



forests. resources. communities.

## IN THIS ISSUE

### Tennessee Fire Report

In late 2016, the Chimney Tops 2 Fire in Tennessee raced through a portion of Great Smoky Mountains National Park and into Gatlinburg and surrounding communities, killing 14 people and causing as much as \$2 billion in property damage. The National Park Service released its promised a report on the incident by an interagency review team in August. The team's main goal was "to understand the decisions that were made based on the conditions that existed and to identify and share lessons learned both within the National Park Service and the interagency fire community." **Page 2.**

### Chief Tidwell's Tenure

Char Miller reflects on US Forest Service Chief Tom Tidwell's tenure a month after his retirement. One of Tidwell's strengths was pragmatism: "One example of many was his commitment to stewardship contracting, a congressionally authorized mechanism whereby revenues generated from timber sales would not go to the US Treasury but instead underwrote restoration projects on the national forests." **Page 12.**

### Forest Products Industry News

Georgia-Pacific Corp. recently announced plans to construct a \$100-million lumber production facility in Talladega, Alabama. And an analysis by Grand View Research Inc., a California-based market research and consulting company, shows the global cross-laminated timber market growing to more than \$2 billion by 2025. This and more news on **page 14.**

### Rethinking the Stand

As society increasingly demands that we manage forests for values beyond fiber—especially for ecosystem services such as carbon, water, and species habitat—the stand paradigm is beginning to show its limits. Why should the stand bounds used for harvesting be the same as those used for carbon assessment? Why should we use the same bounds for measuring timber volume as we do for mapping a multitude of species habitats? Why should these bounds remain mostly fixed over time? **Page 16.**

## DEPARTMENTS

17	SAF News
20	People in the News
20	In Memoriam
22	Continuing Education Calendar
23	Employment Ads
24	News Briefs

## At War with Wildfires in the West

By Steve Wilent

While much of the nation was focused on the destruction caused by Hurricanes Harvey and Irma, and the recovery from those storms, primarily in Texas and Florida, several states in the western US battled disasters of their own: wildfires. By September 19, 49,840 fires had burned 8.53 million acres in the US, according to the National Interagency Fire Center (NIFC). That's 148 percent of the 10-year, to-date average of 5.77 million acres. Oregon and Montana had the largest areas of active fires on September 19—527,410 and 508,252 acres, respectively—followed by California (252,394 acres) and Washington (232,433 acres). Significant rainfall in the Pacific Northwest in late September helped firefighters contain and control many fires.

Heavy fuel loads and dry conditions throughout the region have been significant factors this season. Much of the Pacific Northwest experienced moderate drought conditions this summer, according to the National Drought Mitigation Center, and nearly all of Montana was



Onlookers watch smoke and flame from the Eagle Creek Fire on the Oregon side of the Columbia River Gorge National Scenic Area in September. The fire, started by fireworks thrown from a trail by a 15-year-old boy, had burned nearly 36,000 acres as of September 13. Photo: US Forest Service/inciweb.nwcg.gov.

classified as in severe, extreme, or exceptional drought.

Fires plagued western Canada, too. As of mid-September, the Canadian Interagency Forest Fire Centre reported that 5,143 fires had burned a total of 3,322,296 hectares (about 8.21 million acres) in 2017, primarily in two provinces: British Columbia (1,172,461 ha) and the Northwest Territories (1,027,440 ha).

According to a September 6 Canadian Press article, BC Forests Minister Doug Donaldson said that an estimated 53 million cubic meters of timber had burned.

Any fire season with more than 8.5 million acres burned can be characterized as extreme, but the number of acres burned is only one measure.

**WILDFIRE ■ Page 3**

## New Mexico Focuses on Collaboration in a Statewide Approach to Managing Water and Forests

By Andrea Watts

One example of New Mexico's forestry practices will be showcased at SAF's upcoming National Convention in Albuquerque, November 15–19 ([www.safconvention.org](http://www.safconvention.org)): A scientific/technical session and a technical tour (Rio Grande Water Fund/Santa Fe Fireshed) will feature the Greater Santa Fe Fireshed Coalition. The coalition is part of a larger effort in New Mexico to address the ecological health of its forests and watersheds. Here's a look at these efforts.

At 43 pages, *The New Mexico Forest and Watershed Health Plan* is modest in length compared to the 121,697-square-mile landscape it addresses. Its authors describe the ecological health of the landscape as being in "an unhealthy state, as demonstrated by overly-dense woody vegetation, a degradation of biodiversity, and fragmentation and deterioration of wildlife habitat. As a result, New Mexico faces greater susceptibility to catastrophic wildfire and drought, compromised watersheds and decreased water supply, accelerated erosion, and desertification." Since its adoption in 2005, the report's call for an integrative collaborative ap-



The Santa Fe Fire Department is one of the participants in the Greater Santa Fe Fireshed Coalition, and Porfirio Chavarria, the wildland-urban interface specialist with the department, is a member of the communications team. Headshot is courtesy of Porfirio Chavarria.

proach when conducting ecological restoration has served as the foundation for all the current (and future) ecological restoration being undertaken in the state.

"We are a big state, we have a lot of land, we have a small population, and a pretty small community of practitioners who do this work, so we know each other. It just became obvious that we have to

## SAF Convention: Meeting Diverse Needs in a Changing World

By Steve Wilent

If you're still mulling a trip to Albuquerque, New Mexico, for the 2017 Society of American Foresters National Convention, November 15–19, convention co-general chairs Mary Stuever and Paul Sheppard have a number of inspiring reasons why it's worth attending. And if you've already signed up, they offer some highlights to look forward to.

Stuever and Sheppard are members of the Southwest SAF division, which is hosting the convention ([www.safconvention.org](http://www.safconvention.org)). Stuever is the Chama District forester for the New Mexico State Forestry Division; the district is near the state's border with Colorado. She leads a four-person office that typically triples in staff numbers during fire season, and carries out the division's three main objectives.

"We provide fire protection for state and private lands, technical forestry support to private landowners and state agencies, and leadership for landscape-scale collaboration over all jurisdictions,"

**NEW MEXICO ■ Page 6**

**CONVENTION ■ Page 8**



Published monthly by the Society of American Foresters (SAF), *The Forestry Source* (ISSN 1084-5496) provides SAF members and other natural resource professionals with news regarding developments within the forestry profession as well as the activities and policies of SAF.

The opinions expressed in articles, commentaries, and letters do not necessarily reflect the policies or views of SAF.

Publisher: Matt Menashes, mattm@safnet.org  
Editor: Steve Wilent, (503) 622-3033, wilents@safnet.org  
Associate Editor: Andrea Watts, wattsa@safnet.org

Editorial Offices and Advertising Sales  
10100 Laureate Way, Bethesda, MD 20814  
Tel (301) 897-8720 • www.safnet.org

Correspondence: Address all editorial correspondence to the Editor at the above address. Advertising inquiries should be directed to Christopher Whited at (301) 897-8720, ext. 110.

Subscription rates: \$61 for individuals in the US and Canada \$116 in other countries); \$116 for institutions in the US (\$173 in other countries). Subscriptions for members is included in annual dues. See [tinyurl.com/m6xo2x9](http://tinyurl.com/m6xo2x9) for other rates and information. For information regarding subscriptions, address changes, and purchasing single editions, call 866-897-8720.

Permission to reprint: Individuals, and nonprofit libraries acting for them, are permitted to make fair use of the material in this publication; for example, copying an article for personal or classroom use. For republication, or systematic or multiple reproduction of copyrighted material, permission must be obtained from SAF, with a fee for commercial use to be determined. To request permission to republish or reproduce material, contact the Editor at the address above. Proper notice of copyright and credit to *The Forestry Source* must appear on all copies made. Permission is granted to quote from *The Forestry Source* if the customary acknowledgment accompanies the quote.

Postmaster: Send address changes to *The Forestry Source*, 10100 Laureate Way, Bethesda, MD 20814, Attn.: E. Cooke

Periodicals postage paid at Bethesda, Maryland, and at additional mailing offices. Printed in the USA.

© 2017, Society of American Foresters.  
ISSN 1084-5496.

### Society of American Foresters

The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish standards of professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

President: Frederick W. Cubbage,  
[fredcubbage@yahoo.com](mailto:fredcubbage@yahoo.com)

Vice-President: David S. Lewis, CF, ACF,  
[dlewis@southernforestry.net](mailto:dlewis@southernforestry.net)

Immediate Past-President: Clark W. Seely, CF,  
[cseely2@cfl.rr.com](mailto:cseely2@cfl.rr.com)

Chief Executive Officer: Matt Menashes,  
[mattm@safnet.org](mailto:mattm@safnet.org)

**Board of Directors (District):** Keith A. Blatner, CF (1); Michael J. Cloughesy (2); Richard B. Standiford, RPF (3); Jim Thinnies CF, (4); Donald E. Howlett, CF (5); Sidney E. Balch, CF (6); Rachel R. Reyna, CF (7); Christa F. Rogers (8); Lee A. Crocker, CF (9); R. Wayne Bell, CF (10); Michael L. Murphrey, CF (11).

**Non-voting members of the Board of Directors:** Alexa Denhoff, Student Representative to the Board; Christopher J. Farley, Chair, Forest Policy Committee; Gregory R. Russell, CF, chair, House of Society Delegates; Andrew J. Sánchez Meador, Chair, Forest Science and Technology Board.

**National Office Department Directors:** John R. Barnwell, Director of Government & External Affairs; Jeff Ghannam, Senior Director, Strategic Communications; Jennifer Kuhn, Director of Publications; Louise Murgia, CF, Chief of Staff and Chief Operating Officer; Naomi Marcus, Director of Professional Development; Carol Redelshiemer, CF, Director, Science And Education; Corey Ruple, Director of Membership and Business Operations; David Seabrook, Comptroller; Christopher Whited, Senior Director of Marketing and Conventions.

## Unimaginable Smoky Mountains Park Fire Is the “New Normal”

By Steve Wilent

The tendency to assign blame in the aftermath of natural disasters is a natural response to destruction and tragedy. “If only X had done Y, then Z wouldn’t have been so bad.” Z might be any natural disaster: the 1906 San Francisco earthquake, the Great Fires of 1910, Hurricanes Katrina or Harvey or Irma—or the fire that burned a swath of forest in and around Great Smoky Mountains National Park last fall. On the afternoon of November 28, 2016, high winds, combined with unusually dry fuels, turned a small fire in the park into a raging inferno called the Chimney Tops 2 Fire (CT2). The flames spread to the adjacent Gatlinburg, Tennessee, area, killing 14 people and causing as much as \$2 billion in property damage by some estimates.

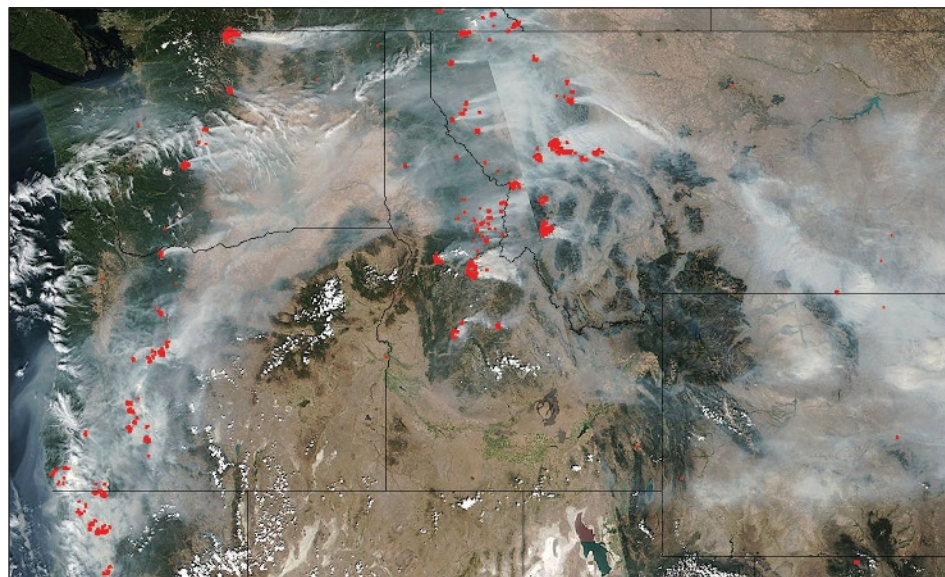
In the wake of the fire, the National Park Service assembled an interagency review team to assess the park’s preparedness for fire and its response to CT2. On August 31, more than eight months after the fire, the eight-member committee released its report, the primary goal of which was “to understand the decisions that were made based on the conditions that existed and to identify and share lessons learned both within the National Park Service and the interagency fire community.”

The review team identified situational preparedness weaknesses at Great Smoky Mountains National Park, as well as with its adjacent stakeholders, and found inconsistencies between the fire management program in the park and other national parks. It recommended that the agency conduct a review of the wildland fire program at the park and at regional Park System levels, and that it institute a formal fire management officer mentoring and/or development program. Although the report addresses only the portion of the fire that occurred within the national park’s boundaries—not the fire’s effects on private land and homes outside the park—it will be a valuable learning tool for wildland fire managers at all levels, from local to federal. Read it for yourself at [tinyurl.com/yatfhma8](http://tinyurl.com/yatfhma8).

One thing the team did not do was assign blame.

“The review team found no evidence of negligence by anyone at the park when it came to their duties,” said team leader Joe Stutler, Western Region co-chair for the Cohesive Wildland Fire Strategy, at a press conference announcing the release of the report. “They did the very best they could, based on what was loaded in their hard drives.” [Stutler points to his head.]

“We found that the park [personnel] did not see or imagine the potential for the low-frequency, high-risk event,” continued Stutler. “We did an exhaustive fire history of the park. Never in the history of this park or even the surrounding area had anyone seen the combination of severe drought with fire on the landscape



Red areas indicate wildfires in the Pacific Northwest in this September 5 NASA satellite image, and smoke from the blazes covered much of the region.

and an extreme wind event that was determined to be a mountain wave.”

Although mountain waves are common from November through March in the western foothills of the southern Appalachian Mountains, Stutler said that “never before have we seen the combination of those three” conditions at the same time. “Of the scores of people we identified as witnesses, people with lots of fire experience said, ‘I’ve never seen anything like this and I never imagined I ever would.’”

In addition to Stutler, the review team included:

- Tim Reid, superintendent, Devils Tower National Monument, National Park Service
- Shane Greer, assistant fire director of risk management, Region 2, US Forest Service
- Miranda Stuart, fire management specialist, National Interagency Fire Center, National Park Service
- William Grauel, fire ecologist, National Interagency Fire Center, Bureau of Indian Affairs
- Jimmy Isaacs, fire chief, Town of Boone, North Carolina
- Mike Lewelling, fire management officer, Rocky Mountain National Park
- Paul Keller, technical writer-editor, Wildland Fire Lessons Learned Center

The team’s conclusions are applicable not just to Great Smoky Mountains National Park, but also to much of the nation, especially the western states where numerous large fires are burning as I write this, including one here in Oregon, the Eagle Creek Fire, which has led to the evacuation of hundreds of homes in a rural area a few miles from my community:

*The park and adjacent wildland fire agencies have been successful in limiting the presence and impact of unwanted fire for decades. However, today, a variety of emerging*

*trends increasingly places responders, the public, and other values to be protected at risk. Changes in wildland fuels resulting from past land management practices, climatic change, and decades of fire suppression have all conspired to create a fire exclusion conundrum that can no longer be ignored.*

Combined with these factors, expansion of the wildland-urban interface (WUI), which has largely been unaccompanied by parallel increases in local community resiliency, is also creating new risks. Fire suppression in conjunction with a limited prescribed fire program only exacerbates the problem and limits fire managers’ best tools to combat fire-related smoke and air quality issues. These issues are expected to become more acute as climatic change exposes new areas—particularly those with high concentrations of organic biomass—to wildland fire.

During the review team’s interviews, a universal statement from responders was: “I’ve never seen anything like this, and I never even imagined this could happen.” The review team agrees that these circumstances present during the Chimney Tops 2 Fire will likely be the “new normal” for the park. To be sure, these same conditions are likely to align again in the future to allow for a large-scale wildfire that leaves the park and burns into the urban-interface. The findings and recommendations in this review report are intended to help the park be prepared for such a scenario.

Park leadership and adjacent stakeholders must challenge long-held assumptions and practices in the wildland fire management community and produce a multidimensional planning framework to enable fire leaders’ evaluation of strategies and programmatic investments against plausible future wildland fire environments, or the “new normal.”

