



Kansas Forest Service From the Ground Up

December 2015



From the State Forester

Water, Fire, Quality of Life, Sustainability, and Developing Stewards constitute the Kansas Forest Service's report themes for 2015. These themes are of significant importance to Kansas and to the Kansas Forest Service, with water being the pinnacle. Along with the assistance of 21 partners, we received a \$13 million grant to implement forestry practices in four watersheds and assess streamside forests in 10 other watersheds. Educational programs and field work central to this subject are to begin in January 2016.

Closely related to water quality issues are ecological challenges with specific reference to invasive plant threats to quality hardwood regeneration, wildlife habitat, and rangeland sustainability. For forested areas, the issue is natural regeneration. Overstocked timber stands prohibit sunlight from reaching the forest floor, permitting shade-tolerant species to overrun more desirable shade-intolerant species. The challenge with rangelands is the lack of prescribed fire to control eastern redcedar. In both cases, there are economic, environmental, and social losses in wood, forage, and wildlife habitat.

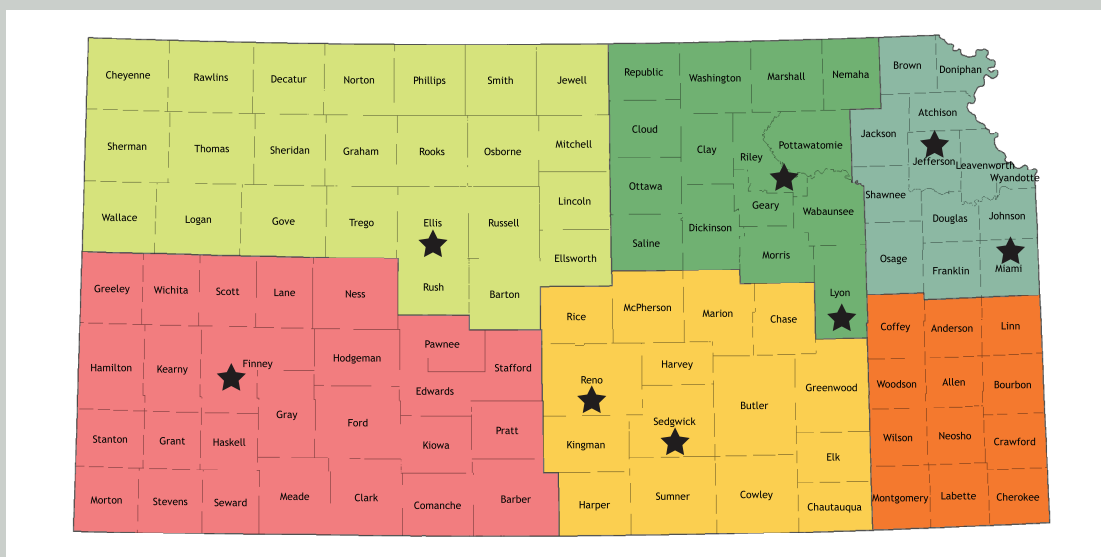
Firmly linked to the above are rural and urban quality of life issues. In rural settings, quality of life around farmsteads is often measured by the presence of windbreaks. In community settings, quality of life is frequently tied to the presence of open space, spring flowers, fall foliage, and summer shade.

A partial solution to the water, fire, sustainability, and quality of life issues is our work in developing and nurturing conservation stewardship. We are proud of our connectivity to clients and customers through multiple field days and workshops across the conservation spectrum. Included are rural, community, fire management, and forest health field days and workshops; media broadcasts; printed literature; one-to-one technical services; and an open-door approach to customers and clients. Through these processes, the Kansas Forest Service fosters natural resources stewardship, natural resources fellowship, and community well-being.

2015 saw significant achievements toward our mission of "Care of Natural Resources and Service to People through Forestry." Join us in celebrating our accomplishments as we look forward to the opportunities and challenges of 2016. For more information about our programs, our people, and upcoming events, please visit www.kansasforests.org.

Larry Biles, Kansas State Forester

Kansas Forest Service Districts



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 program and Conservation Trees greenhouse are also located at the state office.



What does the Kansas Forest Service do

We serve rural fire districts, forest and arboriculture industries, and citizens of the state through our

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



Water

Water issues are an important and complex part of the lives of Kansans. Water gives life to our industries, our economy, and literally, to our people. Keeping sediment and silt from reducing the capacity of the state's reservoirs directly affects the lives of Kansans, as well as the state's economy. Water quality in eastern and central Kansas and water quantity in western Kansas are topics the Kansas Forest Service actively addresses through one-on-one service with landowners, conservation tree planting, and education.

