

# Utah Forest News

Utah Forest Landowner  
Education Program Newsletter

EXTENSION

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## Water Quality Guidelines: Your Help is Needed

A draft of Utah's Non-Point Source Management Plan for Silvicultural Activities has been completed! This plan is a set of voluntary guidelines for landowners and the forest industry to use on the ground to protect water quality during and after forestry activities. The guidelines provide recommendations to protect water quality on a wide array of practices that may occur during forestry activities including stream crossings, road construction and maintenance, streamside management zones, wetland disturbance, chemical management, skid trails and much more.

Working closely with private landowners, forest industry, federal and state agencies, and environmental and conservation groups, the Division of Forestry, Fire and State Lands and the Division of Water Quality have prepared this draft plan. Now your help and input is requested.

A public comment period from February 1 to March 1, 1998, will allow you to provide input on the plan. In addition, three public meetings will be held to answer questions concerning the plan and its implementation.

For a copy of the draft Non-Point Source Management Plan for Silvicultural Activities, or for questions concerning the plan or public meetings, call Scott Burroughs at (801) 538-5457. Written requests for the plan or comments may be sent to:

Division of Forestry, Fire and State Lands  
Attention: Scott Burroughs  
1594 West North Temple, Suite 3520  
Box 145703  
Salt Lake City, UT 84114-5703

Public meetings concerning Utah's Non-Point Source Management Plan for Silvicultural Activities will be held in:

Cedar City - February 12, 1998, 7:00 to 9:00 PM at the State and County Building, 585 North Main, Cedar City, Utah

Ogden - February 17, 1998, 7:00 to 9:00 PM at the Weber County Library, 2464 Jefferson Avenue, Ogden, Utah

Price - February 19, 1998, 7:00 to 9:00 PM at the Dept. of Work Force Services, 475 West Price River Road, Suite 256 Room 251, Price, Utah

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## Private Timber Harvesting: Past, Present and Utah's Future

*The following is excerpted from the web site of Timbergreen Farm, a family farm and forest committed to the sustainable harvest of Wisconsin's private forest lands (<http://www.execpc.com/timbergreen/>). This article illustrates the progress that landowners in Wisconsin have made toward correcting harvest mistakes of the past. Unfortunately, many of the conditions described in the 'Past' section still sometimes apply to harvesting of timber on private lands in Utah. Following the conditions described in the 'Present' section can help Utah landowners take control of the management of their resources while providing for maximum productivity and financial benefit from their forests.*

### PAST:

- Timber was plentiful.
- Supply was much greater than demand.
- Stumpage prices were low and steady.
- Timber management was not profitable.
- Owners cut any and all merchantable trees.
- Harvesting was done like there was no future.
- Old way: cutting just the good trees.
- Regeneration of good trees hindered.
- Harvested land often left in shambles.
- Sawmills selected the trees to harvest.
- Logging was very wasteful.
- Forest owners knew little about trees.
- **Timber buyer and logger had the advantage.**

### PRESENT:

- Good timber is becoming very scarce.
- World demand exceeds available supply.
- Stumpage prices have climbed 1000%.
- Forest investments are growing quickly.
- Informed owners grow good, large trees.
- Future- and environmental-oriented logging.
- Leave the good trees and cut the bad ones.
- Desirable trees now perpetuate the forest.
- Forests thinned for optimum future growth.
- The owner determines which trees to cut.
- All usable wood utilized from each tree.
- Owners becoming very knowledgeable.
- **Forest owner is now in control.**

Summary: Market conditions have totally changed for forest owners. The future of forestry as a profitable business is an exciting new frontier. Those that do manage their timber for the future will be in extremely high demand. Timber harvesting should now be done just the opposite of what has been Business-as-Usual. We must stop the practice of high-grading: taking the good trees, leaving the bad trees, and ignoring the future of the forest.

## Provisions for Timber Sale Contracts

A written contract is essential for all timber sales. While a verbal agreement between a buyer and a seller is legal, verbal agreements are subject to misunderstanding and misinterpretation and are not adequate. Written contracts protect the buyer and seller by clarifying responsibilities and preventing misunderstandings.

