to a FRG from a single source is limited to \$1,000.

On the rainy, humid afternoon 36 deer were seen by the six hunters, but only Apache helicopter pilot Bayne Parsons harvested deer. Bayne harvested a nice eight-point buck and a big doe in the Coastal orchard. Bayne really appreciated the Commission still holding the hunt since he was supposed to participate in the turkey hunt back in March, but was cancelled due to the pandemic.

The last deer hunt of the season will be for the youth Dec. 4-5.



Hunt participants of the Veteran's Day hunt and staff join together in supporting the donation of \$1,000 to the SC National Guard Foundation.



The four SC National Guardsmen practice social distancing while getting briefed on the hunt.



Pilot Bayne Parsons had a great hunt, harvesting this 8-point buck and a doe.



Billy Nowlen thanks the soldiers for their service to our country.



State Forester Scott Phillips presents a SCFC Challenge Coin to Brian Elender and all the other soldiers.



Derek Rast takes aim on the gun range while Coastal Assistant Regional Forester Kip Terry monitors the target.



A wild hog, big doe and 8-point buck were harvested during the hunt.

Caught ON Camera

WESTERN FIRE DETAIL

With wildfires raging in several western states, we had several employees out on western fire detail. On this page and the next two are a few photos from employees' experiences.



Black River Unit Forester Ron Holt (third from right) with his dozer crew and transport drivers on the Bobcat Fire in California.



Holt scouting ahead of the area his dozer crew was working on at the Bobcat Fire.



Ron held several positions on the fire and had to tape the channels for the five divisions on his radio.

Black River Unit Forester Ron Holt was assigned to the Bobcat Fire outside of Los Angeles as a Heavy Equipment Boss (HEBQ). It was extremely dry and fire growth was intense. The fire was 35,000 acres when Ron arrived and had grown to over 114,000 by the time he left. On his first day he was moved to a Task Force Leader (TFLD) position over several different engines and tenders. The task force bounced around on a couple divisions then he was a contingency division with a dozer as a HEQB and later rotated on two divisions with three contract dozers and a trainee. All in all, Ron was on five different divisions where tasks ranged from initial attack to burnout prep and contingency line construction.

Each day there were a few of the "watch-out" situations observed as the fire reached trigger points, forcing crews and equipment to withdraw and move to safety zones. Burnout operations were conducted but holding the line was a challenge as 100-hour and 1,000-fuels were reaching new record lows each day and the 8-12 percent humidity, along with 20-30 mph winds that did not help the situation. Ron was glad to gain more experience but definitely glad to be home. He walked over 101 miles while on duty and his tired feet and knees appreciate the flat ground in Williamsburg County.



Ron holds one of the largest pine cones, a coulter pine, weighing 8 pounds.



Holt with a LA County double-cab dozer that can seat two operators.



Ron saw tall flames from the Bobcat Fires over the San Gabriel Mountains.

Caught ON Camera

WESTERN FIRE DETAIL



Forest Protection Chief Darryl Jones working as lead PIO on the biggest fire in CA history.



Jones sitting at the Rattlesnake Fire Memorial where 15 firefighters died in 1953.



A helicopter makes a drop on fire near a house on the August Complex Fire, which became the largest fire in California history.



Sand Hills State Forest Director Brian Davis posed with "Ruby" the AFA Champion Ponderosa Pine (above and below) located in the Eldorado National Forest in Northern California where he was a Situation Unit Leader on the Fork Fire. Ruby measures 324 inches around and stands 235 feet tall.



An area of the August Complex Fire after it was scorched.



Caught ON Camera

WESTERN FIRE DETAIL



Piedmont Forestry Center Manager Chris McCorkle waits on his flight to the Archie Creek Fire in Oregon where he was a Base Camp Manager.



Chris wanted to bring the salmon back to the Piedmont Forestry Center streams.



Environmental Education Coordinator Matt Schnabel was shocked when this heavy helicopter flew over him and started sucking up water from a pond for a water drop on the Badger Fire in Idaho.

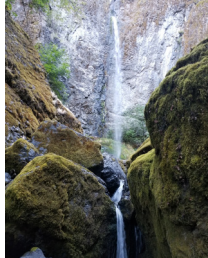


The North Umpqua River near camp at Archie Creek.

Oregon



An area of trees burned by the Archie Creek Fire.



Waterfall behind Chris McCorkle's base camp.



Matt's luxurious hotel at the Pine Gulch camp had cattle stampeding through it at night.

