

Utah Forest News

Utah Forest Landowner
Education Program Newsletter

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Frandsen Selected as Utah State Forester

Joel Frandsen has been selected as the new state forester and director of the Utah Division of Forestry, Fire and State Lands. He has been the division's deputy director since January 2002.

Prior to joining the state he served in various positions with the USDA Forest Service, most recently as branch chief of the Manti-LaSal National Forest in Price, Utah. While there he was responsible for timber, fire, range, watershed management and wildlife programs.

Frandsen also served as acting forest supervisor on the Manti-LaSal, as well as district ranger on the Ashley National Forest, Duchesne, Utah; Toiyabe National Forest, Las Vegas, Nevada; Boise National Forest, Boise, Idaho; and assistant district ranger, forester and range conservationist with Utah's Wasatch National Forest.



State Forester Joel Frandsen

"Joel is uniquely qualified for this position," states Department of Natural Resources Executive Director Bob Morgan. "He has a wealth of knowledge and experience, combined with excellent communication skills, which will serve him well in the challenges ahead."

Frandsen manages the Division of Forestry, Fire & State Lands with responsibility for state sovereign lands, wildland fire protection, urban and community forestry, forest stewardship and agro-forestry programs, and Lone Peak Conservation Center- the state nursery.

A Utah State University graduate with a Bachelor of Science degree in forest-range management, he is a member of the Society for Range Management, where in 1977 he was elected a Fellow. He has a wide variety of hands-on and administrative experience in natural resource management.

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Research Notes: Cutting Only Small Trees Yields Only Small Benefits

This is the second installment of Research Notes, a feature occasionally included in the Utah Forest News. Our intent is to better address USU Extension's most fundamental mission, extending USU to you – informing you about current research results from your Land Grant universities. We will use this feature to highlight interesting and useful forestry-related research from USU and elsewhere.

Much attention has been given to the National Fire Plan and a West-wide call-to-action to thin forest stands that have grown thick from a century of aggressive fire suppression. It stands to reason that some thinning strategies might be more effective than others when it comes to reducing fire hazard and improving ecological condition. A recent study that compared different wildland fuel treatments in New Mexico concluded that a more comprehensive management approach, removing trees from a variety of age and size classes, created lower hazard stands and was much more cost effective than removing only small trees.

The study titled “A Strategic Assessment of Fire Hazard in New Mexico” was conducted by scientists from the University of Montana and supported by the Joint Fire Sciences Program in cooperation with the U.S. Forest Service Pacific Northwest Research Station. To view the complete reports on the web go

to www.nifc.gov/joint_fire_sci/NMreport.pdf.

The researchers found that over 80 percent of all forested lands in New Mexico are rated high/moderate for crown fire hazard (when a fire quickly moves from treetop to treetop). They also found



Removing a variety of size and age classes can result in less fire hazard and greater diversity.

that removing only the smallest trees (those less than 9 inches in diameter) resulted in a limited reduction in danger of crown fire spread, shifting only 29 percent of the treated stands into a low hazard category. In contrast the comprehensive treatment shifted 69 percent of the treated acres into a low hazard category.

By using a computer forest model known as Forest Vegetation Simulator researchers found that 30 years down the road only 20 percent of the acres in the small-tree-removal treatment stayed in the low hazard category and would need another thinning, whereas over 50 percent of acres in the comprehensive treatment stayed in the low hazard category. A third hazard reduction treatment included removing all trees less than 16 inches in diameter also yielded long term hazard reduction, but without the ecological benefits associated with the comprehensive treatment.

Treatment costs and revenues were also estimated in this study. The comprehensive treatment paid

