KANSAS FOREST SERVICE
KANSAS STATE UNIVERSITY

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Research and Extension

Kansas Canopy

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Newsletter of the Kansas Forest Service

Conservation Seedling Sales and Distribution Underway

Spring conservation tree seedling sales are underway and will continue until the first Monday in May. This is the 56th season of offering more than 30 species of low-cost trees and shrubs for windbreaks, wood lots, riparian planting, wildlife planting, Christmas tree plantations, and other conservation tree planting. The program no longer offers bare-root Austrian pine seedlings. A complete list of items offered is available online at *www.kansasforests.org/conservation/PDFs/pricelists.pdf*. Shipping and distribution starts mid-March, weather permitting.

Seedlings are stored in a large, walk-in cooler at the Kansas Forest Service where temperatures are kept between 33 and 35 degrees Fahrenheit with high humidity levels. This keeps the seedlings fresh and dormant before shipment. Orders are taken from the cooler, sorted and packed in boxes, and then loaded for delivery. Once on the delivery truck, orders usually arrive within 1 to 2 days to ensure the plants are fresh.

Conservation seedlings being packaged for distribution.

Once seedlings arrive, inspect the order to ensure the plants are the correct species, quantities, and in good condition. Proceed with planting as soon as possible. Proper planting includes keeping plant roots moist until they are put into the planting hole. Dig the planting hole deep enough to accommodate the roots in their natural form. Roots can be pruned to a minimum of 8 inches to facilitate planting. Plant the seedlings the same depth or slightly deeper than they were in the nursery and water thoroughly.

Weed control is important for the first 2 to 3 years, depending on the planting site, because weeds compete for moisture and nutrients. They can be controlled with weed barrier fabric, mechanical methods, and herbicides.

Most soils have adequate nutrients to support seedlings. Fertilizing is usually not needed unless a soil test indicates a deficiency of nutrients.

Watering the seedlings helps the success of the planting. Watering depends on factors such as air temperature, wind velocity, and soil characteristics. Frequency of irrigation will depend on all these variables. Irrigate thoroughly, saturating the root zone, and then let the soil partially dry out. This promotes soil aeration and root growth.

Mulching the seedlings will help with success and survival of the seedlings by conserving moisture and reducing competition with weeds. Mulch should not come in direct contact with the stem as its increased moisture can encourage rot, house insects and disease, and create other problems.

Establishing a successful conservation seedling planting takes planning, effort, and maintenance. With proper planting, weed control, and irrigation one can enjoy the benefits of the trees for years to come.

Mark Haller, *Conservation Forester, manages the Conservation Tree Planting Program and related activities for the Kansas Forest Service.*

Contents:

Comments from the State Forester .. 2
Tree Profile 3
Funding Increase ... 4
Exploring Water Links 5
Forest Threats 6
District Forester Highlights 7
Mennonite Shelterbelts 8
Winter Tree Problems 9
Fire Management 10
Fire and GIS Positions 11
Calendar of Events 12

Kansas Forest Service —125 Years Old

Larry Biles, State Forester, Kansas Forest Service.

On March 10, 1887 the Kansas Legislature established what is now the fifth oldest state forestry agency in the nation — the Commissioner of Forestry office, the precursor of the Kansas Forest Service.

The commissioner was to develop public interest in forestry by encouraging Kansans to plant forest trees. His first duty was procuring the donation of two suitable tracts of land of not less than 160 acres each, within 3 miles of a station on the Union Pacific railway, Kansas division, and on the Atchison, Topeka & Santa Fe railway, respectively.

The commissioner then established an experimental forest on each tract of land to promote the science of forestry and encourage people to plant seeds and cuttings that were likely to survive on the plains. The commissioner offered seeds and cuttings, free of charge, to anyone who requested them.

