



Colorado State Forest Service

Fort Collins/Fort Morgan District 2013 Annual Report

The Colorado State Forest Service (CSFS) mission is to achieve stewardship of Colorado's diverse forest environments for the benefit of present and future generations.

Message from the CSFS Fort Collins District Forester:

The Colorado State Forest Service (CSFS) is a service and outreach agency of the Warner College of Natural Resources at Colorado State University. We work to help forest landowners make sound stewardship decisions through technical assistance. We work to balance the natural change agents at work in forests (bark beetles, wildfires, regeneration, growth, etc.) with opportunities for stewardship activities and the landowner's objectives. These various CSFS activities focus on having Colorado's forests more enjoyable, productive, healthy and well managed.

The CSFS Fort Collins District serves Larimer and Weld Counties. Beginning in May of 2013, I was assigned the position of Acting District Forester for the CSFS Fort Morgan District. I look forward to directing the delivery of CSFS services in both Districts. The CSFS Fort Morgan District includes Adams, Kit Carson, Logan, Morgan, Phillips, Sedgwick, Washington and Yuma Counties in northeast Colorado.

Thank you for taking a few minutes to read our 2013 Annual Report. You will see a number of different ways that trees and forests bisect our lives whether we are Tree Farm owners, live in small towns, are farmers or ranchers, or live in cities. The role that trees and forests play in our lives is often overlooked – but it is an important one. We consider this an important job that contributes to our quality of life. Thank you for participating in the stewardship of our tree and forest resources.

-Boyd

2013 Holiday Trees

CSFS Provides Christmas Trees for State Capitol and CSU

The State Capitol Christmas tree, lit by Gov. Hickenlooper in a ceremony in the North Foyer of the capitol, was provided in 2013 for the third year in a row by the Colorado State Forest Service Fort Collins District.

The 32-foot subalpine fir was themed the "Gold Star Tree of Honor" to pay tribute to military members lost in the line of duty since Sept. 11, 2001, as well as their families. Colorado National Guard soldiers and their families decorated the State



32-foot subalpine fir to be the "Gold Star Tree of Honor."



Capitol tree, and decorative boughs trimmed off the tree were given to Gold Star families or used by the Colorado Department of Military and Veterans Affairs to craft wreaths for National Guard personnel deployed throughout the world.

Gold Star families are the survivors of fallen

service members “who have lost their lives in conflict or in support of certain military operations.”

“It’s our way of giving them a piece of the tree to take home,” said Janelle Darnell, DMVA chief of protocol for the Office of The Adjutant General.

Fresh-cut Christmas trees provided by the CSFS Fort Collins District also were distributed to the Colorado State University President’s Office and other CSU offices. CSFS foresters selectively cut the trees as part of ongoing management efforts to improve forest health on State Trust Land in northern Larimer County.

Gift of a Green Christmas Tree

Gift of a Green Christmas Tree, a Fort Collins-based charity that each year provides hundreds of free Christmas trees to brighten the holiday season for families, senior citizens and others with limited resources, once again obtained most of its trees through a collaboration with the CSFS Fort Collins District and Colorado State University’s Pingree Park. In 2013, the charity focused its efforts on families impacted by the September floods.



CSFS Assistant District Forester Greg Zausen with a lodgepole pine tree harvested from Pingree Park.

“With the ever-present need in our communities to brighten each holiday season, we want to make sure we

continue to reach out to everyone we can,” said Ryan Behm, who heads the charity. “This program is not just about the families who receive a tree. It’s also about the volunteers who gain something positive from the experience.”

On Nov. 23, the Colorado State Forest Service, Boy Scouts and other volunteers harvested 300 young lodgepole pine trees from a 19-year-old burn scar in Pingree Park – CSU’s mountain campus and outdoor classroom for natural resources students. Trees were only cut in designated locations to improve forest health on the campus.

“We’re actually helping out the forest here, by thinning the stand to provide less-crowded growing conditions for the remaining trees,” said Boyd Lebeda, district forester for the CSFS Fort Collins District.