What We're Doing

- Secured a \$13 million grant from the U.S. Department of Agriculture focused on water quality, wildlife habitat, and tree plantings.
- Providing landowners low-cost shrub and tree seedlings for streamside conservation plantings.
- Increasing streamside plantings to reduce sediment and nutrient-caused algal blooms.
- Gathering data on public trees through state-of-the-art technology to help communities better understand the stormwater and related benefits of their trees.

Results

- \$8 million of the grant will be used to improve native woodlands, and reestablish streamside woodlands, keeping soils out of our streams potentially saving millions of dollars in dredging costs.
- Protecting remaining streamside forests in high-priority watersheds.
- Protecting and preserving water-based recreation in our state and others where our watersheds feed into reservoirs.
- Communities with iTree analyses are better able to manage stormwater to reduce sediment and pollution entering streams and rivers.

Results Are in the Numbers



6.7 million

Gallons of rainwater intercepted by trees from one KC community stormwater system



\$19 million

Cost to dredge 3 million cubic yards of sediment from the John Redmond Reservoir



Quality of Life

Studies show forested areas improve our wellbeing. The fact that cities with declining tree canopies report higher rates of respiratory illnesses, heart attack, and stroke supports the link between trees and improved health. Streamside plantings, windbreaks, and shelterbelts also benefit the quality of life for Kansans by increasing crop yields, lowering household energy bills, and cleaning our water and air.

What We're Doing

- Fostering the benefits of windbreaks and shelterbelts through the Conservation Trees Program.
- Providing advisory assistance to communities without skilled staff for planning, planting, and care of community trees.
- Conducting tree inventories and assessments that establish the value and health of trees.
- Informing the public on the importance of tree diversity.
- Protecting forest resources by stressing the importance of not transporting firewood that may contain destructive pests.

Results

- Windbreaks and shelterbelts decrease cold winter winds, reducing home heating bills and helping protect livestock.
- Research shows shelterbelts increase crop yields 12 to 23 percent.
- 87 percent of Kansans live in communities assisted by the Community Forestry Program.
- Through inventories, 55 Kansas communities are now better able to mitigate risk of existing and impending threats to their community trees, including emerald ash borer, thousand cankers disease, and pine wilt.
- Reduced threat of loss to tree farms, windbreaks, and neighborhood trees through outreach on the risks of moving firewood.

Fire

The Kansas Forest Service Fire Management Program helps local fire departments through training, equipment, and financial assistance. Programs such as the Equipment Donation Program and federal excess property programs support Kansas fire departments by making equipment and vehicles available to them free of charge. The Kansas Forest Service also deploys personnel in support of national wildfire fighting efforts.

What We're Doing

- Providing wildland fire training opportunities for all Kansas firefighters.
- Supporting state and federal partners with personnel and equipment on national fire incidents.
- 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.
- Leading the Prescribed Fire Council to encourage prescribed burning and smoke management.

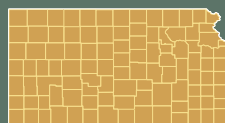
Results

- 32 students from Hutchinson Community College underwent 1,920 combined hours of wildland fire training, adding to their knowledge of prescribed burning and wildfire suppression.
- Kansas wildland firefighters supported firefighting efforts for 463 days on 31 fire incidents in eight states.
- Kansas Forest Service federal excess property programs supplied \$4.3 million in surplus property to be repurposed into firefighting equipment.
- The Volunteer Fire Assistance cost share program matched each dollar spent by 99 rural Kansas fire departments, resulting in \$272,000 in savings.



15x

Shelterbelts can reduce wind velocity for a distance of up to 15x the trees' height



104/105

Counties in Kansas participated in conservation tree planting



\$272,000

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



1,100

"Number of acres treated with prescribed fire by the Kansas Forest Service in fire-prone urban areas"



Sustainability

The Kansas Forest Service sustains healthy prairie and woodland ecosystems. Prescribed burning and forest management prevents the spread of invasive vegetation while improving wildlife habitat, water quality, and recreation. Restoring our ecosystem is important not only to wildlife and native trees and grasses, but also to the state's economy. Forest and prairie management remove undesirable species that in turn create the potential for valuable wood products and new energy sources.

What We're Doing

- Partnering with land managers, owners, and conservation groups to demonstrate the benefits of prescribed fire.
- The Conservation Trees Program bundles select species of seedlings to provide habitat for specific wildlife, including upland game birds.
- Assisting partners to control invasive species such as bush honeysuckle and eastern redcedar.
- The Forest Stewardship Program engages landowners in the active management of shelterbelts and woodlands.