Milestone events in the evolution of the state's forestry agency include:

1888 – 1889: Experimental forests established at Dodge City and Ogallah

1907: Commissioner of Forestry office split into two offices, one for each of the experiment stations

1909. Commissioner of Forestry office transferred to Kansas State University to assist towns, counties, corporations, and individuals in the planting, protection, and management of timber tracts

1935: First Kansas forest inventory completed

1957: Conservation Tree program began. Program seedling came from nurseries outside Kansas

1961: Commissioner of Forestry title changed to Kansas State Forester, agency became Department of State and Extension Forestry. Second state forest inventory completed

1963: Cooperative Fire Management program began

1968: Harold G. Gallaher forestry office building constructed

1970: Fire equipment garage constructed

1974: Conservation seedlings greenhouse constructed

1981: Third state forest inventory completed

1995: Fourth state forest inventory completed

1997: Name changed to Kansas Forest Service

2005: Fifth state forest inventory completed

2009: Jackman State Forest established — Kansas' first state forest

Today the Kansas Forest Service consists of 25 staff members. Nineteen of the 25 have broad training in biological sciences (forestry, horticulture, fire sciences, ecology, environmental sciences, wildlife habitat, and range management). The remaining six possess valuable clerical, accounting, diesel mechanic, and greenhouse management skills. Thanks to its skilled staff, the agency boasts annual achievements valued at $27 million. These achievements include:

- forestry training to more than 1,000 forest and windbreak landowners, and timber harvesters;
- assisting more than 300 forest landowners professionally manage in excess of 5,000 acres of timber, including the protection and reforestation of stream corridors to slow sediment deposition in water supply reservoirs, improving water quality and quantity;
- assisting interested forest and ranch landowners with more than $100,000 of forestry and windbreak financial assistance through USDA conservation programs;

continued on page 7

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Tree Profile

Sycamore, or American Planetree,
Platanus occidentalis L.

Family: Platanaceae

Native Range: Found in 56 counties in the eastern third of Kansas with highway 81 serving as a boundary line for its western range. Grows in all states east of the Great Plains except Minnesota. Its native range extends from southwest Maine to New York; extreme southern Ontario; central Michigan to southern Wisconsin; south in Iowa; eastern Nebraska, Kansas, and Oklahoma to south central Texas; east to northwest Florida and southeastern Georgia. Also found in the mountains of northeastern Mexico.

Mature Height: Sycamore is one of the largest trees in Kansas, with many averaging heights of 90 to 95 feet. The state champion, located in Topeka, is 120 feet tall.

Spread: Crown spread is similar to height, between 75 and 100 feet. The state champion has a 124 foot spread.

Form: Huge, slightly pyramidal, round-headed tree with immense spreading branches.

Growth Rate: Fast.

Foliage: Simple, alternate, deciduous, 10 to 12 inches long, 6 to 8 inches wide, with five main lobes (sometimes only three). Lobes are coarsely toothed. Yellow-green to medium-green above, paler underneath with dense fuzz along veins. Leaf base completely covers terminal buds, which are not visible until leaf drop. Fall color is yellow to orange-brown.

Flowers: Male and female flowers are separate on the same tree, not showy; in clusters at the base of the leaf on last year's wood.

Fruit: Golf ball-like, 1 to 1½ inches in diameter. Made up of many seeds; green when young, brown when mature. Borne singly, compared to London Planetree, which often occurs in pairs. Hangs on throughout winter, shedding seeds in late spring.

Bark, Twigs, Stems, Buds: One of the most beautifully barked trees in Kansas. Red-brown and scaly near base, exfoliating on upper trunk, exposing white to creamy-white inner layers. Stout twigs that are zigzag, shiny yellow-brown to orange. Buds are terminal, absent laterals, large, ¼ to ⅜ inch long, conical, blunt-pointed.

Site Description: Grows along streams in rich or rocky soil. Tolerates wet soil conditions and has intermediate tolerance to shade. Tolerates soil pH of 6.6 to 8.0. Grows bests on loam to sandy loam soils. Though the tree handles moist soils, it will die if the entire tree is inundated for more than 2 weeks. Can be a pioneer species on upland sites, and is surprisingly drought tolerant for a bottomland species. Handles air pollution in urban environments well.

Insect and Disease Problems: Anthracnose attacks leaves and young twigs and can completely defoliate young trees, especially during wet years. Repeated infection creates die-back, resulting in a "witch's broom" effect on branches and twigs. Lace bugs can be a serious problem. Leaf spot, aphids, and sycamore plant bugs can be pests.

Limitations: Limit planting to the eastern third of Kansas. The size, anthracnose, and litter associated with this species keep it off the Kansas Forest Service preferred tree lists for urban environments.

Suggested Applications: Even though limitations keep sycamore from being recommended as a street tree, the beauty of the bark and character of the tree make it a good choice for parks and open areas that can handle its size. It is an excellent choice for riparian tree plantings and tends to be spared beaver damage.