In an effort to understand the human factors involved in the Chimney Tops 2 Fire, part of its attempt at “sensemaking,” the team solicited the professional opinion of Branda Nowell, a professor at North Carolina State University’s School of Public and International Affairs. Her response





## THE ULTIMATE COMBINATION OF LASER ENGINEERING



### TOUGH

Holds up to everyday uses under any conditions and is completely dust and waterproof



### LONG RANGE

Makes objects easy to see and target up to 300 meters with 2x optics and sharp in-scope display



### ADAPTABLE

Automatically switches between distance meter and rangefinder technology for greater flexibility



### SMART

Measures and calculates a wide variety of solutions, stores data on-board and sends files using wireless communication



### FAST

Quickly displays the highest degree of accuracy possible on an automatically rotating viewscreen



### ACCURATE

Achieves millimeter to centimeter accuracy, dependent upon the range and quality of target



**COMING SOON: TRUPOINT™ 200H —**  
**The world's first laser rangefinder + distance meter!**

Visit us at SAF National Convention Booth #306  
or online at [hybridmeasurements.com](http://hybridmeasurements.com)





## WILDFIRE

■ From Page 1

“In 2015, a record 10.1 million acres burned. However, more than half of those acres burned in Alaska in remote locations, and that’s why this fire season has seemed to be more extreme to a lot of people,” said Jessica Gardetto, a Bureau of Land Management (BLM) employee who is a spokesperson for the National Inter-agency Fire Center. “We’ve had so many large fires on the landscape burning for such an extended amount of time. The Rice Ridge Fire in Montana, for example, has been burning since the first week of July. And a lot of people have been affected by these fires—homes have been evacuated, homes have burned. That’s been the difference for this fire season—we’ve had a lot of fires threatening homes, communities, and infrastructure, and these fires have been on people’s minds.”

Conditions conducive to fire were and are present throughout the West: plentiful dry fuel and lots of ignitions.

“The weather did not help us out very much this summer,” said Gardetto. “A lot of people thought that perhaps we wouldn’t have above normal to extreme fire activity in many of the areas

that received high amounts of snow this past winter. But it became hot and dry pretty early on in the early summer and the snow melted quickly, and there was a lot of fuel built up that, once it dried out, was ready to burn. Mother Nature also sent us a lot of thunderstorms with a lot of lightning—unfortunately, those thunderstorms were a pretty regular occurrence throughout the summer, so we had a lot of fire starts on the landscape.”

This year, the US Forest Service (USFS) and Interior Department (DoI) agencies such as the Bureau of Land Management began the fire season with 14,516 firefighters (10,000 USFS, 4,516 DoI), 103 fixed-wing aircraft and 683 helicopters (on either exclusive-use or call-when-needed contracts), and 1,617 engines. As of September 8, 1,440 active-duty military and reserve personnel and National Guard service members were assigned to fires or were training for deployment. In total, counting these and state, local, and contract fire crews, there were more than 21,000 firefighters on the firelines in 10 western states as of September 13, according to NIFC.

Those numbers may sound impressive, but this year personnel have been stretched thin.

“We are definitely having to be very strategic about where we place resources. When we have an extended fire season like this, where there’s so much fire on the landscape for such a long time, we do end up with stretched resources,” Gardetto said. “We’ve been okay as far as aircraft go, because we have had ample numbers of large air tankers, single-engine aircraft, and US military planes with MAFSS [Modular Airborne Fire-Fighting Systems], along with plenty of helicopters of all types and sizes.

“Some people say, ‘Why aren’t there more air tankers out here?’ Well, that’s often due to a combination of weather, visibility if it’s too smoky, the terrain, and many other factors,” she added. “In some cases, it’s too hot and the air density isn’t right for helicopters to fly, but air tankers can fly.”

As is often the case at the end of summer, many fire crews lost members as college students returned to classes.

“When late August and early September roll around, a lot of college students are going back to school, and we definitely notice the loss of the members of our fire crews who are college students. We have to make up the difference by hiring emergency firefighters or detailing fire-

fighters from other crews, especially with Type I Hotshot crews, so they can still be considered Type I crews and have the experienced firefighters with the qualifications they need.”

Together, the USFS and DoI field 87 Hotshot crews, 375 Type 2 20-person crews, and 471 smokejumpers.

### Political Heat

Concerns about the fires and the homes and resources burned or at risk spurred talk of action from Trump administration leaders. On September 12, Interior Secretary Ryan Zinke directed all department bureaus, superintendents, and land managers “to adopt more aggressive practices, using the full authority of the Department, to prevent and combat the spread of catastrophic wildfires through robust fuels reduction and pre-suppression techniques.”

“This Administration will take a serious turn from the past and will proactively work to prevent forest fires through aggressive and scientific fuels reduction management to save lives, homes, and wildlife habitat. It is well settled that the steady accumulation and thickening of vegetation in areas that have historically burned at frequent intervals exacerbates



The Highline Fire burning within an area burned in a 2000 wildfire in the Frank Church River of No Return Wilderness on the Payette National Forest in Idaho. Timber types are a mixture of lodgepole pine/subalpine fir at the higher elevations and some ponderosa pine on the lower, or more exposed, southern/western aspects. Most of the area within and around the fire area has previously been burned. This has resulted in a significant amount of dead and down fuels. Photo: US Forest Service/inciweb.nwcg.gov.





About 350 California National Guard received fire-suppression training at Camp Roberts, a National Guard post in central California, in September. The soldiers were led by about 50 experienced California Department of Forestry and Fire Protection firefighters. Photo: California National Guard.

fuel conditions and often leads to larger and higher-intensity fires,” said Zinke via a press release. “These fires are more damaging, more costly, and threaten the safety and security of both the public and firefighters. In recent fire reviews, I have heard this described as ‘a new normal.’ It is unacceptable that we should be satisfied with the status quo. We must be innovative and where new authorities are needed, we will work with our colleagues in Congress to craft management solutions that will benefit our public lands for generations to come.”

In remarks delivered during the swearing in of new USFS chief Tony Tooke, Agriculture Secretary Sonny Perdue called on Congress to change the way USFS is funded, to prevent the routine borrowing of money from fire-prevention, forest-management, and other programs to combat ongoing wildfires. “You know the facts. Our [USFS] budget has moved from 15 percent of fire suppression to over half—55 percent-plus. It may be more than that this year, in having to fight fires. And there’s no way we can do the kind of forest man-

agement and the prescribed burning and harvesting and insect control, all those kinds of things that diminish fires,” Perdue said. “Fires will always be with us. But when we leave a fuel load out there because we have not been able to get to it because of a lack of funding, or dependable funding, we’re asking for trouble. We’re asking for disasters, year in and year out. And that’s what we hope to get fixed.”

According to USFS, the fire-suppression portion of its budget is funded at a rolling 10-year average of appropriations, whereas the overall agency budget has remained relatively flat. Because the fire seasons are longer and conditions are worse, the 10-year rolling fire-suppression budget average keeps rising, consuming a greater percentage of the total budget each year. The agency has had to borrow from prevention programs to cover fire-suppression costs. Perdue said he would prefer that Congress treat major fires the same as other disasters covered by emergency funds, so that programs aimed at fire prevention and forest health are not affected.

### Funding Firefighting

In early September, Congress passed and President Trump signed a bill that provides hurricane disaster relief funding and raises the federal debt ceiling. The bill includes an amendment that allows USFS and other agencies to retroactively cover the remaining costs of fighting fires for the 2017 fire season, which could reach \$300 million above the previously set firefighting budget for 2017.

“I am glad the Senate has heeded our call to provide some help for the short term. I am also pulling out all the stops to fight for our bipartisan, long-term wildfire funding solution that tackles the skyrocketing cost of fighting fires and ends the backwards cycle that shortchanges wildfire prevention every year,” said Sen. Ron Wyden (D-Oregon), ranking Demo-

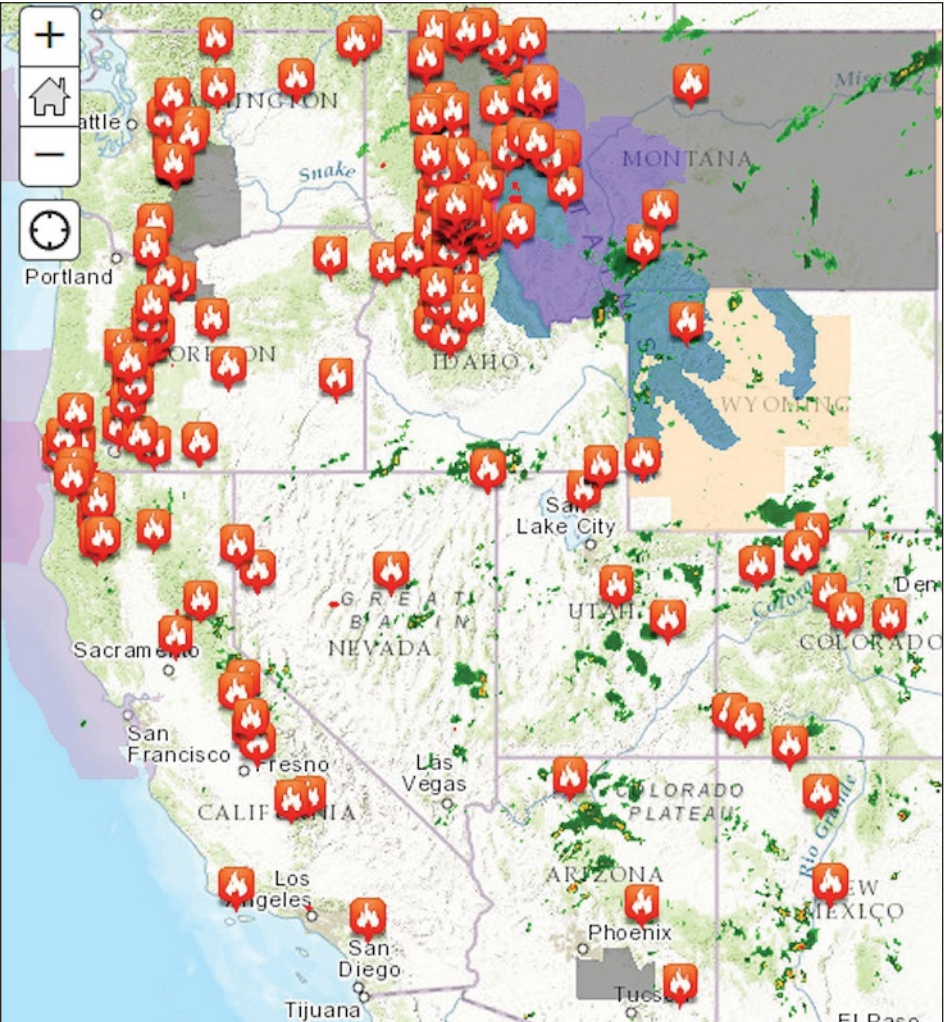
cratic member of the Senate Committee on Finance. “These fires are getting hotter, bigger, and tougher to fight. Congress needs to step up and treat these infernos like the natural disasters they are.”

Danielle Watson, assistant director, SAF Government Affairs and External Relations, lauded the increased funding for 2017, but added that Congress ought to provide a long-term solution.

“While the wildfire funding provision included in the bill is a much-needed fix to cover expenses in fiscal year 2017, it does nothing to address the larger, more troubling issues related to how we fund wildfire costs,” said Watson. “In addition, this provision merely takes money from next year’s budget to pay for this year’s shortfalls. We are fortunate—and grateful—that Congress was able to make this shift—and, hopefully, avoid transfers from nonfire programs this year—but additional funds will be need to be approved by Congress to restore proper funding for fiscal year 2018. Ultimately, Congress must implement a comprehensive budgetary solution to wildfire funding that allows access to disaster funding, stops transfers, and addressing the growing 10-year average.”

Gary Schiff, policy director for the National Association of State Foresters, agrees that long-term funding reforms are needed.

“Again this year, we seeing wildfires rage across the West. These wildfires are increasingly costly and devastating to the forests and neighboring communities because of overgrown, fire-prone stand conditions,” he said. “More active management is needed across all ownerships to mitigate the impacts. As we all know, thinned park-like stands of trees can most often withstand a wildfire and can provide a safety zone from which fire crews can battle oncoming blazes. The forestry funds needed to thin our nation’s forests are being used to fight these rag-



From Esri’s US Wildfire Activity Web Map on September 13 showing most of the 114 active wildfires burning throughout the nation. See [tinyurl.com/god6xjp](http://tinyurl.com/god6xjp).



be coordinated and do this type of work together in order to really be effective at a larger scale,” explained Susan Rich, the state’s forest and watershed health coordinator.

The creation of the Forest and Watershed Health Office and Rich’s position was one of the plan’s 20 action items. As for why the office includes both forest and watershed health in the title, Rich said, “Here [forests and watersheds] are just so clearly linked. Our surface water sources and our aquifer water sources are tied to precipitation in the high-elevation forestlands.... People who live here recognize that connection.”

In the decade following the report’s adoption, a number of its action items have been completed, including conducting a statewide assessment of forests and watersheds and establishing an on-line clearinghouse for information. Others are ongoing, such as creating a statewide projects database and supporting local collaborative efforts.

The statewide assessment and ensuing Strategy and Action Plan identified the high-priority watersheds, and those areas became the focus of developing collaboratives, said Rich. Depending upon the area, the collaboratives may be led by county or state agencies, conservation districts, or grassroots groups, but in all cases “they’re developed to meet the needs of the landscape and the needs of the people who work and live in the landscape,” she explained.

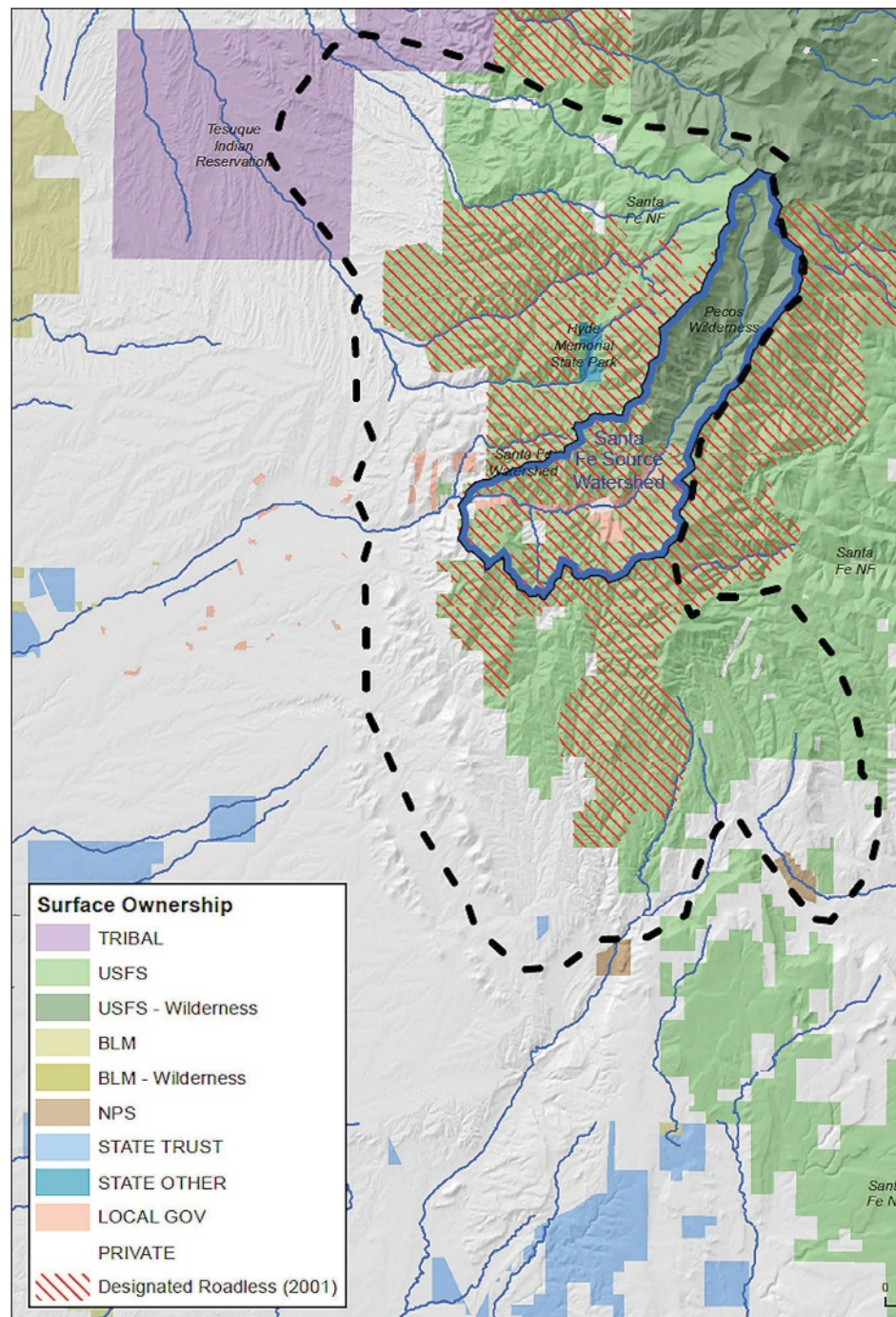
In the case of grassroots-initiated collaboratives, Rich and her colleagues help the groups frame their work within the statewide goal of landscape-scale ecological restoration, so they can be more successful in obtaining funding and, in the long run, be more effective.