The following is a brief overview of provisions that should be included in a written timber sale contract. It is not intended as legal advice, but as a starting point for forest owners considering entering into a harvest agreement. For further assistance in preparing a timber sale contract, contact an attorney, consulting forester, or a DFFSL Service Forester. Contact Lisa Dennis-Perez with USU Extension for sample timber sale contracts (435-797-0560).

### ESSENTIAL ITEMS FOR A TIMBER SALE AGREEMENT:

- Name and address of seller
- Name and address of buyer
- Date of the agreement
- Location and description of property and sale boundaries, best described with the use of maps
- Guarantee of ownership of timber
- Description of timber being sold and how it is designated (marked, size, species)
- Payment schedule, amount, method (lump- sum or sale-by-unit, m.b.f. or cords, etc.)
- Method of timber measurement (pre-harvest inventory or scale tickets from mill, etc.)
- Performance and/or payment bonds (insurance that sale will be conducted as agreed)
- Anticipated harvest starting and completion dates, if appropriate
- Time period covered by the contract
- Penalties to the buyer if undesignated trees are cut or damaged
- Protection for seller from liability for buyer's operation
- Guarantee that buyer is responsible for health and safety of all its employees
- Right of seller to suspend operations if provisions of the contract are violated

### OTHER IMPORTANT CONTRACT CONSIDERATIONS:

- Seller has right to inspect sale area at any time
- Buyer has right of access onto seller's land for harvesting purposes
- Buyer cannot subcontract any part of the agreement without written consent of the seller
- Location of all stream crossings, roads, skid trails, and landings agreed upon by both buyer and seller before operations begin
- Stabilization or rehabilitation of logging roads, stream crossings, landings, and skid trails upon completion of harvest activity
- Handling of logging debris (lopped and scattered, piled and burned, etc.)
- Method of timber measurement (pre-harvest inventory or scale tickets from mill, etc.)
- Utilization standards set forth (stump height, top diameters, etc.)
- Adherence to state Forest Water Quality Guidelines
- Erosion control and stream protection measures
- Fire protection and hazard prevention measures
- Seller's post-harvest inspection to ensure compliance with the contract
- Release of the buyer, through written letter, from further obligations

### SPECIAL PROVISIONS FOR SPECIFIC CIRCUMSTANCES:

- Specific season or ground condition when harvesting is allowed (when soil is frozen, dry, etc.)
- Method of harvesting and/or equipment specifications



## Timber Volume Measurement

*The following terms are used to determine the volume of wood involved in a harvest operation, the market price of that wood, and the financial value of standing timber, referred to as the stumpage value.*

- Board foot** - a unit of wood 1 inch thick, 12 inches long, and 12 inches wide. One board foot contains 144 cubic inches of wood. Thousand board feet, m.b.f., is often used to indicate the volume of wood in a timber sale and the price paid for stumpage, i.e. \$100 per m.b.f.
- Cruise, inventory** - to survey a wooded area to determine species present and to estimate volume, quality, and stocking of the stand. A cruise usually is conducted by sampling representative plots to obtain estimates.
- dbh** - diameter at breast height or 4.5 feet above ground level; used with the merchantable height of the tree to determine the volume of timber, or board feet, in the tree.
- dib** - diameter inside bark; measurements for log scaling or timber volume measurement are taken inside the bark at the small end of the log.
- Log rule, log scale** - a table used to estimate the amount of lumber (usually in board feet) which may be sawn from logs of various lengths and diameters. A tree rule or scale is a similar system used to estimate lumber (b.f.) from standing timber. While there are several different rule systems, the Scribner rule is the scale most commonly used in Utah.
- Merchantable height** - the point on the tree stem at which the diameter becomes less than the limit required for a certain product. Generally, the limit for sawlogs is 6 inches dib.
- Sawlog, sawtimber** - trees or logs of suitable quality and size for conversion to lumber.
- Stumpage** - uncut trees standing in the forest; sometimes refers to stumpage price or value, which is the commercial value of standing trees.