Cultivars: None available commercially, Though London Planetree, *Plantanus x acerifolia*, is often used as a substitute in urban environments, and the 'Bloodgood' cultivar is recorded by Whitcomb as resistant to anthracnose.

Wildlife Benefits: Sycamore crowns often serve as the habitat of choice for great blue heron rookeries. The massive size of their trunks (the state champion has a 25-foot circumference) provide great wildlife habitat for songbirds and mammals. Chimney swifts used the hollowed trunks on older trees before settlers provided chimneys. Purple finch, goldfinch, chickadee, junco, and other birds eat the fruit's seeds.

Comments: A tree that should be planted more often in riparian tree plantings in the eastern third of Kansas. The wood is used for pallets, crates, boxes, blocks, millwork, and furniture. Named "lacewood" in the lumber industry because of its flaky appearance. Planted extensively in the southeastern United States for biomass in the 1960s and 1970s. *Platanus* is the classical Greek name of plane tree and means "flat," in reference to the large leaves; *occidentalis* indicates the Western Hemisphere.

Bob Atchison, *Rural Forestry Coordinator, coordinates rural forestry activities for the Kansas Forest Service.*

Sycamore's large five-lobed leaves, coarsely toothed, and golf ball-like fruit.

The exfoliating brownish bark of Sycamore reveals white stems, a beautiful characteristic of the tree.

Conical, blunt-pointed buds and zigzag twigs are key characteristics of Sycamore.

Funding Increase for Forestry Projects

A great opportunity exists for Kansas landowners who are interested in financial assistance to manage or renovate older windbreaks, forests adjacent to streams (riparian), and woodlands.

Through the Cooperative Conservation Partnership Initiative (CCPI) more than $200,000 is available in 2012 through the Environmental Quality Incentives Program (EQIP). Landowners can apply for the program at their local county Farm Service Center, Natural Resource Conservation Service (NRCS) office. Contact information for county NRCS offices can be found online at *http://offices.sc.egov.usda.gov/locator/app* by clicking on the county where the proposed project is located. Landowners also can get more information by calling the state NRCS office at (785) 823-4500.

CCPI has increased payment for forest stand improvement practices to $292.81 per acre.

Forest Stand Improvement Payments Up

This year the program has increased payment for forest stand improvement practices ("thinning out" poorer quality trees with a chain saw) to $292.81 per acre. In cases where the majority of woodlands are made up of honeylocust, Osage orange, or other invasive trees or shrubs, the program pays landowners up to $720 per acre to use heavy equipment like bulldozers to remove trees. CCPI also covers the cost to replant higher-quality trees, such as oaks and black walnut, back into woodlands to bring them up to proper stocking levels.

CCPI will pay landowners almost $1 per lineal foot to remove old tree rows from windbreaks that are in fair to poor condition, and cover most of the cost to plant new trees.

Windbreak Renovation

Many shelterbelts and windbreaks planted as a result of the Dust Bowl are old and no longer provide conservation benefits. One of the more popular options under CCPI has been the renovation of these older windbreaks.

Landowners with windbreaks that provide protection for livestock or crop fields are eligible. This practice pays landowners $0.98 per lineal foot to remove old tree rows that are no longer growing well and covers the majority of costs to plant new tree rows, apply weed barrier fabric mulch, or install irrigation systems.

Riparian Forest Establishment and Renovation

Since many of the trees that line our major rivers and streams are in decline due to human-caused changes to river channels and stream flows, CCPI provides funding to plant additional trees and to manage mature riparian forests. Landowners can receive $1,214.90 per acre to plant thousands of acorns and walnuts. Or they can plant seedlings and receive $1.49 for each one. Funds are also available to prepare planting sites and for the follow-up maintenance necessary for success.

The application deadline for this year's funding is April 6, 2012. Kansas Forest Service foresters are available to make site visits and help landowners plan their projects. To applying for CCPI: 1) contact your county Farm Service Center, NRCS office and make an appointment to apply for the program and 2) contact your local Kansas Forest Service district forester, who can be found online at *www.kansasforests.org/staff/rural/index.shtml* or by calling the state office at (785) 532-3300. Landowners also are invited to complete a self-assessment worksheet for forestland located online at *www.ks.nrcs.usda.gov/programs/eqip/2012/self_assessment.html,* which may assist with the application process.

continued on page 5

Kansas Forest Service Joins Team Exploring Link Between Streamside Forests, Wetlands, and Healthy Watersheds

Do healthy streamside forests and wetlands lead to healthy watersheds? The Kansas Forest Service has recently joined the Kansas Water Office, Kansas Alliance for Wetlands and Streams, and a number of other natural resource partners in an effort to find out.