However, there have been setbacks in creating collaboratives where they are needed, Rich acknowledged: “There have been a couple attempts to start collaboratives where it’s recognized as a high-priority watershed, but for some reason it’s not ripe on the ground to have one. They start and sputter—they haven’t quite taken off yet.”

### An Integrated Approach in Action

One of the grassroots collaboratives that took off right away is the Greater Santa Fe Fireshed Coalition (GSFFC), and from the beginning, it was established and built on the National Cohesive Wildland Fire Management Strategy framework. Porfirio Chavarria, the wildland-urban interface specialist with the Santa Fe Fire Department, recalled that there were two separate discussions occurring within the community that helped build the momentum and support for the eventual formation of GSFFC.

“Eytan Krasilovsky, with the Forest Stewards Guild, and I had approached the mayor of Santa Fe to discuss working together on outreach and projects related to creating fire-adapted communities within Santa Fe,” said Chavarria. “The mayor was all onboard and said, ‘Okay, let’s do this. What are the action items?’”



**The Greater Santa Fe Fireshed Coalition encompasses a 107,000-acre landscape in the southern Sangre de Cristo Mountains. Later this year, there will be a signatory event of all the partner organizations to formally announce the formation of the coalition. Map courtesy of Greater Santa Fe Fireshed Coalition website.**

Unbeknownst to Chavarria, his chief, Erik Litzenberg, was also in discussions of his own. “Two weeks later, my chief and state forester Tony Delfin called a meeting in December 2015 to get all the partners to say we want to do something in this landscape.”

That’s not to say that work hadn’t been done on the landscape. A number of projects were initiated in response to the Cerro Grande Fire in 2000. In the nearby Santa Fe National Forest, the Pueblo of Tesuque and the Bureau of Indian Affairs Northern Pueblos Agency had conducted fuels treatments on Aspen Ranch and planning for the Vigil Grant. Fuels-reduction treatments were also conducted within the city’s 17,000-acre municipal watershed. In Santa Fe, a citywide hazard and risk assessment in 2006 identified 19 neighborhoods that had a wildfire risk. As part of his duties, Chavarria visits landowners and connects them with resources to help reduce their wildfire risk. Through its green waste program, the fire department picks up slash material from May through September and hauls it to the transfer station for free. Chavarria said that one community produced enough slash that residents needed weekly pickups for 10 weeks. Another community along the Santa Fe River took

the initiative to do fuels-reduction work along the riparian corridor, “which is excellent, because that leads right to our municipal watershed,” Chavarria said.

However, as a result of the December 2015 discussion, it was recognized that a more integrated approach was needed to effectively carry out the restoration work; hence the need for GSFFC. GSFFC encompasses a 107,000-acre landscape in the southern Sangre de Cristo Mountains, which was identified as high-priority area by the state’s Forest and Watershed Management Coordinating Group. It includes the Santa Fe municipal watershed, the Pueblo of Tesuque, and US Forest Service lands, as well as state and private land. More than 20 partner organizations representing state, local, tribal, and federal agencies and nongovernmental organizations participate in the coalition.

Since that discussion, three task teams—a landscape analysis team, a communications team, and the implementation team—were formed to parse out the work. Chavarria, along with Krasilovsky, is a member of the communications team, while his supervisor, Greg Gallegos, a wildland superintendent, is on the implementation team, and Chief Litzenberg is currently serving as the Coalition’s chair through the end of 2017. In late September

2017, the overall landscape assessment The Nature Conservancy produced for the landscape analysis team will be unveiled to the public, and in the next few months the strategies for addressing the work will be rolled out, along with a signatory event of all the partner organizations to make GSFFC formal.

Even as this planning work was underway, there was concurrent forward momentum with identifying and funding restoration projects. Chavarria said that a number of agencies, including the Santa Fe–Pojoaque Soil and Water Conservation District, the New Mexico State Forestry Division, the Pueblo of Tesuque, the Forest Stewards Guild, and the US Forest Service, have received grant funding or allocated funds for projects within the fireshed. “I don’t know whether some of these projects were going to be done anyway, but what has happened is this [the Greater Santa Fe Fireshed Coalition] has given support to people to accomplish these projects with backing from other partners,” said Chavarria.

“Attracting the funding and then being able to apply it in a complementary way across jurisdictional boundaries—that’s probably the most solid accomplishment besides the development of the science-based risk assessment and the [Greater Santa Fe Fireshed Coalition] itself,” Rich said.

It’s the funding of these projects that has and will make the difference in the success of this collaboratives and others, according to Rich. The Division of Forestry has received \$12.2 million in state funding since 2014 for watershed restoration on public lands, with a matching \$14.5 million in federal funding.

“All the activity that’s happening in New Mexico now couldn’t have happened without the state funding that has been coming through the last five years,” she said. “The forest and watershed health plan set up the foundation and got things moving, but the fruit of all this effort really happens when you get the governor’s and legislature’s support and state funding and that leverages the federal funding and attracts foundation support and private industry.” **FS**



**Following the initial discussion regarding the need for the Greater Santa Fe Fireshed Coalition in December 2015, a series of public meetings was held to discuss the formation and goals of the coalition. Photograph courtesy of NM State Forestry.**





Student Society of Arboriculture—ISA



# STUDENTS

## JUMP-START YOUR CAREER

### WITH ISA

[www.isa-arbor.com/students](http://www.isa-arbor.com/students)



# 1

### Careers in Arboriculture

Looking to work in the industry, but wondering where to start? Unsure of your career options? Check out the flowchart that outlines multiple arboriculture career path options.

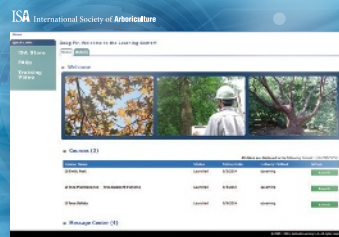
### Online EDUCATION

# 2

ISA Online Learning Center (OLC)  
Supplement your studies with these online courses in the field of arboriculture.

Tune in to ISA's informative, entertaining, and **free podcasts!**

Access past issues of *AUF* for current findings on the care and management of trees in urban environments.



# 3 Job Bank

Start your career early. Find available jobs in the area of practice that interests you.

Join ISA, and you can also post a resume in the ISA Job Bank.

**Student membership in ISA is free when you join your local chapter!**



International Society of Arboriculture  
[www.isa-arbor.com](http://www.isa-arbor.com) • p. +1 217.355.9411 • [isa@isa-arbor.com](mailto:isa@isa-arbor.com)

Learn more at  
[www.isa-arbor.com/students](http://www.isa-arbor.com/students)



## CONVENTION

### ■ From Page 3

Stuever said. “We try to get everyone to play well in the sandbox. We focus a lot on watershed restoration, firehedges, and the best approach for solving problems at the right scale and bringing people together

to address the issues.”

Sheppard, an associate professor at the University of Arizona’s Laboratory of Tree-Ring Research, uses dendrochronology—the study of tree rings—to reconstruct environmental conditions of the past and/or to monitor modern-day environmental change.



Paul Sheppard, 2017 SAF National Convention co-general chair, outside his office at the University of Arizona’s Laboratory of Tree-Ring Research. The tree cross-section is from a ponderosa pine that died in 1993 in the Jemez Mountains, just north of Albuquerque. Labels show the pith date (1583); other labels show the first fire scar, which occurred in 1607, and the last, from 1873.



Signature  
FEDERAL CREDIT UNION  
Everywhere You Are



### Help yourself while you help your great organization!

We are excited to offer SAF members a special Visa® credit card that shows the pride you have in your organization. The Society of American Foresters shares in the interest earned on these special cards used by SAF members.

**Additional benefits of the SAF Visa card:**

- Low competitive rate
- Earn one (1) reward point per \$1.00 spent on qualified purchases
- No annual fee, no balance transfer fees, no cash advance fees
- Credit limits from \$250 to \$25,000
- No foreign transaction fees

Visit our website at [www.signaturefcu.org/SAF](http://www.signaturefcu.org/SAF) or call (800) 336.0284 for more information and to apply.

(800) 336.0284  
membership@signaturefcu.org  
SignatureFCU.org  
#Signaturefcu



**Federally insured  
by NCUA**

Membership eligibility required

“The big applications of dendrochronology are dating the ruins [of ancient dwellings] in the Four Corners area,” he said. “I’m interested in prehistoric and historic forest use and the dating of humans on the landscape. I’m also interested in the reconstruction of climate and ecological events—including past forest fires—so that we can know how fires used to burn. We ask ourselves today whether the fires of today are similar to the fires of the past, and the answer appears to be no. It’s been determined through the tree-ring record that the big change in western forests and fire ecology beginning in the late 1800s and early 1900s is one of the biggest ecological changes in US history.”

In the late 1800s and early 1900s, low-intensity surface fires that burned every 10 to 15 years in mid-elevation ponderosa pine forests largely ended with the introduction of large-scale livestock grazing by European settlers.

### Convention Theme

I began my conversations with Stuever and Sheppard by asking for their thoughts about the convention theme: The Future of Forestry: Meeting Diverse Needs in a Changing World. Both said that the emphasis on diversity has more than one meaning.

“The word ‘diversity’ is pretty common these days, and it can be applied to both ecosystems and humans,” Sheppard said. “The human part of it is where SAF is striving to improve—it is trying to get a more diverse membership, with more women, people of color, younger people. But in the American Southwest, ecosystem diversity is huge—we have everything from desert to high subalpine forests and nonforest. The Southwest is so interesting topographically. Many people go to Arizona and think it’s all desert and saguaro cactus, and they think of New Mexico as nothing but native cultures and ancient peoples living in stone houses. Those stereotypes are so old and tired. We want to try to get people who come to Albuquerque to realize the incredible diversity of ecosystems and the extremely long period of human habitation spanning at least 10,000 years.”

Stuever said the convention theme is inspiring.

“The theme is not only pertinent, but also a demonstration of how our profession of forestry is right there on the cutting edge. We started using the word ‘sustainability’ way before some of the other fields that are now claiming ownership of it, and yet we’re still on the cutting edge of defining what sustainability means, determining how we go about attaining it, and stretching our minds to think about where we are in our profession and where we need to go,” she said.

Plenary sessions 2, “Integration & Adaptation,” and 3, “Transforming Resource Management,” examine this type of diversity from multiple viewpoints.

“I’m grateful that we have so many different agencies and foresters working on our landscape. I love landscape-scale collaboration and the idea of us all working together, but that doesn’t mean we all do the same thing,” said Stuever. “By having different values, different objectives,

different ways of looking at the forest, and acting as professional managers, we end up not doing the same things on the landscape, and that’s a good thing. That’s diversity in our profession.”

### Convention Highlights

What one event would our convention co-chairs recommend for attendees?

For SAF members and others who want to get a taste of New Mexico outside Albuquerque, Stuever recommends the two-day Philmont, Vermejo Park, and Western Wood Industries tour, on Tuesday and Wednesday, November 14 and 15. The tour includes travel to two iconic properties in northern New Mexico: the Boy Scouts’ Philmont Scout Ranch and Ted Turner’s Vermejo Park Ranch, where the forests of each property reflect the different land-use influences of the past. The tour costs \$250, including overnight accommodations at the Scout Ranch; see the convention website for details.

Of course, picking just one event to highlight is difficult.

“I wish I could be on every field tour and attend every technical session,” said Stuever, “but what I’m looking forward to most is the opportunity to be a host for the convention and sharing with my forestry colleagues this place I call home, a place I think is so amazing and wonderful.”

Technical tours are of the most interest to Sheppard.

“I would highly recommend going on a technical tour. There are trips around Albuquerque to see urban forestry—Albuquerque is a very old town, so there’ll be some old and interesting trees. There’s also a trip to see the *bosque* and riparian ecosystems along the Rio Grande and the problems that they have, especially with the reduction of surface-water quantity. But don’t forget the trips to higher-elevation conifer forests that protect watersheds for the city of Santa Fe, for example, and the devastation caused by fires such as the Cerro Grande Fire in 2000. I suggest choosing one tour and sort of making that the linchpin for your week at the convention.”

### New Mexico Sights

For an attraction within the city and close to the convention center, Stuever



2017 SAF National Convention co-general chair Mary Stuever in a photo taken for her book, *The Forester’s Log: Musings from the Woods* (2009, University of New Mexico Press).





the view from your  
dad's lucky treestand



your childhood  
swimming hole



your family's  
weekend retreat



your dog's favorite  
romping spot

Anyone can see the beauty.  
Our specialty is helping  
preserve your legacy.

Land Management | Real Estate Services | Wildlife Management  
Recreational Leases | Timber Sales

**We're in this together**  
[americanforestmanagement.com](http://americanforestmanagement.com)



AMERICAN FOREST  
MANAGEMENT





The Sandia Peak Tramway outside Albuquerque, New Mexico. Photo by Adam Selby/Wikimedia Commons.



# SILVIATERRA

## LESS FIELDWORK BETTER DATA



CANOPY



CRUISE BOOST



PLOT HOUND

**Simple imagery-assisted cruising for everyone**

**SILVIATERRA.COM/FS**

recommends the New Mexico Museum of Natural History and Science ([www.nmnaturalhistory.org](http://www.nmnaturalhistory.org)).

“The museum does a pretty good job of capturing New Mexico in terms of both time and space, and it has interesting interpretations. As someone who lives in New Mexico, I find the museum’s displays and programs pretty phenomenal at helping us understand where we live.”

Sheppard said he plans to visit the Sandia Tramway before or after the convention while he’s in New Mexico.

“The tramway crosses a few thousand feet of elevation, and the forest ecosystems change constantly, and at the top you wind up at something like 10,300 feet, where there is subalpine forest. For us foresters, the important thing would be the opportunity to see the environmental gradients that are so well expressed in the American Southwest’s sky islands. The tram isn’t really on a sky island, but it has a similar scale of environmental gradient as you go up and down in elevation—you go through different ecosystems, climate regimes, temperatures, rainfall totals, and it’s so interesting to see so much environmental change in one area.”

The Sandia Tramway is about nine miles from downtown Albuquerque. For more information, see [www.sandiapeak.com](http://www.sandiapeak.com).

#### Why New Mexico?

“New Mexico is well-known for having very different cultures,” said Stuever. “We all get along and work together well, and we respect and honor each other’s cul-

tures. We have pueblos, Apaches, Navajos. We have the Hispanic cultures that have come up from Mexico, Hispanics that come from Puerto Rico and other places. We have all kinds of Anglos—Irish, Germans—as well as many African Americans and Asians. In New Mexico, people are encouraged to be themselves and to honor their cultures.

“This kind of diversity is something that I’m excited about each year at our SAF conventions, where I see more students, more minorities, more people who were engaged in the forestry profession who didn’t necessarily major in forest management, but are coming to us with other types of skills and knowledge,” she added. “It’s exciting to me to see our SAF conventions becoming melting pots of different kinds of people, and I hope that the 2017 convention is a place where all kinds of people with interests in healthy forests and ecosystems can come together and celebrate the diversity in the ways we think about them.”

The beauty of New Mexico is reason enough for Sheppard to attend the convention.

“Come to Albuquerque and immerse yourself in this ‘land of enchantment’ [the state’s motto],” he said. “The expression is really kind of old and clichéd, but it really is an enchanting land. I feel enchanted every time I’m in New Mexico. I consider a trip to New Mexico to be essential every year—I go some place in New Mexico every summer. This year the convention will be my trip to Mexico for 2017, and I’m really, really looking forward to it.” **FS**



# Congratulations



**Alexa Denhoff** is the recipient of the 2017 Leadership Award. She's a senior majoring in forest resource management at SUNY College of Environmental Science and Forestry in Syracuse, N.Y.