On Dec. 7, volunteers delivered the trees to families throughout the northern Front Range, including the communities of Fort Collins, Greeley and Loveland. Donated lighting, ornaments and a stand were included with each tree.

Behm started Gift of a Green Christmas Tree in 2003, delivering 23 trees that year. The organization is now part of the broader 501c3 organization Northern Colorado Shares, of which Behm is president. Last year, the program provided more than 300 trees to families along the northern Front Range. The charity obtains most of the recipients’ names from United Way of Larimer County 2-1-1, House of Neighborly Service and similar organizations that support families in need.

High Park Fire Recovery Events

“Be Prepared” Event Helps Residents Face Wildfire Risks

CSFS Volunteers staffed an outreach booth at the “Be Prepared” event off Stove Prairie Road west of Fort Collins on May 11, 2013. This was a community event to help area residents be better prepared to reduce the damage to their properties and increase the odds that their homes could be saved during the upcoming wildfire and flood seasons in the High Park Fire burn area.

There were several guest speakers at the event, including:

- Chief Bob Gann (Rist Canyon Fire Department)
- Chief Carl Solley (Poudre Canyon FD)
- Todd Boldt (Natural Resources Conservation Service)
- Boyd Lebeda and Mike Hughes (CSFS Fort Collins District)
- Tony Simons (Larimer County Emergency Services)



Participants at the “Be Prepared” event.

Also present were several homeowners who have lost their homes to wildfire, including local author Linda Masterson, who wrote the book “Surviving Wildfire: Get Prepared, Stay Alive, Rebuild Your Life.”

District Leads Motorcycle Club in Volunteer Tree-Planting

Also in May, the Sleigh Riders, a Greeley-based motorcycle club best known for delivery of donated toys at Christmas, planted 1,900 seedling trees in the High Park Fire burn area. The trees were planted in the Stove Prairie vicinity as part of a coordinated volunteer effort led by the CSFS Fort Collins District.

The seedling trees, a mixture of ponderosa pine and Douglas-fir grown at the CSFS Nursery in Fort Collins, were planted on private properties impacted by the fire. The planting will help accelerate regeneration and ultimately protect water supplies, restore wildlife habitat and reduce flooding and erosion.

Mike Hughes, assistant district forester for the CSFS Fort Collins District, led the weekend planting

efforts; additional volunteers from the Environmental Ministry Team at Plymouth Congregational Church in Fort Collins and the SERVE 6.8 group at Timberline Church, among others, also contributed to the effort. Hughes said the affected landowners were extremely appreciative of everyone’s efforts.

“The Sleigh Riders and other volunteers worked hard and really planted a lot of seedlings,” Hughes said. “There’s nice moisture in the ground now, so these trees have a great chance of survival.”

In 2013, other landowners in the High Park burn area received more than 4,000 seedlings from the CSFS-administered Restoring Colorado’s Forests Fund, which provides trees through donations from Colorado businesses and private citizens.



Sleigh Riders help plant 1,900 seedling trees in the High Park Fire burn area.

National Wildlife Federation Provides Over 2,000 Seedling Trees for Restoration

The National Wildlife Federation provided the CSFS Fort Collins District funding to supply more than 2,000 seedling trees for High Park Fire reforestation efforts in the spring of 2013, to help protect water supplies and restore wildlife habitat. The NWF provided the funding for the native trees as part of its 75th Annual National Wildlife Week, March 18-24, designed to teach children about the wonders of

nature and inspire their interest in spending more time outside. In 2013 National Wildlife Week featured trees, with a theme of “Branching Out for Wildlife,” intended to educate children on the importance of trees and their benefits to ecosystems and wildlife. The NWF Legacy Society made a monetary donation to purchase native seedlings grown at the CSFS Nursery in Fort Collins.