A good quality Douglas-fir tree with a dbh of 24 inches and a height of 95 feet would contain approximately 544 board feet. The same tree of lesser quality would contain fewer board feet, depending on the extent of the defects, i.e. heart rot, insect damage, etc. Trees of the same size and quality, but of different species, would not yield exactly the same volume due to differences in log shape and taper. In Utah, aspen generally are measured in terms of weight in tons, instead of board foot volume.

A densely stocked acre of Douglas-fir trees might have more than 20,000 board feet of timber. A poorly stocked acre of Douglas-fir might yield less than 5,000 board feet. Again, the exact volume of timber per acre depends on quality, size, species, and stocking density of the forest stand.

## Why have a Timber Inventory?

How much timber do you have in your forest? What species of trees are there? What is the quality of the timber? Is the wood ready for harvest? You can find the answers to these questions by having your timber inventoried.

An inventory is an estimate of the total number, species, sizes, and quality of trees on a timbered area. You can use this information to estimate the monetary value of your timber resources. Inventorying your timber is similar to having your house appraised. Understanding the value of the product you are trying to sell helps to ensure you get a fair price for it.

Timber inventories are important for more than just timber sales. An inventory is a good starting point for developing a management plan to help you reach your forest management objectives. Whether you are concerned about managing for wildlife habitat, aesthetic values, timber volume, or hazard reduction, the initial description of timber resources that an inventory provides is essential in determining the course of action necessary to meet your management goals.

Timber inventories can be conducted by DFFSL Service Foresters or other professional consulting foresters. While timber brokers and logging operators may offer an inventory service, it is often in the best interest of the landowner to have the timber inventoried by an objective third party who has no investment in the volume of timber to be sold.

## Timber Price Estimates

The stumpage prices listed here illustrate the range of values that Utah landowners have received for various timber species in the recent past. Sawtimber stumpage prices vary substantially depending on species, log quality, logging costs, and fluctuating market demands. Logging costs in turn are determined by accessibility, volume per acre, total volume, ground conditions, harvesting method, and hauling distance to the mill. These price ranges are intended only to give you a rough idea of the commercial value of your timber. To determine more precisely what your timber may be worth, consult with a DFFSL Service Forester, consulting forester, or a neighboring forest owner who has recently sold timber.

Aspen	\$8 - \$30/ m.b.f. \$2 - \$5/ ton
Spruce - Fir	\$100 - \$140/ m.b.f.
Douglas-fir	\$110 - \$150/ m.b.f.
Ponderosa Pine	\$120 - \$180/ m.b.f.
Lodgepole Pine	\$100 - \$140/ m.b.f.



## You Should Know: Diameter-Based Cutting

Diameter-based cutting, or diameter limit cutting, is a commonly used harvesting strategy that involves selecting trees for harvest based solely on their size (dbh). All merchantable trees above the designated dbh are cut, while those below the limit are left as the remaining or residual stand. In most cases, this strategy is the equivalent of high-grading, removing all the biggest and best quality trees. While this strategy may appear to be advantageous in terms of immediate financial gain, it has serious implications for future stand productivity and the long-term value of the forest. Diameter-based cutting often results in a residual stand of poor genetic quality and commercial value. Only the smaller, less desirable, and malformed trees are left to perpetuate the forest stand. This strategy lengthens the period between harvests as natural regeneration may be limited by the composition and poor quality of the residual stand and the smaller residual trees must develop to merchantable size.

Alternatively, a long-term harvest strategy involving a series of thinnings of malformed trees and trees of less desirable species allows the biggest and best trees to grow faster. This strategy allows for an increase in the overall volume and commercial value of the forest stand. Thinnings provide some financial benefit for the short-term while preparing the forest stand for a future harvest of premium, large, high-quality timber. The long-term financial gain from a forest managed in this way is substantially greater than that from a forest harvested using a diameter-based cutting system.

### Cost Share Monies Available

The Division of Forestry Fire and State Lands has cost share monies available through its Stewardship Incentives Program. The Stewardship Incentives Program or SIP provides up to 75% cost share for conservation practices including reforestation, forest improvement, agro-forestry, fisheries and wildlife improvement and forest recreation improvement. To qualify for the program, landowners must own at least 10 acres of land and have a forest stewardship plan, agro-forestry plan or a conservation plan prepared. For further information on the Stewardship Incentives Program contact your area Forestry, Fire and State Lands office.