Denhoff is the chair of the SUNY-ESF Forestry Club, helping to coordinate service projects and get fellow students out in the field to network and gain experience. She'd previously served as co-chair.

Denhoff is also the SAF District 6 student representative serving as liaison between students, student chapters and/or clubs—helping to resolve issues and communicate opportunities for students within the district.

Additionally, Denhoff is serving as Student Executive Committee chair, acting as one of four non-voting members for the SAF Board of Directors. She is also leader of the Student Executive Committee



**Ryan Vogel** is the recipient of the 2017 Academic Achievement Award. He's a second-year dual master's degree student at The Ohio State University, majoring in both forest science and environmental planning. Vogel considers himself an "urban forester".

Vogel earned his bachelor's degrees in park management and environmental studies from Florida International University in 2012 and 2014. He also worked as a park ranger at both Everglades and Yosemite National Parks.

After graduating from FIU, Vogel was hired as assistant manager of its nature preserve, ultimately getting promoted to manager two years later. An ISA-certified arborist, Vogel then headed north to The Ohio State University to begin pursuing his master's degrees. While at Ohio State, Vogel was selected as an ambassador by the SAF.



*For the past 12 years Ben Meadows has teamed up with the SAF to help young outdoor pros like you get a head start and support the future of natural resource management. You could be next!*

## **\$2,500 Scholarship Deadline is June 30, 2018**

Find complete details and enter online at:

**[benmeadows.com/scholarships](http://benmeadows.com/scholarships)**



## Reflecting on Chief Tom Tidwell's Tenure

By Char Miller

Unflappable. That is how Tom Tidwell, the recently retired chief of the US Forest Service, always seemed whenever I had a chance to meet him in public settings. As the leader of a 28,000-person agency, he was the Forest Service's much-scrutinized face and he had no interest in embarrassing the rank-and-file, or the organization to which he devoted 40 years of his professional life.

That mask—if such it is—slipped slightly in his farewell e-mail to staff. “We have lived through some tough days responding to natural disasters and dangers that come from keeping citizens safe,” he wrote in reference to the on-the-job deaths of colleagues. “We have grieved together, far too many times, for those who have lost their lives in support of our mission. By far these have been the most trying times for me. But I was always grateful for how you showed up to respect the sacrifices of others, to lend your support for grieving families, friends and co-workers, to help them begin healing from their loss.”

Letting down his guard in this emotional moment reveals how conscientiously he worked in particular to reduce the number of fire-related fatalities. This commitment was borne of his experi-

ence fighting fires on the Boise National Forest, his first job in the Forest Service. “He felt very strongly that we shouldn't be killing firefighters,” observed Andy Stahl, executive director of Forest Service Employees for Environmental Ethics, an organization that over the years has been one of the agency's toughest critics. “That was one of his priorities, ensuring that their workplace is safe.”

Tidwell was more cautious about how the agency publicly addressed climate change's impact on the 193 million acres of national forests, grasslands, and wilderness. Some of this hesitation was in parallel with the Obama administration's first-term wariness about what it perceived to be a third-rail issue that might derail the president's reelection in 2012. Even after he secured a second term, the president did not immediately make up for lost time, despite using the term “climate change” in his second inaugural, which he had not uttered in the first. If we do not act in response to “the devastating impact of raging fires, and crippling drought, and more powerful storms,” the president asserted in January 2013, we will have failed to live up to our planetary responsibilities. “We, the people, still believe that our obligations as Americans are not just to

ourselves, but to all posterity.”

Galvanizing words, to be sure, but the next month the president sent a conflicting message to agency heads like Tidwell when he played a round of golf in Florida with oil-and-gas executives while 40,000 climate activists rallied around the White House in opposition to fossil fuels.

Still, that February Chief Tidwell broke the silence surrounding climate change in his remarks at that year's Pinchot Distinguished Lecture, a point on which many in the audience commented. He did so at the conclusion of his address, a careful riff on the president's inaugural words: “What we need to do,” Tidwell declared, is “to address the effects of climate change...in a way to ensure that future generations are going to enjoy the same range of benefits that we enjoy today.”

Because I had the privilege of moderating a post-talk open conversation with him, I asked Chief Tidwell to expand on his final comment as if he were speaking to one of my classes. “I would tell your students that we're so fortunate in this country to have these vast forests...that can really help mitigate the effects, but before we can talk about mitigation we've got to talk about adaptation. And that is to make sure that these systems are resilient, that they can resist these changes.” To restore forested ecosystems' resilience, he continued, depended on a deep understanding of the relevant science and policymaking, an acceptance that not all current ecosystems will survive the powerful changes already underway, and a reframing of the idea of restoration, with the focus on restoring to the future, not the past. “That's where I would first start out,” Tidwell said, to try and “reassure them that there are some things that we can do and it starts with maintaining these incredible forest resources.”

Pragmatic, too. One example of many was his commitment to stewardship contracting, a congressionally authorized mechanism whereby revenues generated from timber sales would not go to the US Treasury but instead underwrote restoration projects on the national forests. Among the key projects funded were repairing or decommissioning roads, the removal of invasive species, and recreational upgrades. In this regard, Tidwell seemed particularly proud of the Collaborative Forest Landscape Restoration Program. Among its beneficiaries were high-country watersheds, where rehabilitation had incalculable downstream benefits—cleaner potable water, flood control, habitat recovery, and new jobs.

By shoring up local economies with long-term green work, the collaborative initiative cared for the land and served

the people. These stewardship contracts also ratcheted down once-polarized debates over timber harvests. “I can tell you today, that's being replaced by constructive dialogue about ‘how and why,’ not ‘should you or should you not,’” Tidwell told legislators at a 2013 congressional hearing, one of many before which he appeared in the program's support. The Agricultural Act of 2014 granted the permanent authorization that Tidwell sought.

As he had done so often throughout his distinguished career as firefighter, ranger, supervisor, regional forester, and chief, Tom Tidwell made his case without making a flap. **FS**

*Char Miller, a Senior Fellow at the Pinchot Institute for Conservation, is the W.M. Keck Professor of Environmental Analysis at Pomona College, Claremont CA. He is editor most recently of Gifford Pinchot: Selected Writings, and author of America's Great National Forests, Wildernesses, and Grasslands, and Not So Golden State: Sustainability vs. the California Dream.*

*The essay, originally published by the Pinchot Institute for Conservation ([www.pinchot.org](http://www.pinchot.org)) in September, appears here with the institute's permission.*

## Do You have Leadership Role Models?

“There's Gifford Pinchot, the first chief of the Forest Service. The longer I'm in this position, the more impressed I am with what he did to establish the agency and build its foundation. The key principles that guide this agency today are just as true as they were 107 years ago. Also, I admire Theodore Roosevelt and what he did for conservation in this country. He took what was, at times, an unpopular stance to preserve the forests we have today.”—Tom Tidwell to the *Washington Post*, August 14, 2012.

## The Forestry Source Archive

The online archives from August 2009 to the present are available at [tinyurl.com/zd987pj](http://tinyurl.com/zd987pj).



# Unparalleled benefits to provide peace of mind.



As a member of the Society of American Foresters, you and your family have access to two cost-effective and comprehensive insurance programs, SAF Term Life and Long Term Disability. These insurance plans are offered as an exclusive benefit of your SAF membership.

- Ensure your family has the resources required to meet financial commitments and achieve future goals.
- Safeguard your income against disability, illness and accidents.

**A trusted partner focused on your goals.**  
**Visit <http://info.rcmd.com/saf> to learn more.**



## FOREST PRODUCTS INDUSTRY NEWS

### \$100M GP Mill in Alabama

Georgia-Pacific Corp. (GP) recently announced plans to construct a \$100-million lumber production facility in Talladega, Alabama, that will employ more than 100 full-time employees and generate an annual payroll estimated at \$5 million, according to the Alabama Department of Commerce. Operations at the technologically advanced, 300,000-square-foot plant, to be built on the site of a GP plywood mill that closed in 2008, are scheduled to begin in late 2018.

GP, which is based Atlanta, currently operates seven other facilities in Alabama that employ more than 2,300 people. Earlier this year, the company announced a \$50 million upgrade of its pulp and paper mill in Brewton, Alabama.

### Global CLT Market: \$2B by 2025

An analysis by Grand View Research Inc., a California-based market research and consulting company, shows the global cross-laminated timber (CLT) market growing to more than \$2 billion by 2025. The company cites rising concern about the environmental hazards caused by the use of concrete in infrastructure construction and increasing demand for “green” homes as factors spurring growth in the market (see [tinyurl.com/yahpgd5p](http://tinyurl.com/yahpgd5p)).

“The shift from concrete-based construction to wood-based construction, along with supportive government initia-

tives around the world, are positively influencing the market. In addition, decreasing overall cost of CLT construction owing to the increasing number of suppliers and shorter construction time is responsible for rise in demand,” reports Grand View.

The company expects institutional and commercial markets to collectively account for about 47 percent of the total global CLT market in 2025. The demand for CLTs is attributed to their low construction and maintenance cost.

According to Grand View, Europe is the leading CLT-production region, due to the early adoption of cross-laminated timber and research and development on CLT technologies in countries such as Austria and Germany, as well as the availability of timber from the forests of central European countries. The US, Canada, New Zealand, Japan, and China are also rapidly developing markets for CLTs.

### Northern Forest Center Lands \$526K Grant

The US Department of Commerce’s Economic Development Administration (EDA) recently awarded a \$526,000 grant to Northern Forest Center Inc., of Concord, New Hampshire, to help strengthen the economy of the northern forest region of Maine, New Hampshire, Vermont, and New York by providing technical assistance to wood-products companies and related businesses in the region. According



to grantee estimates, the project is expected to help create or retain 400 jobs and generate \$1.625 million in private investment.

### Japan Using More Wood Pellets

Japan imported a record 347,000 metric tons of wood pellets last year for thermal power generation, up 49 percent when compared to 2015, according to *Biomass Magazine*. Of that volume, 261,000 metric tons, or 75 percent, were imported from Canada, with 18 percent imported from Vietnam and 6 percent from China.

Japan’s recently filed report to the USDA Foreign Agricultural Service’s Global Agricultural Information Network ex-

plains that the nation’s feed-in tariff (FIT) incentive for biomass power has driven a rapid increase in demand for biomass, including domestic and imported pellets, along with imports of palm kernel shells.

In 2015, Japan had 142 pellet plants that produced a combined 120,000 metric tons of wood pellets. Most of Japan’s pellet plants are small, with annual capacities of 100 to 1,000 metric tons per year. The report notes 2015 production was down 4.8 percent when compared to 2014 due to reduced heating demand. Next year, domestic wood pellet production is expected to reach record-high levels due to the expanded use of wood pellets in cogeneration systems.

## THE ULTIMATE FORESTRY TOOL.

The proven Nikon Forestry Pro is the professional grade rangefinder/hypsometer that provides accurate range, height and angle measurements using conventional vertical separation and 3-point measurement. 3-point measurement provides the difference in height between two targets by measuring horizontal distance, and then the angles to both the target base and the top.

It’s just one of thousands of products we sell, and each one is backed with our world class customer service.

Go online, or call 800-360-7788 to order your **FREE** catalog today.

**FORESTRY SUPPLIERS**

Sales 800-647-5368  
[www.forestry-suppliers.com](http://www.forestry-suppliers.com)



©2017 Forestry Suppliers, Inc. All rights reserved.



Designed to the exacting demands of the forestry industry, Forestry Pro is equally at-home with arborists and utilities.

Nikon Inc. Limited Warranty Included.







Up to 30 CFEs

5 Technical Tours



Nearly 100 Booths

One Event for Your Professional Development





250 Sessions

1600 Attendees

Register at [www.safconvention.org](http://www.safconvention.org).  
 Preregistration rates end November 14.



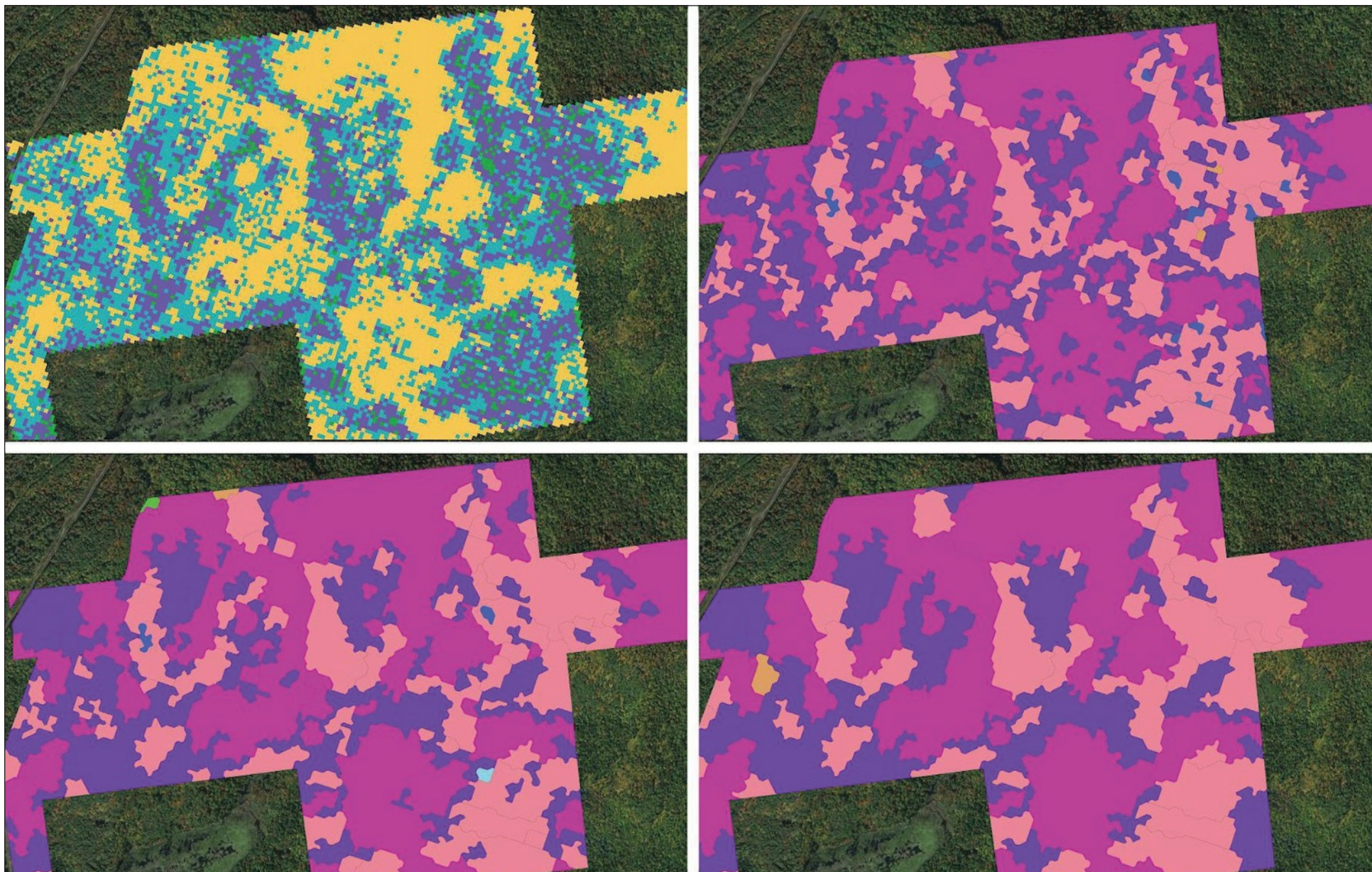
Albuquerque, New Mexico  
 November 15-19, 2017

#safconvention



# The Map Is Not the Territory: Rethinking the Stand

By Zack Parisa and Max Nova



Creation of three different property delineations for biomass accounting, based on an underlying pixel-level inventory.

Advances in remote sensing and information processing have given foresters an unprecedented ability to assess their forests. These powerful tools are beginning to challenge the traditional conception of the “stand” and are opening up a new generation of possibilities for silviculture.

The idea of the stand has a long and multifaceted legacy. Foresters have been using the stand concept to manage forests for hundreds of years, but each forester will give a slightly different definition for what a stand actually is. This is not a surprise—different forestry professionals use stands for very different purposes. Biometricians think about stands in the context of sampling theory. Loggers think about stands in terms of operational units. Ecologists think about stands in terms of species habitat. Silviculturists have to think about everything!