Colorado



Aiken/Bamberg/Barnwell Project Forester Robert Lord, Forest Management Chief Russell Hubright, Piedmont Forestry Center Manager Chris McCorkle and Construction & Property Manager David Owen ran into each other while on the Archie Creek Fire in Oregon.



Darlington/Marlboro Sector FMO Shawn Feldner enjoys the cool weather while on the Red Salmon Complex in California.

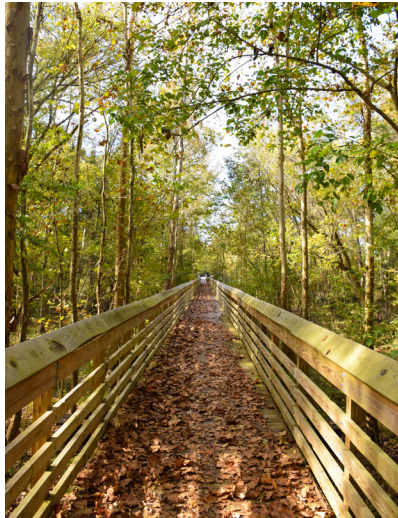


Schnabel was assigned to the Pine Gulch Fire in Colorado, then extended his assignment to the Badger Fire in Idaho.

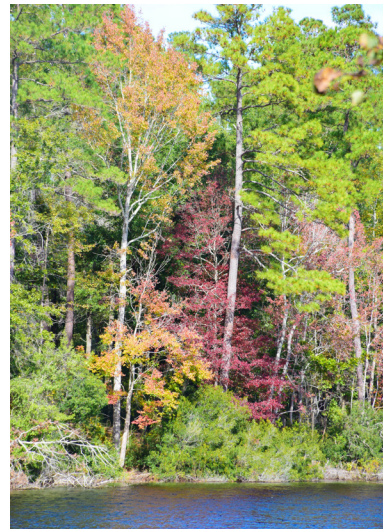
More Fall Colors



Piedmont Forestry Center Manager Chris McCorkle sent in this photo of jack-o-latern mushrooms he found on the property.



(left) The bridge on the Palmetto Trail on Manchester State Forest is covered with fallen leaves. (right) Pops of fall color blend in with the pines on Campbell's Pond on MSF.



WHAT ITEM/S IN THESE PHOTOS ARE NOT FEDERAL SURPLUS PROPERTY?



Answer: Only the orange straps used to tie down the UTVs. The truck-tractor, trailer, bush hogs, and five UTVs all came from federal surplus.



Merry Christmas and Happy New Year!

Bee City Forestry Exhibit



Director of Communications & Public Information Doug Wood visited Bee City zoo and honey farm in Cottageville on Halloween. Here he stands in front of part of the forestry exhibit on which the Forestry Commission partnered with the Edisto Chapter of the Society of American Foresters to build and design. Bee City owner Scott Biering built an entirely new wing of his zoo to house the exhibit, which was completed in 2019.

Congratulations to GraceAnna and Clay Cooper

Congratulations to Georgetown/Williamsburg Project Forester GraceAnna Cooper and husband, Williamsburg Sector Forestry Technician Clay Cooper, on the birth of their first child. Kayce Luke Cooper was born at 10:18 p.m. Oct. 17 weighing 8 pounds, 3 ounces and 21 inches long.

GraceAnna and baby Kayce are doing well.



GraceAnna and Clay are proud, first-time parents.



Baby Kayce likes his Smokey Bear blanket.



Kayce rocks his "My Parents Are WILDLAND FIREFIGHTERS" onesie.



Firetrack Training Held for Instructors at HSF

A training class was held Oct. 27 at Harbison State Forest for those around the state who will teach the Operation and Maintenance of the GT1200 Firetrack.

Pee Dee Assistant Regional Forester James Brunson and Darlington/Marlboro Sector FMO Shawn Feldner taught the class featuring a video they developed and hands-on instruction and questions. Each student got to operate the firetrack for 30 minutes, including loading and unloading the equipment. Due to Covid-19 and time, the class was limited to six participants.



Anderson/Greenville/Oconee/Pickens Project Forester Trey Cox prepares for his drive in the firetrack.



Darlington/Marlboro Sector FMO Shawn Feldner leads the class inside before the hands-on portion of the class.



Coastal Assistant Regional Forester Kip Terry loads the firetrack while Forestry Technician Neal Murdaugh gives direction.