“We want to thank the National Wildlife Federation for their generous donation to help restore the burn area,” said Joe Duda, deputy state forester at the CSFS, upon hearing of the donation. “Our foresters will provide the know-how and resources landowners need to get these trees in the ground.”

Local landowners impacted by the 2012 wildfires received the NWF seedlings. These landowners joined many other High Park landowners who in the spring received more than 4,000 additional free seedlings from the CSFS-administered Restoring Colorado’s Forests Fund. All of these seedlings were paid for by donations from Colorado businesses and private citizens, in a larger effort to help reforest state and private land impacted by wildfires and other disasters.

“Children love learning about wildlife and their habitat. National Wildlife Week will inspire educators and caregivers to take their kids outdoors to explore the natural world, plant trees and learn the important ways trees contribute to a healthy environment,” said Kevin Coyle, VP of Education and Training for the NWF.

To donate to the Restoring Colorado’s Forests Fund, go to <https://advancing.colostate.edu/RestoringColoradosForests>.

2013 Arbor Day Events

CSU a Tree Campus USA

To celebrate Colorado State University’s continued recognition as a Tree Campus USA, and in observance of Arbor Day 2013, CSU Facilities Management and the CSFS led a volunteer tree planting event on April 26 on the CSU main campus. The event was planned

and led by the campus Tree Advisory Committee, which includes CSU Facilities Management, CSU staff in Forestry and Horticulture, the Fort Collins City Forester, students, and CSFS personnel in the Fort Collins District.

At the event, CSU was recognized for the second year in a row as a Tree Campus USA, a national program that honors colleges and universities for effective campus forest management and engaging staff and students in conservation goals. The university maintained the Tree Campus designation by meeting the five standards of the National Arbor Day Foundation for the Tree Campus USA program, which include maintaining a tree advisory committee, campus tree care plan, dedicated annual expenditures toward trees, Arbor Day observance, and student service-learning projects.

The planting was also part of an effort to retain and diversify CSU’s urban forest, which boasts more than 4,500 trees on the main campus. A tree tour around the Oval was offered to participants after the planting.

Tree City USA Presentations



CSU recognized for the second year in a row as a Tree Campus USA.

Besides the Tree Campus USA event, the CSFS Fort Collins District also made Tree City USA presentations in the following locations:

- Berthoud
- Brush
- Eaton
- Estes Park
- Evans
- Fort Collins
- Greeley
- Loveland
- Milliken
- Platteville
- Sterling
- University of Northern Colorado
- Windsor

These communities were each recognized as a Tree City USA for meeting several standards, including having a tree board or department, a tree care ordinance, a community forestry program with an annual budget of at least \$2 per capita and an Arbor Day observance.

Thousand Cankers Disease of Black Walnut in NE Colorado

Thousand Cankers Disease (TCD) has been killing black walnut trees in Colorado since as early as 2003, and is having an impact in communities in northeast Colorado. The disease is caused by the fungus *Geosmithia morbida*, which is spread from tree to tree by the walnut twig beetle.

The fungus produces tiny cankers and causes dieback on branches. Repeated attacks by walnut twig beetles, which lead to multiple infections by thousand cankers disease, eventually cause tree death.

Thousand cankers disease has caused significant mortality of ornamental black walnuts in many of Colorado's urban forests. This tree disease has become established along the Front Range and in communities along the Arkansas River.

In 2009, CSU Professor Whitney Cranshaw led an assessment of black walnut trees in the following eastern Colorado communities: Fort Morgan, Brush, Hillrose, Merino, Sterling, Iliff, Crook, Sedgwick, Ovid, Julesburg, Haxtun, Holyoke and Burlington. In 2013,

CSFS personnel re-surveyed the black walnuts in these same 13 communities.

No TCD-affected black walnut trees were identified in the 2013 survey. However, the symptoms of TCD are subtle. In the future, the CSFS Fort Collins District will be sampling branches of suspected trees and place traps for the walnut twig beetle to detect TCD movement.



Black walnut tree in an urban setting.