The recently funded Wetland Program Development Grant 2011 (WPDG) funds the comparison of the inner workings of two Kansas watersheds — one heavily disturbed by man (stream channelization, land conversion, pipelines, etc.), and the other a relatively undisturbed, high-quality watershed.

The Kansas Forest Service will explore the role that streamside forests, such as this stand in Wabaunsee County, play in high-quality watersheds.

Within these two watersheds, the WPDG team will be investigating environmental disturbance, land cover patterns, vegetative condition, and hydrology to determine the role healthy streamside forests and wetlands play in watershed quality. The specific role of the Kansas Forest Service will be to determine the quality of streamside areas (also known as riparian areas), and compare the results from both watersheds.

To accomplish this, Kansas Forest Service will be using its riparian forest assessment methodology (*www.kansasforests.org/riparian/index.shtml*) that places riparian areas into condition classes (i.e., properly functioning, functioning at risk, non-functioning).

Because WPDG efforts have just started, the team is still in the process of selecting study watersheds, making sure the two are similar in size, geographic region, and other attributes. Adding to the excitement is the fact that the "high quality" watershed will be chosen from a list of Kansas Heritage Stream watershed candidates (*www.kdheks.gov/befs/tech_svcs_bibliography.htm*).

If riparian forests and wetlands are found to play an essential role in the health of high-quality Heritage Stream watersheds, the riparian resources of Kansas will gain much needed public visibility in terms of water quality relevance.

The final step of the WPDG group will be to use information gained during the paired-watershed study, as well as past WPDG efforts, to complete a wetland protection plan for the state of Kansas.

William Beck, *Watershed Forester, has statewide responsibility for forestry practices that improve water quality.*

Funding Increase for Forestry Projects, continued from page 4

Kansas foresters provide one-on-one services over large multi-county districts through a variety of programs. Applying for CCPI now will ensure quality, timely services and improve the chances for successful projects. However, even if landowners miss the April 6th deadline for 2012 funding, applications will be accepted at any time of the year for 2013 funding.

The majority of windbreaks, woodlands, and forests in the United State are privately owned (95 percent in Kansas). The sustainability of those resources falls squarely on the shoulders of Kansas farmers, ranchers, and the many other landowners of our state. CCPI sends a clear message that we, as a people, believe there are public benefits from the management of Kansas forests and agroforestry resources.

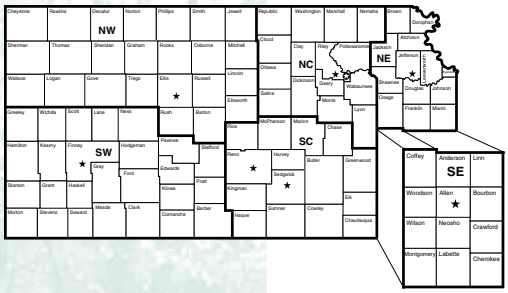
Bob Atchison, *Rural Forestry Coordinator, coordinates rural forestry activities for the Kansas Forest Service.*

District Highlight: Katy Dhungel

Common Threats to a Healthy, Sustainable Forest

I have visited with many landowners and seen a lot of forest land across the southeast corner of Kansas during the past 18 months.

People who say Kansas timber resources are gone are not looking closely enough. There is much solid, healthy, and valuable timber in this part of the state, and more trees are being added all the time along our fragile waterways.



Southeast Kansas has a high capacity to produce healthy forestland. A properly managed forest has potential benefits to both landowners and the environment, such as timber and nut crops, wildlife habitat, and stream health. In my travels across this corner of the state, I have observed some common threats to maintaining healthy forestland. Following is a discussion of those threats and what to do about them.

Grazing forests and woodlands kills new seedlings, leads to low weight gains and poorer quality meat, and exposes livestock to toxic woody species.

