



Kansas Forest Service

Grow Your Understanding

December 2016



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in your landscape
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KansasForests.org



From the State Forester

2016 delivered many successes central to the Kansas Forest Service's 16 legislated powers and duties. While significant outcomes were achieved in nearly all of the agency's powers and duties, the pinnacles for 2016 were fire, water, and community forestry. Especially noteworthy were nearly 5,000 hours of fire suppression services to the Anderson Creek Fire in south central Kansas in March. This fire, the largest in Kansas' recorded history, torched more than 270,000 acres in Kansas and everything in its path, including livestock, farm buildings, bridges, fences, utility poles, and guardrail posts on several miles of highway. The Kansas Forest Service's role in this fire, via 87 nationally qualified staff and cooperators, included an incident commander, public information officer and trainees, safety officer, two operation section chiefs, two division supervisors, base camp manager, four engine bosses, 12 engine crew members, four hand crew bosses, 36 fire fighters, fire weather meteorologist, GIS trainee and 24 other various trainees, personnel time recorder, and finance cost leader.

2016 also heralded 40 years of Tree City USA activities in partnership with the Arbor Day Foundation. The agency qualified 104 Tree City USA communities

in 2016 with Clay Center, Dodge City, Junction City, and Newton constituting one quarter of the nation's 16 original communities recognized as attaining 40 consecutive years of membership.

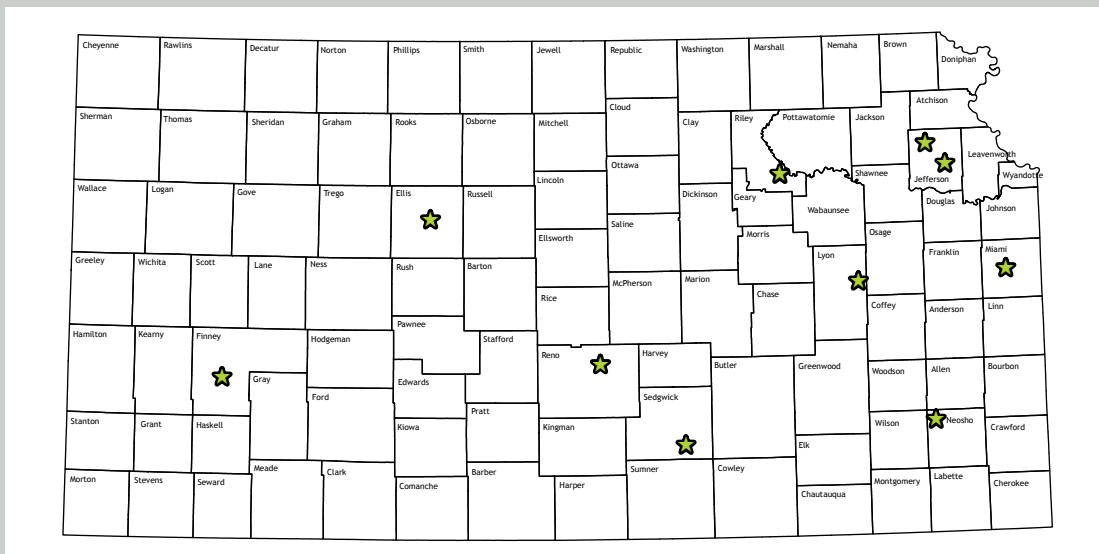
The Kansas Forest Service ramped up riparian forestry endeavors this year with an emphasis on slowing nutrient-laden sediment entering the state's waterways. Based on current data, every mile of fully-functioning riparian forest buffer saves the state \$56,000 annually in future dredging costs, and helps avert untold outdoor recreation income losses associated with algal blooms.

Not to be overlooked are important forest health, conservation tree, and educational program activities. The Kansas Forest Service secured substantial grant awards addressing vital forestry issues this year, we celebrated a 14 percent increase in tree seedling sales, and hosted a plethora of workshops, field days, and youth education programs.

Lastly, in our efforts to carry out our mission of "Care of Natural Resources and Service to People through Forestry," 2016 saw the establishment of the state's first Forest Legacy Forest, a 254-acre parcel in the center of Douglas County's Baldwin Woods area. Join us in celebrating all that was accomplished in 2016; may 2017 be equally productive and rewarding. For more on Kansas Forest Service's programs, people, and events, please visit Kansasforests.org.

Larry Biles, Kansas State Forester

Kansas Forest Service District Offices



The Kansas Forest Service consists of a state office and several district offices. The state office, located in Manhattan, houses the state forester, program coordinators, statewide specialists, and support staff. The rural fire shop and conservation trees greenhouse also are located at the state office.



What are our legislative duties?