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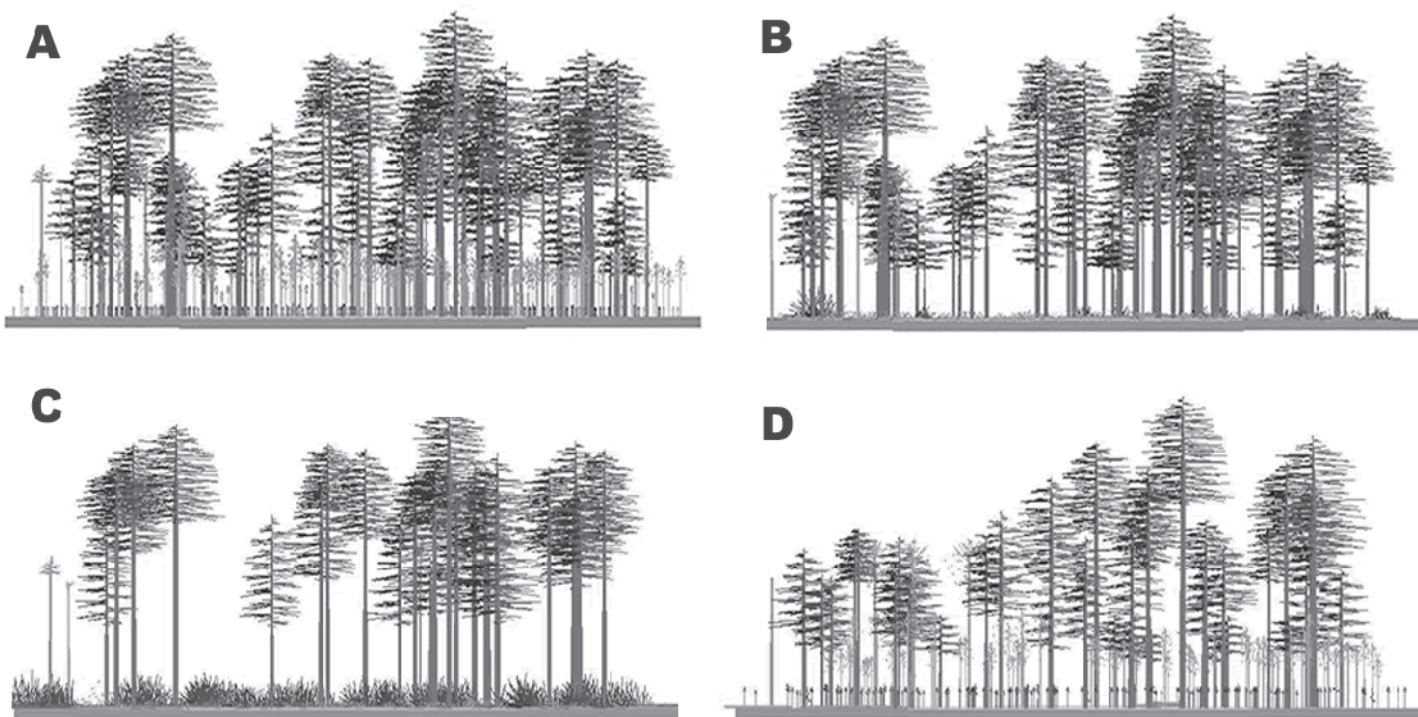
Research Notes continued

for itself on average, with net revenue of \$8 per acre, while the small-tree-removal treatment cost an average of \$368 per acre and the less-than-16-inch-tree removal cost an average of \$439 per acre.

This study shows that fire hazard problems are best addressed by management approaches that consider the density, structure, and species composition of a forest, as opposed to those that focus only on the size of the trees removed. When these other factors are considered in the management process, stands are less expensive to treat and exhibit improved ecological condition and significantly reduce fire hazard. The lesson taught by this study was simply stated by one of my coworkers when he said “forests should

be managed tree by tree, and acre by acre.” A blanket prescription such as “cut all trees less than nine inches” is unlikely to work across an entire landscape, since most forests are highly variable. There are many factors to consider when deciding which trees to leave and which to cut, and decisions should be made on a stand by stand or even a tree by tree basis. These important decisions should reflect the big-picture goals laid out in a landowner’s forest management plan.

By Darren McAvoy, with thanks to Steve Munson, USDA R-4 Regional Entomologist and Dr. John Shaw, USU Forestry Extension Research Scientist



A typical ponderosa pine stand modeled under different management scenarios as described in Research Notes.

A: Stand condition before treatment.

B: Stand after all trees less than 9 inches in diameter have been removed.

C: Stand after all trees less than 16 inches in diameter have been removed.

D: Stand after comprehensive treatment - trees have been removed from the entire range of sizes, with emphasis on retaining large trees.

Conservation Easements through Utah's Forest Legacy Program

A conservation easement is an innovative way for private landowners to protect environmentally significant land while retaining ownership. Land under easement is privately owned — management is accomplished through a forest stewardship plan that is jointly designed by the landowner and service forester.

Conservation easements are legal agreements between a landowner and an agency or organization. The agreement restricts certain rights, including subdivision, surface disturbance, and development. The landowner continues to manage for resource values such as forestry, agriculture, wildlife habitat, scenic views, and watershed protection.