Overcrowding — A couple of things happen when a mature forest is overcrowded. One thing is that trees in the overstory do not have enough room to reach their growth potential. A full and healthy crown is essential to adding inches to a tree's diameter and producing a seed crop. To achieve this, timber stand improvement often is required, removing some trees from the canopy. This frees up water and light resources for the remaining trees, allowing them to grow faster.

Timber stand improvement also allows more light to reach the forest floor, enabling shade-intolerant species of oak and walnut to regenerate naturally. In some extreme cases, even seedlings of shade-tolerant species such as hackberry and elm cannot survive because of a closed canopy combined with a very dense mid-story. In this case, the solution is to remove not only trees from the overstory, but also to remove a good deal of smaller trees that are consuming the little light that does penetrate the canopy.

High grading — The term high grading is used to describe a situation where only trees of the highest economic value are removed in a harvest, leaving mature and over-mature trees of less market value. This practice has negative implications for the future economic potential of forestland. When these "low value" trees are left behind, it is harder for more desirable species to regenerate, thus producing no future crop.

Often, removing only the highest-value trees does not free up enough resources to release the young crop trees already growing in the stand. Young walnut trees then languish and die without enough light to reach into the canopy, while green ash, hackberry, elm, and honeylocust thrive. A properly managed forest can be continuously productive and generate profits multiple times for a single owner through periodic harvesting of large diameter trees and timber stand improvement.

Flooding — Spring flooding is common along Kansas rivers and streams. Prolonged flooding kills the majority of tree species growing naturally in riparian areas in Kansas with a few exceptions, such as willow, cottonwood, and bald cypress. Often this flooding cannot be prevented, but many cases of prolonged flooding are caused by excessive beaver activity, which is reversible. Beavers will dependably stay busy damming up streams and flooding low areas in woodlands which is why it is important to control their numbers before losing large areas of mature trees to flooding.

Damage from grazers — Neglected pasture overtaken by hedge and honeylocust can be seen along almost any highway or country road in eastern Kansas. This is because cows simply do not eat trees with thorns. They do, however, eat just about every other kind of young tree that sprouts. This is a problem not only for old fields but also for existing forestland as well.

continued on page 7

State Forester, continued from page 2

- promoting the harvesting, marketing, and use of wood products to Kansas landowners, timber harvesters, and locally owned sawmills and other wood processing plants;
- distributing more than 350,000 tree seedlings to 2,400 property owners interested in residential energy savings, livestock protection, improved livestock feed efficiency, wind erosion control, wildlife habitat, Christmas trees, timber products, and stream bank erosion control;
- assisting more than 150 communities — home to 85 percent of the state's population — professionally manage their public tree resources through the local allocation of more than $16 million for tree planting, care, and hazard tree removals;
- creating jobs and improving the professional care of the state's community forest by training 40 qualified people to become certified arborist;
- assisting more than 500 rural fire districts train volunteers and acquire excess military equipment leading to wildfire protection services to more than 500 small communities, 46 million acres of land, and qualifying 40 percent of the state's population to save $5 million in hazard insurance premiums;
- assisting the Kansas Department of Agriculture survey and monitor forest insects and diseases and, where necessary, establish forest protection quarantines; and
- measuring and monitoring, in cooperation with the USDA Forest Service, the size, condition, and health of the state's forests through statewide forest inventories and analyses.

Despite the agency's humble beginnings, its vision has yielded immense growth in the programs and services available to Kansans. Continuing to sustain this legacy in the face of increasingly diverse requests for services and increasing public sector fiscal shortfalls will be challenging. May our 2012 and succeeding years work allow a successor state forester to justifiably announce a 150th Anniversary Celebration in 2037.

Larry Biles, *State Forester, oversees all operations of the Kansas Forest Service.*

District Highlights, continued from page 6

When cattle are allowed to graze in too large of numbers or are not given sufficient hay or grass to eat, young trees suffer. Often a grazed forest will become crowded with hedge and honeylocust just like an old field because desirable species will be grazed by cows or horses. Cows and healthy forests do not have to be mutually exclusive. The integration of these two interests is called silvopasture. A few simple methods help producers practice this technique successfully. First, make sure areas are not overstocked with animals and the animals have plenty of appropriate food sources. Keeping cows at a proper stocking level and rotating stock also will reduce soil compaction and damage to roots from trampling. Ranchers also can supplement natural regeneration by planting trees and protecting them from grazing animals and protecting waterway by constructing stream crossings to reduce soil disturbance and providing alternate watering sources to prevent animals from loafing in and around streams.

