

# Utah Forest News

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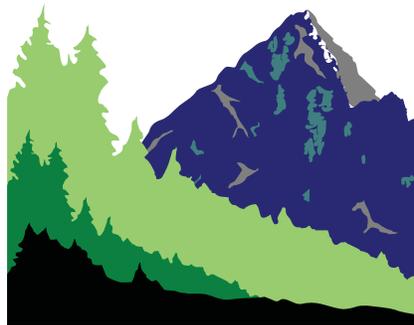
Fall 2001

## Forest Water Quality Guideline Publication Available

*If you receive this newsletter in the mail, please see the included Forest Water Quality Guideline (FWQG) Primer publication; otherwise please contact the Utah Forest Landowner Education Program at the number on page eight for your free copy.*

USU Extension's Forest Landowner Education Program, in cooperation with the Utah Division of Forestry, Fire & State Lands announce the availability of a user-friendly primer publication on *Utah's Forest Water Quality Guidelines: A Practical User's Guide for Landowners, Loggers, and Resource Managers*.

Much of Utah's groundwater comes from the high elevation forests where most of our precipitation falls; the protection and sound management of Utah's private forestlands are therefore critical components of maintaining the state's water quality.



This 51-page full color publication illustrates the use of Utah's Forest Water Quality Guidelines. It is filled with simple and practical information including photographs and illustrations of the voluntary guideline applications. The inclusions of photos that demonstrate poor management practices are equally useful; to help people to recognize mistakes commonly made in the woods.

The publication provides a clear introduction to various management practices such as road and skid trail construction and maintenance, stream crossing options, culvert installation, slash management around creeks, and more. A "Checklist for Success" is provided at the end of each section as a handy organizational reference.

The attractively designed publication also provides an introduction to the basics of forest management operations. Copies may be as useful on a landowner's living room table as copies on the dashboard of a logger's pickup.

A family of landowners contemplating a timber harvest on their property may find it extremely useful for family members to review to better familiarize themselves with the basics of an upcoming timber sale operation.

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## Forest Water Quality Guidelines: Protecting Streams

Although this publication can be helpful for landowners trying to make informed decisions, there is no substitute for seeking the assistance of a professional forester who has your best interest in mind.

### Forest Water Quality Guidelines are about Protecting Creeks

The FWQGs are voluntary measures landowners, loggers, and resource managers can use to protect our state's water quality; this is done in part by identifying Streamside Management Zones (SMZ). An SMZ is not a zone of exclusion, but an area where silvicultural activities should be closely managed. Steams and waterways are separated into two orders known as Class I and Class II steams.

Class I streams and water bodies are essentially those that feed a domestic water supply, or support (or may support) fish populations. Class II streams are those that do not meet those Class I standards, but have defined banks and an ordinary high-water mark.

Both Class I and Class II streams should have an undisturbed strip 15 feet along each side of the high water mark to filter runoff. Trees may be selectively cut from this area, but methods that minimize

disturbances to soil; stream bank stability and stream shading should be used. Trees should be directionally felled away from creeks and machinery should generally not operate within this 15 foot zone.



*The Provo River is a Class I waterway; a Streamside Management Zone (SMZ) that measures 75 feet from either bank is recommended.*

The SMZ for a Class I steam extends 75 feet from the ordinary high water mark on either side of the stream, and should be clearly marked before a logging or road building operations begin.

Class II streams call for a 35 foot SMZ measured and marked from the high water mark on either side of the stream. These figures are slope distances and apply to slope angles of less than 35 percent. Activities that need to be carefully planned or precluded within the SMZ include timber harvesting, road and landing construction, prescribed burning, herbicide application, and refueling of vehicles. Please refer to the publication for a more thorough treatment of the FWQGs.



## State Forester's Stewardship Awards

The Utah Forest Stewardship Coordinating Committee (FSCC) annually considers nominations and selects recipients for three awards including Forest Landowner of the Year, Agro-Forest Landowner of the Year, and Forest Stewardship Achievement Award. There were several highly qualified nominations for each award this year, making the final decision a difficult task. The following articles outline this year's award recipients. To nominate someone you know for one of the awards contact your local Division of Forestry, Fire & State Lands forester, or the Utah Forest Landowner Education Program at the numbers on page eight of this newsletter.