Many landowners in Utah have chosen to place conservation easements on their forested, agricultural, or wetland property in order to protect the natural resource values. The Forest Legacy Program works with private landowners to protect lands that are threatened by conversion to nonforest uses. The program is administered through the Division of Forestry, Fire & State Lands.

Frequently Asked Questions on Conservation Easements and the Forest Legacy Program

Does a conservation easement give the public access to my property?

Only if you allow it. If there is historical use of the property for access to a nearby lake or stream, you may wish to continue this use. However, a

conservation easement does not require you to allow public access.

Can I sell my land with a conservation easement encumbering the property?

Yes. The land can be sold or exchanged at any time. However, the new owner must be aware that a conservation easement encumbers the property. The

easement is perpetual and will always overlay the private ownership and use of the land.

What are the financial benefits of a conservation easement?

Our first recommendation is for you to consult with your tax attorney or adviser. There are tax or financial advantages including:

- Income taxes – donation constitutes a charitable gift which may be deductible for federal tax purposes.

- Estate taxes – state and federal estate taxes can cause a financial burden on heirs; this tax can be lowered through the decreased land value after a conservation easement.

How is a Forest Legacy conservation easement enforced?

The easement is monitored annually by division staff. Landowners are invited to participate in this on-site inspection which determines if any of the restrictions have been violated.

By Ann Price, Forest Legacy Coordinator, Division of Forestry, Fire & State Lands, 1594 West North Temple, Suite 3520, Salt Lake City, UT 84114-5703



Timber harvesting and other traditional uses are allowed under most Utah Forest Legacy conservation easements.

Forest Service Proposes Closing Logan Research Laboratory

The USDA Forest Service research lab in Logan may close this year, curtailing important research into two of the most serious issues affecting the health of Utah forests: bark beetle infestations and aspen decline. In response to the President's proposed 20022003 budget, the Rocky Mountain Research Station has proposed closing the Logan Forestry Sciences Laboratory and terminating the laboratory's work.



A spruce recently killed by bark beetles in the Dixie National Forest.

The move will not only divert \$879,000 that currently helps to maintain and stimulate the state's economy, but even more importantly it will end efforts by scientists to find answers to two of the most commonly asked questions by Utah forest landowners: How can we keep our aspen from disappearing? and What can be done about the massive bark beetle infestations sweeping across the state?

If the Forest Service no longer studies these problems and the health of our aspen and conifer forests continues to deteriorate, there could be negative consequences to Utah's tourism and forest products economies that affect private as well as state and federal forests.

By closing laboratories such as the one in Logan –

and ending the research those labs have pursued for years – the Forest Service hopes to divert funds to new projects, including a major expansion of its Forest Inventory and Analysis (FIA) monitoring effort. In a letter appearing in the Logan Herald Journal, Dr. Mark Brunson of the Wasatch Front Chapter of the Society of American Foresters points out the irony of the Forest Service improving its ability to monitor forest health problems through FIA expansion, while undermining its ability to find new ways to address those problems.

By Darren McAvoy

Editor's Note: It is appropriate to disclose that the author's spouse is a scientist at the Logan Forestry Sciences Laboratory.



Dark sawdust or frass at the base of a still-green spruce tree indicates it has been "hit" by spruce beetles and is a goner.

Fire Season Off to an Early Start

Fire season comes ahead of schedule for much of Utah this year. In 32 years Ron Larsen, Cedar City Area Manager for the Division of Forestry Fire, & State Lands, has never seen a season start so early. “We’ve already had as many fires as we normally have in July!” said Larsen. The April tally for fires this year in Larsen’s area was 39 fires reported for 347 acres.

This increased danger has resulted in a Stage I fire restriction for most of southern Utah. The fire restriction prohibits fireworks, as well as open fires or campfires except in a developed recreation site. Smoking is also prohibited except in an enclosed vehicle or building, a developed recreation site, or in an area that has been cleared of all flammable materials. The use of propane stoves is not prohibited.

The Utah Division of Forestry, Fire & State Lands, in conjunction with the USDA Forest Service, and Bureau of Land Management, have included all federal and state lands in Grand, San Juan, Washington, Kane, Garfield, and Iron counties, and lands west of I-15 in Beaver County in this Stage I Fire Restriction.