Heat and drought stress — After the extreme weather of last summer, many trees — young and old alike — experienced some stress. While environmental stresses are temporary, the damage may be more lasting in the form of increased susceptibility of trees to damage from insects, disease, wind, and frost. Monitor your woodland for insect and disease problems and check new plantings for attrition after extreme weather. Often, infestations can be controlled by removing diseased trees promptly and disposing of the material in a sanitary manner. You should never transport firewood or other unregulated wood products out of state.

Financial and technical assistance in addressing forest health concerns is available from Kansas Forest Service, Kansas NRCS, and Kansas Department of Wildlife, Parks, and Tourism.

Katy Dhungel, *District Forester, provides direct technical assistance to Kansans in 12 southeast Kansas counties for the Kansas Forest Service.*

Mennonites and Shelterbelts

Much has been written and recorded of the various religious, ethnic and racial groups who immigrated to the United States over the course of its history. All brought their own languages and customs, or cultural baggage. Many, whether rural or urbanites, possessed particular skills, a trade or a profession. One group that had close ties to the soil and primarily farmed for a livelihood also had a long–standing association with tree culture.

This group was the Russian Mennonites who emigrated from Czarist Russia to Kansas in the late 19th century.

Not unlike other immigrants who settled in Kansas and other plains states, the Russian Mennonites brought seeds and seedlings from their homeland into south central Kansas in 1874.

The Sam Regier farmstead in Harvey County, circa 1950, is an example of the many shelterbelts established by the Mennonite faith community. Photo courtesy of Raymond Regier.

This group of Mennonites, originally from Germany, had planted shelterbelts on the Russian Steppes throughout the 19th century. As early as 1833, one published report focused upon the success of their shelterbelts. In 1845, the Mennonites organized a "guardian committee" partly to supervise the establishment of shelterbelts and general tree plantations.

However, it was not until 1872 that the Russian government began the systematic planting of shelterbelts. Some of the shelterbelts began by the Mennonites in Russia still existed as late as 1934. Migration of Mennonites to the United States brought to the Great Plains a people well acquainted with shelterbelts.

Kansas promoters welcomed the Mennonites with open arms in 1874, a depression year. One estimate of later years put the number of Mennonites arriving in the plains states of Kansas, Nebraska, and the Dakota Territory at not fewer than 15,000. They settled in an area much like their previous homeland and had many years of experience in planting and cultivating shelterbelts.

Their arrival in 1874 coincided with a serious need for fencing materials in the plains states. Because barbed wire had not been invented and timber for fencing was scarce, many farmers planted the Osage orange to fence in livestock. Because of the rapid growth pattern of this species along with its many sharp thorns that repel livestock, it became popular and was the leading type of fence in Kansas for many years. Osage orange's demise for fencing only occurred with the invention of barbed wire and the gradual acceptance of the "devil's rope." Osage orange was readily selected by the Mennonites who planted this species as fencing and shelterbelts in and around their newly established farms in south central Kansas.

With the mechanization of farming and the advent modern roads, in the 20th century, many hedgerows were bulldozed out of existence. However, many Mennonites who farmed and who had planted hedgerows for conservation purposes abstained from this practice.

Based on satellite imagery, the Natural Resource Conservation Service headquartered in Salina reported the greatest concentration of hedge trees used for fencing and conservation was located in south central Kansas — the location of many Mennonite farms. This tradition of growing trees for conservation purposes and their retention over the generations is a significant custom and practice — stewardship that

continued on page 9

Thirsty Trees this Winter

This has been a beautiful fall and an unexpected warm winter with dry air in the west, low precipitation, little to no soil moisture from the summer, and drastically fluctuating temperatures.

This is not the first time there has not been adequate snow cover to provide needed soil moisture. This could occur through March. Long periods of dry weather can result in the injury of tree root systems.

Trees this spring may appear normal and use stored food energy. Many trees are weakened and may die in late spring or summer when temperatures begin to increase. My concern for spring is the number of trees that may be subject to insect and disease problems, such as wood boring beetles.

The warmer than average temperatures has allowed trees to become more active than when we have long periods of freezing temperatures. Evergreens are photosynthesizing year round because they do not lose their leaves like hardwood trees. Winter watering is important for pines and newly established plantings.

