

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 La Junta District

The La Junta District of the Colorado State Forest Service (CSFS) is one of 16 districts and three field offices located throughout Colorado. We are a service and outreach agency of the Warner College of Natural Resources at Colorado State University (CSU). The CSFS headquarters is located on the CSU Foothills Campus in Fort Collins.

The CSFS La Junta District serves Baca, Bent, Cheyenne, Crowley, Kiowa, Otero and Prowers counties in southeast Colorado.

More information about the CSFS and the La Junta District is available at the CSFS website: www.csfs.colostate.edu. Click on "Your Local District" and then "La Junta District."



The CSFS La Junta District, Shelly Simmons, Donna Davis and Teradette Wilson

At the CSFS La Junta District, we're all about: people, forest health and providing forestry-based technical support.

WE'RE ABOUT PEOPLE

Local Students Graduate from First Master Volunteer Forest Stewards Course



Colorado Master Volunteer Forest Steward – Spring 2014 Class Graduates

Back Row: Edward Vela, Mark Miller, Charles Pannebaker, Fred Sassone, Sylvia Sassone, Heather Craft, Dana Barth; Front Row: Phyllis Adkins, Jeneen Nelson, Norma Verhoeff, Karen Wolf

Not pictured: Norma Cannon, David Miller

In May 2014, 19 students graduated from the first ever "Colorado Master Volunteer Forest Steward – Plains" course. The 36-hour training was sponsored by the Colorado State Forest Service and the Colorado Tree Coalition, and held at Otero Junior College and the CSFS La Junta District office.

The six-week course was designed to acquaint the participants with key concepts of individual tree care and general principles of community, conservation and forest management. After the initial course training, graduates can volunteer 36 hours in tree assistance to the CSFS, local tree boards or other agency partners including, but not limited to, the Colorado Cooperative Extension, Colorado Parks and Wildlife, local Conservation Districts and Natural Resource Conservation Service offices.

"The participants were very enthusiastic and a real pleasure to grow with during the course," said Donna Davis, district forester for the CSFS La Junta District. "We all look forward to the volunteer possibilities in the future, and to a continued enjoyment learning more about maintaining the health and growth of our trees here in southeast Colorado."



Colorado Master Volunteer Forest Steward – Spring 2014 Class Graduates Werner Karlin, Gaynell Williams, David Martin, Patty Johnson, Cody Long Not pictured: Nancy Frieden

The 19 graduates, listed with their communities, were: Dave Martin, Cheraw; Dana Barth, Holly; Norma Cannon, Patty Johnson, E. Werner Karlin, Cody Long, Mark Miller, Charles Pannebaker and Edward Vela, all from La Junta; Heather Craft, La Veta; David Miller, Lamar; Nancy Frieden, Las Animas; Norma Verhoeff, McClave; Fred and Sylvia Sassone, Olney Springs; Phyllis Adkins and Janeen Nelson, Rocky Ford; Gaynell Williams, Swink; and Karen Wolf, Trinidad.

Along with developing trained volunteers in southeast

Colorado, the program also seeks to develop awareness, knowledge and appreciation of trees on the plains and in communities in the area. All who are interested in becoming trained Master Volunteer Foresters are encouraged to contact the CSFS La Junta District to learn about future opportunities.

Lamar Fifth-Grader Wins 2014 Colorado Arbor Day Poster Contest



Jissel Silva with her winning poster in the 2014 Colorado Arbor Day Poster Contest

Jissel Silva, a fifth-grader from Parkview Elementary in Lamar, Colo., was selected as the winner of the 2014 Colorado Arbor Day Poster Contest. Jissel's poster, which depicts the importance of trees and how they benefit Colorado communities, was on display at the State Capitol from April 24 to April 30, 2014, along with the posters of the other 48 state finalists. A panel of judges from the Colorado Tree Coalition (CTC) selected the winning poster from entries submitted by fifth-graders throughout Colorado.

State Senator Larry Crowder, who represents southeast Colorado residents in District 35, formally recognized Jissel on April 28 in a presentation near the display of the state finalists' posters in the North Foyer of the State Capitol. Additionally, Jissel was recognized by State Rep. Timothy Dore. In attendance were Jissel's mother, Corina, and family members; Parkview Elementary teacher Melissa Larrick; CSFS Community

Forestry Program Manager Keith Wood; CSFS La Junta District Forester Donna Davis; CTC committee member Michael McGill; Colorado Arbor Day Poster Contest Coordinator Kyle Sylvester; and Poster Contest committee member Doug Schoch.