Forest Health Update

Environmental conditions that impact tree growth, including climate patterns; stand conditions; and insect populations are the primary drivers of forest health in Colorado's forests and communities. Following is a summary of a few of the more prominent forest health issues in the counties served by the Fort Collins District.

MOUNTAIN FORESTS

Mountain Pine Beetle (MPB):

There are signs that the MPB epidemic in Larimer County is finally in decline. The CSFS Fort Collins District has received fewer calls than in the previous several years, and foresters have observed fewer newly infested trees, even in areas with abundant host trees.

Aerial survey results from flights in 2012 and 2013 also reported a decline in MPB impacted acreage.

At this point, the impact that the High Park Fire may have had on MPB populations, or whether the fire played a role in the decline, is unclear. Although MPB seems to be in decline, it is still the most important forest insect in the Fort Collins District and many CSFS cooperators continue to spend much time and money mitigating MPB impacts.

It is worth noting that many lodgepole and ponderosa pine stands that lost a lot of trees to MPB in recent years still contain a significant component of living trees. In many cases, the larger-diameter classes were taken out, leaving behind smaller trees, but many large, living trees remain in some stands. The results of the MPB epidemic here have been different than those that occurred on the Western Slope, where entire landscapes of mature lodgepole pine were decimated by MPB.

This epidemic may not be completely over, but it seems that a more diverse forest structure and greater tree species diversity on the eastern slope and foothills may have made these stands more resilient to MPB.

Spruce Bark Beetle:

Recent mortality and current infestations of Engelmann spruce are widespread in the Crown Point and Laramie River areas of western Larimer County. Most of the impacted forest is federally owned, and management is focused on treating hazard trees around infrastructure.

COMMUNITY FORESTS

Emerald Ash Borer (EAB):

The EAB, an invasive insect responsible for the death or decline of tens of millions of ash trees in more than 20 states, was confirmed in Colorado in September 2013. As of January 2014, the insect has only been confirmed in the City of Boulder.

EAB could have significant impacts to the urban and community forests of Colorado, which contain a large percentage of green and white ash trees. The insect attacks only ash trees, but all ash species are at risk. It is possible for EAB to infest an ash tree for up to four

years before visible signs of decline in the tree occur.

Further monitoring is needed to determine the extent of EAB presence in Colorado. However, this could be a very significant problem in northeast Colorado in the near future. An interagency plan is already in place to help protect Colorado's ash trees; the Colorado Department of Agriculture, CSFS and partner groups are following a response plan and taking steps to determine the extent of the EAB presence, quarantine the regulated area and expand detection efforts.



Ash is an important component of our urban and community forests.

Coloradans can help minimize the spread of EAB by taking one simple step: Never transport firewood! Transporting firewood or other products from ash trees is the most likely method of accidental spread. Larvae can survive under the bark of ash firewood, and when it's moved from one place to another, the pest can hitchhike to a new location.

Updated information on EAB is available at www.eabcolorado.com.

Weather-Related Damages:

A variety of abiotic agents contributed to significant urban/community tree stress and damage in northeast Colorado in 2013. Of note are the occurrence of early

and late snowstorms/hard freezes on the fringes of fall and spring, which impacted the natural processes of tree dormancy and leaf emergence.

There was a hard freeze on Oct. 6, 2012, that caused significant green leaf drop in the deciduous trees of Colorado communities. After that, the fall was unusually warm and dry. This dry weather continued through much of the winter, until April when the Front Range and mountains were struck by a series of snowstorms (April 15-17, 2013 ~ 30 inches of snow in Fort Collins; April 22 ~ 6 inches in Fort Collins; May 1 ~ 16 inches in Fort Collins).

Overall, much of the tree decline and death in 2013 is being attributed to the effects of extreme environmental conditions. For example, planted spruce on the Front Range struggled to make it through 2013. Many trees died, and even more are turning brown from the inside out. After much investigation by the forestry community, no insect or disease issues have been identified, and the decline of spruce is still being attributed to environmental factors, particularly the late spring freeze in 2013.