Class participants socially distance as they listen.



Piedmont Assistant Regional Forester Brad Bramlett and Spartanburg/Union Sector FMO Jon Barker check out the air filter.

Questions that leave you wondering...

If the black box flight recorder is never damaged during a plane crash, why isn't the whole airplane made out of the same stuff?

Why is there an expiration date on sour cream?

Why isn't there mouse-flavored cat food?

Caught ON Camera



Assistant Education Coordinator Beth Foley caught these brown-headed nuthatches playing around at Harbison State Forest.



Beth captured this walking stick sunning at Harbison State Forest.



Beth also sent in this photo of a yellow garden spider in his web.



Maintenance Technician Carter Cummings smiles as he cuts the front lawn of the headquarters Oct. 1.



Dew hangs onto a spider web, resembling strings of pearls in Sumter County.



Administrative Coordinator Tonya Steadman waves as she leaves for lunch Oct. 1.

Communications & Public information Director Doug Wood videos Beth Foley for a virtual school field trip Nov. 4. The education staff has been doing several virtual field trips, sometimes three a day.



Kershaw/Lancaster/Lee Project Forester Gwyn Clonger took this photo of a decaying stump while doing a Stewardship plan in Lancaster County. The stand had been harvested in 2005.

Rare Christmas Star to Appear Dec. 21

On December 21, Jupiter and Saturn will get so close in the sky that they will almost appear to merge with one another. Such a close conjunction between the two has not occurred under a dark sky for some 800 years.

Astronomers are calling it the Great Conjunction of 2020. On December 21 — coincidentally the winter solstice — the two largest planets in our solar system will appear to almost merge in Earth's night sky.

During the event, Jupiter and Saturn will sit just 0.1 degrees apart, or a mere one-fifth the width of the Moon. Appearing to be one big "Christmas Star." The sight will likely leave many casual observers wondering "What are those large, bright objects so close together in the sky?"

In fact, Jupiter and Saturn will be so close that you will be able to fit them both in the same telescopic field of view. That's an incredibly rare occurrence. The last time Jupiter and Saturn were this close together away from the Sun was in 1226 A.D., at a time when Genghis Khan was conquering large swaths of Asia, and Europe was still generations away from the Renaissance.

Humanity won't have to wait quite as long to see the solar system's two largest planets repeat this month's performance, though. Another Great Conjunction will occur in 2080. Of course, many of us alive today won't be around then, so it would be wise to soak in this show while you can.

How to find Jupiter and Saturn

For much of the year, Jupiter and Saturn have shared the same swath of sky. The pair begin the month of December just 2 degrees apart, creating an already impressive sight. Now, you can find them both in the southwestern sky just after sunset, located some 20 degrees above the horizon at 6 p.m. local time.

By mid-month, they'll be just one Moon-width apart. On December 16, the Moon will sit just 5 degrees away from the pair, offering a handy comparison. They'll reach greatest conjunction on December 21.

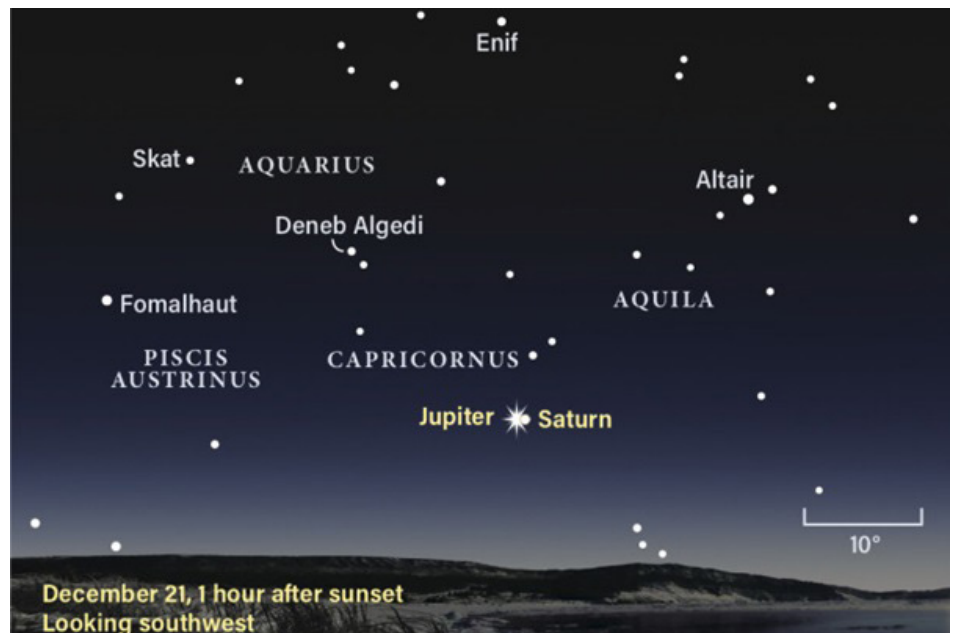
Conjunctions happen when two celestial objects appear to pass close to one another as seen from Earth. Of course, those objects aren't necessarily physically close, they simply look that way because of their orbital alignment. Conjunctions are extremely common, though. Throughout the year, the Moon regularly appears alongside a number of planets and bright stars. And two or more planets come together relatively frequently. However, having two bright planets like Jupiter and Saturn pair up is extremely rare.