### 2001 Forest Landowner of the Year: Keith Allred

Keith Allred of West Jordan is the winner of the 2001 Forest Landowner of the Year Award. Allred has 837 acres on Range Creek, southeast of Price, which he purchased in 1994. Allred, a retired general contractor, wanted the property for his children and grandchildren to be able to experience a working ranch and appreciate its natural surroundings.

The property is forested with Douglas-fir, pinyon-juniper, and a few ponderosa pines. This mixture provides a rich diversity of habitat for grouse, deer, elk, and bear. Range Creek also holds a resident fish population.

Allred wants the property to serve not only as a place for family to spend time together, but also as a place to demonstrate how proper management can complement ecosystem function.

Allred's devotion to forest stewardship is demonstrated by his willingness to actively seek out professional expertise for the application of his management goals, including grazing for livestock and wildlife, and income generation through long-term management decisions that promote forest health. To protect the property from development and keep it a working ranch in perpetuity, Allred set up a conservation easement. He is further commended

for encouraging his neighbors to consider using some of the management approaches that he has found successful.

Allred started to pursue his management goals soon after purchasing the property. He had the forest resources inventoried by the Utah Division of Forestry, Fire & State Lands and, in 2001, the Division completed a Forest Stewardship Plan that reflects his management goals. Consistent with the plan, Allred has already begun implementing the recommended measures, which call for erosion control, range improvement, prescribed fire use, and timber harvesting.



*pinyon*

## 2001 Agroforest Landowners of the Year: Melvin and Nanette Coonrod

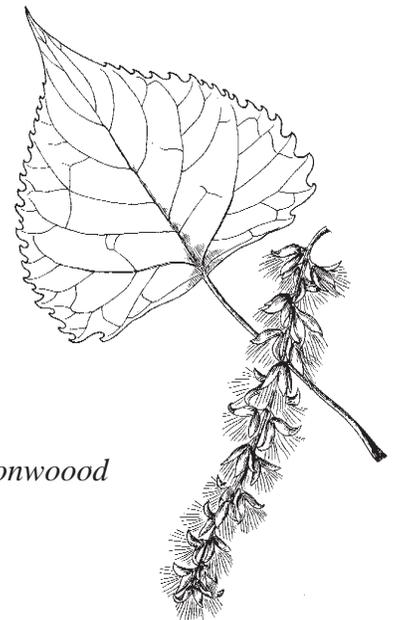
Agroforestry is the deliberate use of trees and shrubs in agricultural land management. Nanette and Melvin Coonrod have applied agroforestry techniques on their 120 acre ranch south of Price since 1972; often balancing seemingly competing values such as livestock grazing with wildlife habitat improvement.

The property is known as Desert Lake Farms and their goals include protecting the soils from erosive canyon winds, improving cattle grazing opportunities, and increasing wildlife habitat. They are well positioned to understand and apply prudent management techniques on their land; Melvin has background and education in silviculture and together he and Nanette own an environmental consulting firm, Environmental Industrial Services, which specializes in preparing environmental impact assessments to meet federal policy guidelines.

The Coonrods have created windbreaks on the ranch that in addition to providing wind protection also provide wildlife habitat. By carefully planning the placement, frequency, and species used in their windbreaks they have created safe-travel corridors for wildlife. They have also created wetlands for waterfowl and established nesting and brooding areas for upland game birds. By deferring grazing in certain pastures, bird nesting and hiding cover have increased. Limiting grazing leases to winter months in some pastures has eliminated conflicts with nesting and brooding bird populations. Adding irrigation and

revitalizing pastures with an improved forage mixture has increased production to 300 animal-unit-months while concurrently providing habitat for ducks, geese, pheasants, and deer.

Each step was outlined in the agroforestry plan the Coonrods had developed for the ranch by the USDA Natural Resource Conservation Service and the Utah Division of Forestry, Fire & State Lands. The Forest Stewardship Coordinating Committee is pleased to highlight individuals and families that provide outstanding examples of land stewardship ethic and practice such as Nanette and Melvin Coonrod.



*eastern cottonwood*

## 2001 Forest Achievement Award: Chad Reid

USU Iron County Extension Agent Chad Reid is an ideally suited recipient for this achievement award. The list of his efforts and their impacts is lengthy and demonstrates a wide range of forestry-related concerns; from researching the influence of windbreaks on alfalfa yield to creating and co-organizing a series of aspen management tours and workshops.