The *SAF Dictionary of Forestry* says that a stand is:

*An aggregation of trees or other growth occupying a specific area and sufficiently uniform in species composition, size, age, arrangement, and condition as to be distinguished from the forest or other growth on adjoining areas.*

Ultimately, we use the concept of a stand because it simplifies the complexity

of the underlying forest. As Dr. James Scott, the director of Yale’s Agrarian Studies Program, notes in his magisterial book, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, much of history is the story of humankind attempting to impose “legibility” upon complex natural and social systems. Without some level of abstraction, forests would simply be too complex to understand.

Have we oversimplified? Scott claims that no administrative system can represent our complex world “except through a heroic and greatly schematized process of abstraction and simplification.” Or, as philosopher Alfred Korzybski famously quipped, “the map is not the territory.” How divergent is our map from reality?

Oversimplification can have costly consequences. Scott spends an entire chapter of his book on the birth of scientific forestry in 16th-century Saxony and how oversimplified mapping and management led to production losses of 20 to 30 percent. Since the 1500s, cartographers and biometricians have become much better at ensuring that the “map” stays in sync with the “territory,” but we would do well to keep Scott’s warning in mind:

*At the limit, the forest itself would not even have to be seen; it could be “read” accurately from the tables and maps in the forest-*

*er’s office.... This utopian dream of scientific forestry was, of course, only the immanent logic of its techniques. It was not and could not ever be realized in practice.*

In modern forestry, the map is often located within a digital Geographic Information System (GIS). Forest managers spend a lot of time and money to implement, maintain, and update these systems. Ultimately, the information contained within them is much the same as the tables and maps of our Saxon forebears. While digital technology enables us to accumulate vast databases of tables and maps, modern GIS systems suffer from the same weaknesses as their ancient paper predecessors: they are constantly falling out of sync with the reality on the ground. Major landowners spend millions of dollars every year re-typing stands, cruising timber, and analyzing aerial imagery to try to keep up with the never-ending changes in their forests.

Updating inventory information for each stand is a Sisyphean task in itself, but it gets even harder when stand bounds themselves change. One of the classic challenges in maintaining a GIS database is the problem of splitting or merging stand bounds to account for partial harvests, growth differences, and so on. What portion of the inventory should be

allocated to each section? Where should the lines be drawn? What happens to the record of the stand’s management history? All of these factors are important for good silvicultural decisionmaking, but our intentions often run up against the limitations that our stand-based tools have created for us.

One of the most profound limitations is that we are forced to make single delineations of our forest. As society increasingly demands that we manage for values beyond fiber—especially for ecosystem services such as carbon, water, and species habitat—the stand paradigm is beginning to show its limits. Why should the stand bounds used for harvesting be the same as those used for carbon assessment? Why should we use the same bounds for measuring timber volume as we do for mapping a multitude of species habitats? Why should these bounds remain mostly fixed over time?

Cost is certainly a factor, but so is the lack of a clear replacement for the stand concept. At SilviaTerra, we’re excited about the potential to move from a vector-based stand paradigm to a raster-based “pixel” paradigm. Recent advances in remote sensing and biometric analysis have





Twelve members of the Maryland/Delaware Division of the Allegheny SAF acted as teachers at the North American Envirothon, held in July in Emmitsburg, Maryland. Left to right: Kenneth Jolly, Claude Eans, Champ Zumbrun, Bud Reaves, Will Williams, Dave Plummer, Aaron Cook, Adam Miller, Ken Turner, Frank Lopez, Chloe Courtade, and Mike Kay.



SAF members Frank Lopez (left) and Mike Kay (right), demonstrate use of the Merritt Hypsometer for students at the North American Envirothon.

## MD/DE SAF at Envirothon

A team of foresters from the Maryland/Delaware Division of the Allegheny SAF joined up to staff the forestry station at the North American Envirothon, held in July at Mount St. Mary's University in Emmitsburg, Maryland. The envirothon is a high school-level environmental knowledge competition sponsored by the National Conservation Foundation and the National Association of Soil Conservation Districts. The competition consists of five subjects: soils, forestry, wildlife, and aquatics, and a fifth topic that changes from year to year and is chosen by the host state. The competition is team-oriented, with each team consisting of five students. Teams that competed in the National Envirothon were the champions of their state or provincial competitions. This year, a total of 54 teams from across the US and Canada, along with two teams from China, participated in this annual event. The MD/DE SAF Division cosponsored the forestry station with a contribution of \$500.

The competition lasts five days and includes the knowledge and skills test, as well as an oral presentation on the special fifth subject. Intertwined with the competition are informative and fun field trips for the students.

The knowledge and skill test is a two-day event. The first day consists of review

of the subject matter, and the students are given time to practice with the tools and ask questions of the subject-area experts. At the forestry station, SAF members took on the role of teachers. For the review and training day, the foresters split into groups to reacquaint the students with the tools they had previously been introduced to and helped students from different regions and countries become familiar with the tree species found in western Maryland. This was a challenge for students from the western states and Canada, where forest types have considerably fewer tree species and are mostly coniferous. Students were encouraged to ask questions about careers in forestry, and the students responded with numerous questions about the educational requirements, which universities offer forestry programs, and what foresters do on a day-to-day basis.

The following day, the students were tested on tree identification, the use of measuring tools to determine diameter, merchantable height, stocking levels, and general forestry knowledge. The students were in the woods the entire time and had to manage their time to get to all of the test trees. During this time, the foresters directed traffic, maintained order, and answered those questions allowable concerning the test itself.

Twelve MD/DE SAF members participated in the event on one or both days. It was an enjoyable experience for all working and interacting with the young people of the National Envirothon. Many members participate at the local and state level as well and will take the energy and enthusiasm back with them.—submitted by Bud Reaves

## SAF and Oxford University Press

The Society of American Foresters and Oxford University Press recently announced that they will work together to publish *Forest Science* and the *Journal of Forestry*. The relationship between the two organizations will allow the Society and its members to access an array of benefits, including new tools, improved technologies, and streamlined processes.

Joining with Oxford University Press (OUP) to publish SAF's journals represents the first time in more than 115 years of publication that the Society has partnered with a contract publisher. SAF's journals community, from readers to editors, will benefit from access to the expertise of OUP's dedicated editorial, production, sales, and marketing teams.

Digital subscribers will notice several key improvements with the online reading experience. Altmetric scores will be available for all published articles via the Silverchair platform, where the entire digital archive of SAF's journals (including the *Western*, *Southern*, and *Northern Journals of Applied Forestry*) will be available in 2018. Online access for members will be simplified through trusted proxy server authentication technology—meaning members will be required to remember one less password. In addition, SAF members will receive complimentary access to a new journals app, expected to launch next year for iOS and Android devices. Members and subscribers receiving print subscriptions will continue to receive print through arrangements with OUP.

"We are very proud to be partnering with Oxford and look forward to publishing our first issue," said SAF's CEO Matt Menashes. "Our new partnership will bring even more value and benefits to SAF members and subscribers to our science journals."

"We at SAF have many priorities with our journals to help them realize their maximum potential," says Jennifer Kuhn, SAF's director of publications. "These journals serve as important conduits for extending the Society's mission. With Oxford, we'll be able to go even further than ever before with communicating the important science we publish and promoting the field of forestry."

The two organizations look forward to a fruitful relationship and to the possibilities of refining the strategic plan for the journals and enhancing the footprint of forest research through increased efforts to disseminate the published science.

## Seeking Raffle/Auction Items

A raffle and silent auction at this year's SAF National Convention in Albuquerque,

New Mexico, November 15–19, will support both the Foresters' Fund and Kurt Gottschalk Science Fund (KGSF). The Foresters' Fund assists local SAF units in achieving the goals of the Society, and KGSF supports the development and dissemination of scientific findings and new technology for natural-resources professionals to facilitate science-informed management.

The proceeds raised will be split 50/50 between the two funds. Additionally, KGSF portion will be matched by a generous contribution from the estate of W.D. (Bill) Hagenstein.

All SAF local units are encouraged to donate items for the raffle and silent auction. Items such as artwork, forestry tools, books, handcrafted items, specialty foods, gift cards or baskets, and other items will help support these important programs. Donated items can be brought to the event or shipped in advance. Please contact raffle and auction chair Andy Mason (acmason1954@gmail.com or 571-214-5536) for more information or to inform him of your plans to donate items.

## Want to Write an Op-Ed or Letter?

SAF's Government Affairs and External Relations team is always striving to provide better service and support to SAF units and members as they deal with issues in their states and local communities. Although the team often encourages members to meet with, call, and write letters to state officials and representatives, opinion editorials (op-eds) and letters to the editor can also be valuable complements to these advocacy and outreach efforts.

Recently, SAF wrote a letter to Iowa's governor expressing concern over the decision to dissolve the Bureau of Forestry ([tinyurl.com/y6ux75cj](http://tinyurl.com/y6ux75cj)). Following that letter, our team also worked with SAF President Fred Cubbage and Iowa SAF members to write and place opinion articles in the *Des Moines Register* ([tinyurl.com/yat2lptr](http://tinyurl.com/yat2lptr)) and *The Gazette* ([tinyurl.com/y8xuvkmw](http://tinyurl.com/y8xuvkmw)). In this case, we did not necessarily believe that the letters would cause the decision to be reversed, but thought it was still important to shed light on the issue and help the general public better understand the role of forests and forestry professionals in Iowa.

In the past, SAF has been successful in shaping state-level decisions, particularly when we are alerted to issues early in the process. Our team then works closely with SAF local leaders to decide on the best path forward.

Next steps: Get in touch with your SAF local leaders and discuss your concerns. Check in with local partner organizations to see if they have a strategy in place. Reach out to us if you or your local leaders need help or want to talk through any current or anticipated issues.

Don't hesitate to contact the team's director, John Barnwell (301-897-8720, ext. 300, [barnwellj@safnet.org](mailto:barnwellj@safnet.org)), or assistant director, Danielle Watson (301-897-8720, ext.202, [watsond@safnet.org](mailto:watsond@safnet.org) us). We look forward to working with you!



# SAF Names 11 Presidential Field Forester Award Recipients

The Society of American Foresters will honor one member from each of the 11 SAF voting districts with the Presidential Field Forester Award at the 2017 SAF National Convention (www.safconvention.org), to be held November 15–19 in Albuquerque, New Mexico. The award recognizes foresters who have dedicated their professional careers to the application of forestry on the ground using sound, scientific methods and adaptive management strategies.

The members of SAF's Board of Directors identify outstanding field foresters from the voting districts they represent; each Board member was given the option of soliciting nominations from state society chairs and, from those nominations, selecting a nominee for recognition, or using any other processes that would identify a worthy candidate based on the selection criteria. What follows is drawn from information provided by the districts.

## Lisa B. Naylor, CF

### District 1: Inland Empire SAF

Naylor, an SAF member since 1986, has worked for the US Department of Agriculture for 30 years, including 20 years for the US Forest Service and 10 years for the Natural Resources Conservation Service (NRCS). She has applied scientific methods and adaptive management strategies to prepare timber sales and complete pre-commercial thinning activities on remote southeast Alaska islands while recognizing and protecting critical habitat for threatened and endangered species. As a field forester in Michigan, she supervised forestry technicians while designing timber sales in red pine plantations and northern hardwood and aspen stands to enhance the residual stands. Naylor has a natural ability to bring varied interests together and focus on improving natural resources.

Over the past five years, Naylor volunteered as a field forester with the Blue Mountain Resource Conservation and Development Council, a nonprofit group. She employed uncommon talent, skill, and innovative methods to engage private-forest landowners to assess forest health and help them access cost-share funds through the Washington Department of Natural Resources fuel-reduction program.

Naylor teaches forestry, field skills, and natural resources at Camp Wooten Environmental Learning Center for sixth graders in southeastern Washington State, and has presented a forestry seminar at the Expanding Your Horizons conference, a program for middle school girls interested in science-based careers. She recently completed training as an American Tree Farm System inspector. In 2006, she was awarded Forester of the Year of the Inland Empire SAF State Society.

## Jake Gibbs

### District 2: Oregon SAF

As an early-career forester, Jake demonstrated an aptitude for communication and consensus building, and his employer, Lone Rock Timber, increasingly assigned him commensurate responsibilities. He became a board member and later chair of the Partnership for the Umpqua River, and served for six years as a board member of Oregon Forest Resources Institute. He also served on the board of directors of Oregonians for Food and Shelter (OFS), a group dedicated to the wise use of chemicals and other active management in forestry and agriculture.

As a mid-career forester, Jake continued to expand his responsibilities. In 2009, he became Lone Rock's head of wildfire protection, with responsibility for setting policy, arranging employee training, and serving as the company's fire liaison. This year, he was named the CEO of Starker Forests.

Jake serves on the boards of directors of the Douglas Forest Protection Association and Coos Forest Protection Association (he's currently the vice-president). For eight years, Jake was chairman of the forest management policy committee of the Oregon Forest Industries Council (OFIC). Among his many other positions, Jake has served as chair of Oregon State University's Fish and Wildlife Habitat in Managed Forests Committee and chair of the National Association of Forest Owners Operating Committee.

Jake is not only an outstanding forester, but is also community minded. He has been a board member for the Oakland School District Board of Directors for more than six years, including several years as board chair. He also serves on the Oregon School Board Association (OSBA) Legislative Policy Committee.

## James L. Able

### District 3: Northern California SAF

Jim has practiced forestry in California since 1964, with the exception of two years of military service in Vietnam. His experience includes two years with the US Forest Service, 11 years with Georgia Pacific and Louisiana Pacific, and, since 1979, as a private consulting forester. His company specializes in appraisals, land management, timber sales, and logging supervision. Jim's firm has provided forest and land management services to more than 60 private landowners in northwestern California, with acreages varying from 20 acres to 15,000 acres. Jim has consulted on various special projects in Montana, Oregon, Texas, and Alaska, and has provided expert witness testimony in court cases.

In the more than 50 years he has practiced forestry, Jim has helped landowners in California's redwood region achieve



Jake Gibbs

their long-term business and conservation goals, and has strived to promote the key forestry concepts he has learned over the years. He has been interviewed and lauded by various conservation organizations, most notably for a 2009 *National Geographic* article on the redwoods, which highlighted his and other foresters' use of selection and "functional" thinning, rather than traditional even-aged management, an approach credited as being as productive, environmentally sound, and sustainable.

A highlight of Jim's ongoing contributions to forestry is his mentoring of foresters, environmental activists, lawmakers, regulators, and landowners. He encourages his colleagues to continue to expand their forestry knowledge through education, to become more active in the political processes that shape the profession, and to join and support various resource advocacy groups. One of his favorite expressions is "If you know it all, then you don't know it."

## Blaine Cook

### District 4: Dakotas SAF

Blaine began his career with the US Forest Service in the 1970s and became a certified silviculturist in 1983. He was recognized with the US Forest Service's Silviculture Excellence award in 2013. He has served as the lead silviculturist on the Black Hills National Forest since 1998, where he successfully manages one of the largest silviculture programs in the National Forest System. His active engagement in forest planning, inventory, prescriptions, reforestation, stand improvement, and activity reviews has produced exemplary forest management and aided numerous forest managers. He mentors junior foresters to ensure they have the knowledge, skills, and abilities they need for developing into certified silviculturists. Blaine's oversight ensures the Black Hills accomplishes its program objectives while achieving the desired conditions.

Blaine has been a forest-management champion throughout his career. Black Hills forest-management activities are integrated into discussions among various forest resource disciplines, as well as with the public, industry, and environmental community. He encourages research on the Black Hills's forests to ensure its management remains on the cutting edge. He organizes workshops that bring researchers and managers together to discuss the latest science and management applications.

Blaine has been instrumental in planning the Dakotas SAF annual conference. He consistently identifies relevant topics and delivers outstanding speakers.

## Stephen R. Nelson

### District 5: Michigan SAF

In a career spanning more than 32 years, most recently with Weyerhaeuser, Steve has always been recognized by

his peers as being a forester's forester. He demonstrates an admirable work ethic, has a strong belief in proper forest management, is dedicated to his crews, and makes sound forest-management decisions. Steve has a great reputation for working with the public. For example, in 2014 he was awarded the Trailblazer Award from the North Country Trail Association for his close working relationship with the group in the Upper Peninsula. Most foresters in Marquette County are familiar with his reputation. You always hear the same thing when his name comes up... "good guy," "trustworthy," and "willing to put in the extra mile for his guys."