The last conjunction of Jupiter and Saturn happened in May 2000. That close approach in our sky occurred relatively near the Sun, which made it hard to observe. A similar thing occurred in 1623 A.D., when Jupiter and Saturn brushed shoulders near the Sun. We don't have to worry about that this time. Throughout the month, the gas giants will be hard to miss. Jupiter shines brighter than any star in the sky at magnitude -2.0, while Saturn is dimmer at magnitude 0.6 — though the Ringed Planet is still quite bright.

So, you certainly won't need binoculars or a telescope to see the Great Conjunction of 2020. But if you do have observing equipment, you'll be able to zoom in and watch the dance of Jupiter's four moons — Europa, Io, Callisto and Ganymede. Then, without moving the telescope, you can slightly shift your gaze to Saturn and its magnificent rings. Despite the significant size difference between the planets, Saturn's massive rings mean the two worlds both appear to have about the same diameter when viewed through a telescope.

As the conjunction reaches its climax on December 21, scopes located in the Eastern United States will be able to catch Ganymede as it transits Jupiter for three and a half hours starting at 7:04 p.m. EST. You can watch a livestream of the Great Conjunction of 2020, courtesy of Lowell Observatory. Beginning at 7 p.m. EST on December 21, Lowell astronomers and educators will share spectacular live views of Jupiter and Saturn through observatory telescopes while discussing the nature of conjunctions.

<https://astronomy.com/news/2020/12/jupiter-and-saturn-will-form-rare-christmas-star-on-winter-solstice>



On December 21, Jupiter and Saturn will get so close in the sky that they will almost appear to merge with one another. Such a close conjunction between the two has not occurred under a dark sky for some 800 years.

Spot the Differences

Can you find the 12 differences between the top photo and the bottom photo below?



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____



9. _____
10. _____
11. _____
12. _____

Answers on last page.

TREE JOKES

Which Canadian city is a tree's favorite?

Montreal!

Why don't you ever see hippos hiding in trees?

Because they're really good at it!

Why did the pine tree get in trouble?

Because it was being knotty.

What is a pirate's favorite holiday?

AHRRRRR-bor Day



Shaw AFB Celebrates Arbor Day with Tree Planting

A dogwood tree was planted in the yard of Friendship Chapel on Shaw Air Force Base on Arbor Day, Dec. 4. Wing Commander Colonel Lawrence T. Sullivan spoke about the importance of trees to the Shaw AFB community and expressed his own vision about planting more hardwood trees on the base.

Shaw AFB has been a Tree City for 21 years.



20th Civil Engineer Squadron Base Forester Julian Maddox, EQIP Burning Coordinator Lowe Sharpe, 20th Fighter Wing Commander Lawrence T. Sullivan, and 20th Civil Engineer Squadron Major Graham C. Auten plant the dogwood at the Friendship Chapel.

Chuck Leavell Featured in Tree Man Documentary

He's often the guy perched behind Mick Jagger on stage, a keyboard altar at his fingertips as he leads the Rolling Stones through their Bible of hits in his role as the band's musical director. Most days, the man who helped dictate the sound of The Allman Brothers Band in their 1970s heyday is up before dawn. There might be a tree that needs to come down and loaded onto a truck and driven to a sawmill a few miles down the road that his brother-in-law runs. Depending upon the season, it could be time to plant feed plots for wildlife.