We serve rural fire districts, forest and arboriculture industries, communities, private landowners, and youth of the state through

- conservation tree and shrub planting,
- fire management,
- community forestry,
- rural forestry,
- marketing and utilization, and
- forest health programs.



Water

Did you know ... healthy forests lead to healthy streams? They do, and that's why the Kansas Forest Service is in the business of restoring our state's streamside forests. You'll often hear the word "buffer" used to describe our new streamside forest plantings. That's because these areas act like a shock absorber against the pulses of polluted and erosive water that follow heavy rains. Where our streamside forests have been degraded, our streams suffer. But where our streamside forests are healthy, our streams have less pollutants, tamer currents, and improved water quality.

What We're Doing

- Managing 51 major riverbank stabilization projects, with an additional 34 planned over the next two years.
- Planted riparian forest buffers at 24 total sites in 2016, along with 612 acres of woodland improvement in high-priority areas of the Smoky Hill, Cottonwood, Tuttle Creek and Delaware watersheds.
- Providing specialty equipment at no cost for landowners to conduct their own riparian area forestry management activities.
- Supporting landowners wishing to enroll streamside areas into conservation programs

Results

- Guided the protection of 35,163 linear feet of streams with new tree planting projects.
- Riparian buffers planted in 2016 will keep 1,837 tons, equivalent to 102 dump-truck loads, of sediment and associated phosphorus and nitrogen from entering federal reservoirs. This will save an estimated \$188,179 in future dredging costs.
- Reduced sediment and nutrient inputs to streams and reservoirs where two-thirds of Kansas water supplies originate.

The Bottom Line



1,837 tons

Sediment and contaminants annually kept from entering federal reservoirs by 24 riparian plantings.



20:1

Dredging costs are 20 times greater than streambank stabilization costs.



Deb Farris KAKE News

Quality of Life

Did you know ... trees benefit Kansans' quality of life? The positive effect of gardens, parks, and other green spaces on public wellbeing and health are well-documented. Trees cool city streets, clean the air, reduce violence, and increase property values and business traffic. Windbreaks, shelterbelts, and riparian plantings benefit the quality of life for Kansans by improving home energy savings, increasing crop yields, and slowing erosion and sedimentation of reservoirs.

What We're Doing

- Offering landowners low-cost, conservation tree and shrub seedlings to plant streamside forests, windbreaks, and shelterbelts.
- Using 88 years of data from combine monitors to quantify windbreak benefits to increased crop yields, along with conservation benefits like soil health.
- Responding to the threat of emerald ash borer by doing inventories, sharing management strategies, conducting workshops, and hosting tree plantings using diverse species.
- Assisting communities with tree planting projects, removal decisions, and skill development of staff and tree board members..

Results

- Decreased erosion of valuable cropland and reduced sediment in streams and reservoirs.
- Increased understanding of the value that windbreaks and shelterbelts bring to the people of Kansas, including soil conservation, prevention of dust storm vehicular accidents, and crop yield increases.
- 166 people from 15 communities learned how to detect the emerald ash borer and make management decisions for thousands of ash trees.
- Provided 195 technical assists to plant, maintain, and remove high-risk trees in Kansas community forests that are aging and largely in decline.

Fire

Did you know ... the Kansas Forest Service helped battle the largest wildfire in Kansas' recorded history this year? Fire Management Program staff and partners formed a nationally credentialed Type 3 Incident Management Team as part of the effort to contain the Anderson Creek Fire. Kansas Forest Service staff also assisted with large fire response in other areas of Kansas, and the nation, all while keeping up with our core mission of supporting rural fire districts with equipment, training, protection, and public education.

What We're Doing

- Supporting our partners with management personnel and equipment on large fire incidents in Kansas and nationwide.
- Providing National Wildlife Coordinating Group wildland fire training opportunities for all Kansas firefighters.
- Donating fire equipment to fire departments through federal excess property programs and local donations.
- Administering Volunteer Fire Assistance cost share program to rural fire departments.
- Assisting the Kansas Prescribed Fire Council in the support of 12 local prescribed burn associations.

Results

- Kansas Forest Service brought in 87 personnel, including partners from 18 agencies and four states to assist with the Anderson Creek Fire.
- Kansas wildland firefighters supported firefighting efforts for 695 days, on 48 fire incidents, in 17 states.
- Kansas Forest Service federal excess property programs supplied \$4,799,443 in surplus property to be re-purposed into firefighting equipment.
- The Volunteer Fire Assistance cost share program matched each dollar spent by 117 rural Kansas fire departments, resulting in \$283,300 in savings.



\$300

Estimated yearly taxpayer benefit from one streambank stabilization project.



\$159 million

Annual benefit windbreaks provide in energy and crop yield savings."



\$283,300

Savings to Kansas rural fire departments through Volunteer Fire Assistance cost share program.