Sustainability and the Sustainable Forest Initiative (SFI) have been the guiding forces behind Steve's day-to-day management decisions. He has made presentations at several SFI field audits and clearly exhibits his high level of expertise in managing a variety of timber types, including northern hardwoods, aspen, lowland conifer, and plantation pine. He has shown exemplary skills in identifying difficult-to-access areas and scouting road locations that will allow access with both economic and environmental considerations in mind.

Steve truly demonstrates that proper forest management starts with a good plan and an understanding of silviculture, and he has shown that the key to getting the desired results from a harvest is clear communication and close interaction with his crews.

## Robert W. MacMillan, CF

### District 6: New England SAF, Yankee Division, Rhode Island

Rob, an SAF member since 1990, is the senior forest supervisor for the Providence (Rhode Island) Water Supply Board (PWSB). He also works as a consulting forester and is a technical service provider with the US Natural Resources Conservation Service. He served in the US Air Force from 1984 to 1988 and was a member of the Rhode Island Air National Guard from 1990 to 2006.

Rob develops and implements the forest-management program for PWSB's 12,500 acres of watershed forest, based upon a comprehensive forest inventory, GIS database and maps, and applied knowledge of science-based forest and watershed management principles. He helped to develop and direct a deer-management plan for PWSB's Scituate Reservoir. He and other PWSB foresters coordinate regular public tours to highlight the forest management work that they do and its relationship to protecting the state's premier drinking water supply. Rob is the past chair and a current member of the Rhode Island Tree Farm Program Executive Committee and is a Tree Farm inspecting forester. Rob is actively involved with the Rhode Island Forest Conservators Organization, the Northern Rhode Island



Robert W. MacMillan



James L. Able



Blaine Cook



Conservation District, and the New England Water Works Association.

Throughout his career, Rob has been active in Society affairs at the regional and state levels, including chair, vice-chair, and secretary-treasurer of Rhode Island SAF and member for three terms of the Northeast SAF Executive Committee. Rob has been a role model for his commitment to SAF and his presence in the Rhode Island forestry and natural resource community.

#### Mark R. Webb, CF, ACF

##### District 7: Allegheny SAF, Pennsylvania

Mark has been a consulting forester in northwest Pennsylvania for more than 30 of his 41 years as a forester and has built a clientele who know that they can rely on him to provide outstanding professional forestry services in a fair and ethical manner. His field forestry practice has afforded his clients exceptional service, and he has made valuable forest-investment service and contributions to forestland case law. He continually focuses on improving his skills in forest management, not just timber management. When Mark offers his clients a prescription for a forest tract, he also implements that prescription. He is fully invested in ensuring the quality of his work and the desired outcomes for landowners.

Mark values his interactions with landowners; taking time to walk the property and discuss the landowner's values and vision for their forest. Mark views these opportunities as "teachable moments," where he can share his knowledge and experience with the landowners and help them make the best decisions for long-term management of their forest. Mark is well respected in the Pennsylvania professional forestry community. He was recently invited to participate in a joint effort between Penn State Extension and the state Department of Conservation and Natural Resources, a state-wide team that is developing outreach messages and planning tools to encourage private-forest landowners to engage in succession planning as a means to maintain working forests and reduce parcelization.

#### Shelby L. (Lee) Spradlin Jr., CF

##### District 8: Appalachian SAF, Virginia

After graduation from Virginia Tech, Lee worked for six years for Westvaco Corp. in Rupert, WV, as their first Cooperative Forest Management (CFM) forester in West Virginia. He also served as a Tree Farm Inspector and chair of the West Virginia Tree Farm Committee. In 1981, Lee took a position with Continental Forest Investments as an area manager in Powhatan, Virginia, where he was responsible for managing loblolly pine silvicultural operations on the company's property. During this period, he also served on several Virginia Forestry Association committees,



Mark R. Webb

including their Executive and Tree Farm Committees.

Lee returned to Westvaco Corp. in 1989 as a CFM forester in Appomattox, Virginia, and worked in this role for the next 27 years with the company as it became MeadWestvaco and then WestRock. In this position, he assisted more than 500 landowners and facilitated the site preparation and planting of more than 30,000 acres of loblolly pine plantations and numerous forest management plans. He retired in November 2015.

Lee joined SAF in 1976 and served as chair of the Robert E. Lee Chapter, the Virginia Division, and Appalachian SAF; he served on SAF's Council from 2002 to 2004. While serving on the Council, he was always an advocate for field foresters. He received the APSAF Distinguished Service to Forestry Award in 1996 and was elected an SAF Fellow in 2005. Lee was named Virginia's Outstanding Tree Farm Inspector in 2010. He served on the Virginia Board of Forestry from 2010 to 2012.

#### Timothy J. Wilson, CF

##### District 9: Ohio SAF

Although Tim has been a forester who prefers to stay behind the scenes, he has made significant contributions to the practice of forestry. He is highly regarded by his peers, the landowners he worked with for over 30 years as a service forester with the Ohio Division of Forestry (ODF), and the timber industry.

During his career with ODF, Tim helped develop a high school agriculture program called "Ag Reality," which provided students with realistic scenarios involving purchasing a farm and equipment and managing the farm's woodlands. This program has been expanded throughout Ohio and the region. Tim sat on a committee that helped launch the Southern Ohio Forestland Association (SOFA), which has been in existence for over 25 years. He produced a long-running weekly radio program covering forestry issues within his project area, and he worked with OSU Extension in developing a cooperative for small woodland owners.

Tim has been recognized as ODF's Service Forester of the Year by the Ohio Division of Forestry, and as a Tree Farm Inspector, he received the Bronze and Silver Hard Hat Awards for engaging new landowners in the program. He received the Director's Valor Award and Director's Achievement Award from the Ohio Department of Natural Resources. He was recognized by the National Wild Turkey Federation as their Ohio Conservationist of the Year. Tim often mentors younger foresters and frequently provides advice to younger and older foresters alike.

#### Kerry G. Thomas

##### District 10: Southeast SAF, Georgia

Kerry's consulting forestry firm provides a range of forestry services to more than 125 permanent clients in northeast Georgia, a client base that includes a mixture of owner interests, land areas, forest

types, and management practices. The business often employs selective thinning, primarily in pine stands, with a hands-on approach. Kerry provides a personal evaluation of stand treatments, including marking most of the thinnings and conducting prescribed burns and associated silviculture or pest control measures to protect the landowner's investment.

Kerry began his forestry career in 1977 with the Georgia Forestry Commission (GFC) as a ranger; his duties included fire control and forest management assistance to landowners. He later served as a senior forester, forester specialist, and staff forester, with duties including kudzu control program coordinator. Kerry was selected by the GFC as a specialist in the Macon headquarters office in 1979, where he served as a forest entomologist for the southern half of Georgia.

Kerry has been an active member of the Georgia Forestry Association since 1984. He is a past chairman of the Georgia Tree Farm Program for the northeast Georgia area, and he served a three-year term on the state board of registration for foresters in Georgia; in his third year, he was board chair. He is also a past member of the alumni steering committee for the Warnell School of Forestry and Natural Resources at the University of Georgia. He has been called on to provide expert witness testimony before courts. Kerry is recognized among his peers as a "go-to" forester in northeast Georgia.



Kerry G. Thomas

#### Evan Eugene Austin Jr., CF

##### District 11: Louisiana SAF

Eugene is the silviculture manager for RoyOMartin Corp. on 220,000 acres in the Central Louisiana area. He is responsible for site preparation, reforestation, and chemical and mechanical herbaceous weed control operations. He employs scientific methods in silvicultural prescriptions and closely follows Louisiana's recommended best management practices for managing forests and protecting water quality.

Eugene, a graduate of Louisiana Tech University, is a long-time member and Fellow of SAF. He is the coordinator of the Louisiana SAF chapter known to locals as the Piney Woods Chapter. He organized and coordinated Forest Awareness Days for youth in his community and is instrumental in the activities of the Louisiana SAF State Chapter, including fund-raising for state chapter meetings; he helped organize SAF's national convention when it was held in Baton Rouge in 2015. He is a member of the board of directors of the Louisiana Forestry Association.

Eugene is well respected in the forest community. He conducts himself with professionalism and is an excellent example of the high-quality forest-management that is expected of an SAF member.



Evan Eugene Austin Jr.

## SCIENCE & TECHNOLOGY

### Deforestation and Climate Change

Efforts to reduce the rate of climate change often focus on reducing the use of fossil fuels and developing sustainable energy sources. However, a new study from scientists at Cornell University shows that deforestation and the subsequent use of lands for agriculture or pasture, especially in tropical regions, contribute more to climate change than previously thought. While the carbon dioxide collected by trees and plants is released during the cutting and burning of deforestation, other greenhouse gases—specifically, nitrous oxide and methane—are released after natural lands have been converted to agricultural and other human usage. The gases compound the effect of the carbon dioxide's ability to trap the sun's energy within the atmosphere, contributing to radiative forcing and a warmer climate. As a result, while only 20 percent of the rise in carbon dioxide caused by human activity originates from land use and land-cover change, that warming proportion from land use (compared with other human activities) increases to 40 percent once co-emissions like nitrous oxide and methane are factored in.

The study is described in an open-access (free) paper, "Are the Impacts of Land Use on Warming Underestimated in Climate Policy?" in *Environmental Research Letters* ([tinyurl.com/y7lmkves](http://tinyurl.com/y7lmkves)).

### A Century of Wildfire Research

In the face of "mounting, unsustainable costs and difficulty translating existing wildland fire science into policy," the US Forest Service asked the National Academies of Sciences, Engineering, and Medicine to organize a workshop to focus on how a century of wildland fire research can contribute to improving wildland fire management. The proceedings of the March 27, 2017, workshop, *A Century of Wildland Fire Research: Contributions to Long-term Approaches for Wildland Fire Management*, are available as a free PDF or to read online, or in book form (\$54), at [tinyurl.com/ycn4vck9](http://tinyurl.com/ycn4vck9).

In remarks given at the workshop, Dar Roberts, a professor in the Department of Geography at the University of California, Santa Barbara, noted that the workshop had featured "a great deal of information about the anthropogenic link to today's fire problem. Humans start most fires. The consequences of fire are not always negative; the challenge is to get the right fires burning in the right places so they can be used to improve ecosystem management. This balance will be increasingly important as climate change puts pressure on ecosystem resilience."

## The Forestry Source Archive

The online archives from August 2009 to the present are available at [tinyurl.com/zd987pj](http://tinyurl.com/zd987pj).



## IN MEMORIAM

**Jim Gerber**, 76, died on July 15, 2017, in Idaho. He earned a degree in forestry at Michigan State University. While working for the US Forest Service, he lived in Idaho, Colorado, and Utah. His desire was to retire in Idaho, where he spent many years enjoying hiking and serving on various committees for the community. For more information, see [tinyurl.com/y8fa8cz8](http://tinyurl.com/y8fa8cz8).



Jim Gerber

**Anthony Gruba**, of Milwaukie, Oregon, died in March 2017. He was proud to be a member of SAF.

**Everett L. Towle**, 83, died on September 4, 2017, in Scarborough, Maine. Towle, Maine Licensed Forester #3135, graduated from the University of Maine in 1956 with a degree in forestry and then took a position with the US Forest Service on the George Washington National Forest in Virginia. He worked there until 1958, when he took a position at the Cumberland National Forest in Kentucky (now known as the Daniel Boone National For-



Everett L. Towle

est), and in 1962, became a district ranger on the same forest. In 1965, he took a position with the recreation staff and worked in this position until 1968. In 1969, Towle moved to Florida to take a position as the deputy forest supervisor for the Florida National Forests (Apalachicola, Osceola, and Ocala). In 1971, he accepted a position as the forest supervisor for the Inyo National Forest in California. He spent six years working for Inyo before getting called to Washington, DC, and in 1976, Towle was promoted to assistant director of aviation and fire management for the National Forest System. He stayed in this position a year before accepting another promotion as director of policy analysis for the agency.

Towle enjoyed his time in Washington, DC, but wanted to get back into the forest. In 1979, he was offered a position as deputy regional forester in Montana, where he spent four years before being called back to Washington, DC, as the director of aviation and fire management. He spent one year in this position before taking another DC position as the director of land management planning, and he received a Presidential Rank Award for his work. In 1989, he retired and returned to Maine, where he began working as a consulting forester. He became president of the Small Woodland Owners Association of Maine in the 1990s and held that

IN MEMORIAM ■ Page 21

## PEOPLE IN THE NEWS

### Huneke Receives Hornaday Medal

Mike Huneke, CF, a forester with the US Forest Service's Northeastern Area State & Private Forestry unit, recently received the William T. Hornaday Gold Medal for his work with the Boy Scouts of America (BSA). The award is presented by BSA to adult Scouters who have provided more than 20 years of service in conservation at the national or regional level; the Hornaday Gold Medal is the highest of seven levels of Hornaday Awards given, and the only one given for lifetime achievement. Huneke is only the 49th recipient since the award's inception in the 1970s.

Huneke volunteers as the Northeast Region Task Force Leader for Conservation and Environment for BSA. He has written several white papers and training syllabuses to support the ecology and conservation programs in Scouting. In 2016, Huneke served as project manager to write, edit, and produce the second edition of BSA's *Conservation Handbook*. He was awarded the medal at the recent National Jamboree by Dan Jiron, acting US deputy undersecretary of agriculture for natural resources and environment.

### Lewis Named PA Commissioner

The Pennsylvania State Senate recently approved Gov. Thomas Wolf's appointment of SAF member Richard Lewis to the Pennsylvania Fish and Boat Commission for a four-year term. The commission, an independent commonwealth agency comprised of 10 commissioners appointed by the governor and approved by the legislature, works to protect, conserve, and enhance the state's aquatic resources and fishing and boating opportunities. Lewis, a member of the Allegheny SAF Executive Committee and the Keystone Chapter Executive Committee, is the president-elect of the Pennsylvania Forestry Association.



### Turkey Federation Honors Kodama

The National Wild Turkey Federation (NWTF) recently honored South Carolina state forester Henry E. (Gene) Kodama, CF, and the South Carolina Forestry Commission (SCFC) for their support of the federation's work in the state. Under Kodama's leadership, SCFC has been a key partner for NWTF; in 2011, NWTF named SCFC as a recipient of its Land Stewardship Award, which is given for excellence in land management, partnerships, and NWTF project support. Kodama, who plans to retire at the end of this year, received a print of a wild turkey from NWTF.



"Director Kodama and the SC Forestry Commission have been a great partner of the NWTF," said Becky Humphries, NWTF CEO. "His dedication to our state's forests is unmatched. His presence in the

SCFC will be greatly missed, but we look forward to working with him in another capacity in the future."

## Share Your SAF News

*The Forestry Source* welcomes news about SAF members and chapters/divisions for the People in the News and SAF News sections.

**People in the News:** Significant professional accomplishments and awards by individual SAF members. Length: up to 500 words.

**SAF News:** Articles about professional activities and accomplishments by SAF members, chapters, state societies, and divisions that highlight sound forestry, enhance public understanding of forests and forest management, and provide service to the Society and society. Length: Up to 700 words.

Photographs are welcome. Jpeg/JPG and other types of image files that are about 1 megabyte (MB) in size are usually acceptable, including those from most cell phones. In general, larger files provide higher resolution in print.

For more information, contact Steve Wilent, Editor, 503-622-3033, [wilents@safnet.org](mailto:wilents@safnet.org).

## Where Do I Send It?

### Employment Ads

All job announcements in the Classifieds are drawn from the SAF Career Center website, [careercenter.eforester.org](http://careercenter.eforester.org). Information about posting employment ads is available on the SAF Career Center website. Space is limited. Publication of employment ads in *The Forestry Source* may be subject to posting date limits.

### Continuing Education Calendar

Events in this category are drawn from the Event Calendar on SAF's website, [tinyurl.com/hb2uamr](http://tinyurl.com/hb2uamr). All events posted in the Event Calendar must offer Continuing Forestry Education credits. The instructions and forms for submitting events are available on the Event Calendar page. Space is limited. Publication in *The Forestry Source* cannot be guaranteed.

# What's That I Hear?

## SAF Podcasts Take You Beyond the Articles

SAF's podcasts extend the life of journal articles and take listeners behind the scenes with the leading voices behind the literature. Podcasts for select articles published in *Forest Science* and the *Journal of Forestry* are posted open access alongside the parent article. Use them in the classroom or on a hike to lend more mileage to complex scholarly content, making it more accessible to the practicing or future forester.

[www.eforester.org/Main/Library/JOF/Podcasts.aspx](http://www.eforester.org/Main/Library/JOF/Podcasts.aspx)



is included as an appendix to the report. “Sensemaking,” the report states, “is initiated when something is observed that is perceived as surprising; something that challenges existing frames of reference and expectation leading to a cognitive effort aimed at reconciliation between what has been observed and what one expected.”