That's Leavell's other life on Charlane Plantation, the 4,000-acre tree farm outside of Macon where he lives with Rose Lane, his beloved wife of 47 years, as well as a quartet of horses and a pair of gregarious German shorthaired pointers, Babe and Flo. The contrast between performing in front of tens of thousands of people from Paris to Tokyo to Melbourne to Atlanta and the quietude of Charlane — its name a combination of Leavell's birth name, Charles, and his wife's — is something he relishes.

Leavell's dueling lifestyle is unique, making it ripe for exploration in the documentary "*Chuck Leavell: The Tree Man*." Released earlier this month for a limited run in theaters nationwide, the film, which nabbed the 2020 Sedona Film Festival's People's Choice Award, will arrive on video on demand Dec. 1.

The 3½-year undertaking with director Allen Farst keys in on three core aspects of Leavell's life: music, the environment and his love story with Rose Lane. Leavell's commitment to forestry and sustainability earned him and Rose Lane the National Outstanding Tree Farmers of the Year award in 1999 from the American Tree Farm System, an arduous selection process that includes visits from the voting board to inspect and walk the land.

Read the full article at: https://epaper.ajc.com/popovers/dynamic_article_popover.aspx?guid=9af649b3-4c8b-4a20-ba88-329ec5432707&pbid=8e0858ee-1443-484d-9e94-f8b8a1eaaaff&utm_source=app.pagesuite&utm_medium=app-interaction&utm_campaign=pagesuite-epaper-html5_share-article.



Rolling Stones' Chuck Leavell, a legendary rock 'n' roll musician, gets up early nearly every morning to check out what needs to be done to take care of his sprawling tree farm in Middle Georgia. (Photo: Atlanta Journal Constitution)

Fire Weather Outlook

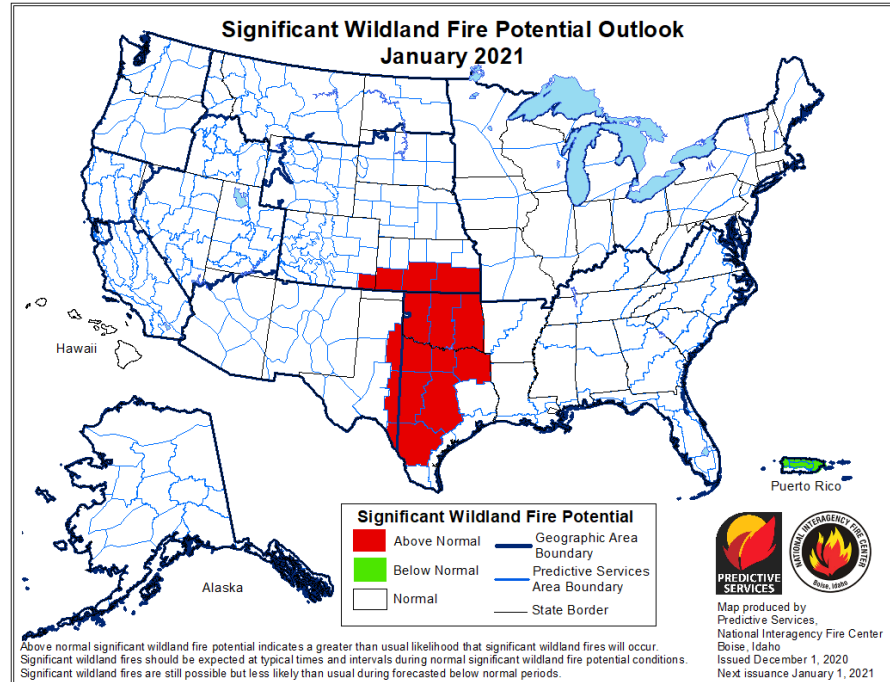
Southern Area: Overall, a general upward trend back to seasonal levels is expected for most of the Southern Area through the rest of fall and then mostly seasonal fire potential through winter.

While a warmer and drier than average winter is expected due to the ongoing La Niña, periodic short periods of post cold frontal dry air will likely produce episodic elevated to high fire danger. Exceptions to seasonal (i.e., average) fire potential will be portions of Oklahoma and Texas where drying is already occurring and across the southeast state area where dryness is likely to amplify over winter. Should La Niña persist and be stronger than expected into early spring, above normal significant fire potential could develop from the central and southern Gulf states to the Mid-Atlantic and Florida. However, the forecast long-range pattern should result in normal to above normal precipitation during February and March.