The Arbor Day Poster Contest is sponsored by Arborscape Services, CTC and the CSFS.

CSFS Recognizes a Dedicated, Hardworking Partner

The CSFS La Junta and La Veta districts want to publicly recognize Karen Wolf for her stellar support of the agency. Wolf has made supporting CSFS programs a priority in her different roles as the former assistant city planner for the City of Trinidad, as a leader and member of the Trinidad Tree Board, as the Coordinator for the Purgatoire Watershed Partnership, and as a member of the local Trout Unlimited Chapter. She also volunteers as a Colorado Master Volunteer Forest Steward.

Trinidad Tree Board

Wolf was instrumental in the formation of the Trinidad Park and Tree Board in 2012, and in attaining Trinidad's first Tree City USA recognition from the National Arbor Day Foundation. Her position as assistant city planner provided a beneficial link between the Tree Board and city officials, and without her commitment and dedication, the Tree Board would not have gotten off the ground.

Under Wolf's leadership and guidance, the Trinidad Tree Board has been very productive right from the start. Since its formation, the board has tallied an impressive list of accomplishments:

- Multiple Arbor Day tree plantings at K-12 schools, Trinidad State Junior College and city parks in 2013 and 2014.
- Arbor Day Poster contests with area schools.
- Successful 2013 application for CTC funding for the Trinidad City Tree Inventory.
- Trinidad Water Festival educational programs in 2013 and 2014.

While her outstanding organizational and communication skills have been the bedrock of the

Tree Board, Wolf also is active on the ground, whether pruning park trees, participating in the city's tree inventory or moving soil at the city's outdoor nursery in preparation to plant new trees.

Community Wildfire Protection Planning in Las Animas County

As the coordinator of the Purgatoire Watershed Partnership, Wolf continues to serve the citizens of Trinidad and Las Animas County. She applied to the federal VISTA program and received volunteer assistance, and has generously allowed her VISTA volunteer to work with the Stonewall Fire Protection District in writing its Community Wildfire Protection Plan (CWPP). She also directly assisted the CWPP group in work sessions and devoted valuable time at CWPP evening meetings.

<u>Forest Management - Tackling Tamarisk on the Purgatoire (TTP) Partnership</u>

Since 2004, the Tackling Tamarisk on the Purgatoire (TTP) partnership, led by the CSFS, has been working hard on riparian forest management within the upper Purgatoire Watershed. When Wolf came on board as the assistant city planner, she diligently worked to fill in treatment gaps along the Trinidad River Walk. Where once there was a huge gap in treatment control of Russian-olive and/or tamarisk along the river walk, there now is a continuous area of treatment (approximately 70 acres), solely due to Wolf's initiative and cooperative efforts.



Karen Wolf walking through a treated area along the Purgatoire River Corridor through the City of Trinidad

Perhaps the biggest challenge Wolf faced was figuring out land ownership within the river walk area, and getting permission to conduct treatments. She accomplished the following for the TTP partnership:

- Identified approximately 90 percent of the landowners within the Trinidad River Walk area
- Created landowner maps
- Tirelessly located and contacted landowners to get permission to conduct tamarisk treatments along the river walk
- Created a landowner agreement and signed up landowners under a City of Trinidad agreement
- Served as the point of contact for the contractor
- Initiated and organized training sessions for invasive control training with city crews and local volunteers from the Trinidad Tree Board and local Trout Unlimited chapter
- Wrote several grants to assist with the TTP project along the river walk

Simply put, without Wolf's hard work, limited or no tamarisk treatments would have been completed along the Trinidad River Walk. And there was no other reason that Wolf took this upon herself other than her personal desire to improve her community.

<u>Colorado Master Volunteer Forest Steward (CMVFS)</u> Volunteer

Wolf also was a 2014 graduate of the CMVFS course offered by the CSFS La Junta District. She invested time to take this course to strengthen her knowledge of community forestry to better assist the CSFS with promoting urban tree management in the City of Trinidad.