Results

- Demonstrated the application of prescribed fire at eight different workshops statewide, with 190 attendees.
- Increased and improved wildlife habitat by distributing 247,499 seedlings through the Conservation Tree Planting Program.
- In four Wichita parks, 78 volunteers eradicated 4 acres of invasive bush honeysuckle.
- Statewide, 429 landowners received professional assistance in managing 42,136 acres of private lands.
- In nine forest health workshops across the state, more than 500 individuals were educated in disease, insect, and invasive threats to trees.

Developing Stewards

Caring for our natural environment is important to all Kansans. The Kansas Forest Service educates Kansans to provide for the future health and sustainability of the state. We are doing this by introducing elementary school students to conservation and the importance of trees, and by offering tree-care professionals training to better care for trees.

What We're Doing

- Developing lesson plans to support forestry education through the Arbor Day Poster Contest in Kansas elementary schools.
- Hosting forestry workshops to engage landowners in the management of their natural resources.
- Providing citizens who care for their community trees a framework of action through the Tree City USA program.
- Providing financial incentives to conserve, protect, and enhance the natural resources of the state.

Results

- Educated 1,012 Kansas 5th graders through lesson plans, activities, and information concerning the importance of our state's tree resources.
- 1,121 landowners participated in hands-on workshops on tree planting, forest health, and wildlife habitat.
- 1,623 citizens spent a total of 26,445 volunteer hours in 101 Kansas Tree City USA communities learning and practicing tree-care management benefiting their public trees.
- Through the Forest Stewardship program, 89,705 acres of woodlands are actively being managed.
- Conservation district youth education programs and the annual Envirothon got 1,768 young people involved in natural resources.



247,499

Seedlings distributed in 2015 for conservation purposes.



40,000

Tons of wood waste converted to fuel that Frito Lay put to use in their Topeka plant



TREE CITY USA®

101

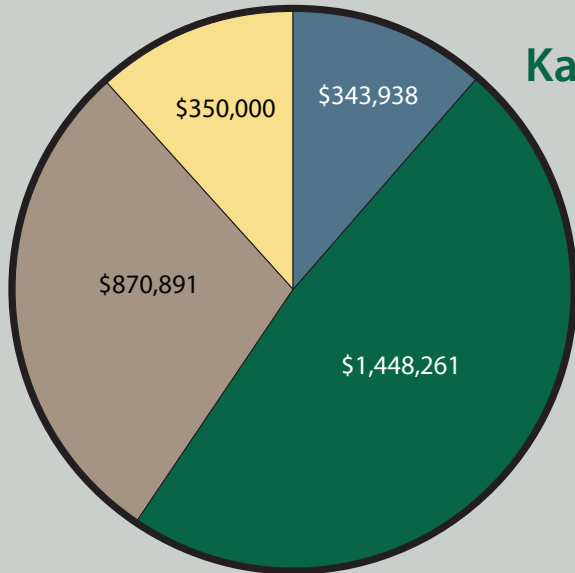
Tree City USA communities in Kansas







1,121

Participants in tree planting, forest health, and wildlife habitat workshops.

Kansas Forest Service 2016 Budget



-  Federal Funds 48%
-  Competitive Grants 29%
-  Fee Income 12%
-  State General Fund 11%

Total: \$3,013,090

The Kansas Forest Service contributes an estimated combined economic impact of \$26,873,000 annually.

Kansas Forest Service Partners

K-STATE Research and Extension
NRCS Natural Resources Conservation Service
Kansas Department of Wildlife, Parks and Tourism
Kansas Water Office
Wildhorse Riverworks Inc.
KACD Kansas Association of Conservation Districts
KANSAS Nursery & Landscape Association
Arbor Day Foundation
WOLF CREEK Nuclear Operating Corporation
FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE
DIVISION OF EMERGENCY MANAGEMENT STATE OF KANSAS
KANSAS FIRE MARSHAL 1913
KAWS Kansas Alliance for Wetlands & Streams
KANSAS ARBORISTS ASSOCIATION
KACEE KANSAS ASSOCIATION FOR CONSERVATION & ENVIRONMENTAL EDUCATION
Westar Energy

K-State Research and Extension
 USDA Forest Service
 USDA National Resource Conservation Service
 Kansas Alliance for Wetlands and Streams (KAWS)
 Kansas Association of Conservation Districts (KACD)
 Kansas Department of Wildlife, Parks and Tourism
 Kansas Water Office
 Kansas Department of Health and Environment Bureau of Water
 Kansas Department of Agriculture
 Kansas Association for Conservation and Environmental Education
 Kansas Forestry Association
 Kansas Grazing Lands Coalition
 Kansas State Fire Marshal
 Prescribed Burn Council
 Kansas Emergency Management
 Arbor Day Foundation
 Kansas Arborists Association
 Kansas Nursery and Landscape Association
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www.kansasforests.org



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