Additionally, many Austrian pines experienced dieback of new growth due to cumulative drought stress and the late spring freeze.

More resources about community forest health are available at www.csfs.colostate.edu.

Field Inventory Analysis - Foresters Learning from Foresters



CSFS employees at the 2013 FIA Field Day.

On May 7, 2013, Andrew Clements, the Forest Inventory and Analysis (FIA) forester for the Fort Collins District, took a group of CSFS employees from both the State Office and the Fort Collins District out on an FIA Field Day. The FIA program is a national, continuous forest census used to assess the condition of America's forests. The data also are extensively used throughout the scientific community for everything from timber product outputs to the LANDFIRE Project to climatology studies.

Tree Farm Program

As always, the Fort Collins District continues to be a strong supporter of the American Tree Farm Program and the Larimer County Tree Farm Association. In 2013, there were four local Tree Farm meetings with an average attendance of more than 50 people.



Lunch at High Peak Camp with the Tree Farmers.

During the summer meeting/picnic, there were four stops in Tahosa Valley near Estes Park. At the Boulder/Larimer Community Forestry Sort Yard, Scott Golden (Larimer County Tree Farmer and Forestry Biomass Specialist with Boulder County) explained how the site is set up to collect wood and slash from private residents in the area. It was established three years ago in response to the mountain pine beetle epidemic, as a place residents could bring beetle-infested logs.

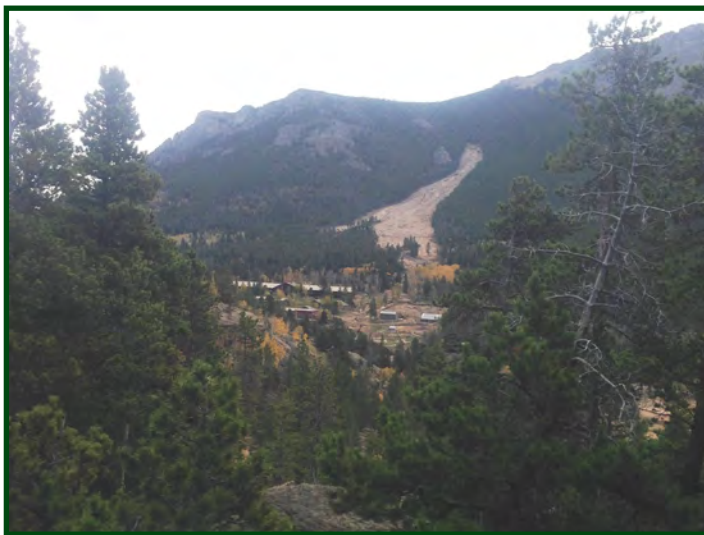
The next stop was at Vance Brand's Tree Farm. Brand is a retired NASA astronaut who commanded three space shuttle missions. At his tree farm, the

group visited three clearcuts put in by Morgan Timber Products over 20 years ago. Lodgepole pine has naturally regenerated in the old cuts, and the Brand Family and the CSFS Fort Collins District have enhanced that regeneration by planting other evergreen species over the last two decades.

The Tree Farmers then stopped at High Peak Camp (Salvation Army) for lunch. There the group saw a cordwood boiler system used to heat the camp's dining hall.

The final stop was at Wind River Ranch, between Long's Peak and Twin Sisters. Ranch workers discussed how many forest activities produce wood used in building maintenance. Since the picnic, the September 2013 flooding caused a devastating alluvial slide, destroying nearly a quarter of the tree farm.

One common message from the summer tour was that even though mountain pine beetle came over the Divide years ago, it has not completely wiped out the pine stands in the area.



Since the picnic, the September 2013 flooding caused a devastating alluvial slide, destroying nearly a quarter of the tree farm.