Perhaps it is his breadth of interest and knowledge that makes him so highly regarded amongst his clientele and peers. As witnessed at the conclusion of a forest landowner workshop in Cedar City last March, local producers gathered around Reid like he was a country music star, but instead of autographs they sought advice on issues such as seed drills and mixtures.

His success at furthering local forestry knowledge can partly be attributed to his personable approach. Reid has had uncommon success in bringing interested parties together to cooperate in finding solutions to the challenges of agricultural and natural resource management in Iron County. By working closely with Dr. Jim Bowns, SUU Range Professor, and Clint Reese, Utah Division of Forestry, Fire & State

Lands Area Forester, Reid has also managed to smooth over some of the seams that commonly exist not only between organizations, but also between organizations and the landowners they serve.



*Chad Reid (far right) this August at an Aspen Field Tour that he co-organized.*

This refreshing atmosphere of cooperation and mutual respect has resulted in an educational synergy in Iron County. As expressed recently by a local rancher at an Aspen Field Tour hosted by Reid and his colleagues: the main reason this rancher was attending was his respect for the people presenting the information.

Reid began his Extension Career in 1990 at the University of Wyoming, and slowly worked his way back west; working from 1991 to 1997 in Uinta and Daggett counties, until finally making it back home to Cedar City where he seems likely to stay.

*State Forester's Award articles by Darren McAvoy*



## Research Notes: More Wood From Sustainable Forests

*This is the first installment of a feature we will occasionally include 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.*

Using *natural process-based management (NPM)* to produce more wood from western public forests while supporting sustainable ecological conditions is the focus of *Overcoming America's Wood Deficit: An Overlooked Option* in January 2001 BioScience.

Scientists from the University of Montana and Washington State University and the USDA Forest Service looked at the history of wildland forest ecosystem management in the West and found that “exclusion of fire, combined with the effects of logging and grazing, has greatly altered the composition and structure of many wildland forests.” Forests are too dense, especially in the understory, and species composition is changing as more shade-tolerant species take over. NPM is suggested as a way to reverse these changes and get forests back to ecologically sustainable conditions. NPM, in short, attempts to restore and sustain stand

structures and species mixes that would exist in an area naturally through the application of treatments such as prescribed fire or timber harvest. Natural forests, though hard to define in some cases, are best suited to an area's climate, topography, and disturbances, and best provide for the needs of their inhabitants. NPM treatments simulate natural disturbances, such as using mechanical understory thinning to mimic prescribed fire effects where fire would be too hazardous to create and maintain forests that resemble their natural counterparts while sometimes also producing wood.



***Fir Encroachment:*** The bark of a large ponderosa pine in the background with the foliage of a Douglas-fir in the foreground: a typical scene in the West.

The authors use the example of ponderosa pine forests, the most common forest type in the West. In Utah ponderosa is found mostly in the south, but also in the Uintas. These forests naturally have frequent low-intensity fires that remove understory plants, leaving the overstory trees with

their thick bark and high crowns that make them resistant to fire injury. Dense understories have developed in these forests due to fire suppression, providing “ladder” fuels that carry ground fires into the overstory and allow replacement of pine with Douglas-fir or other species that are more shade tolerant. NPM treatments on these stands could include a combination of heavy thinning of understory trees, selective cutting of overstory trees,

## Classified

removal of competing shade tolerant species, and prescribed fire.

NPM treatments on ponderosa pine forests in the West could produce nearly 5 million cubic meters of wood a year and reduce softwood imports by up to 20 percent. NPM principles also could be used to improve the ecological condition of other important forests types such as aspen. Other NPM benefits include reducing fire severity and risk and helping to pay for the cost of restoration treatments such as prescribed fire and planting. Wood from NPM also is available without additional plantation establishment costs.

NPM involves trade-offs. Logging often is more expensive and produces less wood volume per acre when ecology rather than economics drives decisions. Still, intensive timber management currently can't even be done on much public land in the West. Perhaps NPM ideas can help make forest management on some of this land socially acceptable. NPM principles can also be applied on private lands.