Nowell’s conclusion: *It appears that we are entering an era where the “unprecedented” is happening with increasing frequency. This signifies a massive organizational challenge for our federal land agencies—particularly those that have worked in relatively stable systems for a long time and that are simultaneously facing increasing budget constraints. Incidents like CT2 are critical opportunities for learning that must not be wasted. These incidents provide new technical insight into the bio-physical micro-dynamics that can challenge our assumptions about what is possible. We can use this information to identify patterns that suggest possibilities that may be, heretofore, unimaginable. However, vague predictions of the “big one” will have little effect if organizational logics inoculate an agency against sensemaking. Therefore, it is also vital that we use incidents like CT2 to illuminate organizational vulnerabilities and opportunities for enhancing adaptive capacity.*

I hope we do not experience an extraordinarily catastrophic “big one”—a wildfire far larger and more destructive than Chimney Tops 2, the 2003 Cedar Fire in California (280,278 acres, 2,232 homes, and 15 dead), the 2011 Bastrop County Complex Fire in Texas (34,000 acres, more than 1,500 homes destroyed), or the 2013 Black Forest Fire in Colorado (14,198 acres, 509 homes burned)—to name a few fires that, not so long ago, might have been classified as “big ones.” Such fires have been happening with increasing frequency in the last couple of decades, proving that any “new normal” can become worse.

It doesn’t have to get worse. We foresters can accomplish any forest-management goal, given the resources and mandate to do so.

But what will challenge Congress’s existing frame of reference such that it will act to reform wildfire funding and to equip our land-management agencies with laws and funding that will allow them to truly increase the pace and scale of their work to increase the resilience of our forests and to reduce the chances for large, intense wildfires? What will challenge existing frames of reference of individuals and communities so that they make the needed parallel increases in local community resiliency? What will challenge the existing frames of reference of the groups who oppose most forest management and even tout the beneficial ecological values of megafires above all else? For all of these challenges and others, the spark may be a bigger “big one” than they ever imagined they would see. **FS**

*The review team’s press conference is available on the Great Smoky Mountains National Park’s Facebook page, [tinyurl.com/yazvnp6u](https://www.facebook.com/yazvnp6u).*

ing wildfires. The current funding situation makes it impossible to get ahead of the challenge. Unless we find another way to fund the largest wildfires, perhaps as we do other natural disasters, we will not have the funding to create the resilient conditions America’s forests and the communities which depend upon them so desperately need.” **FS**

made it possible to get a reasonable estimate of the trees in each 1/20-acre square pixel of a forest.

There are many advantages of maintaining inventory information at the pixel level. Updates to inventory can be driven by frequently updated satellite imagery, which is also collected at the pixel level. It is possible to maintain and change many different “stand boundaries”—just “cookie cut” the underlying inventory raster layer by the different boundary vectors. Management history can be tracked at the pixel level, too. With this switch, many of the classic GIS problems (splitting, merging, updating, etc.) go away, and we gain powerful new ways of visualizing and thinking about our forests.

Our maps are getting closer to the territory. Pixel-based technologies and techniques are enabling us to better assess and monitor the full suite of resources and values on the ground. Storing inventory information at the pixel level is still an abstraction, but it avoids many of the oversimplifications of the stand paradigm. There are still many challenges to overcome and questions to answer—chief among them is how we should rethink silvicultural planning in this new paradigm. We’re excited to get this conversation going and are looking forward to discussing further at the SAF National Convention in November. **FS**

*Zack Parisa and Max Nova are the founders of SilviaTerra ([www.SilviaTerra.com](http://www.SilviaTerra.com)).*

position off and on for about a decade. Towle also helped form a group in southern Maine called ForestWorks, which provides tools, educational programs, and contacts for small woodland owners. He devoted his life to the forest, and when asked about his career, his response was always the same: “If I could go back and do it again, I’d do it exactly the same.” For more information, see [tinyurl.com/yaoegw87](https://tinyurl.com/yaoegw87).

**Arthur B. Wardner**, age 88, passed away on January 26, 2016, in Knoxville, Tennessee. He joined SAF in 1953. For more information, see [tinyurl.com/ya3t3f9a](https://tinyurl.com/ya3t3f9a).

## Algiz 8X: Great Hardware, but It Comes with Windows 10

By Steve Wilent

This edition of Field Tech is much less a review of a rugged tablet than of Microsoft Windows. The tablet, Handheld Group’s Algiz 8X, is a dandy piece of hardware, as I’ll briefly explain. However, it comes with Windows 10 Enterprise. Is that what foresters need in the woods? I don’t think so.

The Algiz 8X is a cousin of Handheld’s Algiz RT7, which I reviewed in June 2017 ([tinyurl.com/y7j6a8zb](https://tinyurl.com/y7j6a8zb)). The two devices look very much the same; the 8X’s eight-inch touchscreen, made of chemically strengthened glass, is a bit larger than the RT7’s seven-inch screen. And both are similarly rugged: Like the RT7, the 8X is rated at IP65, according to Handheld, where the numeral 6 indicates that the device is “totally protected against dust ingress” and the 5 indicates that it is “protected against low pressure water jets from any direction. Limited ingress permitted.” Both meet the United States Military Standard MIL-STD-810G, Method 516.6 Procedure IV, a test that involves dropping the device 26 times from four feet on to a hard surface.

The 8X’s processor, an Intel Pentium N3710, seems up to the task of running the standard 64-bit Windows 10 Enterprise, as are its 4 gigabytes of memory and 128-gigabyte solid-state hard drive. Need more space? Add a micro SDXC memory card. Its dual-band wireless communications facility (802.11 ac, a/b/g/n 2.4 GHz and 5 GHz) allow for high-speed data transfer. The U-blox GPS/GLONASS receiver provides two-meter positioning accuracy, according to U-Blox—typical for most of today’s tablets.

Although the 8X’s battery lasted about as long on a charge as most tablets of its size (which means, as I have written before, that carrying a spare battery or two is advisable), it has an internal backup battery that lets you “hot swap” the main battery without shutting down the tablet—a handy feature that some tablets, including the RT7, don’t have. Note that the backup battery gives you only about five minutes to make the swap, which ought to be plenty of time.

A USB mouse or stylus will come in handy. Using software designed for a desktop screen and a mouse is often very difficult to use via a touchscreen. For example, I tried using U-blox’s U-Center GNSS app via my personal built-in stylus (my right forefinger), and found that, while it is possible, using a mouse is far easier. For what it’s worth, my wide-tipped stylus worked fine, but a fine-tipped one that my wife uses on her Android cell phone didn’t work at all.

OK, enough about the 8X. It is well-built, solid hardware, and I did not find any significant weaknesses. If you need a tablet with Windows 10, and if you’re willing to pay \$1,699 for a rugged device, then the 8X is a sound choice.

I have a quarter-century of experience with Microsoft Windows, starting with Windows 3.1, which was released in 1992 (it came on a stack of 3.5-inch “floppy” disks, which I still have in my box of computing curiosities), and I still have vestiges of sanity. I’ve survived many crashes over the years—the infamous “blue screen of death” (BSOD) or other symptoms. Since I upgraded to Windows 10 a couple of years ago (it was first released on July 29, 2015), I have seen the BSOD only once. One of my colleagues saw the BSOD this week, and she’s still trying to recover her files.

On my desktop computer, Windows 10 often slows to a crawl. It might take several minutes to save a simple Word document, during which “not responding” appears at the top of the screen. During those periods, all other apps behave the same way—my Internet browser (I switched from Chrome to Firefox, and the problem still occurs), Acrobat Reader, Windows Explorer, or other programs slow down or freeze for a few minutes, also with the helpful “not responding” message. Yes, I know it’s not responding, I say not so politely to the screen. That’s why I can’t work! Sure, it might be a non-Microsoft app that’s causing the slowdown, or maybe it’s spyware or a virus. But after 25 years of refinement, you’d think that Microsoft would have developed an operating system that could tell me why it has drastically slowed down or why certain programs are “not responding”—and maybe even fix the problem. Even the software I bought to help me figure out what the problem is hasn’t been helpful. And anyway, why should I have to buy software to make Windows work better?

This is just one issue I have with Windows 10. Another is that, after every Windows update, some of my connected hardware, such as my flatbed scanner, won’t work. I’ve managed to find workarounds, but should I have to take the considerable time and effort to do so? No.

And when I tried to download apps from the Windows App Store to use on the 8X, such as Avenza’s PDF Maps, a GPS app, and a screen-capture utility, I wasn’t able to get them. Every time I clicked on a “Get the App” button, nothing happened. However, I was able to download the same apps via other devices, just not on the 8X. I don’t think this glitch is Handheld’s fault—I blame Windows.

In short, Windows isn’t an operating system I want to depend on in the woods.

### Postscript

I’ve reviewed several Handheld Group tablets in the last few years, but few from other manufacturers, such as Trimble and Juniper Systems and its Cedar Tree subsidiary. I’ve asked the companies for the newest units to field test, but they haven’t sent any. **FS**



# CONTINUING EDUCATION CALENDAR

More Events at [tinyurl.com/gnd78jh](http://tinyurl.com/gnd78jh) ([www.eforester.org](http://www.eforester.org))

Continuing education events for **October and November 2017**. SAF Continuing Forestry Education (CFE) credits are available at all events. Visit SAF's Continuing Education Calendar at [tinyurl.com/gnd78jh](http://tinyurl.com/gnd78jh) for more information on these events and others that may have been recently added to the list. **Note the webinars at the top of the listings.**

**CFE Providers:** To obtain pre-approval of Continuing Forestry Education credits for an event, complete and submit the CFE Provider Application Form on the Certification & Education/Continuing Education

## WEBINARS

- 10/4/2017, Fall Cankerworm Biology, Ecology, and Management in Urban and Rural Landscapes, [www.forestrywebinars.net](http://www.forestrywebinars.net).  
10/31/2017, Restoring Native Plant Communities: Soil and Hydrology Suited Planning Tool, [tinyurl.com/y6w6rryc](http://tinyurl.com/y6w6rryc)  
11/1/2017, Hardwood Forest Management for Health and Productivity, [www.forestrywebinars.net](http://www.forestrywebinars.net)

## ARKANSAS

- 10/3–4/2017, AFA 72nd Annual Meeting, Little Rock

## CALIFORNIA

- 10/13/2017, Sudden Oak Death (SOD) Blitz Fall 2017 Workshop, Portola Valley  
10/18–19/2017, Forest Pest Recognition and Management Training, Redding  
10/20/2017, Sudden Oak Death (SOD) Blitz Fall 2017 Workshop, Santa Rosa  
10/25/2017, Sudden Oak Death (SOD) Blitz Fall 2017 Workshop, Berkeley  
11/8/2017, Sudden Oak Death (SOD) Blitz Fall 2017 Workshop, Berkeley

## GEORGIA

- 10/3/2017, Technical Service Provider Training, Waycross  
10/5/2017, Timber Income Tax, Athens  
10/18–19/2017 Master Timber Harvester Introductory Workshop, Swainsboro  
10/19/2017, Norbord GA MTH Workshop Morning, Cordele  
10/19/2017, Government Regulations and Wildlife, Cordele  
10/27/2017, UGA Extension Gwinnett Green Industry Update, Lawrenceville  
10/30/2017, Exotic Pest Plant Council Annual Conference, Griffin  
11/7–8/2017, Issues and Threats: Tree and Forest Health Care, Athens  
11/8–9/2017, GUFC 27th Annual Conference and Awards Program, Pine Mountain  
11/20–21/2017, Forest Management for Gamebirds, Tifton

## INDIANA

- 10/11–12/2017, Indiana Society of American Foresters Fall Conference, Huntingburg

## MAINE

- 10/6/2017, Proposed Changes to Maine's Tree Growth Law and Chestnut Restoration (Day 1), South Portland  
10/7/2017, Chestnut Restoration, Portland  
10/7/2017, Proposed Changes to Maine's Tree Growth Law and Chestnut Restoration (Day 2), Vienna  
10/11/2017, Foresters Institute on Maine's Tree Growth Tax Law, Scarborough  
10/12/2017, Foresters Institute on Maine's Tree Growth Tax Law, Bangor  
10/18/2017, Road Building Workshop, Augusta  
10/24/2017, Forestry for Maine Birds, New Limerick

## MARYLAND

- 10/6/2017, 25th Annual Urban and Community Forestry Workshop, Westminster

## MASSACHUSETTS

- 10/1/2017, New England ISA Annual Conference (Day 1), Southbridge  
10/2/2017, New England ISA Annual Conference

- (Day 2), Southbridge  
10/3/2017, New England ISA Annual Conference (Day 3), Southbridge  
10/16/2017, RISI North American Conference (day 1), Boston  
10/17/2017, RISI North American Conference (day 2), Boston  
10/18/2017, RISI North American Conference (day 3), Boston  
11/29/2017, Wetland Shrubs in Water, Framingham

## MINNESOTA

- 10/3/2017, Ecosystem Silviculture- Course Introduction and Overview, Grand Rapids

## MISSISSIPPI

- 10/10–12/2017, Mississippi Forestry Association Annual Meeting, Biloxi  
10/26/2017, Managing the Family Forest, Jackson  
10/26/2017, Ethics for Professional Foresters, Jackson  
11/16/2017, ArborGen Open House, New Albany

## MISSOURI

- 10/30–31/2017, Joint meeting of MOSAF and ISAF fall meeting, Kirksville

## NEW HAMPSHIRE

- 10/3/2017, Logger and Forester First Aid, CPR and AED, Colebrook  
10/5/2017, Logger and Forester First Aid, CPR and AED, Campton  
10/6/2017, Safe and Productive Felling, Coos County  
10/10/2017, Logger and Forester First Aid, CPR and AED, Hillsborough  
10/12/2017, Logger and Forester First Aid, CPR and AED, Durham  
10/17/2017, NH Timber Harvesting Law, Colebrook  
10/19/2017, NH Timber Harvesting Law, Hillsborough  
10/20/2017, Overview of the ecology and practice of adding large wood in 1st order streams, Albany  
10/23/2017, Fundamentals of Forestry, Lancaster  
10/26/2017, Fundamentals of Forestry, Hillsborough  
11/3/2017, NHACD Annual Meeting & Working Lands Conference, Keene  
11/9/2017, A practitioners guide to adding large wood in 1st order streams, Albany

## NEW JERSEY

- 10/10–13/2017, Methodology for Delineating Wetlands, Basking Ridge  
10/11/2017, Introduction to Wetland Identification, Basking Ridge  
10/19–20/2017, NJ Shade Tree Federation 92nd Annual Conference, Cherry Hill

## NEW YORK

- 10/25/2017, Long Island Oak Wilt Symposium, Upton

## NORTH CAROLINA

- 10/4–6/2017, NCFA Annual Meeting - Day 1 of 3, Wilmington  
10/4–6/2017, NCFA Annual Meeting - Day 2 of 3, Wilmington  
10/4–6/2017, NCFA Annual Meeting - Day 3 of 3, Wilmington  
10/6/2017, Forest Offset Markets, Boone  
10/12/2017, Urban Forestry, Salisbury  
10/16–17/2017, Burn Boss Certification, Troy  
10/24/2017, 2017 Eastern Forest inSight Conference Day 1 of 2, Wilmington  
10/25/2017, 2017 Eastern Forest inSight Conference Day 2 of 2 - Field Tours, Wilmington  
10/30–11/2/2017, S-290 Intermediate Wildland Fire

page at [eforester.org](http://eforester.org) (or [tinyurl.com/z2zqc3o](http://tinyurl.com/z2zqc3o)). Submittal instructions are included on the form.

**CFE Post Approval for Individuals:** If an event was not preapproved for CFE credit, SAF will evaluate the meeting on an individual basis. This service is available to members and SAF-certified professionals at no cost; non-members are assessed an annual fee of \$30. To apply, complete and submit the CFE Post Approval Form on the Certification & Education/Continuing Education page at [eforester.org](http://eforester.org) (or [tinyurl.com/z2zqc3o](http://tinyurl.com/z2zqc3o)). Submittal instructions are included on the form.