Wolf's efforts are the very definition of a critical partnership, multiplying the energy of area cooperators to provide solutions to this area's natural resource issues. The CSFS La Junta District is grateful for all her hard work and efforts that support CSFS projects.

WE'RE ABOUT FOREST HEALTH

Be Aware of Emerald Ash Borer, a Destructive Tree Pest in Colorado

The highly destructive emerald ash borer (EAB), a non-native insect that attacks all species of true ash trees (genus Fraxinus), was confirmed in Boulder, Colo., in September 2013. Although not yet detected outside Boulder, EAB has become a concern for communities around the state, because an estimated 15-20 percent of Colorado's urban and community trees are ash.

This exotic insect is responsible for the death or decline of tens of millions of ash trees in more than 20 states and Canada. Native to Asia, EAB lacks predators in North America to keep its populations in check. The CSFS publication Emerald Ash Borer: Quick Guide Series UCF 2014-01 provides a general overview of the pest, and is available online in PDF form at http://csfs.colostate.edu under the "Publications" tab. Copies also are available at the La Junta District office.



EAB has not been detected in southeastern Colorado as of May 2015. Photo: Howard Russell, Michigan State University

Also refer to Lilac/Ash Borer: A Common Wood Borer of Colorado's Street Trees (Colorado State University Extension Fact Sheet No. 5.614) at www.ext.colostate.edu/pubs/insect/05614.html to learn more about this EAB imposter. Lilac/ash borer is a common wood borer associated with ash trees all over Colorado, and a species native to North America. Tree damages it causes is often mistaken for that of EAB, which is a far more serious insect affecting ash trees.

EAB has not been detected in southeastern Colorado

as of May 2015 (see www.eabcolorado.com; and click on How Close is EAB to You?).

Considerations for the health of our community ash trees and other tree resources:

- 1. Be cognizant of sources and tree species of firewood, as its movement can transport damaging tree pests like EAB under the bark, and avoid moving firewood over long distances (more information at www.dontmovefirewood.org)
- 2. Avoid planting ash trees, and seek diversity in future tree plantings (tree selection information at https://webcms.colostate.edu/csfs/media/sites/22/2014/02/SECOTreeSelectionMatrixFINAL_SLS_31Dec13.pdf.)
- 3. Plan for healthy community forests through creating current tree inventories and implementing systematic management

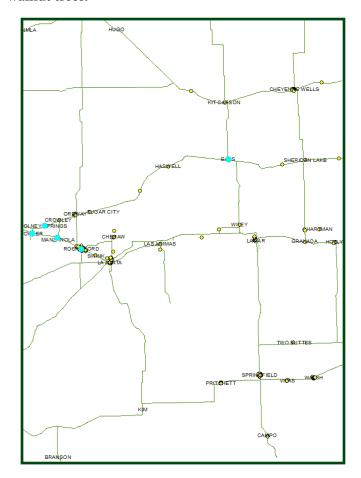
Visit www.eabcolorado.com for the most current information on EAB in Colorado. And if you have any questions, don't hesitate to contact us.

Thousand Cankers Disease in Southeast Colorado

Thousand cankers disease (Geosmithia morbida) is caused by a fungus carried by the walnut twig beetle (Pityophthorus juglandis). Once the fungus is introduced to a tree, it causes small dead areas in the bark called cankers. Trees are eventually killed by overwhelming attacks of walnut twig beetles and subsequent cankers that girdle branches. Currently, there are no effective methods for saving trees with the disease, and many states east of Colorado have quarantines prohibiting the movement of walnut material.

After being introduced to Colorado in recent years, thousand cankers disease (TCD) has caused significant tree mortality in many of the state's urban forests, primarily along the Front Range from Fort Collins to Pueblo. In past years TCD has been confirmed as far east as Rocky Ford and Olney Springs, and in 2014 TCD was confirmed in Fort Morgan. Also in 2014, the Colorado State University Plant Diagnostic Lab in Fort Collins identified walnut twig beetles in a pheromone trap placed in Kiowa County, near the Kansas border. Different than the emerald ash borer (EAB), another

recently arrived Colorado tree pest that spread westward across the Great Plains via the transport of infested wood, TCD has the potential to spread in the opposite direction, to the Eastern U.S. – potentially impacting large numbers of commercially valuable walnut trees.