Dry winters and prolonged drought make trees more susceptible to borer damage. This photo shows symptoms from cottonwood borer damage.

In addition, southerly planted trees have increased temperatures during the daytime than other aspects. Trees should be watered when temperatures are above 40 degrees Fahrenheit during mid-day so that the water soaks into the soil to a minimum of 1 foot; the recommended depth is up to 2 feet. Do not allow a layer of ice to form around your tree because this could damage your lawn.

Some common trees that are susceptible to winter drought damage are those with shallow root systems. This includes maples, lindens, spruces, and other evergreens.

Please contact your local district forester with questions or concerns.

***Nicole Ricci**, Forest Inventory/Forest Health Specialist, statewide responsibility for forestry inventory and forest practices that improve forest health.*

Shelterbelts, continued from page 8

was initiated on the Russian Steppes two centuries ago.

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Larry Rutter is a member of the American Tree Farm System and serves on the Kansas Tree Farm Committee and the Kansas Chapter of the Walnut Council Board.

A Legacy of Service

As some may know, 2012 marks the 125th anniversary of the Kansas Forest Service. The service was established in 1887 under Office of Commissioner of Forestry "to encourage the planting and growing of forest trees in the state of Kansas."

From a historical prospective, the Kansas Forest Service became the fifth state in the nation to establish a state forestry agency. It was preceded by California, Colorado, New York, and Ohio in 1885.

The Kansas Forest Service is one of the few that have been in continual operation since their inception and one of the five forestry agencies that is part of a state university. Others within universities are Colorado, Nebraska, Texas, and North Dakota. Longevity is something we should take pride in, as we have weathered the droughts, floods, westward expansion of the country, and economical depressions and continue to serve the people of the heartland of America. With the exception of western Colorado, we are all "plains" states, most having a relatively small percent of our total landmass defined as forested.

Still, we have carved a niche within our respective states to serve our citizens. Some put more emphasis on living snow fence, while another state sees native pine death loss as a leading issue. For Kansas, it is difficult to say we focus on one issue and spend most of our time on that cause. Kansas Forest Service is a service to several disciplines. The Fire Management Program is of the many disciplines we serve.

Two early examples of excess military property that were converted to fire apparatus by organized fire districts.

Although it is a relative newcomer it has been serving Kansans for 47 years. In 1965, Kansas Statute 76-425 established that Kansas Forest Service would be responsible for providing assistance for the prevention and suppression of forest, brush, or grassland fires in nonfederal areas of the state except on lands within the boundaries of incorporated cities. This legislation set in motion, what has become the Fire Management Program as we know it today.

Over the years, the fire program has expanded and contracted to reflect the economic climate. In the 1960s and 1970s, the program established rural fire districts in rapid secession throughout the state. Soon, almost every township in the state was within a benefit district. Excess military property was distributed to any district that could give it a home. In 1978, a new eight-bay shop was built and trucks were sent out regularly.

Then came a decline and the program fell out of favor with the fire department who had come to rely on free excess military trucks as a staple on which they could build wildland fire equipment. Today, the program is rebounding and looks to be as strong and viable as it was in the beginning. It may never again be the giant it was in the 1960s, but will be a leaner, more resilient model on which financially strapped rural fire departments can depend.

So, in our 125th year of service to Kansas, join the Kansas Forest Service in celebrating our history and accomplishments.

Ross Hauck *Fire Management Coordinator, directs fire management activities for the Kansas Forest Service.*

New Prescribed Fire Specialist

On January 8, Michele de Verteuil joined the Kansas Forest Service as a prescribed fire specialist. This position resulted from a partnership with the USDA NRCS, among others.

Michele will work out of the Scott City USDA Service Center. She will encourage the safe and effective use of prescribed fire on southwest Kansas private lands, and work with several partners on improving lesser prairie chicken habitat in the area.

Michele earned her bachelor's degree in environmental studies from Florida State University and a master's in range and wildlife management from Texas A&M University – Kingsville.

Jason Hartman, *Fire Prevention Specialist, promotes and assists with wildland fire prevention activities for the Kansas Forest Service.*

GIS Specialist Locates at State Office

Geographical information systems (GIS) employ a combination of computer hardware and software to store, retrieve, map, and analyze geographic data. The information is stored in a coordinate system based on latitude, longitude, and other features that reference a particular place on earth. Descriptive attributes of each site are stored in associated tables with spatial features (maps). Spatial data and associated attributes can then be layered together for mapping and analysis. Some examples of spatial data layers may include soils, forestland, streams, and locations of rare wildlife species, but the uses of GIS are broad and varied.