41

National Incident Management System qualifications in command and management positions achieved by staff members.



Sustainability

Did you know ... the Kansas Forest Service supports and strengthens healthy prairie and woodland ecosystems? Through prescribed burning and forest management, the spread of invasive vegetation is halted, improving wildlife habitat as well as landowner enjoyment and delight in their land. Restoring the ecosystem of Kansas is vital not only to wildlife and native trees and grasses, but also to our economy. Forest and prairie management practices remove undesirable species from the landscape, which generates the potential for valuable wood products and new energy sources.

What We're Doing

- More than doubled the size of the Baldwin Forest Preserve in Douglas County from 202 acres to 456 acres, joining the land into one contiguous tract.
- The Forest Stewardship Program involves landowners in the active management of their forested lands, including shelterbelts and windbreaks.
- The Conservation Trees program provides a wide selection of tree seedling species used in wildlife food and habitat, as well as other conservation purposes.
- Uniting with landowners, land managers, and conservation groups to expound the benefits of prescribed fire.

Results

- The Baldwin Forest Preserve is now the first Forest Legacy Program project in Kansas, and protects some of the highest quality forest and threatened and endangered species in Kansas.
- Statewide, 554 landowners received professional assistance in managing 118,560 acres of private lands.
- Increased and improved wildlife habitat by distributing 282,218 seedlings through the Conservation Tree Planting Program, an increase of 14 percent over 2015.
- Demonstrated the application of prescribed fire at seven statewide workshops, with 238 attendees.

Developing Stewards

Did you know ... the Kansas Forest Service educates Kansans to provide for the future health of their state? We're carrying out this objective by introducing grade school students to conservation and the importance of trees, offering practical instruction through workshops and trainings, and helping landowners better care for their land.

What We're Doing

- Created 347 management plans, covering 118,560 acres across Kansas, assisting landowners in the planning and improvement of their woodlands.
- Running 34 statewide rural forestry education events, 43 community forestry trainings, and 14 fire workshops in 2016.
- Celebrating 43 year partnership with the Kansas Arborist Association in the Arborist Training Course.
- Providing citizens who care for their municipal trees a structure to act within to impact their communities through the Tree City USA program.

Results

- Through the Forest Stewardship Program, 96,121 acres of at-risk woodlands in priority areas are actively being managed.
- 556 fire workshop attendees; 1,995 community forestry workshop attendees; and 5,940 rural forestry workshop and field day attendees totaling 8,491 people invested in Kansas.
- Our partnership with Kansas Arborist Association has yielded more than 1,840 individuals trained, with 143 of those currently Kansas Certified Arborists.
- 2,034 citizens spent a total of 32,018 volunteer hours in 100 Kansas Tree City USA communities learning and practicing tree-care management benefiting their public trees.
- Conservation district youth programs, annual Envirothon, and Arbor Day Poster Contest engaged 5,513 young people in natural resources.



456

Total acres of Baldwin Forest Preserve, Kansas' first Forest Legacy Program project.



282,218

Seedlings distributed for conservation plantings in 2016.



118,560

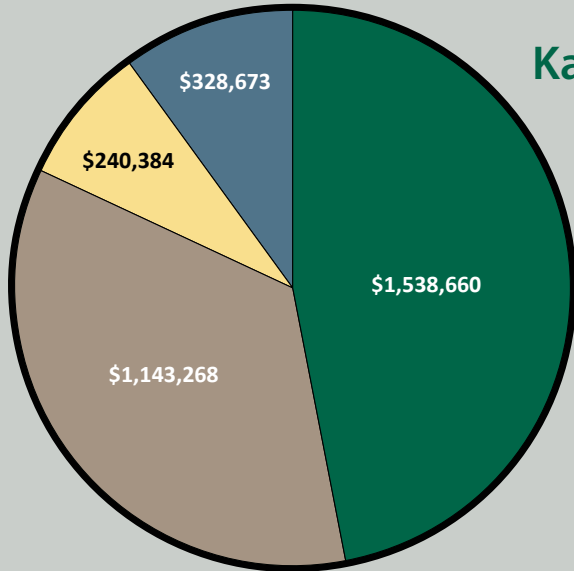
Total number of actively managed acres of private lands.







32,018

Number of volunteer hours Kansans invested in caring for community trees.

Kansas Forest Service 2016 Budget



-  Federal Funds 47%
-  Competitive Grants (State and Federal) 35%
-  Fee Income (Technical Assistance and Tree Sales) 8%
-  State General Fund 10%

Total: \$3,250,985

The Kansas Forest Service contributes an estimated combined economic impact of \$28,774,213 annually at a cost of \$0.11 per capita to Kansans.

Kansas Forest Service Partners



www.kansasforests.org



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