TCD Walnut Twig Beetle Confirmations as of 2014

Landowners with black walnut trees in southeastern Colorado should inspect them regularly for symptoms including sparse foliage, leaf yellowing or wilting, brown leaves, branch dieback and excessive staining of the bark surface. Any suspect trees should be reported to the CSFS La Junta District office or a local CSU Extension Office.

Anyone who has a black walnut tree removed should refrain from moving the wood and contact local authorities to determine the best way to dispose of the tree

For more information about TCD, please view the PDF publication Thousand Cankers Disease of Black

Walnut at http://csfs.colostate.edu, under Publications. For more information about the risks of moving firewood, go to www.dontmovefirewood.org.

We're About Forestry-Based Technical Support

Trees and Utility Lines Maintaining Human Safety and Tree Health

Many people who drive by a bucket truck and watch as a tree-trimming crew chops its way through a beautiful, full-canopied tree wince, thinking about how much worse it will look when the crew is done. But they may not be thinking about the overhead utility lines revealed by the crew's progress.

When a tree is trimmed or removed near utility lines, it's for good reason – it means it is the wrong tree type, and in the wrong place, and could cause interruptions to service. Utility services in the United States have become such an expected part of our daily lives that they are often taken for granted. Overhead utility lines deliver electricity, data and communications; underground utility lines also may carry those services, plus water, sewer, natural gas or propane needs. And utility service providers carry a huge responsibility (by law) to provide safe and reliable service.

For example, Southeast Colorado Power Association (SECPA) services 13,000 square miles in 11 counties, through a network of 5,500 miles of power lines. Every year, SECPA must clear hundreds of tree branches that

TALL ZONE
60' (20m)

MEDIUM ZONE
40' (12m)

LOW ZONE
20' (6m)
OR LESS

HOUSE

Possible Underground Lines

LAWN

WALK

STREET

Fig. 1: Proper tree placement in relation to utility lines. Source: International Society of Arboriculture, 'Avoiding Tree Utility Conflicts', www.treesaregood.com.

have grown into electric lines in order to maintain uninterrupted service, and to ensure public safety. But people can take steps to minimize the impacts of electric line clearance pruning.

Be Proactive when Planting Trees: Look Up, Down and All Around!

Where utilities are concerned, the most important decision you can make when planting trees is choosing to plant them where they will not interfere with utility lines (either above or below ground) when they reach full maturity. It is important to have an understanding of the mature height, canopy spread and potential diameter of the trunk before planting any tree. Understanding what a tree will look like in 20-30 years, and placing it in an appropriate location based on its mature size, will not only avoid utility conflicts in the future, but will also mitigate

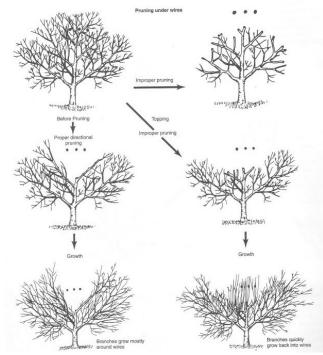


Fig. 2: Branches can be directed away from utility wires with appropriate directional pruning (shown on left). However, topping trees encourages sprouts to quickly grow back into the wires and damages the tree (shown on the right). Source: An Illustrated Guide to Pruning, 2nd Edition, Dr. Edward F. Gilman

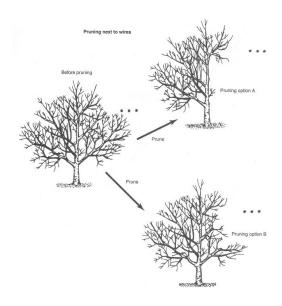


Fig. 3: Option A provides more clearance from the utility wires, but Option B looks better. B is also more expensive because the tree will require pruning sooner than the one shown in A. Source: An Illustrated Guide to Pruning, 2nd Edition, Dr. Edward F. Gilman