2013 CSU Homecoming

Colorado State University fueled the 2013 Homecoming bonfire with trees killed by bark beetles and wildfire, using slash material provided by the CSFS Fort Collins District. Three years ago, CSU Facilities Management decided to take the bonfire in

a new direction. In order to help the environment, as well as to allow Forestry students to gain hands-on experience, Facilities began partnering with the CSFS and the Warner College of Natural Resources Department of Forest, Rangeland & Watershed Stewardship to find a better alternate than wood pallets to fuel the bonfire.

As in each of the past three years, CSFS foresters and volunteers transported about 35 cubic yards of dried slash – enough to fill three dump trucks – from CSU's Borden Memorial Forest to the bonfire site on the Friday in October before the festivities. The CSFS manages the forestland at Borden to improve resiliency and reduce wildfire risk.

“The amount of slash at Borden has increased in recent years due to the mountain pine beetle and High Park Fire, which makes this endeavor all the more important,” said Mike Hughes, assistant district forester for the CSFS Fort Collins District.

Lory Photo Series

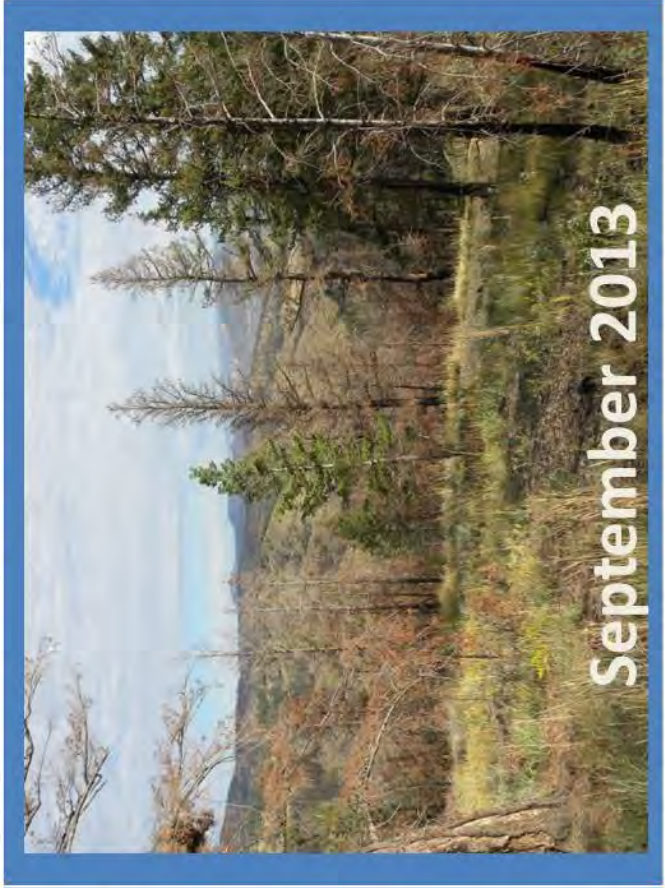
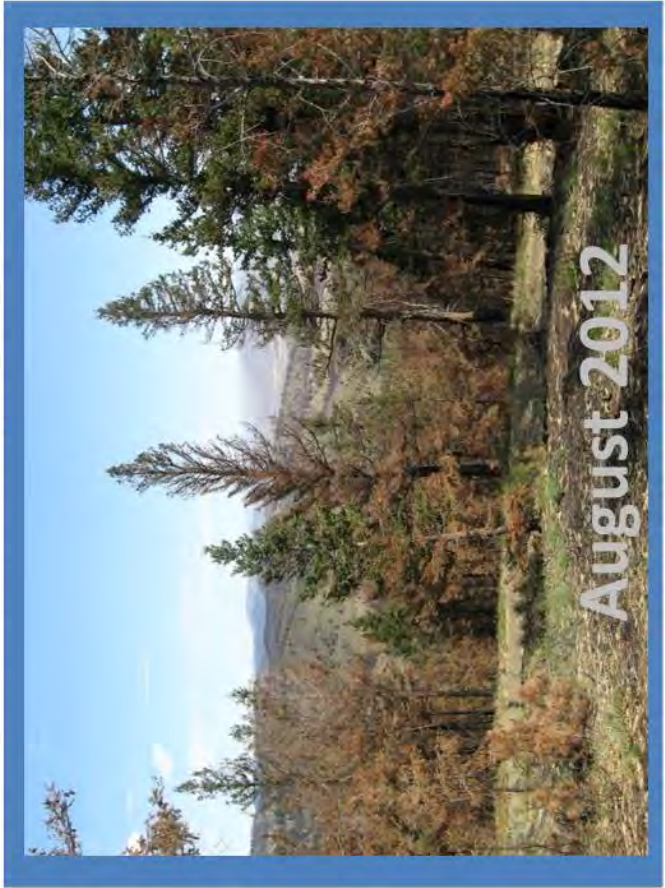
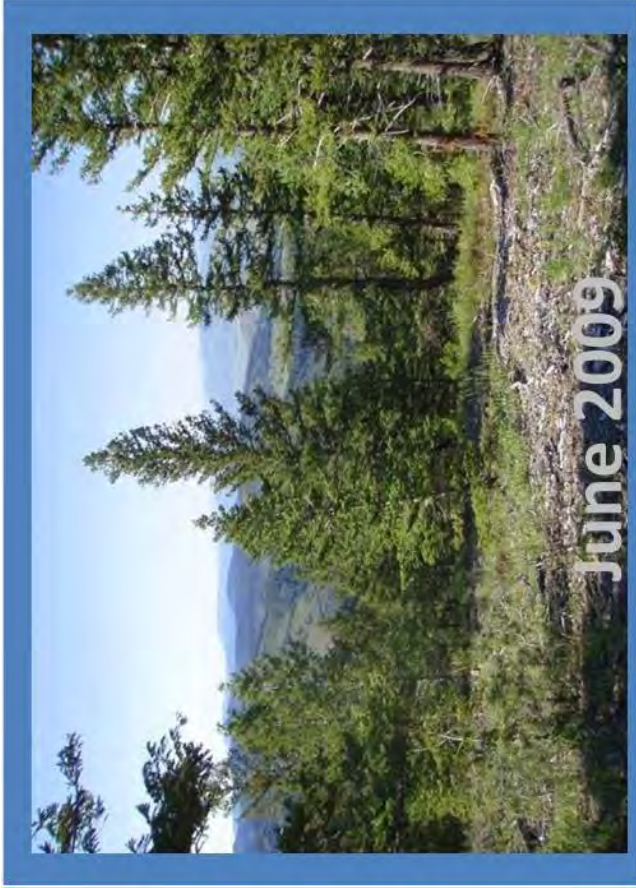
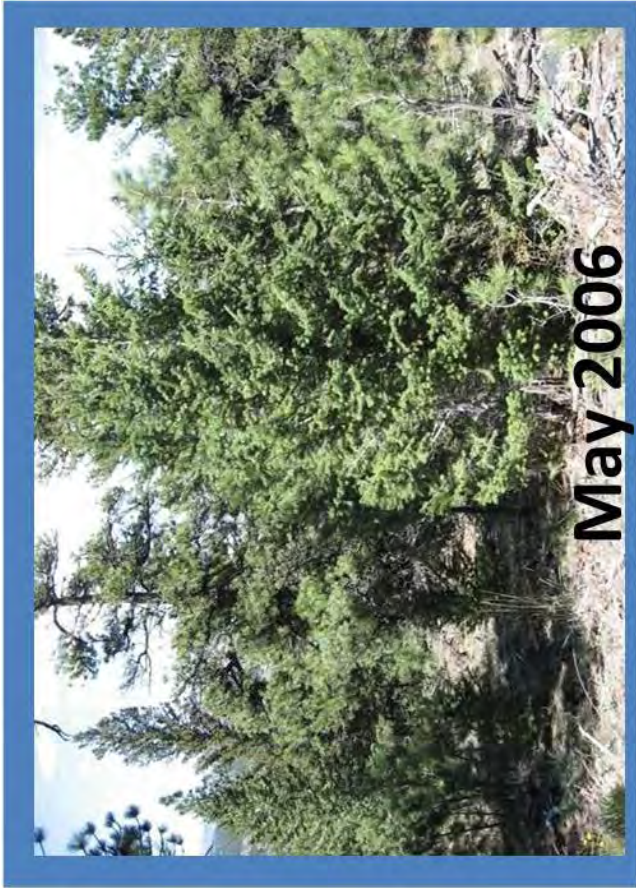
The CSFS has for years assisted the Colorado Division of Parks and Wildlife with projects that reduce wildfire hazard and improve forest conditions at Lory State Park. Starting in 2005, a series of fuelbreaks and fuel hazard reduction treatments have thinned ponderosa pine/lower montane forests on the west side of the park. The CSFS Fort Collins District has established photo points at locations in these areas.