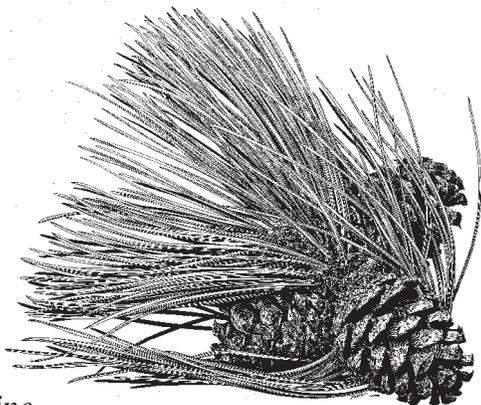
*By Michael Kuhns, USU Extension Forester*

Do you have forest resources you want to sell? Are there specific timber resources you want to buy? Do you offer services useful to forest land-owners? This is the place to advertise your needs! Advertisement is free. If you would like to place an ad, call Darren McAvoy at 435-797-0560 or e-mail [darrenm@cnr.usu.edu](mailto:darrenm@cnr.usu.edu).

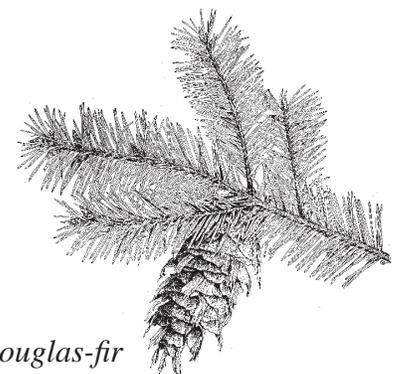
- Utah Forest Products, Inc. is looking for saw logs and offering competitive bids on standing timber. All species considered. Complete management proposals offered using best management practices. Contact John Schmidt, Forester, at 435-865-9438 or at our mill in Escalante, 435-826-4521. Please keep Utah forests working for Utah!

- The Nelson Paint Company, founded in 1940 by Charles and Evan Nelson, has been a family operated business for more than 60 years. We take great pride in manufacturing premium forestry products and being a leader in the forestry industry. For more information please call (800) 869-2629.

*This classified section is a service for forest landowners. Listing of these services, companies, and individuals in no way implies endorsement by USU Extension. We suggest that you use the same precautions you would use in the purchase or sale of any goods and services, including asking for and checking references and using a written agreement to clarify the obligations and responsibilities involved in a sale or service contract.*



*ponderosa pine*



*Douglas-fir*

## The 1902 Wasatch Survey: Diary of A. F. Potter

*The Utah Forest News will occasionally feature excerpts of the Diary of Albert F. Potter, a copy of which is located in the USU Special Collections and Archives. In 1902 Potter conducted the Wasatch Survey, where he crisscrossed the Wasatch Mountains and the Colorado Plateau by horseback for 5 months. At that time he was the Chief Grazing Officer of the Department of Interior Division of Forestry (prior to the formation of the USDA Forest Service). This resulting report on Utah's mountain resources led to the formation of the Forest Reserves. His journal entries provide an interesting look at the conditions of our national forests in 1902; already impacted by 50 years of use. The intensity of use is somewhat surprising in contrast to today and provides a historical insight that may change our perspective on our forests as previously untouched by human hands.*

July 1, 1902 – Left Salt Lake City, Utah at 7:00 am for Logan, arriving at 11:00 a.m. Met Mr. Tom Smart who owns sheep ranging in proposed forest reserve.

He says the range is very much overstocked with sheep, cattle and horses. Many herds are driven in from Idaho and less favorable parts of Utah. Thinks it would be beneficial if grazing could be confined to stock which are owned in the county. Says the most serious damage done by livestock has been in packing the soil so that the water runs off in floods more than it did in former years.

July 2, 1902 – Went with saddle horse for trip to Providence Mountain, took road up Logan River to the Hercules Power House, then went around the point of the mountain and up Dry Canyon. The first part of the mountain is very rough and has no timber except a little scattering scrub cedar. Farther up the canyon on the north slope of the mountain there is a growth of Engelmann spruce which has been good forest at an elevation of 8,000 feet, but much cutting has been done and only the trees too small for telephone poles are now left.

### For More Information:

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

State of Utah Division of Forestry, Fire & State Lands (DFF&SL) 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 above or call 435-797-0560, or email darrenm@cnr.usu.edu.

### COMING EVENTS:

- ❑ Cedar Mountain Aspen Field Tour series continues this winter with events, locations, and dates to be announced. For information call Chad Reid, USU Extension Agent, Iron County, (435) 586-8132.
- ❑ A Logger Education workshop is tentatively planned for March 6, 2002, in Provo. Contact USU Forestry Extension, Darren McAvoy (435-797-0560) for details or input.