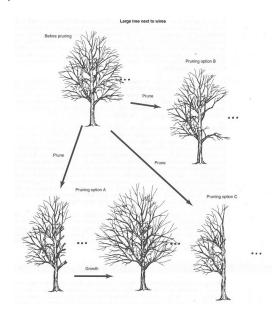


Fig. 4: Option A is a poor choice because sprouts from heading cuts quickly grow back into the wire, and the headed branches then decay. For a lower-maintenance alternative, reduce, and then at a later date, remove, the three branches indicated with arrows at the trunk (shown bottom center). Some utility companies choose between options B and C because they provide clearance for a longer time than option A. Option C provides the best clearance, but is over-pruning that can result in sunscald, cracks and decay in the trunk and roots. Source: An Illustrated Guide to Pruning, 2nd Edition, Dr. Edward F. Gilman

infrastructure damage to sidewalks and buildings (from roots and branches), and visual obstructions at road intersections. Only trees and shrubs that grow to a mature height of less than 20 feet should be planted within the "low zone" of overhead utility lines (see Fig.1).

(Note: Always dial 811 before digging to have underground utilities located on your property.)

Proper Pruning Techniques that Provide Line Clearance

In situations where high-value trees are growing into power lines, electric companies usually trim out branches that interfere with the lines, rather than remove the entire tree. For primary lines, the clearance requirement is 10 feet. This compromise allows the tree to remain where it is, but also means the tree might be pruned in a way that typically makes the tree less aesthetically appealing. However, electric line clearance pruning can be successfully implemented, provided proper pruning techniques are utilized. Figures 2-4 illustrate proper, and improper, pruning techniques to utilize under and alongside power lines (the three dots in the illustrations represent power lines).

(Note: Only qualified personnel trained in electric line safety should prune trees near power lines!)

There are instances when the only option is severe pruning, in which more than half of the live canopy must be removed. In these cases, it is often better in the long run to remove the tree, and replant a new tree in a more appropriate location on the property.

Trees and utility infrastructure can coexist in many instances, but it takes commitment from homeowners, business owners, and municipalities to plant the right tree in the right place, and commitment from utility companies to maintain uninterrupted service and public safety.

For additional information about trees and utilities, please visit http://www.treesaregood.org/treecare/resources/Avoiding Conflicts.pdf.

Also, for important safety information, please visit the SECPA website at http://secpa.com/related-links/safety/, or the Safe Electricity® Program at http://www.safeelectricity.org/.

Arkansas River Watershed Invasive Plant Partnership (ARKWIPP) Helping Private Landowners, Land Managers Improve Waterways

Non-native noxious plants can be detrimental to the ecology and communities in which they occur. Tamarisk is a great example of a woody (tree-like), non-native noxious plant in southeast Colorado.

Tamarisk has become widely spread along riparian areas (rivers and streams) in arid/semi-arid climates of the West. The effects of tamarisk have been extensively studied, and most studies conclude that it often successfully out-competes native vegetation, offers generally poor wildlife habitat, is a non-beneficial consumptive user of water (water that is precious in semi-arid climates), and lessens recreational opportunities in riparian areas due to its tendency to grow in large, dense, impenetrable stands.

Many landowners and land management agencies have been battling tamarisk for over a decade, and help from groups like the Arkansas River Watershed Invasive Plant Partnership (ARKWIPP) have made their jobs a bit easier. ARKWIPP partners have made it their mission to host annual, hands-on workshops since 2009. The workshops focus on best management practices for controlling tamarisk and secondary, non-native noxious plants such as Russian knapweed (which often occurs in conjunction with tamarisk), and on rehabilitating sites once dominated by stands of tamarisk. The workshops have provided more than 350 attendees with critical information to assist them with on-the-ground management of tamarisk-dominated sites, which often are located in riparian areas. For more information about ARKWIPP, visit http://www. tamariskcoalition.org/programs/arkansas-riverwatershed-invasive-plants-partnership.

The 2014 ARKWIPP workshop focused on demonstrating site rehabilitation management practices after tamarisk plants have died from previous control efforts, or have been severely stressed from tamarisk leaf beetle. Presenters included: Julie Knudson, staff scientist, Tamarisk Coalition; Robin Bay, environmental scientist, Habitat Management

Inc.; Rich Rhoades, Pueblo County NRCS district conservationist; Tony Arnhold, Huerfano County NRCS district conservationist; Patty Knupp, Area 3 NRCS wildlife biologist; John Kaltenbach, biological control specialist, Colorado Department of Agriculture; Scott Nissen, professor/research scientist, Colorado State University; and Chase Taylor, wildlife biologist, NRCS/Rocky Mountain Bird Observatory. One of the biggest challenges for land managers is deciding whether or not to actively replant native vegetation on sites previously dominated by tamarisk. The following basic steps can help land managers gather baseline natural resource information to determine the site potential for growing woody native riparian species (cottonwood or willow), or other types of plants.