For the Southeast, only spotty areas of D0/ Abnormally Dry dot the region with the largest area affecting part of southeast Georgia. Otherwise, high rainfall from this year's above normal tropical activity is still having lasting positive impacts to soil and fuel moisture, although a La Niña induced pattern of dryness is beginning to lower fuel and soil moistures. Dry conditions expanded and intensified from west Texas and Oklahoma into more eastern areas of these states. Rain totals since September are now four to eight inches below normal across primarily west and northwest Texas. Drought continues across west Texas periods of elevated to high fire danger are expected.

Fire activity remains mostly seasonal to below seasonal levels with light initial attack and smaller fires. Short-duration dry and windy conditions have led to occasional increases in fire activity and larger fires, especially in areas with cured fuels due to normal frosts and freezes. Fuel moistures have dropped back to normal from very high levels during early fall. With a drying trend expected for the rest of the year, particularly for Oklahoma, Texas, and across southeastern areas of the Southern Area, fuel moistures are expected to continue declining. Given the impending onset of winter temperatures, a post leaf drop fuels environment, and high soil moisture values, the majority of fire activity will likely occur in fine fuels, which respond quickly to dry and windy weather.

With La Niña continuing through winter, periods of elevated to high fire danger are expected in portions of the Southern Area. Normal to above normal significant fire potential is forecast through March in Oklahoma and Texas with periodic increases of initial attack in the Deep South. Precipitation events are expected with the best chances in the Ohio and Tennessee Valleys and the western slopes of the Appalachians, which will significantly reduce the fire threat. An early start to fire season in Texas is likely, and conditions will be closely monitored.



Current Fire Numbers for South Carolina

MONTH-AND-YEAR-TO-DATE COMPARISON TO PREVIOUS 5- AND 10-YEAR AVERAGE

Time Period	OCTOBER		JULY - OCTOBER		FISCAL YEAR	
	FIRES	ACRES	FIRES	ACRES	FIRES	ACRES
5-Year Average	75	257	336	1,660	1,350	10,518
10-Year Average	87	271	360	1,701	1,709	11,824
Current FY ¹	9	30	78	223	78	223

Time Period	NOVEMBER		JULY - NOVEMBER		FISCAL YEAR	
	FIRES	ACRES	FIRES	ACRES	FIRES	ACRES
5-Year Average	71	2,435	407	3,624	1,350	10,518
10-Year Average	111	1,473	471	2,934	1,709	11,824
Current FY ¹	32	129	110	352	110	352

¹To date for current fiscal year



Poems & More...

OF TREES AND WOODLANDS



WHY WE KEEP ARBOR DAY

Trees of the fragrant forest,
 With leaves of green unfurled,
 Through summer's heat, through winter's cold,
 What do you do for our world?
 Our green leaves catch the raindrops
 That fall with soothing sound,
 Then drop slowly, slowly down,
 'Tis better for the ground.
 When rushing down the hillside,
 A might feshet forms,
 Our giant trunks and spreading roots
 Defend our happy homes
 From burning heat in the summer,
 We offer a cool retreat;
 Protect the land in winter's storm
 From cold, and wind and sleet.
 Our falling leaves in autumn,
 By breezes turned and tossed,
 Will make a deep spongue carpet warm
 Which saves the ground from frost.
 We give you pulp for paper,
 Our fuel gives you heat;
 We furnish lumber for your homes,
 And nuts and fruits to eat.
 With strong and graceful outline,
 With branches green and bare,
 We fill the land all through the year
 With beauty everywhere.
 So, listen from the forest,
 Each one a message sends
 To children, on this Arbor Day,
 "We trees are your best friends."

- Anonymous

Taken from the book titled "Poems, Prose and Songs of Trees and Woodlands for South Carolina", published by the S.C. State Commission of Forestry.

Photo of the Month



Piedmont Dispatcher Anna Gantt sent in this photo she took of a yellow garden spider in Pelion.

12 DIFFERENCES:

1. DKNY in place of D5K
2. M-3-2 to BR-2
3. Satellite dish on top
4. Bicycle horn on top of engine
5. Drone flying
6. Vin Vasive mascot hiding at front
7. Eagle in tree
8. State Forester Scott Phillips in camo in bushes
9. Pine tree behind cab missing
10. Dora Explorer backpack replaced shelter
11. Blade tilt arm missing
12. Operator's arm missing

Quote of the Month

"The secret of getting ahead is getting started."

Mark Twain

Please send in your photos or news to Michelle Johnson at mjohnson@scfc.gov.