All lands in Emery and Carbon counties are also included with the exception of National Forest lands. The order includes Zion, Bryce, and Cedar Breaks

National Parks, as well as the Moab and Monticello Ranger Districts in the Manti-LaSal National Forest. It does not apply to incorporated cities and towns.

“A Stage I Fire Restriction Order is not usually needed until late June or early July, so this is an indication of just how dry things are,” explained State Forester Joel Frandsen. “Needless to say, we’re asking everyone to be especially careful with all forms of fire.”



A dry year: This Duck Creek area slash pile was burned in December under two feet of snow, and started smoking again this May.

For more information contact your local office of the Utah Division of Forestry, Fire & State Lands, or call the Salt Lake City office at 801-538-5555.



Logger Education and Pinyon-Juniper Workshops Held

The Utah Forest Landowner Education Program conducted Utah's first Introductory Logger Education Workshop in Provo on March 6, with 32 people attending. Topics ranged from safe falling techniques to silviculture for loggers, forest ecology for loggers, and environmentally friendly logging practices. With logging contractors from Utah, Idaho, Montana, Washington, and Oregon in attendance there was plenty of experience in the room to add to the discussions. Utah County Extension hosted the program at the Old Historic Courthouse, and the morning break featured fresh Krispy Kreme doughnuts. The success of this spring's program has laid the groundwork for a more in depth field program being planned for the summer of 2003.

Pinyon-juniper forests make up more than 50 percent of Utah's forest cover.

USU Extension also put on a Landowner's Pinion-Juniper (PJ) workshop in Torrey this May. Topics included Taking Care of Your Woodland, PJ Ecology, Insect and Diseases in PJ, and Living with Fire. Morning classroom sessions were combined with an afternoon field tour to make for a fun and informative day. Representatives from the U.S. Forest Service, the National Park Service, the Utah Division of Forestry, Fire & State Lands, and Utah State University Extension presented topics in an informal atmosphere.

A featured speaker was respected PJ scientist, Stephen Monsen, who pointed out that while PJ is encroaching onto grasslands across the West, it is simultaneously being threatened. As fires are kept out of these stands they tend to increase in density (number of trees per acre) which leads to more intense wildfires, which may result in widespread loss of this important habitat within 150 years.

Silver Medals for *Utah Forest News* and FWQGs Guide

For the second year in a row the Utah Forest News was awarded a Silver Medal in the annual Educational Materials Awards, a national competition hosted by the Association of Natural Resource Extension Professionals (ANREP). Over 40 items in 11 categories were nominated for these awards.

A Silver Medal also was awarded in the Long Publication category for the booklet *Utah's Forest Water Quality Guidelines; A Practical User's Guide for Landowners, Loggers & Resource Managers*. *Utah Forest News* subscribers received this booklet last fall with the newsletter. It was part of a collaborative effort between the Utah Division of Forestry, Fire & State Lands and USU Extension's Forest Landowner Education Program.

Richfield Natural Resources Festival

Learning opportunities abounded at this year's Natural Resource Festival, held April 25 and 26 in Richfield, Utah. There were a variety of booths covering all kinds of topics related to natural resources, from bees to trees and beyond. The Utah Forest Landowner Education Program participated with a booth of its own.

The festival was a great success again this year, drawing thousands of visitors including elementary and high school groups on Friday, and many returned with their entire families on Saturday. A variety of hands-on activities created a fun atmosphere for visitors of all ages. Activities ranged from interaction with live creatures such as bees, scorpions, birds, and fish to learning about trees, bats, fire, geology, water, and safety.

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For More Information...

Regarding any of the information presented in this newsletter, please call Darren McAvoy at Utah State University, 435-797-0560, write him at 5215 Old Main Hill, Logan, UT 84322-5230, or email darrenm@cnr.usu.edu.

State of Utah Division of Forestry, Fire, and State Lands (DFFSL) Service Foresters for your area can be contacted by calling 801-538-5555

Ideas and written contributions to this newsletter are encouraged. Send your comments to the return address below or call 435-797-0560 or email darrenm@cnr.usu.edu

COMING EVENTS:

- Look for information on upcoming landowner workshops to be held at various locations and dates around Utah late this summer.
- Another in the series of Cedar Mountain Aspen Management Workshops is being planned for late summer/early fall. A field tour of recently planted aspen sites is on the agenda with discussion focusing on aspen regeneration. For more information contact Iron County Extension Agent Chad Reid at 435-586-8132, or Division of Forestry, Fire & State Lands Area Forester Clint Reese at 435-586-4408.