ARKWIPP partners working on rehabilitation management practices after tamarisk plants have died from previous control efforts

Soils

Soils with high salt levels and high pH can affect the growth potential of cottonwood, willow and other plants. Simple on-site soils testing can be done to test for pH and salinity using a quality handheld meter. Testing for texture (sand, loam, clay) can also be done on site by the "feel method" (http://www.ext.colostate.edu/mg/gardennotes/214.pdf). If more extensive soils testing may be required, soil samples can be sent to the CSU soils lab for analysis. The routine plus SAR evaluation is recommended. Visit the CSU Soil, Water and Plant Testing Lab's website for more information

and to download the soil sample submission form, at http://www.soiltestinglab.colostate.edu/documents/ HORTICULTURE FORM.pdf.

Plant Inventory

Identifying what is currently growing, or not growing, on a specific site can be very telling as to site potential. If native plants are abundant, diverse and exhibit healthy populations, active revegetation may not be needed. Even if native vegetation presence is low at a site, documenting the few native plants that are growing will provide a list of plants that are tolerant of the site; revegetation with these plants will probably be the smart choice. If secondary invasives, like Russian knapweed, are in abundance and will fill the void when tamarisk is controlled, then active revegetation should be considered, but only after secondary invasives are controlled.

There are many quality field guides available for plant identification. A field guide to native wetland plants of eastern Colorado can be purchased from the Colorado Natural Heritage Program at http://www.cnhp.colostate.edu/cwic/ident/fieldGuide.aspx. Noxious weeds of Colorado can be found at http://www.cwma.org/noxweeds.html.

Seasonal Depth to Ground Water/Water Quality

If it is determined that soils can support native riparian vegetation and plans call for planting woody riparian species, such as cottonwoods and willows, land managers should know whether seasonal depth to ground water and water quality are sufficient to support such plant materials. Simple ground monitoring wells called piezometers can be constructed and installed by land managers. Information on how to install and use a simple piezometer can be found in the guide Best Management Practices for Revegetation after Tamarisk Removal in the Upper Colorado River Basin. To purchase this guide, visit http://www.tamariskcoalition. org/resource-center/documents/best-managementpractices-revegetation-after-tamarisk-removal. Please note that well permits may be required by the State of Colorado, Division of Water Resources. Please consult with the division before proceeding with any type of well installation, even if only a monitoring well.

Water samples can be sent to the CSU Soil, Water and Plant Testing Lab. The routine package should be all that is needed to determine water quality related to growing woody plants.

Develop a Revegetation Strategy Based on Baseline Resource Information

Once soils testing, plant inventory and water information is obtained, it may be the case that the site will not be compatible for growing native woody riparian vegetation, like cottonwoods and willows. However, it may be the case that more xeric native vegetation will tolerate growing conditions.

If the baseline resource information shows that site conditions are favorable for growing woody riparian vegetation, then great care must be exercised in the planning and techniques used for site preparation, planting and implementing long-term maintenance (i.e. watering, animal protection, eliminating competing vegetation) to ensure plant survival. Visit http://www.nrcs.usda.gov/Internet/FSE
PLANTMATERIALS/publications/nmpmcbr7106.
pdf for more information on techniques for planting riparian woody plants. The State of Colorado also has a downloadable guide for native plant revegetation for Colorado at https://cpw.state.co.us/Documents/CNAP/RevegetationGuide.pdf.

For more information on controlling woody, nonnative noxious plants such as tamarisk and riparian restoration techniques, please visit http://www.tamariskcoalition.org/resource-center.



Completed Russian-olive treatment along the Purgatoire River through Trinidad

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:

Donna Davis – District Forester Shelly Simmons - Assistant District Forester Teradette Wilson – Administrative Assistant II

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