### Forest Tax Tips

The Taxpayer Relief Act of 1997 provides some good news for owners of private forest lands. The big news is that the long-term capital gains rate has been reduced - if you sold your timber at the right time and you meet the holding period requirements. These new rules and other information are contained in a Cooperative Forestry Bulletin entitled "Tax Tips for Forest Landowners for the 1997 Tax Year". The bulletin, prepared by Larry M. Bishop, Forest Management and Taxation Specialist for the Forest Service's Southern Region, contains information which is current as of December 10, 1997. Utah forest landowners who wish to obtain a copy of the bulletin, or other federal forest taxation information, may do so by calling Dave Schen or Scott Burroughs at the Utah Division of Forestry, Fire, & State Lands, 801-538-5555.

## Forest Stewardship Awards Honor Utah Landowners

The 1997 Forest Stewardship Awards have been presented by the Division of Forestry, Fire, and State Lands in ceremonies at the annual convention of the Utah Association of Conservation Districts.

Donielle Slanina, Cleveland, Utah, was recognized with the “Utah Forest Stewardship Achievement Award for 1997.” Slanina is a sheep rancher and farmer who promotes the benefits of good agro-forestry in her community. Gordon Bosworth and Bobbie Cleave have been recognized as “Agroforestry Landowners of the Year” for their efforts to protect their Hyde Park farmstead and feedlot from high winds, and to improve wildlife habitat on nearby winter rangeland.

The “1997 Forest Landowners of the Year” award was presented to Erich and Sharlene Bretthauer, Las Vegas, Nevada. The Bretthauers were recognized for their conscientious management of their land, which is near Hatch, Utah, in Kane and Garfield counties. The Bretthauers, concerned about the use of their forest land, have worked closely with the state forester’s office to develop a comprehensive Forest Stewardship Plan.

“We applaud these people for their exemplary application of forestry techniques to protect the environment while providing resources for the use of society,” said State forester Art DuFault. The awards were presented during a luncheon on Wednesday, November 5th, 1997, in Moab, Utah.

Regrettably, the 1996 Forest Stewardship Award recipient, Barney White, from Cache County, passed away in late December. As a private forest landowner, he was an active participant in the development of resource management policy in Utah, serving on the Utah Forest Practices Task Force, the DFFSL Forest Stewardship Coordinating Committee, and local, state, and national soil conservation organizations. He will be missed.

Forest Stewardship Awards are presented annually to landowners who show outstanding forest management or who conduct exemplary agro-forestry practices. For more information on Stewardship Awards or to nominate a landowner for consideration, contact Scott Burroughs at 801-538-5555.

### *Utah Forest News Classifieds!!!*

Do you have forest resources you are looking to sell? Are there specific timber resources you are looking to buy? Do you offer services useful to forest landowners? We hope to develop a classified section in this newsletter as a service to forest landowners. Advertisement would be free. If you are interested in placing an ad, please contact Lisa Dennis-Perez at 435-797-0560.

### Upcoming Events...

#### Forest Landowner Workshops:

- Logan.....February 19
- Cedar City.....March 3
- Price.....March 4
- Salt Lake City.....March 12

*See newsletter insert of call 435-797-0560.*

#### Landscape Tree Care Workshops:

- Ogden.....February 26
- Cedar City.....March 3
- Manti.....March 4
- Orem.....March 5

*Contact Mike Kuhns at 435-797-4056.*

#### Natural Resource Festival:

- Richfield.....April 24 & 25

*Contact Kelly Allen at 801-896-5697.*

### For More Information...

On upcoming events or any of the information presented in this newsletter, please call Lisa Dennis-Perez at Utah State University at 435-797-0560.

State of Utah Division of Forestry, Fire, and State Lands (DFFSL) Service Foresters for your area can be contacted by calling the main office in Salt Lake City at 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. **NEXT DEADLINE: APRIL 9th**

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