Behavior, Brown's Summit

- 10/31–11/2/2017, Bottomland & Swamp Forest Symposium Day 1 of 3, Wilmington  
10/31–11/2/2017, Bottomland & Swamp Forest Symposium Day 2 of 3, Wilmington  
10/31/2017–11/2/2017, Bottomland & Swamp Forest Symposium Day 3 of 3, Wilmington  
11/8/2017, RUSSWOOD Library Furniture Manufacturing Tour, Raleigh

## OREGON

- 10/3/2017, 2017 Fire, Water, and Forest Health Workshop, Albany  
10/11–12/2017, PNW-FIA 2017 Client Meeting and Data Workshop, Gresham  
10/19/2017, Wildlife in Managed Forests: Forest Carnivores and their Habitats, Albany  
11/1/2017, Westside Forest Health Issues: Identification and Management, Wilsonville  
11/13–17/2017, Skyline Analysis and Unit Layout Workshop, Corvallis  
11/29–30/2017, PNW Forest Vegetation Mgt. Conf.: Evolution of Science and Emerging Technology, Wilsonville

## PENNSYLVANIA

- 10/10/2017, Maple Syrup: A Beginner's Experience  
11/14/2017, Two-pronged Approach to Deer Management

## SOUTH CAROLINA

- 10/4/2017, The South Carolina Chapter of The Wildlife Society: Annual Meeting, Columbia  
10/12/2017, Pine and Hardwood Markets, Columbia

- 11/1/2017, A Walk In The Piney Woods, Greenville  
11/2/2017, Forests at Work, Greenville

## TENNESSEE

- 10/2/2017, The Science and Art of Pruning, Knoxville  
10/5–6/2017, Leading Green: Urban Forestry in a Changing Environment, Knoxville  
10/9/2017, Tree Health and Invasive Species, Knoxville  
10/24–26/2017, Oak Symposium, Knoxville

## TEXAS

- 10/12/2017, Genetics Workshop, Bullard  
10/25–27/2017, 2017 Texas Forestry Association Annual Meeting, Nacogdoches

## VIRGINIA

- 11/3/2017, Turning a New Leaf Conference, Herndon

## WASHINGTON

- 10/3–4/2017, Intro. to Cable Logging Systems, Tumwater

## WISCONSIN

- 10/16/2017, Habitat Management for Young Forest Wildlife, Brule  
10/17/2017, BMPs along the Wolf River and Other Water Bodies, Shiocton

UNITED STATES POSTAL SERVICE® (All Periodicals Publications Except Requester Publications)		
1. Publication Title	2. Publication Number	3. Filing Date
The Forestry Source	1 0 8 4 _ 5 4 9 6	9/18/2017
4. Issue Frequency	5. Number of Issues Published Annually	6. Annual Subscription Price
Monthly	12	\$61 - Individual (\$116 Foreign) \$116 - Institution (\$173 Foreign)
7. Complete Mailing Address of Known Office of Publication (Not printer) (Street, city, county, state, and ZIP+4®)		Contact Person
10100 Laureate Way Bethesda, MD 20814		Louise Murgia
8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer)		Telephone (include area code)
10100 Laureate Way Bethesda, MD 20814		301 897-8720
9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do not leave blank)		
Publisher (Name and complete mailing address)		
Matt Menashes; 10100 Laureate Way; Bethesda, MD 20814		
Editor (Name and complete mailing address)		
Steve Wilent; 10100 Laureate Way; Bethesda, MD 20814		
Managing Editor (Name and complete mailing address)		
Steve Wilent; 10100 Laureate Way; Bethesda, MD 20814		
10. Owner (Do not leave blank. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual owner. If the publication is published by a nonprofit organization, give its name and address.)		
Full Name	Complete Mailing Address	
Society of American Foresters	10100 Laureate Way, Bethesda, MD 20814	
11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box <input checked="" type="checkbox"/> None		
Full Name	Complete Mailing Address	
12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one) The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes: <input checked="" type="checkbox"/> Has Not Changed During Preceding 12 Months <input type="checkbox"/> Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)		
PS Form 3526, July 2014 (Page 1 of 4 (see instructions page 4)) PSN: 7530-01-000-9931 PRIVACY NOTICE: See our privacy policy on <a href="http://www.usps.com">www.usps.com</a> .		



From the SAF Career Center

For the complete listing of these and other ads, visit <http://careercenter.eforester.org>

**Forestry Technician**  
Employer: County of Los Angeles Fire Department  
Location: California  
Job ID: 37164671  
Posted: September 20, 2017  
Job Type: Full-Time  
Min Education: Associate's Degree  
Min Experience: None

**Staff Forester II - Outreach and Program Development**  
Employer: Texas A&M Forest Service  
Location: Lufkin, Texas  
Job ID: 37136716  
Posted: September 18, 2017  
Job Type: Full-Time  
Min Experience: 3–5 Years  
Required Travel: 10–25%

**Forestry Assistant II**  
Employer: CAL FIRE  
Location: California  
Job ID: 34472813  
Posted: September 17, 2017  
Job Type: Full-Time

**Investment Analyst**  
Employer: Resource Management Service  
Location: Birmingham, Alabama  
Job ID: 37047779  
Posted: September 13, 2017  
Job Type: Full-Time

**District Manager**  
Employer: Resource Management Service  
Location: Livingston, Texas  
Job ID: 37035672  
Posted: September 12, 2017  
Min Education: BA/BS/Undergraduate  
Min Experience: 5–7 Years

**Forester**  
Employer: J.M. Longyear LLC  
Location: Marquette, Wisconsin  
Job ID: 36961897  
Posted: September 7, 2017

**Procurement Forester**  
Employer: Sierra Pacific Industries  
Location: California  
Job ID: 36374101  
Posted: September 5, 2017  
Job Type: Full-Time

**Forester Specialist - Nursery**  
Employer: Indiana Division of Forestry  
Location: Vallonia, Indiana  
Job ID: 36876832  
Posted: September 1, 2017  
Job Type: Full-Time  
Min Experience: 0–1 Year

**DNR Assistant Division Manager - Product Sales**  
Employer: Washington State Department of Natural Resources  
Location: Olympia, Washington  
Job ID: 36840817  
Posted: August 30, 2017  
Min Experience: 5–7 Years  
Required Travel: 10–25%

**Forester**  
Employer: Presidio Trust  
Location: San Francisco, California

Job ID: 36840375  
Posted: August 30, 2017  
Min Education: BA/BS/Undergraduate  
Min Experience: 3–5 Years

**Forest Technician, Crew Leader**  
Employer: Itasca Woodland Services, Inc.  
Location: Grand Rapids, Minnesota  
Job ID: 36811711  
Posted: August 28, 2017  
Job Function: Forest Inventory  
Entry Level: Yes  
Job Type: Full-Time  
Job Duration: 6–12 Months  
Min Education: Associate's Degree  
Min Experience: 1–2 Years  
Required Travel: 75–100%

**Forester**  
Employer: NewLife Forest Products LLC  
Location: Mesa, Arizona  
Job ID: 36728735  
Posted: August 23, 2017  
Min Education: BA/BS/Undergraduate

**Executive Director**  
Employer: Minnesota Forest Resources Council  
Location: St. Paul, Minnesota  
Job ID: 36615462  
Posted: August 15, 2017  
Min Education: BA/BS/Undergraduate

**Assistant/Associate Professor**  
Employer: Purdue University  
Location: West Lafayette, Indiana  
Job ID: 35242356  
Posted: May 22, 2017  
Min Education: PhD

The Davey Tree Expert Company

These are a small selection of the employment ads by The Davey Tree Expert Company in the SAF Career Center.

**Transmission Consulting Utility Forester**  
Location: Scottsbluff, Colorado  
Job ID: 37157134  
Posted: September 20, 2017

**Consulting Utility Forester**  
Location: Chico, California,  
Job ID: 37144635  
Posted: September 19, 2017


**Consulting Utility Forester**  
Location: San Jose, California  
Job ID: 37125842  
Posted: September 18, 2017

**Consulting Utility Forester/Traveling Forester**  
Location: Sioux City, Iowa  
Job ID: 37125827  
Posted: September 18, 2017

**Consulting Utility Forester/ Traveling Forester**  
Location: Columbia & Kansas City, Missouri  
Job ID: 37125813  
Posted: September 18, 2017

**Consulting Utility Forester/ Traveling Forester**  
Location: Davenport & Cedar Rapids, Iowa  
Job ID: 37125809  
Posted: September 18, 2017

13. Publication Title <b>The Forestry Source</b>		14. Issue Date for Circulation Data Below <b>October 2016-September 2017</b>	
15. <b>Extent and Nature of Circulation</b> The Forestry Source provides SAF members and other natural resource professionals with news regarding developments within the forestry profession as well as the activities and policies of SAF.		<b>Average No. Copies Each Issue During Preceding 12 Months</b>	<b>No. Copies of Single Issue Published Nearest to Filing Date</b>
a. Total Number of Copies <i>(Net press run)</i>		<b>11,854</b>	<b>10,785</b>
b. Paid Circulation <i>(By Mail and Outside the Mail)</i>	(1) Mailed Outside-County Paid Subscriptions Stated on PS Form 3541 (Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)	<b>11,011</b>	<b>10,873</b>
	(2) Mailed In-County Paid Subscriptions Stated on PS Form 3541 <i>(Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)</i>		
	(3) Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®		
	(4) Paid Distribution by Other Classes of Mail Through the USPS (e.g., First-Class Mail®)		
c. Total Paid Distribution <i>[Sum of 15b (1), (2), (3), and (4)]</i>		<b>11,011</b>	<b>10,673</b>
d. Free or Nominal Rate Distribution <i>(By Mail and Outside the Mail)</i>	(1) Free or Nominal Rate Outside-County Copies included on PS Form 3541	<b>4,918</b>	<b>0</b>
	(2) Free or Nominal Rate In-County Copies Included on PS Form 3541		
	(3) Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g., First-Class Mail)		
	(4) Free or Nominal Rate Distribution Outside the Mail <i>(Carriers or other means)</i>		
e. Total Free or Nominal Rate Distribution <i>(Sum of 15d (1), (2), (3) and (4))</i>		<b>4,918</b>	<b>0</b>
f. Total Distribution <i>(Sum of 15c and 15e)</i>		<b>15,929</b>	
g. Copies not Distributed <i>(See Instructions to Publishers #4 (page #3))</i>		<b>234</b>	112
h. Total <i>(Sum of 15f and g)</i>		<b>16,163</b>	10,785
i. Percent Paid <i>(15c divided by 15f times 100)</i>		<b>69.1%</b>	100%
* If you are claiming electronic copies, go to line 16 on page 3. If you are not claiming electronic copies, skip to line 17 on page 3.			

 <b>UNITED STATES POSTAL SERVICE®</b> <b>Statement of Ownership, Management, and Circulation (All Periodicals Publications Except Requester Publications)</b>			
16. Electronic Copy Circulation		<b>Average No. Copies Each Issue During Preceding 12 Months</b>	<b>No. Copies of Single Issue Published Nearest to Filing Date</b>
a. Paid Electronic Copies			
b. Total Paid Print Copies (Line 15c) + Paid Electronic Copies (Line 16a)			
c. Total Print Distribution (Line 15f) + Paid Electronic Copies (Line 16a)			
d. Percent Paid (Both Print & Electronic Copies) (16b divided by 16c × 100)			
<input checked="" type="checkbox"/> I certify that 50% of all my distributed copies (electronic and print) are paid above a nominal price.			
17. Publication of Statement of Ownership			
<input checked="" type="checkbox"/> If the publication is a general publication, publication of this statement is required. Will be printed in the <b>October 2017</b> issue of this publication. <input type="checkbox"/> Publication not required.			
18. Signature and Title of Editor, Publisher, Business Manager, or Owner			Date
<b>Matt Menashes, CEO and Publisher</b>			<b>Sept 18, 2017</b>
I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).			
PS Form 3526, July 2014 (Page 3 of 4) <span style="float: right;">PRIVACY NOTICE: See our privacy policy on <a href="http://www.usps.com">www.usps.com</a>.</span>			



# Forestry News from across the Nation

## Hurricane Harvey Recovery

A number of state forestry agencies deployed personnel to aid in recovery efforts following Hurricane Harvey's destructive path through Texas. Among the resources were a 20-person incident management team from the Virginia Department of Forestry; mobile pet shelters for evacuees provided by the Louisiana Department of Agriculture and Forestry; and two 20-person interagency fire crews provided by the state of Kentucky, which included employees from the Division of Forestry.

As of September 20, 119 responders from the Texas A&M Forest Service (TFS), which include Texas Intrastate Fire Mutual Aid System teams, were deployed to assist in relief efforts. A software application that the agency developed to track the distribution of emergency supplies, such as water, food, and blankets, at regional staging areas was recently shared with Florida officials to assist in their Hurricane Irma recovery efforts.

"As an incident response agency, we are always seeking faster, better ways to work," said SAF member Tom Boggus, director of the Texas A&M Forest Service. "Our GIS specialists developed this application to streamline some of our tasks in the response stage of the incident, and we've simply adapted it to be effective for part of the recovery stage as well."

## New Educational Resources

Billed as "the gateway to all things public lands," out•LAND•ish is a new podcast available from Your Forests Your Future. The podcast is an initiative of the US For-

est Service in conjunction with Salmon Valley Stewardship and More Than Just Parks. Six podcast episodes are available at [www.yourforestsyourfuture.org](http://www.yourforestsyourfuture.org).

A yearlong art trail and exhibition called *Hemlock Hospice* at the Harvard Forest combines science and art to educate visitors on the decline of eastern hemlock due to the hemlock woolly adelgid. The exhibit, which features outdoor sculptures, is a collaboration of interdisciplinary artist and designer David Buckley Borden and Aaron Ellison, a senior ecologist at the Harvard Forest. There is an accompanying indoor display of prints and drawings in the Fisher Museum, created by David Buckley Borden, a Harvard Forest Bullard Fellow.

"A field-based installation that blends science, art, and design, *Hemlock Hospice* respects the eastern hemlock and its ecological role as a foundation forest species," said Ellison. "[It] promotes an understanding of the adelgid, and encourages empathetic conversations among all the sustainers of and caregivers for our forests—ecologists and artists, foresters and journalists, naturalists and citizens—while fostering social cohesion around ecological issues."

## Shortleaf Pine Restoration

Since the start of the My Alabama Woods initiative about two years ago, nearly 500 small forest landowners have restored shortleaf pine on more than 4,400 acres in Alabama's Cumberland Plateau, and next year, another 2,000 acres is targeted for restoration. The shortleaf pine is con-

sidered a "cornerstone" tree for the area, but its numbers have declined due to other, more economically viable trees being planted.

My Alabama Woods is the result of collaboration by nearly 20 organizations, including the American Forest Foundation and the Alabama Forestry Association. Prior to the project, few landowners were actively restoring shortleaf pine on their forestland.

Interested in learning more about shortleaf pine restoration? The November issue of *The Forestry Source* will feature a recap of the upcoming Fourth Biennial Shortleaf Pine Conference.

## NC Floodplain Protected

With a grant provided by the Enviva Forest Conservation Fund and a loan from The Conservation Fund, the Coastal Land Trust has protected nearly 1,000 acres of "ecologically significant" riparian forests in North Carolina's Bertie County. In addition to upland pine forests, the landscape includes a tidal freshwater marsh and a cypress-gum swamp. The area also contains a valuable archaeological site that could be where the survivors of the Roanoke Colony settled after leaving Roanoke Island in the 1580s.

"Thanks to the Coastal Land Trust, The Conservation Fund, and the Enviva Forest Conservation Fund, this magnificent property will not only be protected, but will one day be open to the public to enjoy as a state natural area" said Carlton Owen, president and CEO of the US Endowment for Forestry and Communities,



Following the destruction caused by Hurricane Harvey, urban forest strike teams and saw crews were out in force assessing the damage and clearing trees. Photo: Texas A&M Forest Service.

which administers the Enviva Forest Conservation Fund.

After the Coastal Land Trust repays The Conservation Fund for its loan of nearly \$5 million, the property and its management will be transferred to the Division of Parks and Recreation, which will call it the Salmon Creek State Natural Area.

# THE FORESTRY SOURCE

News for forest resource professionals published by the Society of American Foresters

10100 Laureate Way, Bethesda, MD 20814 • [www.e-forester.org](http://www.e-forester.org)

October 2017 • Vol. 22 • No. 10

## Unparalleled benefits to provide peace of mind.



As a member of the Society of American Foresters, you and your family have access to two cost-effective and comprehensive insurance Programs, SAF Term Life and Long-Term Disability. These insurance plans are offered as an exclusive benefit of your SAF membership.

- Ensure your family has the resources required to meet financial commitments and achieve future goals.
- Safeguard your income against disability, illness, and accidents.

A trusted partner focused on your goals. Visit <http://info.rcmd.com/saf> to learn more.