The High Park Fire burned through about 500 acres in Lory State Park in 2012, including three of the fuel reduction project units. The district has been able to re-take photo series pictures depicting: before the thinning (2006), after the thinning (2009), immediately after the fire (2012) and one year after the fire (2013). The photo series has helped foresters and park managers monitor effects of the treatments, evaluate their effectiveness and make adjustments for future forestry work.

Barr Lake State Park Forest Inventory

In the spring of 2013, Colorado Parks and Wildlife and the Colorado State Forest Service entered into an

Lory State Park



agreement for the CSFS to conduct a forest inventory and write a forest management plan for Barr Lake State Park. The inventory was conducted by a core team of CSFS employees, including Assistant District Forester Diana Selby, of the Fort Collins District, during the months of March and April. Selby wrote the forest management plan to achieve several objectives for Barr Lake State Park, including:

- identifying natural reproduction and providing planting recommendations
- reducing the risk of hazard from trees in high-use areas
- controlling insects, diseases and invasive woody plant species
- identifying small, easily implemented projects for the park

In 2014, the CSFS Fort Collins District will assist in implementation of a portion of the plan by administering a project to remove the invasive Russian-olive in the park.

CSFS Hires New Nursery Manager

The CSFS is excited to introduce its new Nursery Manager, Joshua Stolz. He comes to the agency with 14 years of experience in the green industry.

Stolz began his career as an installation foreman, where he quickly mastered the proper methods of planting, handling and care of plant material. He also has served in the U.S. Army, is a graduate of Colorado State University and is now pursuing a master's degree at the university. He asserts that high standards of quality, efficiency, communication and service will be goals of the nursery moving forward. To learn more about the CSFS Nursery, visit www.csfs.colostate.edu.

District Assumes Responsibilities of Fort Morgan District

The Fort Morgan District of CSFS, which serves Adams, Kit Carson, Logan, Morgan, Phillips, Sedgwick, Washington and Yuma Counties in northeast Colorado, is currently being managed by the CSFS Fort Collins District. The previous District Forester, Norland Hall, retired at the end of April 2013 and Fort Collins District Forester Boyd Lebeda has

indefinitely taken on the position of Acting District Forester for the CSFS Fort Morgan District. Lebeda now oversees delivery of CSFS services in both districts.

The Fort Collins District staff also will take part in delivering service to the Fort Morgan District. The district will continue to focus on landowner and community assistance programs and to establish partnerships with landowners, communities, organizations and other agencies to better serve the needs and concerns of the plains.

In Closing...

We would like to thank our many customers and cooperators. It is a pleasure to serve and work with you. If you have questions or need assistance with forestry-related issues, please contact us.

- Boyd Lebeda – District Forester
- Mike Hughes, Diana Selby & Greg Zausen – Assistant District Foresters
- Peggy Ely – Administrative Assistant
- Bonnie Kuntz - Administrative Assistant

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Teaching present and future generations to be stewards of Colorado's forests is essential to ensuring that our forests are healthy and can continue to provide all the benefits on which we rely.