Rob Daniels, GIS specialist, is integrating the discipline into Kansas Forest Service operations.

The Kansas Forest Service uses GIS to prepare forest stewardship management plans for Kansas landowners and to determine where to focus efforts and resources to address the most important opportunities and risks facing Kansas forests and other natural resources.

To accomplish this goal, the Kansas Forest Service has developed a wonderful partnership with the Geography Department at Kansas State University. Each year the Kansas Forest Service contracts with the Department of Geography for GIS services. These services have been provided through a GIS specialist located at the Geographical Information Systems Spatial Analysis Laboratory (GISSAL). GIS has become central to the operations of most natural resource professionals, including the Kansas Forest Service. Rob Daniels, operations manager for GISSAL, has moved his office to the Kansas Forest Service state office. Although Daniels will remain a Department of Geography employee, his presence at the state office will improve communication and adoption of GIS within the agency.

Daniels earned his bachelor's degree in geography from University College London (UK) and a master's degree in Geography from the University of Illinois. Daniels originally hails from England, but has lived in the United States for the past 13 years and moved to Kansas from New England in 2008. Before his position in Kansas, Daniels was a GIS specialist for The Trustees of Reservations in Massachusetts, one of the oldest land trusts in the nation.

Bob Atchison, *Rural Forestry Coordinator, coordinates rural forestry activities for the Kansas Forest Service.*

Kansas Canopy
Kansas Forest Service
2610 Claflin Road
Manhattan, KS 66502–2798

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Links of Interest:

Kansas Forest Service
www.kansasforests.org

K-State Research and Extension
www.ksre.ksu.edu

State of Kansas
www.kansas.gov

Kansas Department of Wildlife, Parks and Tourism
kdwpt.state.ks.us

Natural Resources Conservation Service–Kansas
www.ks.nrcs.usda.gov/

Farm Service Agency–Kansas
www.fsa.usda.gov/ks/

Calendar of Events

March – May 7 — Order Conservation Seedlings. Order online at: *www.kansasforests.org*, or call (888) 740-8733.

Feb. 27 – March 2 — S-130/190 Wildfire Training, Salina. Contact Rodney Redinger, (620) 728-4464 or *rodney2@k-state.edu*

March 6 — Wildfire Refresher Training, Salina. Contact Rodney Redinger, (620) 728-4464 or *rodney2@k-state.edu*

March 7 — Kansas Prescribed Fire Council Meeting, Dorrance. Contact Jason Hartman, (785) 532-3316 or *hartmanj@ksu.edu*

March 8 — 2012 Pest Detector Workshop, Topeka. Contact Nicole Ricci, (785) 532-3276 or *nmricci@k-state.edu*

March 12 — 2012 Agriculture and Conservation Expo, Delaware River WRAPS, Horton. Contact Billy Beck, (785) 532-3693, *wjbeck@k-state.edu*

March 14 — 2012 Pest Detector Workshop, Hutchinson. Contact Nicole Ricci, (785) 532-3276 or *nmricci @k-state.edu*

March 27–28 — Tree City USA Recognition Day, Derby. Contact Tim McDonnell, (316)788-0492, ext. 202 or *tmcdonne@ksu.edu*

April 2 — Wildfire Training, Halstead. Contact Rodney Redinger, (620) 728-4464 or *rodney2@k-state.edu*

April 17-18 — Great Plains Tree Pest Council Meeting, Olathe. Contact Nicole Ricci (785) 532-3276 or *nmricci@k-state.edu*

May (TBA) — Kansas Agroforestry Field Day, Contact Bob Atchison, (785) 532-3310 or *atchison@k-state.edu*.

We Need Your Help

In an effort to reduce printing and mailing costs, the Kansas Forest Service would like subscribers who are willing to receive the newsletter electronically to send their e-mail address to *cathy@ksu.edu* or call us at (785) 532-3300.

Your e-mail address will not be given to any other organizations.

If you have any questions please do not hesitate to let us know.

For a current listing of events, check our Web site: *www.kansasforests.org/calendar*